



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Chair: R. Tepper
Vice-Chair: J. Carroll
Secretary: A. Pappastergion
Board Members:
P. Flanagan
J. Foti
B. Peña
H. Vitale
J. Walsh
P. Walsh
M. White-Hammond
J. Wolowicz

BOARD OF DIRECTORS' MEETING

To be Held on Wednesday, January 18, 2023

Time: 1:00pm

**To be Held Virtually Pursuant to An Act Relative to
Extending Certain State of Emergency Accommodations**

WebEx Meeting Link (Registration Required)

<https://mwra.webex.com/weblink/register/r37fff6d9c2774e946a24b7fde976d2e2>

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Event Number: 2343 084 7081 Password: 011823

AGENDA

- I. **APPROVAL OF MINUTES**
- II. **REPORT OF THE CHAIR**
- III. **REPORT OF THE EXECUTIVE DIRECTOR**
- IV. **EXECUTIVE SESSION**
 - i. Approval of December 14, 2022 Executive Session Minutes
 - A. **Litigation**
 1. Annual Litigation Summary and Update
- V. **WASTEWATER POLICY & OVERSIGHT**
 - A. **Information**
 1. MWRA's Ongoing Contribution to Wastewater Based Epidemiology
- VI. **WATER POLICY & OVERSIGHT**
 - A. **Information**
 1. Update on Temporary Fluoride Shutdown for Construction
- VII. **PERSONNEL & COMPENSATION**
 - A. **Approvals**
 1. PCR Amendments – January 2023

VII. PERSONNEL & COMPENSATION (Continued)

A. Approvals (Continued)

2. Appointment of Kristen Patneaude, Manager, Energy
3. Appointment of Martin McGowan, Director, Construction
4. Appointment of Kristen Schuler Scammon, Associate General Counsel, Litigation
5. Appointment of Kimberley A. McMahon, Associate General Counsel, Labor and Employment

VIII. ADMINISTRATION, FINANCE & AUDIT

A. Information

1. Delegated Authority Report – December 2022
2. FY23 Financial Update and Summary through December 2022

B. Approvals

1. Transmittal of the FY24 Proposed Capital Improvement Program and Proposed FY24-28 Spending Cap to the MWRA Advisory Board

IX. CORRESPONDENCE TO THE BOARD

X. OTHER BUSINESS

XI. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

December 14, 2022

A meeting of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on December 14, 2022. The meeting was conducted via remote participation by the Board of Directors pursuant to Chapter 20 of the acts of 2021 and subsequent acts extending certain COVID-19 measures adopted during the state of emergency.

Chair Card presided remotely from MWRA headquarters. Also present from the Board were Messrs. Flanagan (remote participation); Foti (remote participation); Pappastergion (remote participation); Peña (remote participation); Vitale (remote participation); Jack Walsh (remote participation); Patrick Walsh (remote participation); and Ms. Wolowicz (remote participation). Mr. Carroll and Rev. White-Hammond were absent.

MWRA Executive Director Frederick Laskey, General Counsel Carolyn Francisco Murphy and Chief Operating Officer David Coppes participated remotely from MWRA headquarters. Other MWRA staff in attendance remotely included Thomas Durkin, Director, Finance; Carolyn Fiore, Deputy Chief Operating Officer; Michele Gillen, Director, Administration; Kathy Murtagh, Director, Tunnel Redundancy; Patterson Riley, Special Assistant For Affirmative Action; Paula Weadick, Director, MIS; Claude Cormier, Director, Internal Audit; Sean Cordy, Senior Financial Analyst; Matthew Horan, Deputy Director of Finance/Treasurer; Ted Otis, Purchasing Manager; Rita Mercado, Acting Director, Procurement; David Duest, Director, Deer Island Treatment Plant; Rebecca Weidman, Environmental and Regulatory Affairs Director; Brian Kubaska, Assistant Director, Engineering; Michael O’Keefe, Senior Program Manager, Master Planning; Wendy Leo, Senior Program Manager, ENQUAL; Sean Navin, Director of Intergovernmental Affairs; Cori Barrett, Director, Construction; Andrea Murphy, Director, Human Resources; William Kibaja, Controller; and Assistant Secretaries Ria Convery and Kristin MacDougall. Vandana Rao, Executive Office of Environmental Affairs (EEA) also was also in attendance remotely, and Joseph Favaloro, MWRA Advisory Board, participated remotely from MWRA headquarters.

Chair Card called the meeting to order at 10:03am. MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance. The Chair announced that except for Executive Session, the meeting was open to the public 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. Chair Card announced that the meeting would move into Executive Session after the Executive Director’s report, and that the Open Session would resume after the adjournment of Executive Session. She also announced that individual roll call votes would be conducted after each motion was made and given an opportunity for discussion.

APPROVAL OF NOVEMBER 16, 2022 MINUTES

A motion was duly made and seconded to approve the minutes of the Board of Directors’ meeting of November 16, 2022.

Chair Card 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>
Card Flanagan		
		Foti Pappastergion
Peña Vitale J. Walsh P. Walsh Wolowicz		

(ref. I)

REPORT OF THE CHAIR

Chair Card advised that the drought continued in Massachusetts, particularly the Northeast and Cape Cod regions, and that the Drought Management Task Force was monitoring the circumstances. She explained that rebounding from a prolonged drought can take many months, and asked members of the public to continue practice water conservation. Next, Chair Card reported that the advancement of the Baker-Polito Administration's net zero goals continued, including the Commission on Clean Heat's recommendations for heating buildings, retrofits, clean heat standards, workforce development, innovation, and technology. She noted that the Massachusetts Clean Energy and Climate Plan for 2050 would be published by the end of calendar year 2022 in accordance with state law, and stressed the importance of clean energy and climate initiatives. Next, Chair Card congratulated MWRA Advisory Board Executive Director Joseph Favaloro and staff for hosting a successful conference on water system expansion and thanked MWRA staff for their work on system expansion studies. She explained that system expansion, temporary entrance fee waivers under certain conditions, investments in water infrastructure, and the identification of opportunities to apply federal funding to these efforts were timely subjects for the Commonwealth. Chair Card noted that Governor Baker and her colleagues at EEA and DEP were paying close attention to ongoing system expansion discussions. Finally, Chair Card advised that MWRA Board of Directors Vice Chair John Carroll had announced that he would step down from his Board seat upon the appointment of his successor. She thanked Mr. Carroll for his decades of service and many invaluable contributions to MWRA and its Board of Directors. (ref. II)

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey thanked Mr. Carroll for his vision, candor, leadership, mentorship and dedication to MWRA. He then updated Board Members on the status of MWRA's Draft Environmental Impact Report (DEIR) filing for the Metropolitan Water Tunnel Program. He advised that a supplemental filing was expected to be required due to concerns raised by the City of Waltham, whose support is important to the Tunnel Program because of its key location. Mr. Laskey explained that staff would continue to work with the City to address their concerns. Next, he reported that the Massachusetts Emergency Management Agency (MEMA) had reimbursed MWRA \$450,000

for expenses related to Covid testing and related protective items, and thanked MEMA for their support. He then noted that MWRA staff had participated in its annual Angel Tree gift drive in support of the Salvation Army of Chelsea and commended staff for their generosity. Next, he wished Andrea Murphy well on her upcoming retirement from her position as Director of Human Resources and thanked her for her years of hard work and leadership. Finally, Mr. Laskey congratulated Mr. Favaloro and Advisory Board staff for holding a productive water system expansion workshop.

Board Member Pappastergion said that it had been an honor to serve on the Board with Mr. Carroll. He suggested that Board members and MWRA staff recognize Mr. Carroll more formally at a later date, and added that Mr. Carroll's departure from the Board will leave behind a huge legacy that he hoped he and his fellow Board members could live up to. Board Member Foti also wished Mr. Carroll well and described how Mr. Carroll had generously served as his respected mentor and advisor. Chair Card agreed that it would be fitting to celebrate Mr. Carroll's work and to thank him more directly, and encouraged Board members and staff to hold further discussions on the matter. (ref. III)

EXECUTIVE SESSION

Chair Card requested that the Board move into Executive Session to discuss Real Estate, since Open Session may have a detrimental effect on the negotiating position of the Authority. She announced that the planned topic of discussion in Executive Session was watershed land acquisition. She announced that the Board would return to Open Session after the conclusion of Executive Session.

A motion was duly made and seconded to enter Executive Session for this purpose, and to resume Open Session after Executive Session adjournment.

General Counsel Francisco Murphy reminded Board members that under the Open Meeting Law members who were participating remotely in Executive Session must state that no person is present or able to hear the discussion at their remote location. A response of "yes" to the Roll Call to enter Executive Session when their name was called would also be deemed their statement that no other person was present or able to hear the session discussion.

Upon a motion duly made and seconded, a roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		

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

Voted: to enter Executive Session, and to resume Open Session after Executive Session adjournment.

The Board moved to Executive Session to discuss Real Estate since discussing such in Open Session could have a detrimental effect on the negotiating position of the Authority.

*** EXECUTIVE SESSION ***

The meeting entered Executive Session at 10:21am and adjourned at 10:31am.

*** CONTINUATION OF OPEN SESSION ***

ADMINISTRATION, FINANCE AND AUDIT

Information

Delegated Authority Report – November 2022

Mr. Foti invited Board Members' questions about the Delegated Authority Report.

Board Member Jack Walsh asked for more information about the purchase of a replacement Muffin Grinder for the Braintree-Weymouth Pump Station. MWRA Chief Operating Officer David Coppes explained that the new grinder was needed to operate the facility during Braintree-Weymouth Pump Station Improvement Project construction.

Hearing no further discussion or questions, Mr. Foti moved to the next Information item. (ref. V A.1)

Internal Audit Department Activities Report – FY2022

MWRA Internal Audit Director Claude Cormier summarized highlights of the Internal Audit Activities Report for FY2022. Mr. Cormier described the scope of the annual report and noted that staff had identified nearly \$2 million in savings and recoveries in FY22. He then described Internal Audit staff goals including audit coverage, and the review of contracts and related documentation, and MWRA's policies, procedures and operational management methods. Next, Mr. Cormier noted that the Internal Audit report included a list of projects that were in process or planned for FY23, and explained that staff would continue to develop its risk assessment and reprioritize focus as warranted. He then reported that Internal Audit's cost savings in fiscal year 2022 was over \$538,000 including incurred cost audit recovery; potential cost savings from future change orders; and savings related to HEEC Cross Harbor Cable project. Next, Mr. Cormier described Internal Audit staff's strategies for controls and procedures, and the mitigation and elimination of risks of unwelcome outcomes or events. He added that a key Internal Audit team objective was to shorten the cycle time needed to close recommendations and implement corrective action. Finally, Mr. Cormier described recent and planned staff

restructuring and a staff promotion. .

Mr. Pappastergion requested information about a payment for MWRA's Charlestown Navy Yard lease that was noted in the report, and asked when the lease would expire. Mr. Cormier explained that the lease payment was included as part of the report's review of FY22 activities, and that Internal Audit staff would perform a final review of the lease upon its expiration in May 2023. Board Member Vitale asked if the report's findings were discussed with outside auditors. Mr. Cormier explained that the findings were reported and presented internally to management.

Hearing no further discussion or questions, Mr. Foti moved to the next information item. (ref. V A.2)

Information

FY23 Financial Update and Summary through November 2022

MWRA Finance Director Thomas Durkin summarized financial highlights for FY23 through November 2022. He reported that direct expenses were under budget by \$5 million (-4.5%) primarily due to full time equivalent (FTE) counts that were lower than budgeted (-113 FTEs). He noted that direct expense underspending was offset by overspending for chemicals (+9.6%) and utilities (+6.1%) such as energy, diesel fuel and natural gas; he advised that the rising costs of chemicals and utilities illustrated the impacts of inflation. Mr. Durkin then provided an overview of trends in Consumer Price Index, which had increased by 7.1% since November 2022, and rising prices, which appeared to be stabilizing. Next, he reported that indirect expenses were on budget (+0.6%), due to watershed protection efforts and reimbursements, and that Capital Finance was under budget by \$2.2 million (-1.2%), attributable to variable rate bonds. Mr. Durkin then advised that interest rates were volatile but generally lower than staff's budget estimate. He added that MWRA's budget variance was shrinking, but at a slower pace than in earlier this fiscal year. He then provided a brief general overview of MWRA's short- and long-term budgetary strategies with respect to inflation and interest rates. Finally, Mr. Durkin reported a positive total variance of \$15.6 million (8.2%) including revenue. He explained that revenue was higher than estimated, driven by the impact of interest rates on investment income, and \$4 million in unanticipated water sales to the City Cambridge.

Mr. Jack Walsh asked why overtime expenses were lower than estimated when MWRA was experiencing reduced staffing levels. Mr. Durkin explained that the overtime expenses were lower than anticipated to date because the MWRA service area had seen fewer significant weather events than expected due to drought, and advised that overtime spending could increase as the fiscal year progressed. Mr. Vitale asked for more information about calendar year 2022 MWRA's Pension Trust Fund and Other Post-Employment Benefits (OPEB) yields. Mr. Durkin advised that the Pension portfolio was down 10.5%, up from approximately -13% in October 2022. MWRA Deputy Finance Director/Treasurer Matthew Horan reported that through October OPEB was down 13.2% year-to-date.

Mr. Vitale asked if there was any consideration to making any adjustments to the portfolios. Mr. Durkin explained that portfolios are built with diverse assets that are designed to withstand

economic downturns, and that the portfolios continued to be well positioned. Mr. Vitale asked if MWRA employees participated in the Commonwealth of Massachusetts SMART Plan's deferred compensation program. Mr. Durkin responded in the affirmative. Mr. Vitale asked about the Authority's involvement in the plan, including whether MWRA has any input in the plan. There was brief, general discussion about the management and oversight of the SMART Plan.

Hearing no further discussion or questions, Mr. Foti proceeded to Approvals. (ref. V A.3)

Approvals

Appointment of Proxy for Fore River Railroad Corporation: Matthew R. Horan; and Direction of the Proxy to Elect FRRC Board Members: David W. Coppes, Rose Marie Convery, Thomas J. Durkin, Carolyn M. Fiore, Michele S. Gillen, Frederick A. Laskey, Carolyn M. Francisco Murphy, Brian Peña and John J. Walsh

A motion was duly made and seconded that the MWRA Board of Directors, as holder of all voting rights of all the issued and outstanding shares of stock of the Fore River Railroad Corporation, vote to appoint Matthew R. Horan, with the power of substitution, to vote as proxy at the next annual meeting and any special meeting of the stockholders for the Fore River Railroad Corporation in accordance with the form of proxy attached to the December 14, 2022 Staff Summary presented and filed with the records of this meeting. In addition, the MWRA Board of Directors directs the proxy to elect the following board members: David W. Coppes; Rose Marie Convery; Thomas J. Durkin; Carolyn M. Fiore; Michele S. Gillen; Frederick A. Laskey; Carolyn M. Francisco Murphy; Brian Peña; and, John J. Walsh.

MWRA Senior Financial Analyst Sean Cordy explained that the MWRA Board of Directors has annually appointed a proxy to vote for the elected Fore River Railroad Corporation's (FRRC) board members, and that staff were requesting the approval again this year.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. V B.1)

Proposed Amendment to the Management Policies of the Board of Directors—Threshold for Purchases

A motion was duly made and seconded to adopt the proposed amendments to the Management Policies of the Board of Directors to increase the general procedures threshold for purchases from not more than \$5,000 to \$10,000, as set forth in the December 14, 2022 Staff Summary presented and filed with the records of the meeting.

MWRA Director of Administration Michele Gillen introduced MWRA Purchasing Manager Ted Otis, who provided a summary of staff's recommendation to amend the Management Procedures of the Board of Directors' threshold for purchases. Mr. Otis advised that staff requested Board approval to amend the Procedures to increase the general threshold for purchases from \$5,000 to \$10,000. He explained that the amendment was consistent with sound business practices of the Commonwealth of Massachusetts. He added that the increased threshold would ensure that MWRA kept pace with the rate of inflation while continuing to handle routine purchases to support efficient operations. Finally, Mr. Otis noted that staff would update MWRA's corresponding purchasing policies should the Board adopt the proposed amendment.

Mr. Jack Walsh asked if staff could include analyses of any cost savings resulting from the proposed amendment in future Staff Summaries to the Board. Ms. Gillen explained that the proposed amendment was aimed at increasing operational efficiency rather than realizing cost savings. Mr. Foti noted that in his work experience at municipalities and other state agencies, this amendment would increase staff efficiency and streamline procurement workflows. Chair Card agreed with Mr. Foti and added that the proposed amendment was consistent with similar state agencies' policies. Mr. Vitale asked if Board approval was necessary for such an amendment. MWRA General Counsel Francisco Murphy explained that because the purchasing threshold is included in the Board of Directors' policy, Board approval is required to amend it. Mr. Foti asked why staff did not request approval for a higher threshold for purchases, given the current economic climate of rising inflation and higher costs. MWRA Acting Director of Procurement Rita Mercado explained that the \$10,000 threshold was consistent with the policies of municipalities and the Inspector General's guidance for sound business practices.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		

Yes No Abstain
Wolowicz

(ref. V B.2)

WASTEWATER POLICY AND OVERSIGHT

Information

Operations and Maintenance of the Fore River Pelletizing Plant Update

MWRA staff presented an update on the operations and maintenance of the Fore River Pelletizing Plant and the continued regulatory uncertainty concerning PFAS. . MWRA Deer Island Treatment Plant Director David Duest presented an overview of the pellet plant's location, functions and history. He noted that the plant has been operated and maintained under contract since its startup in 1991. He explained that the pellet plant is integral to the operation of the Deer Island Treatment Plant because it eliminates ocean disposal of digested sludge. He noted that the pellet plant was entering the final year of Amendment 3 of the second competitively bid contract. Next, Mr. Duest briefly described the process of converting liquid digested sludge into an exceptional quality fertilizer as defined by EPA and DEP, and noted that MWRA's operation and maintenance (O&M) contractor was responsible for pellet marketing and disposal. He then presented pellet distribution volumes by state in 2021, and noted that 37%-69% of the product had been distributed within New England over the past five years. He advised that New England distribution volumes had dropped to 37% in 2022, most of that due to PFAS concerns.

Next, MWRA Director of Environmental and Regulatory Affairs Rebecca Weidman presented an overview of the evolution of state and federal regulations related to PFAS over the past two years, including MA-DEP drinking water regulations. She reported that in 2022, MA-DEP promulgated regulations that included a maximum contamination limit (MCL) for six PFAS compounds at 20 parts per trillion, and that EPA had issued interim health advisories for PFAS, PFOA and two other PFAS compounds. She added that the EPA's PFAS and PFOA advisories were below the current detection methods used. Ms. Weidman then noted that the EPA's MCLs for PFAS and PFOA were currently under review, and that new federal drinking water standards for those compounds were expected to be issued in early 2023. She further advised that DEP would need to promulgate revised state standards for PFAS compounds that were at least as stringent as any new federal standards. Ms. Weidman noted Maine's 2022 ban of all biosolids land applications, and Connecticut's guidance to farmers recommending the request of PFAS tests for biosolids prior to land application. She further advised that Massachusetts could potentially revisit its approval of the suitability for Type One biosolids. Finally, she explained that the changes in regulations for PFAS compounds nationwide and within the region could have significant impacts on the ability to distribute pellets.

Mr. Duest then presented staff's recommendations to move forward with issuing an RFQP for the next operating contract, the primary goal of which would remain beneficial use of the pellets so long as that opportunity is available. He explained that the duration of the contract would be ten years, rather than the current 15-year contract duration. He explained that the RFQ/P would include separate line items for O&M, marketing and disposal and would expand the landfill contingency from four months to one year. Finally, Mr. Duest advised that expected increases in

landfill and transportation costs could drive up the price of pellet disposal.

Chair Card asked if staff had developed plans to address the expected increase in demand for landfill space. Mr. Duest explained that staff was evaluating the need to purchase more reserved landfill space for longer terms. He advised that only seven working landfills were currently operating in the New England region, with three expected to shut down within five years, and explained that staff would advertise a separate landfill contract if necessary. Mr. Peña asked if MWRA would need to dispose of pellets as hazardous waste if EPA was successful in expanding the CERCLA list to include PFAS and PFOA. Mr. Duest explained that MWRA's fertilizer pellets were currently below EPA's proposed standards, and that future standards were unknown. He then discussed concerns regarding CERCLA revisions and the potential for future cleanup claims.

Mr. Jack Walsh asked if there was further discussion or questions from the Board. Hearing none, he moved to the next Information item. (ref. VI A.1)

Public Meeting for Development of the Updated CSO Control Plan

Staff updated Board Members on the second public meeting for the development of the updated CSO Control plan for the Charles River, Mystic River and Alewife Brook, planned to be held jointly by MWRA and the Cities of Cambridge and Somerville on December 15, 2022. MWRA Assistant Director of Engineering Brian Kubaska noted that live language interpretation services would be available at the meeting, which had been widely publicized. He then presented an overview of the planned topics of discussion at the virtual meeting, including combined sewer systems' wet and dry weather operations, the purpose of the revised CSO control plan; significant CSO control achievements to date; and phases of the updated plan's development. Mr. Kubaska explained that staff intended to stress CSO's functions as sewer system relief points that protect ground surfaces and homes, and noted that staff would welcome the public to share input and feedback throughout the plan's development process. He reminded the Board of the extension requests by MWRA, Cambridge and Somerville to develop the updated plans. Mr. Kubaska noted that at the public meeting the goals of the CSO planning process will be reiterated, including the development of a new typical year which reflects future climate change, the development of sound alternatives to reduce or eliminate CSO that will support the further improvement of water quality, engagement of interested members of the public and consideration of potential impacts to Environmental Justice populations.

Next, Michael O'Keefe, MWRA Senior Program Manager, Planning noted that the public meeting presentation would include discussion of the updated typical year's usefulness for the development and measurement of effective CSO control strategies, and an overview of the process to develop a new typical year. He explained that staff would clearly communicate that climate change projections calculated through methodologies developed by City of Cambridge consultants and Cornell University climate scientists would be reflected in the new typical year. He also noted that a technical details slide deck that explained the typical year methodology in more detail was available to the public. He added that the meeting the public will be given a preview of what the typical year looks like compared to observed data. He noted that overall, on

average, staff expect slightly more annual rainfall in the future as well as more frequent intense storms in 2050, and that the public meeting would be include questions from attendees. Finally, Mr. O’Keefe presented to Board members the schedule for the updated CSO Control Plan as put forth in the extension request to EPA and DEP, and advised that this is the very early stages of the planning process and staff expected the final plans would be completed in December, 2026.

Chair Card asked about EPA and MA-DEP’s response to the extension requests. Mr. Kubaska explained that staff were hopeful for a response soon, but had not received a response yet, and there’s some discussion regarding whether it is related to the court ordered deadlines which include submission of a supplemental report in December 2024. Chair Card asked about any expectation for comment on the proposed changes to the typical year from the regulatory agencies or stakeholders. Mr. Kubaska explained that staff plan to solicit input from the public on the typical year and that staff are hopeful that what is being presented will be well received. Mr. Laskey stressed that what is being done to create new typical year has been recommended to or urged upon MWRA; and the Authority continues to do what it being asked of it. Chair Card agreed. MWRA Chief Operating Officer David Coppes noted that the consideration of future climate change is not a regulatory requirement, that MWRA is going above and beyond because it’s the right thing to do, and that staff are hopeful that what is being proposed will be accepted. Chair Card agreed. Mr. Laskey added that the question remains of how the long term plan and variances all come together. Mr. Vitale asked about any discussion on green infrastructure. Mr. Kubaska noted that he did not recall the specifics of the first public meeting, and he explained the public expressed interest in green infrastructure as a strategy to reduce CSOs as well as support other community issues. Mr. Laskey added that it included stormwater. Mr. Kubaska concluded by briefly explaining the issue of pollutant loads with stormwater.

Mr. Jack Walsh asked if there was further discussion or questions from the Board. Hearing none, he moved to Approvals. (ref. VI A.2)

Approvals

Approval of Appointment of Jim Ferrara to the Wastewater Advisory Committee

A motion was duly made and seconded to approve the addition of one new member, Mr. Jim Ferrara, to the Wastewater Advisory Committee.

MWRA Senior Program Manager, ENQUAL Wendy Leo described Mr. Ferrara’s qualifications and work experience, and explained that the Wastewater Advisory Committee (WAC) contract required Board approval of new member nominees. MWRA Director of Intergovernmental Affairs Sean Navin added that the Mr. Ferrara was an elite engineer at National Grid with key knowledge of energy, water and transportation infrastructure projects, and noted that WAC would have 14 members if Mr. Ferrara’s appointment were approved.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. VI B.1)

WATER POLICY AND OVERSIGHT

Board Member Vitale briefly offered well wishes to Mr. Carroll and congratulated Ms. Murphy on her upcoming retirement.

Contract Awards

Metropolitan Water Tunnel Program, Geotechnical Support Services: GEI-McMillen Jacobs JV, Contract 7557

A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to award Contract 7557, Metropolitan Water Tunnel Program Geotechnical Support Services, to GEI-McMillen Jacobs JV and to authorize the Executive Director, on behalf of the Authority, to execute said Contract in an amount not to exceed \$12,789,889.49 for a contract term of 36 months from the Notice to Proceed.

MWRA Director of Tunnel Redundancy Kathy Murtagh explained that the proposed geotechnical support contract would allow test boring work and geological data collection to continue as staff transitioned the Metropolitan Water Tunnel Program from preliminary design into final design. She noted that preliminary design was expected to continue through January 2024, and that procurement for final design was expected to begin in late 2023, with an anticipated start in mid-2024. Ms. Murtagh explained that the collection of geologic data was critical to the success of the Tunnel Program, and that the scope of work for the proposed contract included the drilling of approximately 40 deep test borings throughout the preferred tunnel alignment. Finally, Ms. Murtagh noted that the recommended firm would provide a cost-effective and well-qualified team with locally available staff and the flexibility needed to complete the investigation work as planned over three years.

Board Member Patrick Walsh noted the delta in hours between the staff estimate and the firm's proposal, and asked whether staff were comfortable with that particularly given the proposed hours of the low bidder. Ms. Murtagh explained that the recommended firm's approach to field work, including core logging in the field, was more efficient than those of the non-selected proposers, and that it provided a savings in hours. She noted that the firm's approach to field work was one of the reasons why the firm was chosen.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. VII A.1)

Contract Amendments/Change Orders

Quabbin Aqueduct Shaft 2 Repairs: Unified Contracting, Inc., Contract 7198, Change Order 2

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 2 to Contract 7198, Quabbin Aqueduct Shaft 2 Improvements, with Unified Contracting, Inc. for a lump sum amount of \$347,297.31, increasing the contract amount from \$1,289,000 to \$1,636,297.31, with no increase in contract term.

MWRA Director of Construction Cori Barrett began with an overview of the shaft's location, construction history and current function as a high level overflow. Ms. Barrett then provided background on the original scope of the project and of Change Order 1, which addressed unforeseen deterioration discovered during repair work. She then presented a summary of modifications and repairs to Shaft 2 since its construction in 1927. Next, Ms. Barrett presented the shaft's conditions as revealed during Change Order 1 work, including additional deteriorated concrete, cracks that required epoxy injection, badly splintered timbers, and deep spalls that required hand repair. She explained that the repair work was performed satisfactorily, the difficulty in negotiating costs and that the contractor has submitted a claim that exceeds the Executive Director's Board-authorized delegated authority amount of \$250,000. Finally, Ms. Barrett noted that those funds are still available for any issues that could arise during the contract's closeout.

Mr. Jack Walsh asked how frequently the Quabbin Shaft 2 overflow was used. Mr. Laskey explained that it's an emergency overflow; used occasionally. Mr. Coppes added that in his recollection the overflow was last used approximately 15-20 years ago, when roughly 500-600 million gallons per day was diverted from the Ware River to the Quabbin Reservoir. Mr. Walsh asked if the overflow could be capped. Mr. Coppes explained that the overflow was a needed relief point. Mr. Pappastergion noted the good quality of the work performed and expressed concern about the increased contract cost. He then asked for more information about the project's Design Engineer, and whether the shaft's deteriorated conditions could have been anticipated. Ms. Barrett explained that Santec performed design engineering work under task

order. She further explained that it would have been difficult to assess the extent of the shaft's deterioration because it had been obscured by many layers of concrete and other materials. She also noted that the shaft had been unsafe for entry until its cover and hatches had been replaced. Mr. Foti asked if the proposed change order would settle the contractor's claims. Ms. Barrett explained that the amount requested is what staff believe the contractor is owed which, between Change Order 1 and proposed Change Order 2, totals \$847,000, and that is less than the contractor's claim of over \$1.0 million. She further noted that staff expect the contractor's claim will go through the claims process. She explained that the contractor had submitted costs that staff believe are ineligible. Mr. Foti expressed concern regarding the increase and the lack of finality on the claim. Mr. Foti requested additional information regarding the negotiations with the contractor and asked whether staff attempted to reach an agreement. Ms. Barrett explained some of the costs submitted which staff believe are ineligible, and advised that while staff disagreed with the contractor's \$1.0 million claim, Change Orders 1 and 2 represented what staff believe are fair eligible costs for the time-consuming and challenging work performed. Ms. Barrett advised that staff had repeatedly discussed its intentions and rationale regarding payment for eligible costs with the contractor, and that the contractor was taking these discussions into consideration. Ms. Barrett noted that staff are confident in their number, but that it has to go through the claims process.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. VII B.1)

PERSONNEL AND COMPENSATION

Approvals

PCR Amendments – December 2022

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.

MWRA Director of Human Resources Andrea Murphy summarized three proposed PCR amendments, including a new position in the Executive Division, Security Department; a title and grade change to a filled position in the Operations Division, Laboratory Services

Department per Union settlement; and, a new position in the Operations Division, SCADA Department.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. VIII A.1)

Appointment of Tracy Leonard, Manager, Policy & Planning Support, Operations

A motion was duly made and seconded to approve the appointment of Tracy Leonard to the position of Manager, Policy and Planning Support (Non-Union, Grade 13), in the Operations Division at the recommended annual salary of \$114,500, commencing on a date to be determined by the Executive Director.

Ms. Murphy described the proposed candidate's work experience and qualifications.

Chair Card asked if there 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. VIII A.2)

Contract Amendments/Change OrdersExtension of Employment Contract Copy and Supply Clerk, Administration Division: Ward Merithew

A motion was duly made and seconded to approve the extension of an employment contract for Mr. Ward Merithew, Copy and Supply Clerk, Facilities Management Department, for a period of 6 months from January 1, 2023 to June 30, 2023, at the current hourly rate of \$15.76 per hour for an annual compensation not to exceed \$8,196 (20 hours per week for 26 weeks).

Ms. Murphy advised that staff recommended a six-month extension to the contract for a Copy and Supply Clerk position, and summarized the position's job duties. Mr. Laskey noted that this contract would end when MWRA vacates its Charlestown Navy Yard headquarters.

Mr. Pappastergion congratulated Ms. Murphy on her upcoming retirement. Ms. Wolowicz echoed Mr. Pappastergion's remarks and thanked Ms. Murphy for her helpfulness and preparedness. Mr. Foti wished Ms. Murphy luck in her future endeavors. Chair Card offered her best wishes and thanked Ms. Murphy for all she has done for MWRA.

Chair Card 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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. VIII B.1)

CORRESPONDENCE TO THE BOARDAuditor's Letter Accompanying the Audited Financial Statements

MWRA Controller William Kibaja noted that the Auditors are required to communicate with the Board the significant audit findings or issues related to their audit. He then reported that the Auditor, CliftonLarsonAllen LLP, did not identify any item impacting the performance of MWRA's Audited Financial Statements. Finally, Mr. Kibaja advised that the Auditor's letter included a schedule summarizing uncorrected misstatements of the financial statements, and such are included because they could potentially cause future period financial statements to be materially misstated.

Mr. Vitale noted that he had spoken to CliftonLarsonAllen LLP staff on behalf of the Board of Directors and reported that the Auditor's staff had offered positive feedback on Mr. Laskey,

MWRA's Finance staff, and MWRA's financial position.

Chair Card asked if there was further discussion or questions from the Board. Hearing none, she moved to Other Business. (ref. IX.1)

OTHER BUSINESS

Chair Card asked Board members if there was any Other Business.

Mr. Foti noted that the City of Chelsea School Department had contacted him to report that MWRA staff had assisted the City in cleaning up a major flood in a school basement. Mr. Foti thanked and commended staff for their help to re-open the school.

Mr. Laskey invited Board Members to participate in an after-work MWRA holiday gathering.

Chair Card reported that the Baker-Polito Administration's transition with Governor-elect Healey and Lieutenant Governor-elect Driscoll was going smoothly, and that she expected cooperation and information-sharing to continue. She advised that she would discuss the important work of the MWRA Board of Directors, MWRA and the MWRA Advisory Board with members of the incoming administration. Finally, Chair Card thanked MWRA Board members for their service and wished all meeting participants a safe, happy holiday season. (ref. X)

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>
Card		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

The meeting adjourned at 11:59am.

Approved: January 18, 2023

Attest:

Andrew M. Pappastergion, Secretary

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director *Frederick A. Laskey*
DATE: January 18, 2023
SUBJECT: MWRA's Ongoing Contribution to Wastewater Based Epidemiology

COMMITTEE: Wastewater Policy & Oversight

X INFORMATION
___ VOTE

Steven F. Rhode, Director of Laboratory Services
Carolyn M. Fiore, Deputy Chief Operating Officer
Preparer/Title

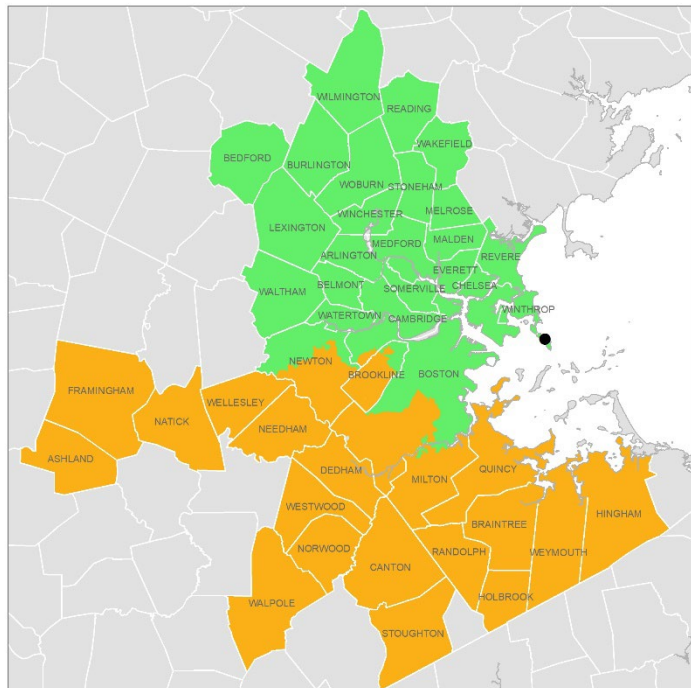
David W. Coppes
David W. Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

For information only. This staff summary provides an update on MWRA's ongoing contribution to Wastewater Based Epidemiology and some commentary on how that relates to the current state of the COVID-19 pandemic.

DISCUSSION:

The MWRA regional wastewater collection system accepts sewage flows from 43 metropolitan area communities, representing over two million residents, through a complex network of conduits and facilities that is strongly influenced by seasonal and wet weather conditions. Flows from the north and south systems are directed through head works facilities to the Deer Island Treatment Plant which has an average flow of 360 million gallons per day and can treat up to 1.3 billion gallons per day during wet weather. Treated effluent from the Deer Island Treatment Plant meets all state and federal environmental standards and is subject to a National Pollution Discharge Elimination System (NPDES) permit and is discharged through a 9.5 mile outfall tunnel to Massachusetts Bay.



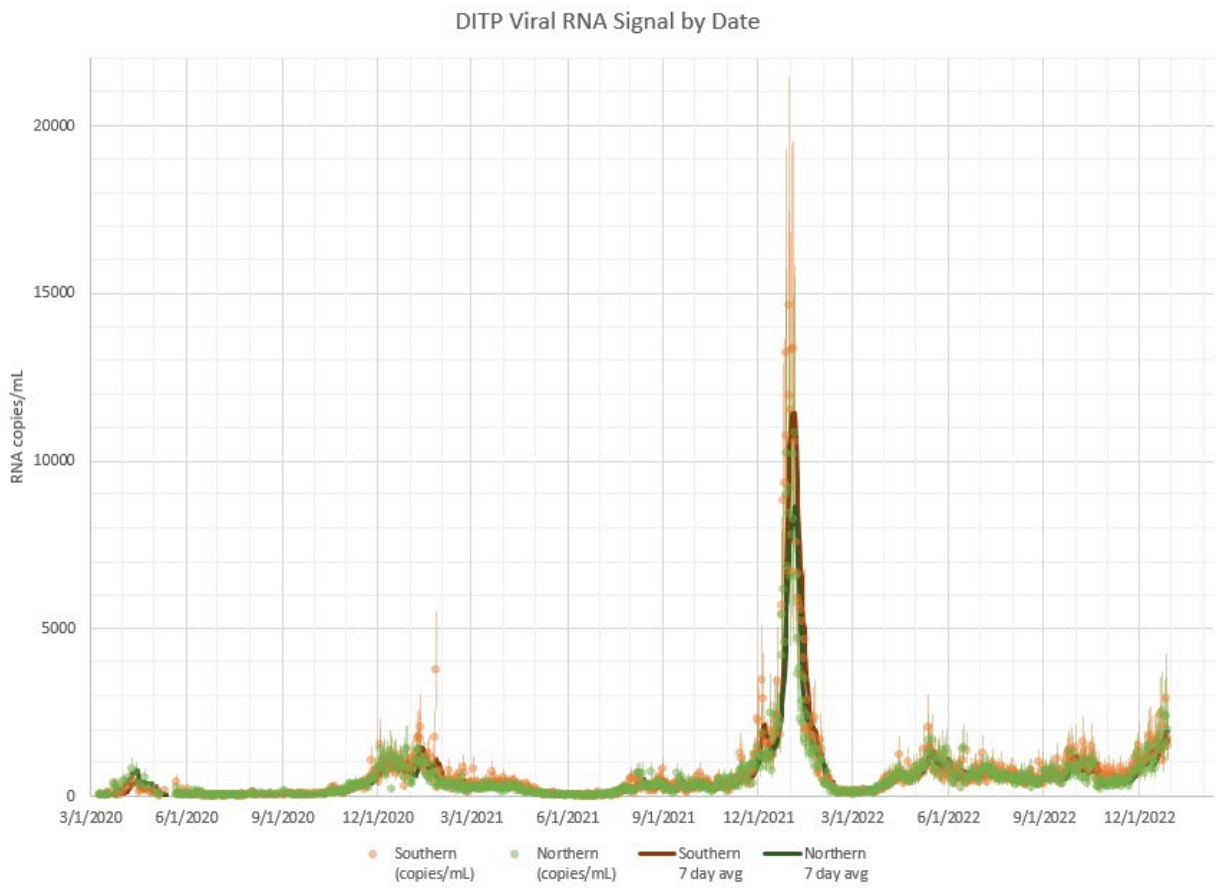
North and South system communities served by MWRA wastewater collection system

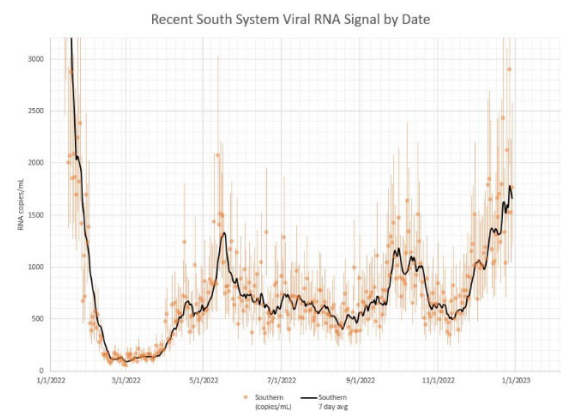
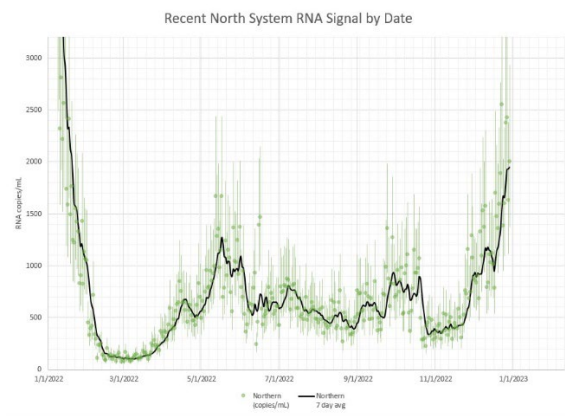
Analysis of wastewater for the genetic signal (viral RNA) of the SARS-CoV-2 virus that causes COVID-19 continues to be a cost effective approach to providing population-level screening for outbreaks of COVID-19. Biobot Analytics released the first demonstration of this approach in the United States using data from samples provided by MWRA in early March 2020. Studies from numerous locations around the

world have subsequently confirmed the efficacy of wastewater analyses to provide an early warning of COVID-19 outbreaks by up to seven days in advance of confirmed cases appearing in the public health data. MWRA has been publishing its wastewater COVID-19 data on MWRA.com since June 2020. MWRA was among the first utilities to provide this data, and local and national media as well as the public closely watch these postings. The Boston Globe and Boston Herald both reference our data regularly as a key indicator of the current local situation. There are now dozens of cities performing this analysis on their wastewater to support the clinical data collected by public health officials.

History

MWRA conducted an Early Warning Pilot for the Resurgence of COVID-19 under a sole source contract with Biobot Analytics approved by the Board of Directors at its June 24, 2020 meeting. The pilot program served as an early warning system to the MWRA and other state health agencies of outbreaks of COVID-19 within the area served by the MWRA sewer system. The program analyzed wastewater samples from the north and south influents to the Deer Island Treatment Plant with rapid analysis for the genetic signal (viral RNA) of the SARS-CoV-2 virus. Initial sampling was at a frequency of three days per week. The state COVID-19 Command Center requested that sampling be performed daily in November of 2020, and it has remained at that level. Sample results and reports are shared with the state COVID-19 Command Center, the Massachusetts Department of Health and Human Services and the public through MWRA’s website.





MWRA staff conducted a competitive procurement in October 2020, and entered into a contract with Biobot to test for the viral RNA of the SARS-CoV-2 virus. That contract was awarded in December 2020, initially for one year at a total cost of \$206,200. The contract was later amended with Board approval to extend it through the end of FY22. Currently, the testing continues under a contract agreement between Massachusetts Department of Public Health and Biobot Analytics. MWRA staff collect and ship the daily samples to Biobot Analytics.

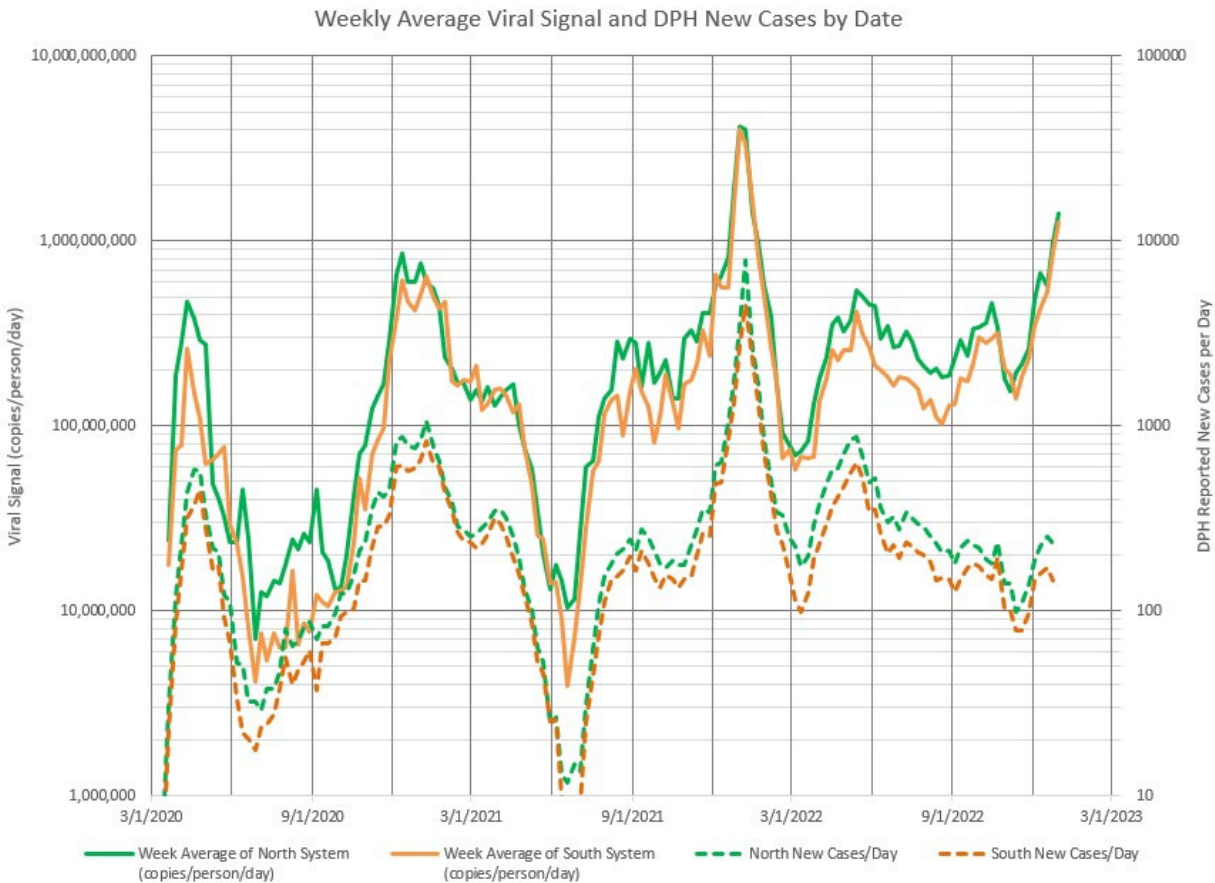
Continued Research Support

MWRA continues to provide samples to a variety of other entities to support research methods for analyzing wastewater for SARS-CoV-2 and other pathogens. In November 2022, MWRA entered into a Materials Transfer Agreement with Verily Life Sciences LLC at the request of the Massachusetts Department of Public Health. MWRA will provide samples at a frequency of three samples per week. Verily Life Sciences will test samples for a variety of pathogens and report out the data publicly on its WastewaterSCAN website¹ along with the data from other utilities from across the country. Verily Life Sciences hopes to enroll 300 utilities covering approximately 45% of the U.S. population in its program. Testing is performed in conjunction with Stanford University and Emory University and currently includes SARS-CoV-2 (abundance and variant monitoring), Mpox Virus, Influenza A and B, Respiratory Syncytial Virus (RSV), Norovirus and Human Metapneumovirus (HMPV), which is similar to RSV.

Relationship to the Ongoing Pandemic

If the definition of a pandemic is the rapid worldwide spread of a novel pathogen among an immunologically naïve population, then some would say that we have reached the end of that phase. However, a recent research study reported that only about a third of the world’s children have been either infected or vaccinated against COVID-19. This represents a substantial immunologically naïve population that is still susceptible to the virus. Even if one were to concede that the pandemic is “over,” it is clear that the public health emergency that the pandemic created is not. CDC has reported an average of 2,700 COVID-19 deaths per week over the last four weeks. Compare that to 1,626 influenza deaths in the third week of January 2018, the maximum for any week between 2015 and 2020. Clearly, we are still experiencing a significant level of COVID-19 mortality in the U.S. and around the world.

¹ <http://publichealth.verily.com/#Boston,%20MA:Influenza>




The graph above shows the relationship between weekly COVID-19 cases reported for the MWRA sewer communities by the Massachusetts Department of Public Health and the weekly average of the wastewater viral RNA signal reported by Biobot Analytics. The two signals have tracked well against each other throughout the data record. The trend in reported cases has diverged from the wastewater signal in recent months. This is likely due to fewer people seeking testing from healthcare providers or reporting test results to their providers. This illustrates the ongoing benefit of wastewater testing; it provides an insight into what is happening at the population level without being biased by who is being tested.

BUDGET/FISCAL IMPACT:

Costs associated with the two wastewater sampling contracts (OP-419 and OP-420) during FY21 and FY22 were reimbursed to MWRA by the Massachusetts Emergency Management Agency. The Massachusetts Department of Public Health is paying Biobot Analytics for the current testing program through 2023 at least. The agreement with Verily Life Sciences LLC calls for MWRA to be reimbursed for sampling costs at a flat rate of \$200 per sample.


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 18, 2023
SUBJECT: Update on Temporary Fluoride Shutdown for Construction

COMMITTEE: Water Policy & Oversight

X INFORMATION
 VOTE

Valerie Moran, Director, Waterworks
Stephen Estes-Smargiassi, Director, Planning and Sustainability
Preparer/Title

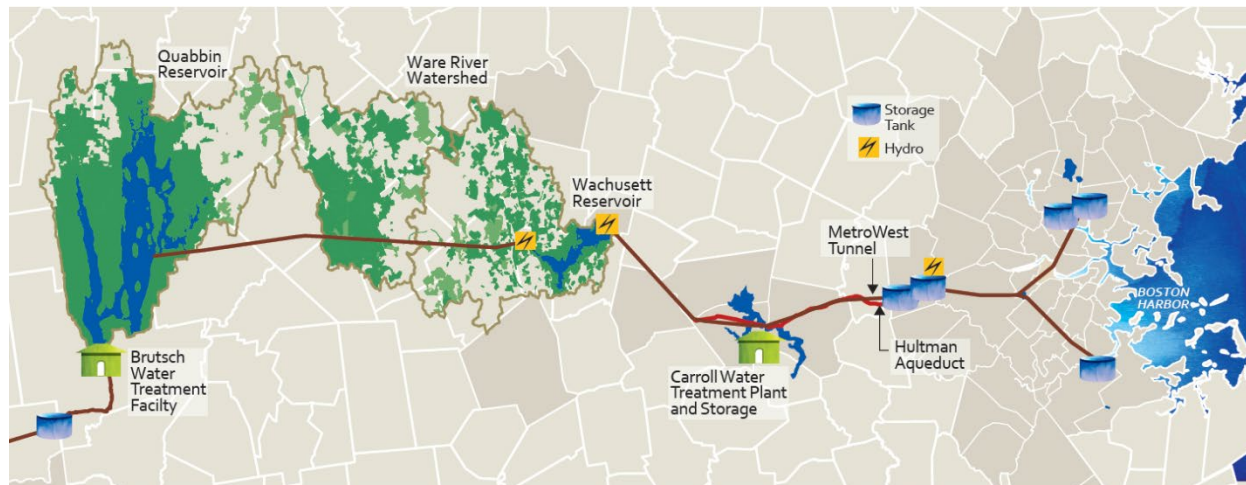

David Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

For information only.

DISCUSSION:

Water from the Quabbin Reservoir and Wachusett Reservoirs is transferred through hydroelectric generating facilities down to the John J. Carroll Water Treatment Facility in Marlborough, which provides approximately 185 million gallons per day of drinking water to 45 metropolitan Boston and MetroWest communities. The plant achieves primary disinfection using ozone and ultraviolet light, adjusts pH and alkalinity for lead and copper corrosion control, and provides residual disinfection using monochloramine (a combination of chlorine and ammonia.) In addition, MWRA adds fluoride for dental health as recommended by the CDC, and as regulated by the Massachusetts Department of Public Health (DPH) and the Massachusetts Department of Environmental Protection (MassDEP.)



MWRA Drinking Water Treatment and Transmission Facilities

MWRA is about to replace large portions of the almost 20-year-old chemical feed system for fluoride at the plant. To safely and efficiently perform the work, it will be necessary to shut down the fluoride feed system for several months. MWRA has been providing fluoridated water to the

region since the 1970s, and due to its importance in protecting dental health, consulted with the Department of Public Health Oral Health Office on appropriate outreach prior to the shutdown.

Staff have reviewed the project and a proposed notification process with staff from DPH and MassDEP and received their approval for the manner in which MWRA will provide outreach.

Project Description and Schedule:

The project is a portion of Contract 7598, which includes the replacement of chemical feed equipment for both fluoridation and the sodium carbonate (soda ash) used for pH and alkalinity adjustment for corrosion control. Work on the soda ash feed system will not necessitate a shutdown of corrosion control. Construction Contract 7598 was awarded to Walsh Construction Company II, LLC for \$2,479,000 at the January 2022 Board of Directors' meeting. The project Notice to Proceed was issued on March 11, 2022 with a 15-month contract duration.



Carroll Water Treatment Plant

The fluoride feed portion of the project includes removal and replacement of:

- weight loss differential fluoride feeders;
- piping in the Chemical Building and in the Post Treatment Building;
- underground tubing between the Chemical Building and the Post Treatment Building;
- control panels for the weight loss feeders;
- fill piping from the fill station to the bulk storage tank; and
- piping between the bulk storage tanks and the day tanks.

All of the existing Chlorinated Polyvinylchloride (CPVC) piping and appurtenances will be replaced with new Polyvinylidene Fluoride (PVDF) piping and appurtenances. The PVDF material is substantially more resistant to the hydro-fluorosilicic acid used to fluoridate the water. Replacing all the CPVC with PVDF at once will also reduce the likelihood of failures over its useful life by minimizing the number of temporary-to-permanent connections needed.



Fluoride Tanks and Piping

To do the work safely and to reduce the risk of operational problems, staff plan on using all of the fluoride supply, emptying the tanks and piping, and handing the empty system over to the contractor, who will then be able to replace all the components safely. When the work is

completed, the new system can be safely tested and adjusted with water before reintroducing chemical to the system, decreasing the risk of unexpected issues and reducing personnel safety risks.

The construction work will take approximately six weeks. Assuming additional time for draining the system prior to work and then testing at the completion, yields an expected duration for the fluoridation system being off-line of approximately three months.

Current schedule is for the work to begin in March.

Planned Notification Procedures:

Staff reviewed the project, its schedule and MWRA's proposed notification processes with staff from DPH in December and followed up with additional materials in early January. DPH staff indicated that they did not see any health issues from a cessation of fluoridation for that time period and indicated that they did not believe any specific advice to dentists on additional fluoride supplements was necessary.

After consultation between MassDEP and DPH, both agencies approved MWRA's outreach plan.

MWRA staff will provide notice to all the communities served by the Carroll Plant prior to and during the shutdown, as detailed below:

- email notice from MWRA to all local water superintendents and local health officers;
- note on highlights page of MWRA Monthly Water Quality report beginning in January and continuing throughout the shutdown;
- notice of the temporary shutdown added to MWRA's fluoridation website page; and
- notice on front page of the MWRA website prior to and during shutdown.

The first email to local officials is planned to go out the week of January 16, and information will be included in the monthly Water Quality Update (issued around January 20). Information will be posted on MWRA's website that week as well.

Notification will be repeated later in February closer to the start date, and staff will keep material on the website and in the Water Quality Update throughout the shut down, and then issue an email to water and health officials when fluoride is turned back on.

BUDGET/FISCAL IMPACTS:

The FY2023 CIP includes \$2,479,000 for Contract 7598.

MBE/WBE PARTICIPATION:

Contract 7598 includes 6.30% and 2.17% participation for MBE and WBE respectively.

STAFF SUMMARY

TO: Board of Director
FROM: Frederick A Laskey, Executive Director
DATE: January 18, 2023
SUBJECT: PCR Amendments - January 2023




COMMITTEE: Personnel and Compensation

 INFORMATION

 X VOTE

Wendy Chu, Director of Human Resources
Preparer/Title



Michele S. Gillen
Director, Administration

RECOMMENDATION:

To approve amendments to the Position Control Register (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 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.

January 2023 PCR Amendments

There are three PCR Amendments this month.

Organizational Changes:

1. Title and grade change to one vacant position in the Executive Division, Public Affairs Department from Community Relations Manager, Unit 6 Grade 13 to Environmental Justice Community Liaison, Unit 6 Grade 11 to better meet staffing needs.
2. Title and grade change to one vacant position in the Executive Division, Public Affairs Department from Special Projects Coordinator, Unit 6 Grade 8 to Community Relations Liaison, Unit 6 Grade 11 to better meet staffing needs.
3. New position in the Operations Division, Engineering and Construction Department for a Unit 9, Grade 30 Senior Program Manager, Engineering and Construction to better meet staffing needs.

BUDGET/FISCAL IMPACT:

The annualized budget impact of these PCR amendments will be a maximum cost of \$139,719. Staff will ensure that the cost associated with these PCR amendments will not result in spending over the approved FY23 Wages and Salaries budget.

ATTACHMENTS:

New Job Descriptions

Old Job Descriptions

**MASSACHUSETTS WATER RESOURCES AUTHORITY
POSITION CONTROL REGISTER AMENDMENTS
FISCAL YEAR 2023**

PCR AMENDMENTS REQUIRING BOARD APPROVAL - January 18, 2023																		
Number	Current PCR #	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget Salary	Estimated New Salary		Estimated Annual \$ Impact		Reason For Amendment			
B18	Executive Public Affairs 8250036	V	T, G	Community Relations Manager	6	13	Environmental Justice Community Liaison	6	11	\$145,649	\$74,323	-	\$113,729	-\$71,326	-	-\$31,920	To better meet staffing needs.	
B19	Executive Public Affairs 8250038	V	T, G	Special Projects Coordinator	6	8	Community Relations Liaison	6	11	\$85,378	\$74,323	-	\$113,729	-\$11,055	-	\$28,351	To better meet staffing needs.	
B20	Operations Engineering & Construction TBD	N/A	N/A	N/A	N/A	N/A	Senior Program Manager, Engineer and Construction	9	30	\$0	\$102,604	-	\$143,289	\$102,604	-	\$143,289	To better meet staffing needs.	
BOARD TOTAL=					2													
										TOTAL:				\$20,223	-	\$139,719		

**MWRA
POSITION DESCRIPTION**



POSITION: Community Relations Manager

DIVISION: Public Affairs

DEPARTMENT: Public Affairs

BASIC PURPOSE:

Manages communication and relationships with MWRA communities to provide customer service, improve awareness of the impacts and benefits of MWRA projects and resolve community concerns.

SUPERVISION RECEIVED:

Works under the general supervision of the Deputy Director of Community Relations.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Participates with other planning, engineering and operational staff in the management of MWRA projects and programs impacting the communities.
- Serves as MWRA liaison to local elected and appointed officials and citizens of communities in the MWRA service district.
- Manages meetings and relations with relevant constituent groups including environmental and citizen advisory committees. Addresses community organizations as appropriate.
- Ensures consistent delivery of information to the public regarding MWRA maintenance activities and construction projects.
- Has responsibility for all verbal and/or written inquiries from the public regarding MWRA activities.
- Provides support for after-hours and weekend project problems and operational crises.

- Answers inquiries from public regarding operating and capital projects underway in the service area. Coordinated with MWRA and consultant project managers and engineers to resolve concerns regarding impact on communities. Provides support in the event of project problems and operational crises.
- Attends daytime and evening community meetings, responding as an official spokesperson of the MWRA.
- Recommends project changes and modifications in response to concerns from neighborhood groups and community leaders through regular attendance at job meetings with project managers.
- Directs preparation of necessary documents with operating divisions to secure permits and abutter sign-offs from local authorities.
- Addresses community and professional organizations and maintains liaison relationship with other agencies.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical, writing and communication skills as normally attained through a four (4) year college program in public administration, political science, communications or related field; and
- (B) Understanding of community relations, project management and public organizations and how to deal with controversial issues as acquired by six (6) to eight (8) years of experience; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Ability to attend evening meetings on a frequent basis.
- (B) Excellent interpersonal, written and oral communications skills.
- (C) Ability to work independently and to assist with the coordination of emergency response activities.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

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

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

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

October 2006

**MWRA
POSITION DESCRIPTION**

NEW

POSITION: Environmental Justice Community Liaison

DIVISION: Executive

DEPARTMENT: Public Affairs

BASIC PURPOSE:

Works with Public Affairs and MWRA staff implementing public awareness and participation programs for MWRA Capital Improvement Projects in Environmental Justice (EJ) Communities, including those who have limited English proficiency, and develops contacts in EJ neighborhoods. Collaborates with staff across MWRA to coordinate internal and external diversity, equity, inclusion, environmental justice, and accessibility engagement activities.

SUPERVISION RECEIVED:

Works under the general supervision of the Director of Intergovernmental Affairs.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Assists Director of Intergovernmental Affairs and MWRA staff with identifying and executing strategies that encourage public participation and community outreach initiatives regarding MWRA projects and maintenance operations across all communities. Strategies should include encouraging public participation in communities with limited English proficiency.
- Works with Operations Division staff to ensure timely communications to the public regarding MWRA emergency or routine maintenance operations and to address community concerns.
- Attends project meetings to help coordinate communications between departments and impacted communities.
- Contributes to assessing environmental justice impact and comprehensive outreach and communications strategies across the MWRA service area.
- Assists with conducting research and drafting written communications to effectively convey environmental justice impacts during project development and implementation.

- Collaborates with Public Affairs staff to develop targeted communication and engagement strategies to ensure that diverse stakeholders can participate in meetings that may affect their communities. This includes identifying languages that materials should be translated into and interpretation services required for public meetings.
- Serves as a liaison to elected and appointed municipal officials in MWRA's member communities.
- Responds to verbal and/or written inquiries from the public regarding MWRA activities.
- Coordinates and attends community meetings on behalf of the Authority.
- Assist MWRA Community Relations Liaison as needed.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and writing skills as normally attained through a Bachelor's degree in public administration, political science, communications or related field; and
- (B) Working knowledge and understanding of community relations/public affairs as acquired through four (4) to six (6) years of related experience; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Ability to work independently Strong interpersonal skills
- (B) Sensitivity to populations of varying income, ethnicity, and language.
- (C) Ability to deal with others with tact and diplomacy.
- (D) High-level understanding of the MWRA water and wastewater systems is preferred.
- (E) Bilingual language capabilities are preferred (English/Spanish).

SPECIAL REQUIREMENTS:

Availability to attend community meetings each week outside the normal business hours (i.e. nights and/or weekends)

A Valid Massachusetts Class D Motor Vehicle Operators License.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

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

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

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

January 2023

**MWRA
POSITION DESCRIPTION**



POSITION: Special Projects Coordinator
DIVISION: Executive
DEPARTMENT: Public Affairs/Communications

BASIC PURPOSE:

Coordinates the production of multi-departmental publications, assists with graphics for presentations.

SUPERVISION RECEIVED:

Works under the general supervision of the Special Assistant to the Executive Director.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Works with staff across departments in the production of financial and technical documentation and reports.
- Works with Engineering and Construction and Public Affairs staff to produce construction notices and updates for the general public via web and hardcopy.
- Works with Special Assistant and other staff on graphics for presentations.
- Assists in the production of forms and signage for internal and external use.

SECONDARY DUTIES:

- Reviews and proofreads documents prepared by other staff.
- Assists with preparation of materials for groundbreakings, facility openings, etc.
- Performs other duties as required

MINIMUM QUALIFICATIONS:

Education and experience:

- (A) A four (4) year college program in Graphic Design, Computer Sciences, Information Services, Engineering or related field; and
- (B) One (1) to three (3) years professional experience in administrative and technical work, such as data tracking and analysis, and document management.
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent computer skills, including scanning and database management.
- (B) Excellent interpersonal, oral and written communications skills.
- (C) Excellent organizational skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operator's License

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

The employee must frequently 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, peripheral vision, distance vision, depth perception and the ability to adjust focus.

WORK ENVIRONMENT:

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

While performing the duties of this job, the employee regularly works in an office environment.

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

November 2014

**MWRA
POSITION DESCRIPTION**

NEW

POSITION: Community Relations Liaison

DIVISION: Executive

DEPARTMENT: Public Affairs

BASIC PURPOSE:

Communicates project updates, provides customer service, and maintains relationships with constituents and cities and towns under the guidance of senior management. Serves as a liaison to the public on MWRA projects and shares community concerns with MWRA managers.

SUPERVISION RECEIVED:

Works under the general supervision of the Director of Intergovernmental Affairs.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Works closely with other work units such as Planning, Engineering and Operations staff to understand impacts of MWRA projects and programs to the communities in the MWRA service district.
- Serves as a liaison to local elected and appointed officials and citizens of communities as well as community and professional organizations including attending meetings.
- Ensures consistent delivery of information to the public regarding MWRA maintenance activities and construction projects by working closely with the Communications Manager.
- Drafts necessary documents with Operations Division to secure permits and abutter sign-offs from local authorities.
- Communicates concerns from neighborhood groups and community leaders with MWRA project managers.
- Provides community relations support for after-hours and weekend issues as needed.

SECONDARY DUTIES:

- Supports Environmental Justice Community Liaison as necessary.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Bachelor's degree in public administration, political science, communications, or related field; and
- (B) At least four (4) to six (6) years of experience in community relations, public affairs, public administration, or related field; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Ability to work independently.
- (B) Ability to handle conflict with tact, diplomacy, professionalism, and confidentiality.
- (C) General knowledge of engineering concepts.
- (D) Excellent interpersonal, written and oral communications skills.
- (E) Strong analytical skills.
- (F) Basic understanding of the MWRA water and wastewater systems preferred.
- (G) Bilingual language capabilities (English/Spanish) or another language preferred.

SPECIAL REQUIREMENTS:

Availability to attend community meetings each week outside the normal business hours (i.e. nights and/or weekends).

A valid Massachusetts Class D Motor Vehicle Operators License.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

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

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

The employee occasionally works in outside weather conditions at construction sites.

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

January 2023

**MWRA
POSITION DESCRIPTION**

NEW

POSITION: Senior Program Manager (Engineering & Construction)

DIVISION: Operations

DEPARTMENT: Engineering & Construction

BASIC PURPOSE:

Manages all projects in assigned programs from conceptual planning through construction contract award and supports construction implementation. Oversees engineering staff in their development, procurement, and management of engineering design consultant contracts for the design and construction of various capital improvement projects, studies, and programs.

SUPERVISION RECEIVED:

Works under the general supervision of the Assistant Director, Engineering.

SUPERVISION EXERCISED:

Exercises close supervision of professional engineering and project management staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Manages assigned programs including conformance to standards and procedures, staffing assignments, project scheduling and prioritization, and work product quality in accordance with the Quality Management Plan.
- Oversees the work of professional engineering consultants under contract to the MWRA including quality of outputs, budget and schedule compliance and conformance to contract terms.
- Prepares and manages staff development and provides thorough review of staff and consultant work products, including scopes of service, requests for proposals, project specifications, contract documents, and necessary documents to secure contracts, grants and permits from various federal and state agencies.
- Supervises professional engineering work of substantial difficulty and importance requiring the application of professional engineering principles and the exercise of independent engineering judgement.

- Oversees staff coordination of projects with communities, government agencies and other MWRA departments.
- Coordinates and manages the preparation of annual and supplementary budget requests on future and current capital projects.
- Participates in consultant selection procedures and contract negotiations.
- Addresses community and professional organizations on agency programs and policies, prepares reports and correspondence and maintains liaison with representatives of other agencies.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Knowledge of engineering principles and practices as normally attained through Bachelor's Degree in civil engineering or related field; and
- (B) Understanding of issues related to engineering design as acquired through eight (8) to ten (10) years of experience in water and/or wastewater field, of which a minimum of four (4) years is in a supervisory capacity; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated skill in the design of water and/or wastewater facility and system components including CSO remediation and regulatory requirements.
- (B) Knowledge of water and/or wastewater facility and system operations, process control theory, practices & principles, and computer applications.
- (C) Excellent interpersonal, oral and written communication skills. Ability to communicate technical information effectively.
- (D) Strong organizational skills and the ability to manage multiple priorities with competing

demands for resources.

- (E) Excellent analytical and quantitative skills, and attention to detail with some experience supporting financial tracking and monitoring.
- (F) Skill in the development and oversight of MGL Chapter 30 and 149 contracts.
- (G) Proficient computer skills including MS Office Suite and project management software.

SPECIAL REQUIREMENTS:

A valid Class D Massachusetts Motor Vehicle Operators License.

Massachusetts Registered Professional Engineer preferred.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools 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, walk, climb or balance, stoop, kneel, crouch, or crawl, taste or smell.

The employee must frequently lift and/or move up to 10 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, 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 wet and/or humid conditions and vibration. 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 an office setting.

November 2021

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 18, 2023
SUBJECT: Appointment of Kristen A. Patneau, Manager, Energy, Operations Division

COMMITTEE: Personnel & Compensation

Wendy Chu, Director, Human Resources
Carolyn M. Fiore, Deputy Chief Operating Officer
Preparer/Title

INFORMATION

VOTE


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

RECOMMENDATION:

To approve the appointment of Ms. Kristen A. Patneau to the position of Manager, Energy (Non-Union, Grade 14) in the Operations Administration Department, at an annual salary of \$143,000 commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Manager, Energy, in the Operations Administration Department became vacant with the departure of the previous incumbent. The position oversees the Energy Management Unit and reports to the Deputy Chief Operating Officer. The position oversees MWRA's renewable energy portfolio, energy efficiency initiatives, and cost reduction programs and contracts related to the operations of MWRA facilities. The position is responsible for the development and implementation of a comprehensive Energy Management Plan, and plays a central role within the agency, providing coordination and communication with MWRA management and staff, as well as outside agencies and regulators.

Selection Process

This position was posted internally and externally. A total of 13 candidates applied for the position. Two candidates, one internal and one external, were determined to meet the qualifications of the job description. Both candidates were interviewed by the Chief Operating Officer, the Deputy Chief Operating Officer, and Special Assistant for Affirmative Action. Upon completion of the interviews, it was determined that Ms. Kristen Patneau was the most qualified candidate to fill the position based upon her combination of education, knowledge and experience in the energy and wastewater sectors.

Ms. Patneau has over 32 years of professional experience, including the last 20 in the energy field. Ms. Patneau is currently the Director of Innovation for PowerOptions, where she manages and leads new product services, including energy efficiency and clean transportation programs. In this role, she advises public and non-profit clients to create value in the energy realm, keeping abreast of market conditions and rules. Ms. Patneau also worked as the Energy Storage and Resiliency Program Coordinator for the Massachusetts Department of Energy Resources managing the grant program for energy storage. Prior to that, Ms. Patneau worked at MWRA

for 24 years; in the Residuals program for the first 9 years and then in roles of increasing responsibility overseeing Energy Management at the Deer Island Treatment Plant. She managed the planning, design, construction, operation and maintenance phases of clean energy assets, including solar and wind installations. In addition, she managed the purchase of electricity, the sale of Renewable Energy Certificates, and energy conservation initiatives. Before coming to MWRA, Ms. Patneaude worked as an Engineer with Metcalf & Eddy, Inc.

Ms. Patneaude's extensive experience in the implementation of energy programs, including the oversight of the design and installation of several clean energy projects on behalf of the MWRA, as well as her recent experience at both PowerOptions and DOER, make her an excellent candidate for the position of Manager, Energy.

Ms. Patneaude holds B.S. in Civil Engineering from the University of New Hampshire and an Engineer in Training Certificate. She also has a Massachusetts Grade 6 Wastewater Treatment Plant Operator's License.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the Operations Division's FY23 Current Expense Budget for this position.

ATTACHMENTS:

Resume of Kristen A. Patneaude
Position Description
Organizational Chart

KRISTEN A. PATNEAUDE

PROFESSIONAL EXPERIENCE

PowerOptions, Boston, MA

Director of Innovation

2018 - present

Serves as lead to develop new and supplemental products and services that create value for PowerOptions members. Identify opportunities for collaboration with potential partners that advance the strategic and long-term interests of both PowerOptions and its members.

- Lead PowerOptions Clean Transportation Program, including EVSE program procurement, Member education and support, fleet electrification tool development and fleet analyses.
- Manage PowerOptions Energy Efficiency Program, including development and provision of Member education, liaison with utility and other external stakeholders, and develop and manage energy efficiency program partnerships.
- Drive innovative solutions from inception to market in service of PowerOptions members. Includes engaging cross-functional staff, management, Members and Board of Directors to identify opportunities for new/groundbreaking and supplemental, products and services.
- Development of new products and services from research, brainstorming, testing, and assessment to launch and implementation. Facilitate real-time sharing of knowledge and best practices throughout development. Provide business case to support solution implementation. Create operational launch plans and drive transition from business case to fully operational, including budget development and tracking.
- Provide customized gas and electricity budgets for Members, including evaluation of usage and demand profiles, and rate analysis.
- Monitor local and regional clean energy policy and progress and market participation rules, for expansion of existing and development of new program offerings.
- Member of senior management team responsible for strategic planning and organizational operations.
- Member of PowerOptions' Core Alliance for Race and Equity Committee, fostering diversity and inclusion in the workplace and the clean energy industry.

Massachusetts Department of Energy Resources, Boston, MA

Energy Storage and Resiliency Program Coordinator

2017- 2018

Supported the Commonwealth's clean energy and climate adaptation goals by advancing DOER's energy storage and energy resiliency initiatives. Included DOER oversight of Advancing Commonwealth Energy Storage (ACES) grant program, involving RFP development, application review and selection, and contract award. Oversight of development and management of clean energy resiliency contracts, evaluation of combined heat and power (CHP) for resiliency, and engagement with stakeholders and grant recipients. Represented DOER on interagency Project Management Team developing State Hazard Mitigation and Climate Adaptation Plan.

Massachusetts Water Resources Authority, Boston, MA

1993-2017

Program Manager, Energy Management

2008 – 2017

Project Manager, Energy Management

2002 - 2008

Energy and Sustainability Management

Responsible for MWRA clean energy development and management, energy supply management, energy conservation, and energy cost reduction programs

- Served as primary internal and external representative for agency energy issues: led MWRA Energy Task Force Committee focused on energy efficiency and sustainability for agency-wide operations, participated in energy budget development and delivered program updates to Advisory Board, led DITP clean energy tours, and liaised with other relevant professional organizations and agencies.
- Managed planning, design, construction, operation and maintenance phases of professional services, non-professional services, and design-build-install of over 4MW of MWRA clean energy assets; including technical review of proposals, project design documents, schedule, budget and consultant deliverables.
- Managed competitive purchase of electric power for MWRA accounts. Modified contract structures with evolving MA electricity market, structured to combine budget certainty with opportunity for market hedging with managed risk. Over \$16 million annual contract value.
- Led evaluation and implementation of energy efficiency improvements to various plant process operations (lighting retrofits, pumping optimization, process equipment upgrades), resulting in estimated combined energy savings of over \$3 million annually.
- Prepared applications and managed grant funding for various renewable energy/energy conservation efforts. Secured federal, state, and local utility grant and rebate funding of over \$6 million for renewable energy and efficiency initiatives.
- Managed and optimized MWRA's renewable energy generation, yielding revenue value from MA Renewable Portfolio Standard Renewable Energy Certificates of over \$8.5 million.
- Managed MWRA's energy generating assets participation in ISO-NE Demand Response Programs. Identified comprehensive demand side management strategies to maximize net avoided costs. Recognized over \$8 million in revenue and avoided cost savings.
- Initiated and managed an MWRA Energy Storage Feasibility analysis, including refinement of energy storage options, opportunities for collaboration, and funding resources.

Project Engineer, Residuals Management/Operations 1996 - 2002

Staff Engineer, Residuals Management 1993 - 1996

- *Biosolids Program* – Managed commercial and municipal marketing programs, including operations, distribution, and stakeholder coordination; monitored environmental compliance.
- *MWRA Sludge Processing Facility Expansion* - Owner representative for design and construction contract of sludge processing facility expansion - \$6 million design, \$35 million construction.
- *Grit and Screenings Hauling and Disposal* - Contract management for facilities over \$1M annual contract value.

Earth Services Corporation, Inc., Taunton MA, - Surveyor II (part-time) 1983 - 2012

Metcalf & Eddy, Inc., Laurel, MD - Engineer I 1990 - 1993

EDUCATION AND CERTIFICATIONS

B.S. Civil Engineering. University of New Hampshire, Durham, NH
 Engineer in Training Certification (No. 2224)
 Grade 6 Wastewater Treatment Plant Operator's License
 MA DEP Title 5 Soil Evaluator

COMMUNITY SERVICE

Boston Partners in Education 1996 – 2011
United Womens Ball Hockey Foundation 2017 – present
Greater Ashmont Main Street 2018 – present

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Energy
DIVISION: Operations
DEPARTMENT: Operations Administration

BASIC PURPOSE:

Provides management of Energy Management Unit. Responsible for the development and implementation of a comprehensive Energy Management Plan. Oversees MWRA's renewable energy portfolio, energy efficiency initiatives, and cost reduction programs and contracts related to the operations of MWRA facilities. The position will play a central role within the agency, providing coordination and communication with MWRA management and staff, as well as outside agencies and regulators, to ensure the continued success of these programs.

SUPERVISION RECEIVED:

Works under the general supervision of the Deputy Chief Operating Officer.

SUPERVISION EXERCISED:

Provides matrix supervision of the Program Manager, Energy Management; Program Manager, Energy and Environmental Management; and Project Engineer, and other staff as assigned.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and oversees implementation of a Comprehensive Energy Management Plan.
- Stays abreast of energy-related federal, state and local regulations, and energy markets to minimize MWRA energy costs and reduce MWRA's greenhouse gas footprint.
- Works closely with the Director of Planning and Sustainability to establish energy policies consistent with MWRA's mission, and Business and Master Plans.
- Oversees and directs MWRA and consultant staff in the execution of projects related to energy supply for all MWRA facilities, including power and/or combined heat and power generation, transmission and distribution, and fuel supply.
- Coordinates energy management team with representation from variety of MWRA Departments.

- Oversees MWRA's renewable energy portfolio, and manages Renewable Portfolio Standards (RPS) Contracts for renewable energy certificates (RECs).
- Recommends new renewable energy projects and oversees the development of the planning and design phases of renewable energy and energy efficiency projects including feasibility and operational impact reports, detailed plans and specifications, permitting, work schedules, technical assistance, progress review and evaluation.
- Oversees management of new projects from development of scope of services, specifications, cost estimates, work schedules, through negotiations, and preparations of contract award recommendations. Oversees compliance with contract budgets, schedules and terms.
- Oversees management of ongoing energy contracts.
- Oversees the development of energy management budget. Seeks out and identifies grant funding opportunities related to energy-related infrastructure, projects, and studies.
- Oversees the management of energy-related data including collection, evaluation and summary of energy usage, costs, savings, and variables impacting them.
- Directs and oversees the developments energy conservation programs. Such programs include: (a) a method for evaluating what level of energy conservation is cost-effective for particular facilities; (b) facility energy conservation plans; and (c) a priority list for energy conservation projects.
- Recommends agency, program or division energy policy by analyzing cost, operational and environmental impacts of proposed policy on division projects.
- Represents MWRA and coordinates projects with communities, government agencies, professional organizations and other MWRA departments. Oversees the provision of technical information and assistance. Addresses professional and community groups, initiates outreach projects as required, and acts as liaison with representatives of other agencies.
- Oversees the preparation of and reviews, as necessary, staff summaries to the Board of Directors.
- Ensures compliance with MWRA policies, procedures and directives, and regulatory requirements and applicable engineering standards. Ensures all activities are coordinated with operation staff, MWRA divisions and outside concerns as appropriate.
- Serves on MWRA consultant selection committees as requested.

SECONDARY DUTIES:

- Oversees personnel management. Ensures that major initiatives and policy changes are properly communicated to all staff. Identifies needed improvements to work practices and works with Operations Management and Labor Relations staff to bring about changes.
- Identifies organizational needs and proposes re-organization plans to address changing needs.
- Oversees staff productivity monitoring and continual improvement through staff skills development, strategic planning, standard operating procedures (SOP) improvements and research and implementation of technology advances.
- Reviews assigned employees' performance per MWRA procedures.
- Assists in maintaining harmonious labor management relations through proper applications of collective bargaining agreement provisions and established personnel policies.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in environmental, civil or mechanical engineering or related field required; Master's degree in public policy, public administration, planning, environmental, civil or mechanical engineering with a focus on energy/sustainability preferred; and
- (B) Ten (10) or more years of experience in the area of energy management related to complex commercial, industrial, or water/wastewater facilities, with at least 4 years in a supervisory capacity; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of energy markets at the state and federal level.
- (B) Knowledge of equipment energy demand principles, energy production systems and their impacts on plant performance and budgets.
- (C) Knowledge of state and federal regulations related to energy.

- (D) Outstanding computer skills to include proficiency with MS Office Suite including MS Project and statistical data analysis packages.
- (E) Demonstrated excellent organizational, written, and verbal communication skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operator's License.

May be required to respond after hours on an as needed basis for issues that develop as this position is ultimately responsible for oversight of MWRA's renewable energy operations, including wind turbine operations.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with the use of telephone, personal computer including word processing, databases and other software, copy machine and fax machine. Field equipment used may include flashlight, tape measure, air, water and soil sampling equipment and sampling containers, and various hand held measuring devices such as LEL meters.

PHYSICAL DEMANDS:

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

While performing the duties of this job, the employee is regularly required to sit and talk or hear. The employee is frequently required to use hands to finger, handle or operate objects, including office equipment and controls, and reach with hands and arms, and unroll plans. The employee is also required to stand, walk and be able to climb staging and or ladders as associated with construction site visits in order to see facilities, associated equipment, and observe conditions, record information, and collect samples or take meter readings. In addition, the employee will need to be able to lift and carry reports, proposals and project files.

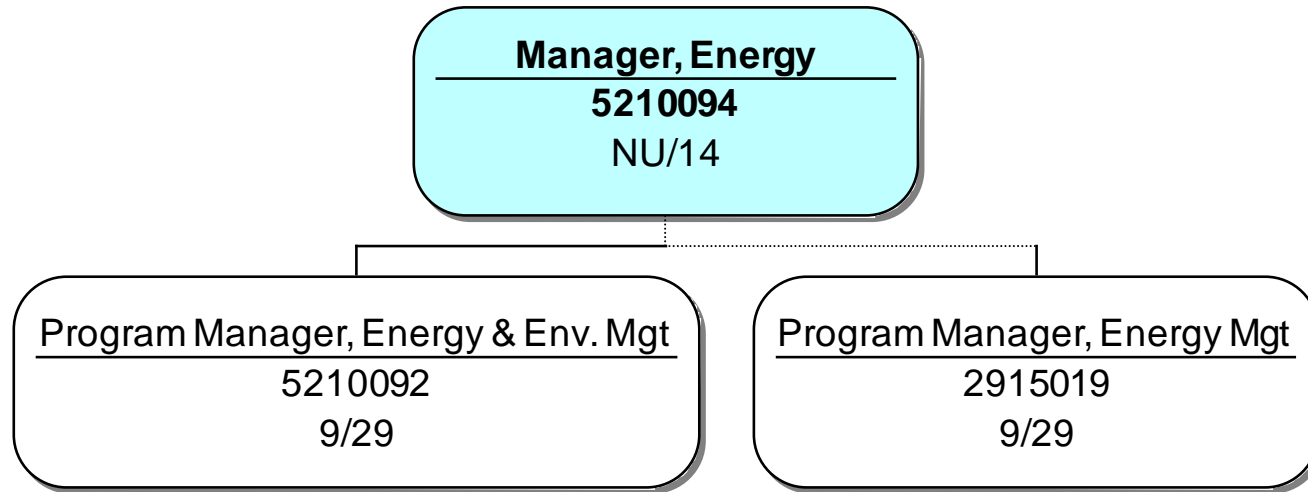
WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee would encounter performing the essential functions of the job. While performing the duties of this job the employee works in an office environment as well as working in the field, at facilities, construction sites, or pipelines and easements.

August 2022

Energy Management

December, 2022



STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 18, 2023
SUBJECT: Appointment of Martin McGowan, Director, Construction



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

John Colbert, Chief Engineer, Engineering & Construction
Wendy Chu, Director, Human Resources
Preparer/Title


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

RECOMMENDATION:

To approve the appointment of Mr. Martin McGowan to the position of Director, Construction (Non Union, Grade 16), in the Engineering and Construction Department at an annual salary of \$162,542, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Director, Construction will become vacant upon the retirement of the incumbent in March 2023. This position reports to the Chief Engineer and manages an in-house staff of 28, as well as numerous construction and consultant contracts. The position is responsible for managing the coordination and control of all aspects of MWRA's capital construction, including providing overall oversight and management of construction contracts and professional construction management services, reviewing and recommending approval of change orders and negotiating settlement of construction claims.

Selection Process

The position of Director, Construction was posted internally and externally. Three external and two internal applicants applied. Two external and two internal applicants were determined to be qualified and were referred for interviews. The candidates were interviewed by the Chief Operating Officer, the Special Assistant for Affirmative Action, and the Chief Engineer. Upon completion of the interviews, Martin McGowan was recommended to the Executive Director for the position based upon his qualifications and experience.

Mr. McGowan is an excellent candidate and has worked in construction for his entire 28-year career. Mr. McGowan is currently a Construction Coordinator at MWRA, a position he has held since 2011. In his capacity as Construction Coordinator, Mr. McGowan has demonstrated exemplary management skills and extensive knowledge of the construction industry, and he is highly respected by his colleagues and supervisors, as well as the construction contractors with whom he regularly interacts. He has overseen the successful completion of several complex multi-million dollar water and wastewater projects, including the Chelsea Creek Headworks (\$85 million), Spot Pond Water Storage Facility Design Build (\$50 million), and the Nut Island Odor

Control and HVAC System Improvements (\$59 million). Mr. McGowan has also been the main construction resource for the implementation of the construction portion of the Enterprise Content Management software that is currently in development.

Mr. McGowan began his career working on MWRA projects for Earth Tech, Inc. in progressively more responsible positions, first as an Operations and Maintenance Representative, Resident Engineer and then Startup Engineer. The projects included working on the Boston Harbor Project Deer Island Treatment Plant, Carroll Water Treatment Plant, and the Cosgrove and Wachusett Intake Projects.

During his 18 years at the MWRA, Mr. McGowan also worked as a Program Manager, Mechanical at Deer Island working on various construction, maintenance and professional services contracts. These contracts were carried from inception, design, bid, construction, to final closeout. As a Construction Coordinator since 2011, he has worked on a variety of projects including water and wastewater facility and water pipeline projects. In this capacity, he has supervised office and field construction staff as well as consultant engineering and resident engineering services. He has been involved in all aspects of construction, including change order negotiations, staff summary preparation, claim evaluations and reviews, constructability reviews, community coordination, and coordination with Operations staff.

Mr. McGowan holds a Bachelor of Science degree in Civil Engineering from Northeastern University and is an Engineer-In-Training (Massachusetts).

BUDGET/FISCAL IMPACTS:

There are sufficient funds for this position in the Operations Division's FY23 Current Expense Budget.

ATTACHMENTS:

- Resume of Martin McGowan
- Position Description
- Organizational Chart

Martin E. McGowan

SUMMARY

Civil engineer with 25+ years of construction experience on a wide range of MWRA Water and Wastewater projects included in the Capital Improvement Program. Hands-on professional with a track record of providing leadership on complex multimillion-dollar construction contracts. Organized, practical and hardworking individual that excels at developing strong cross functional working relationships with contractors, consultants, communities and Authority staff.

EXPERIENCE

Massachusetts Water Resources Authority

October 2004 to present

Construction Coordinator, October 2011 to present

- Manages all aspects of MWRA construction projects to ensure they are in accordance with contract documents, MWRA policies and procedures, regulatory requirements, and applicable engineering standards.
- Projects include the Chelsea Creek Headworks Upgrade (\$85M), Nut Island Headworks Odor Control and HVAC System Improvements (\$59M), Spot Pond Water Storage Facility Design Build (\$50M); Section 23, 24 & 47 Pipeline Rehabilitation (\$27M), Brusch Water Treatment Facility UV Disinfection (\$6.6M), Deer Island Sludge Piping and Valve Replacement (\$6.3M) and Thermal Power Plant Back Pressure Steam Turbine and Dump Condenser Improvements (\$5.5M).
- Supervises office and field staff, as well as consulting engineers, to oversee and manage construction and professional engineering contracts.
- Leads the Construction Unit's transition to an electronic content management (ECM) system. Prepared and detailed multiple construction workflows for automating these processes. Participated in the development of a pilot program to be used in advance of the Authority-wide ECM system.
- Evaluates and resolves construction and engineering issues encountered during construction.
- Reviews contractor change order requests to determine merit and negotiates final cost and time impacts. Prepares all change order documentation, including proposed change orders, memorandum of negotiations and staff summaries for the Executive Director or Board of Directors.
- Reviews and evaluates construction claims and provides support for Engineer's Decisions.
- Acts as a liaison with operations and maintenance staff to ensure continuous operation of critical equipment and systems. Works with contractor and consultant to develop and implement work plans for all operational impairments and shutdowns.
- Reviews and approves monthly contractor pay requisitions and progress schedules.
- Prepares, tracks and updates construction progress, including budget, cash flow and accruals.
- Coordinates on-going pipeline construction activities within member communities.
- Performs constructability reviews of contract plans and specifications prior to advertisement.

Project Manager, Mechanical, October 2004 – October 2011

- Managed all aspects of various construction, maintenance and professional services contracts at the Deer Island Treatment Plant in accordance with MWRA policies and procedures.
- Prepared and reviewed contract documents and estimates for public bid and qualified bids for award.
- Reviewed and approved contractor submittals, RFIs and pay requisitions.
- Negotiated and prepared change order, claim and contract closeout documentation.
- Coordinated contractor activities with plant operations and other contractors.
- Assisted in solving design and construction problems and inspected work to confirm compliance.

John J. Carroll Water Treatment Plant and Cosgrove & Wachusett Intakes, Construction Manager
Startup Engineer, March 2002 – October 2004

- Supervised contractor field and functional testing activities for the rehabilitated Cosgrove and Wachusett Intakes and the new water storage and treatment facilities at Walnut Hill.
- Reviewed and prepared test and checkout plans and coordinated testing with MWRA staff.
- Witnessed equipment and system testing to confirm compliance with contract documents.
- Assisted resident engineers with review of construction schedules, submittals, change orders and monthly pay requisitions.
- Worked closely with design, construction and MWRA staff during facility turnover.

Boston Harbor Project, Construction Manager

Resident Engineer, August 2000 – March 2002

- Managed the Labor, Electrical, Plumbing and HVAC construction labor support contracts.
- Assisted with the startup of the Disinfection Basins, Hydro Power Plant and Effluent Outfall Tunnel.
- Directed craft labor workforce and supervised resident inspectors and administrative staff.
- Prepared cost estimates for approximately 200 as-needed task orders.
- Scheduled and coordinated work activities with contractors, vendors and MWRA staff.
- Approved monthly pay requisitions and prepared change order and contract closeout documentation.

Startup Engineer, April 1996 – August 2000

- Supervised contractor field and functional testing activities for the Secondary Treatment Facilities, Nut Island Headworks and East/West Odor Control Facility upgrades.
- Reviewed and prepared test and checkout plans and coordinated testing with MWRA staff.
- Witnessed equipment and system testing to confirm compliance with contract documents.
- Assisted resident engineers with review of construction schedules, submittals, change orders and monthly pay requisitions.

Operations and Maintenance Representative, April 1991 – April 1996

- Assisted MWRA staff during construction and startup of the new Primary Treatment Facilities.
- Tracked contractor deliverables, open issues and punchlist items generated by MWRA staff.
- Conducted operability walkthrough inspections and guided process tours for MWRA staff.

EDUCATION

- **Northeastern University**, Boston, Massachusetts
Bachelor of Science in Civil Engineering, June 1994

CERTIFICATION & TRAINING

- Fundamentals of Engineering (EIT), Commonwealth of Massachusetts Certificate No. 16250
- Core Growth: Building Water's Future Leadership Training Program
- OSHA 40-Hour Hazardous Waste Operations and Emergency Response
- OSHA 10-Hour Construction Safety
- Confined Space Entry, CPR/AED/First Aid, Excavation and Work Zone Safety Training
- Tower Climbing Safety Training
- ACI Concrete Field Testing Certification
- USDOT Hazardous Material Training

**MWRA
POSITION DESCRIPTION**

POSITION: Director, Construction

PCR#: 55250137

DIVISION: Operations

DEPARTMENT: Construction

BASIC PURPOSE:

Manages the Construction Unit which controls and coordinates all Water and Wastewater construction projects of the MWRA Capital Improvement Program.

SUPERVISION RECEIVED:

Works under the supervision of the Chief Engineer.

SUPERVISION EXERCISED:

Supervises the Assistant Director, Construction Services and an MWRA team comprised of professional staff of Construction Coordinators, Project Managers, Field and Resident engineers and inspectors. Also through staff, indirectly supervises the activity of consultant staff assigned to construction projects and Construction management firms assigned to large Capital Programs.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Directs the management of the Construction Unit, assigning responsibilities and reviewing performance of staff.
- Evaluates, identifies and establishes appropriate construction management structures for all projects ranging in size from \$250,000 through \$400 million and with varying complexity and inter-relationships.
- Develops and implements MWRA policies and procedures as they relate to the construction of water and wastewater.
- Directs review of designs, construction schedules and support for constructability of assigned work.
- Provides and controls construction input into bid process.
- Provides overall oversight and management of professional construction management

services. Oversees the work of all consultants and contractors to insure adherence to budgets, schedules, quality and compliance with contract terms.

- Recommends approval of construction contract awards, reviews and approves change orders, claims and contract close outs. Review recommendations for progress payments, substantial completion, and final acceptance of work.
- Provides oversight, guidance and control to consultant teams in managing the construction of assigned projects, including quality of work, schedule, cost and safety. Evaluate performance of CMs as part of contract administration duties.
- Manages contracts and Engineering Services during Construction Program reviews and participates in the preparation of annual and supplementary project budgets; provides management and oversight to actual cost and schedule performance and approves project requests.
- Develops annual operating budgets for unit and manages to ensure compliance with budget.
- Manages the Department in a manner that is consistent with MWRA's goals of Diversity, Equity, and Inclusion.

SECONDARY DUTIES:

- Participates in collective bargaining and other grievance issues as may be required.
- Participate in meetings and negotiations for establishment of mitigation agreements with neighborhood groups, government officials, regulatory agency staff, and other outside parties.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

- (A) A Bachelor's degree in engineering or related field required (Master's degree preferred); and
- (B) Knowledge of management of major water or wastewater facilities construction such as tunnels, water treatment plants and other large concrete construction as acquired by at least 12 years of construction experience of which five must be in a senior management or supervisory position; and
- (C) Experience in construction project dispute resolution procedures such as partnering, Disputes Resolution Boards and other alternative dispute resolution procedures; or
- (D) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent oral and written communication skills.
- (B) Demonstrable experience of successfully working with communities to minimize the impact of construction projects.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class “D” driver’s license.

Registration as a Massachusetts Professional Engineer preferred.

Must be available for on-call assignments and to respond to emergencies on a 24/7 basis using an MWRA domicile vehicle.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools 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 walk; stand; climb or balance; stoop, kneel, crouch, or crawl; taste or smell.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception and the ability to adjust focus.

WORK ENVIRONMENT:

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

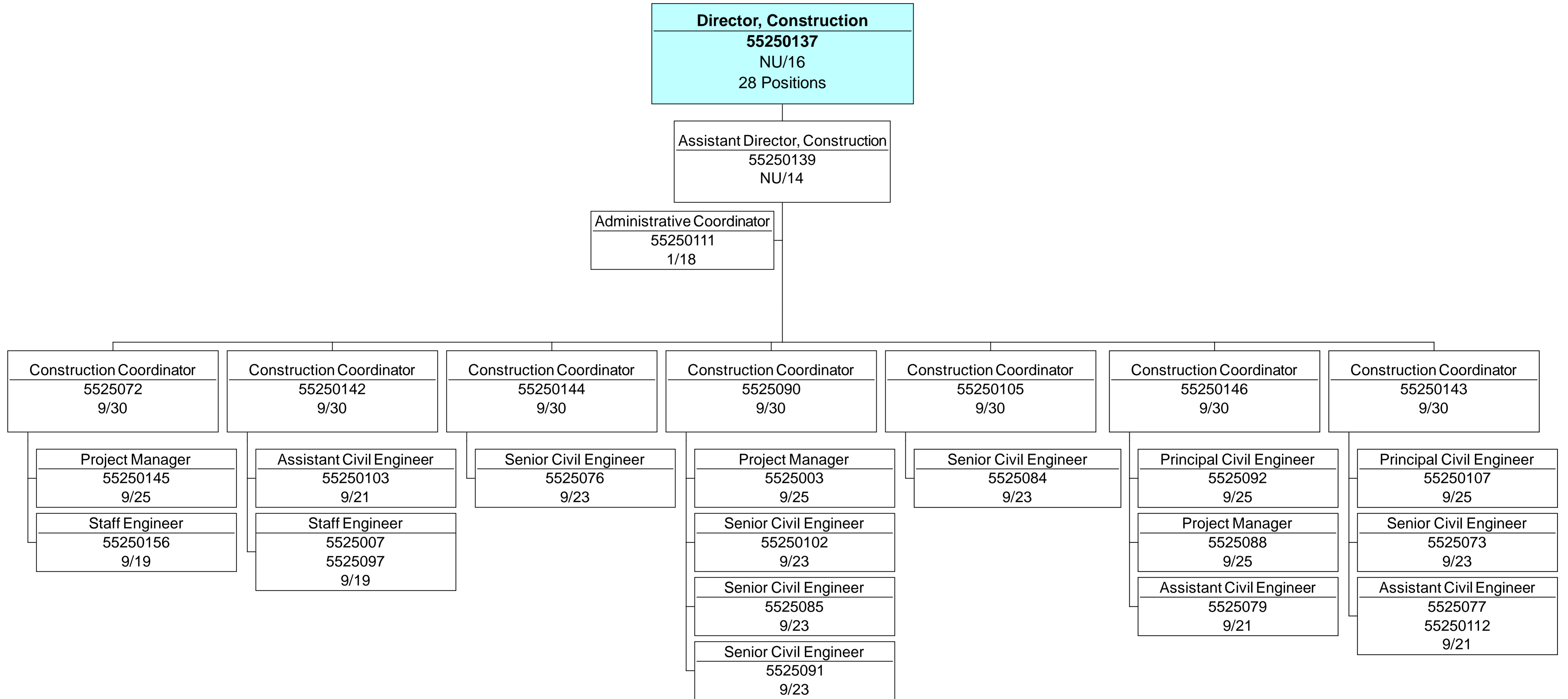
While performing the duties of this job, the employees frequently works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and 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.

August 2022

Engineering & Construction
Construction
 January, 2023



STAFF SUMMARY

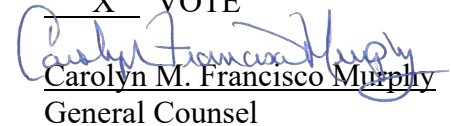
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 18, 2023
SUBJECT: Appointment of Kristen Schuler Scammon
Associate General Counsel, Litigation



COMMITTEE: Personnel & Compensation

Wendy Chu, Director, Human Resources
Preparer/Title

 INFORMATION
 X VOTE



Carolyn M. Francisco Murphy
General Counsel

RECOMMENDATION:

To approve the appointment of Ms. Kristen Schuler Scammon to the position of Associate General Counsel, Litigation, (Non-Union, Grade 15) at an annual salary of \$149,000, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Associate General Counsel, Litigation became vacant upon the resignation of the incumbent. The position reports to the General Counsel and serves as the Authority's lead litigation counsel, representing MWRA in defensive and affirmative litigation and other legal matters in a wide range of legal areas including disputes arising out of construction projects, design contracts, personal injury and other tort claims, insurance, employment and environmental law issues and eminent domain takings. This position is responsible for all phases of litigation in state and federal court, before adjudicatory agencies and in alternative dispute resolution processes such as mediation and arbitration. The position also provides legal advice and counsel on federal, state and local laws and regulations, and supervises staff.

The position was posted internally and externally. Nineteen applicants responded, including one internal candidate. Four candidates were selected to be interviewed. The interviews were conducted by the General Counsel, Director of the Affirmative Action and Compliance Unit and the Director of Administration. Ms. Schuler Scammon is recommended for appointment and is well suited and qualified for the position based upon her experience, background and knowledge.

After graduating with honors from Boston College Law School, Attorney Schuler Scammon began her legal career as an Associate attorney in the Commercial Trial Section of a DC law firm where she participated in all aspects of complex commercial litigation in federal and state courts. She next spent over eleven years as Of Counsel in the Litigation Section at Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. While at Mintz, she maintained a wide-range of civil and criminal litigation and counseling practice including complex commercial litigation and white collar defense work such as fraud and false claims and debarment proceedings relating to public construction projects. In 2012, Attorney Schuler Scammon became a founding partner of a

litigation boutique law firm specializing in business, real estate, employment and insurance coverage litigation and white-collar criminal defense. Attorney Schuler Scammon maintains an active litigation practice and has extensive courtroom experience. She has strong case work experience in all phases of litigation in both state and federal courts, including preparation of pleadings, motion practice and discovery in complex, document and expert witness intensive cases. Attorney Schuler Scammon has served as lead litigation counsel as well as a trial team member. As a litigator since 1996, she has worked on cases in state and federal trial and appellate courts, as well as arbitrations and mediations.

Attorney Schuler Scammon received her Bachelor of Arts degree in 1993 from Colby College and her Juris Doctor from Boston College Law School in 1996. She is a member in good standing of the Massachusetts Bar and is admitted to practice before the state and federal courts.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY23 CEB.

ATTACHMENTS:

Resume of Kristen Schuler Scammon
Position Description
Organizational Chart for Law Division

KRISTEN SCHULER SCAMMON

PROFESSIONAL EXPERIENCE

Torres, Scammon, Hincks & Day, LLP
Boston, MA

March 2012-present

Partner/Owner

- Founding partner of litigation boutique law firm specializing in business litigation, real estate litigation, employment litigation, insurance coverage litigation and white-collar criminal defense.
- Extensive courtroom experience including motion and trial practice in state and federal court as well as mediations and arbitrations.
- I maintain a busy law practice as well as work with my partners to manage the day-to-day operations of the business, including staffing, budgeting and collections.

Mintz
Boston, MA

September, 2000 – March, 2012

Of Counsel - Litigation Section

- Wide-ranging civil and criminal litigation and counseling practice. Extensive experience successfully managing and supervising junior attorneys, paraprofessionals, consultants and staff to achieve efficient and effective results for both individual and corporate clients. My experience encompassed the following substantive areas:
 - **Commercial Litigation**
 - Represented clients in the healthcare and pharmacy industries in numerous types of complex commercial litigation, including Civil RICO, Consumer Protection Act, Breach of Contract and Fraud.
 - **White Collar Defense**
 - Advised the executives, management and employees of two government contractors throughout major investigations into alleged fraud and false claims. Wide ranging advice included criminal, antitrust, fraud and false statements, debarment and compliance.
 - Managed defense of large-scale white collar crime investigations and prosecutions, including managing a large team defending a former CEO charged with criminal tax evasion and a companion SEC enforcement action.
 - Represented clients under government investigation in a number of areas, including public corruption, tax, fraud, false claims, false statements, securities and campaign contributions.

- **Public Contracting**
 - Advised public contractors in connection with federal and state debarment proceedings. This advice included assessment of suspension and debarment risk, negotiation and implementation of independent monitorships and corporate integrity agreements, as well as issues surrounding prequalification and certification for public contracting.
- **Internal Investigations**
 - Conducted internal investigations precipitated by both criminal investigations and civil litigation.
- **Pro Bono**
 - Drafted brief *amicus curiae* to United States Supreme Court on behalf of a national domestic violence advocacy organization.
- Member of Hiring Committee (2001, 2004, 2005).

Howrey, LLP - Washington, DC
Associate - Commercial Trial Section

September, 1996 – August, 2000

- Participated in all aspects of complex commercial litigation in federal and state trial courts and courts of appeal, and before administrative agencies. My experience included the following substantive areas:
 - **International Arbitration**
 - International arbitration between US client and foreign government over tariff issues. This representation involved extensive factual and legal development and management of political considerations in foreign nation.
 - **Antitrust**
 - On behalf of a major oil company, participated in the defense of a number of class actions alleging price fixing and other antitrust violations.
- Member of Hiring Committee (1998, 1999)

EDUCATION

Boston College Law School, Newton, MA

J.D. - May, 1996

- *Magna Cum Laude*
- *Order of the Coif*
- Executive Editor, Boston College Third World Law Journal.

Colby College, Waterville, ME

B.A., Government/Spanish – May, 1993

- *Magna Cum Laude*
- *Phi Beta Kappa*
- Women's Rugby
- Semester at Universidad de Valencia, Valencia,

- Sigma Delta Pi - National Spanish Honor Society; Pi Sigma Alpha - National Political Science Honor Society
- Distinction in Government Major

Spain, Spring 1992

Bar Admissions: Massachusetts, District of Columbia, U.S. District Court for the District of Massachusetts, U.S. Court of Appeals for the First Circuit.

Community Involvement: Board Member, TargetCancer Foundation

Memberships: Boston Bar Association; Federal Bar Association; Massachusetts Women's Bar Association, Massachusetts Association of Criminal Defense Lawyers (MACDL)

**MWRA
POSITION DESCRIPTION**

POSITION: Associate General Counsel -Litigation

DIVISION: Law

DEPARTMENT: Law

BASIC PURPOSE:

Represents the Massachusetts Water Resources Authority (MWRA) in litigation and legal matters in state and federal courts and before regulatory, quasi-judicial agencies and administrative bodies and in mediation, arbitrations and other alternative dispute resolution processes. Handles all phases of litigation, provides legal advice and counsel and manages staff in the areas of responsibilities described below.

SUPERVISION RECEIVED:

Works under the general supervision of the General Counsel.

SUPERVISION EXERCISED:

Exercises close supervision of the Senior Staff Counsel, Staff Counsel, and administrative staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Represent the Authority in state and federal courts, before regulatory and quasi-judicial agencies and administrative bodies and in mediation, arbitrations and other alternative dispute resolution processes, in litigation and other legal matters, in a wide range of legal areas including construction, contracts, public procurement, personal injury, property damage, environmental, eminent domain, employment and insurance. Handles and is responsible for all phases of litigation and matters including case preparation, drafting of pleadings, motions, memoranda and briefs, conducting all phases of discovery, court appearances, settlement negotiations and hearings, trials and appeals.
- Researches and provides advice and counsel on federal, state and local laws, regulations and case law. Provides advice on interpretation of the MWRA Enabling Act. Analyzes contracts, legal documents and claim documents. Prepares advice memoranda.
- Supervises outside counsel where required in major cases beyond the expertise or resources of the Law Division.

- Supervises staff attorneys, paralegal and administrative personnel involved in the handling of legal issues.
- Apprises the Board of Directors, Executive Director and General Counsel of issues and developments in areas of responsibility.
- Manages MWRA's response to subpoenas, Public Record Act requests and other legal notices in a timely, well-organized manner within the requirements of law.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in any field; and
- (B) JD from an accredited law school; and
- (C) Understanding of substantive legal areas such as construction, contracts, public procurement, personal injury, property damage, environmental, eminent domain, employment and insurance; Candidate should have direct in-court experience as a trial attorney, including jury trial experience, acquired by seven (7) to ten (10) years of related experience; or
- (D) Any combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Strong supervisory skills are preferred.
- (B) Strong analytical, research, organizational and written and oral communication skills are required.

SPECIAL REQUIREMENTS:

Admission in good standing to practice law in Massachusetts state and federal courts.

A valid Massachusetts Class D driver's license.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

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

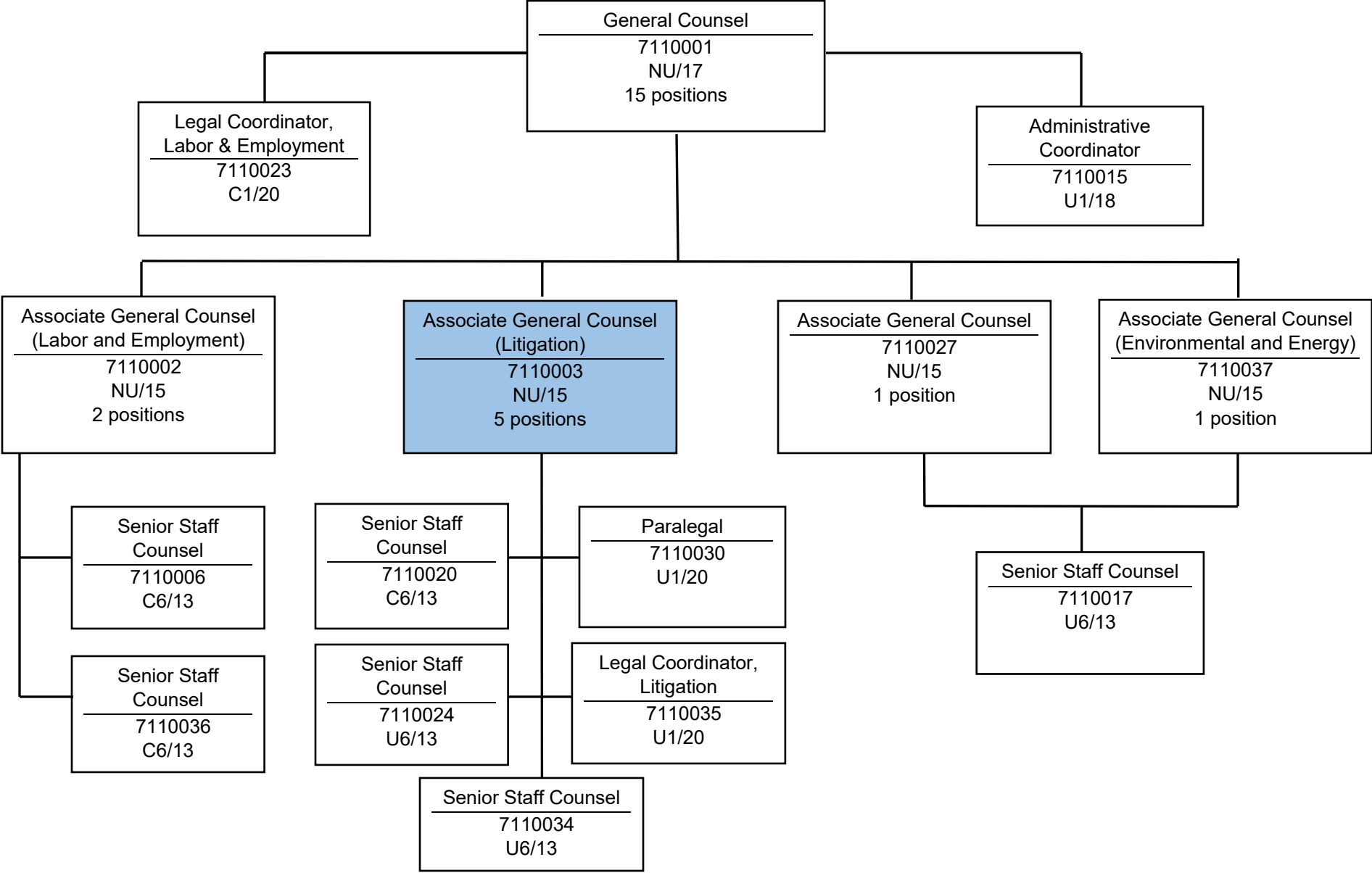
WORK ENVIRONMENT:

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

While performing the duties of this job, the employee regularly works in an office environment. The noise level in the work environment is usually a moderately quiet office setting.

October 2022

**Legal Division
December 2022**



STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 18, 2023
SUBJECT: Appointment of Kimberley A. McMahon
Associate General Counsel, Labor and Employment



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Wendy Chu, Director, Human Resources
Preparer/Title


Carolyn M. Francisco Murphy
General Counsel

RECOMMENDATION:

To approve the appointment of Ms. Kimberley A. McMahon to the position of Associate General Counsel, Labor and Employment, Law Division (Non-Union, Grade 15) at an annual salary of \$149,000, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Associate General Counsel, Labor and Employment became vacant by the promotion of the incumbent to the position of Director of Human Resources. The position reports to the General Counsel and involves a broad range of legal duties related to labor and employment matters, including: serving as lead labor and employment counsel for the Authority; providing advice and representation in all areas of federal and state labor, employment, wage and hour, unemployment and state ethics law; representing the Authority in court and in arbitrations, mediations and adjudications before various administrative bodies such as the Massachusetts Commission Against Discrimination (MCAD) and the Department of Labor Relations (DLR); analyzing and developing policies and procedures and advising on the MWRA Enabling Act; apprising the Board of Directors, Executive Director and General Counsel of issues and developments in their areas of responsibilities; advising on public records requests; and determining the applicability of federal, state and local laws, regulations and orders.

This position was posted internally and externally. Eight candidates applied for the position, including one internal candidate. The internal candidate was interviewed by the General Counsel, Director of the Affirmative Action and Compliance Unit and Director of Administration and is the recommended candidate. Attorney McMahon is recommended for appointment as Associate General Counsel, Labor and Employment and is well suited and qualified for the position based upon her experience, background and knowledge.

An attorney since 1998 Attorney McMahon has significant experience in public sector labor and employment law. Attorney McMahon began her legal career as Associate General Counsel for the Office of the Treasurer and Receiver General. Her work there included representing the State Board of Retirement before the Superior Court, Division of Administrative Law Appeals and Contributory Retirement Appeal Board in matters concerning retirement pensions and disability.

After serving in that role she was employed by the City of Lowell, first as Assistant City Solicitor and then First Assistant City Solicitor, for nearly 13 years. She later was employed by the City of Worcester as its labor and employment counsel. In her municipal roles she represented the Cities in litigation in state and federal court, grievances in arbitrations and proceedings before administrative agencies such as the DLR, MCAD, U.S. Equal Employment Opportunity Commission, Department of Unemployment Assistance and Department of Industrial Accidents. She handled a wide range of labor and employment legal matters including discrimination, retaliation, investigations, FMLA leave, ADA accommodation requests, retirement, discipline, grievances, collective bargaining, wage and hour, worker's compensation and unemployment claims. For over three years Attorney McMahon was employed in human resource roles, first as the Assistant Director and then Director of Human Resources, for the Middlesex Community College. Attorney McMahon spent over five years in private law practice that included employment law areas of discrimination, investigations, unemployment, workers compensation and wage and hour law. Attorney McMahon joined the MWRA Law Division in May 2022 as a Senior Staff Counsel – Labor and Employment. In addition to providing advice and counsel in all aspects of labor and employment law, she represents the Authority in administrative hearings, arbitrations and litigation.

Attorney McMahon received her Bachelor of Arts degree in 1995 from Boston College and her Juris Doctor from Suffolk University Law School in 1998. She is a member in good standing of the Massachusetts Bar and is admitted to practice before the state and federal courts.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the FY23 CEB.

ATTACHMENTS:

Resume of Kimberley A. McMahon
Position Description
Organizational Chart for Law Division

Kimberley A. McMahon

PROFESSIONAL EXPERIENCE

Massachusetts Water Resources Authority, Boston, MA, May 31, 2022 to present
Senior Staff Counsel - Labor and Employment

- Represents Authority in administrative hearings, arbitrations and litigation for employment and labor matters in courts and administrative agencies, including but not limited to the Department of Labor Relations, Massachusetts Commission Against Discrimination and Department of Unemployment Assistance. Drafts and edits various legal documents, including motions, briefs, legal memoranda, various claim filings, and correspondence.
- Assists Associate General Counsel, Human Resources Department, Department Heads and senior management staff with matters concerning employment and labor relations, including impact bargaining, settlement agreements and negotiation, discipline, workers compensation and employee injuries, grievance and arbitration, interpretation of collective bargaining agreements, wage and hour issues, retirement, personnel files, conflict of interest and other compliance issues.
- Reviews internal policies for compliance with state and federal law, including but not limited to the Fair Employment Practices Act, Family and Medical Leave Act, Americans with Disabilities Act, Paid Family and Medical Leave.
- Counsels Human Resources staff concerning investigation practices, grievances, disciplinary action and compliance with collective bargaining agreements.
- Researches legal issues regarding personnel, labor and employment and related matters involving state government. Drafts legal memoranda analyzing various legal issues regarding labor and employment matters.
- In collaboration with Human Resources and outside counsel, participates as a member of the workers compensation claims management team. Reviews injury and claim documentation and medical records. Recommends settlement claims and litigation strategy.

City of Worcester, Worcester, MA October 1, 2018 to May 31, 2022

Coordinator of Labor Relations/Workers Compensation Attorney/Labor Relations Specialist

- Served as labor and employment counsel. Responsible for representation of the City in litigation for employment and labor matters before arbitrators, courts and state and federal agencies, including but not limited to the Equal Employment Opportunity Commission, Department of Labor Relations, Civil Service Commission, Massachusetts Commission Against Discrimination, Department of Unemployment Assistance, Department of Labor Standards and Department of Industrial Accidents.
- Coordinated all matters concerning employment and labor relations, including impact bargaining, settlement agreements and negotiation, discipline, workers compensation and employee injuries, grievance and arbitration, interpretation of collective bargaining agreements, wage and hour issues, safety and health matters, employee benefits, Criminal Offender Record Information review, I-9, public retirement, personnel files, conflict of interest and other compliance issues.
- Managed employee medical issues, including leave under the Family and Medical Leave Act and related state laws, interactive processes for reasonable accommodations under the Americans with Disabilities Act, and various fitness for duty matters under collective bargaining agreements and City policies.
- Researched legal issues regarding personnel, labor and employment, and provided legal memoranda to department heads regarding labor and employment matters.
- Drafted and edited various legal and training documents, including motions, briefs, legal memoranda, various claim filings, procurement documents, training slides and business letters.
- Drafted and edited employment training presentations, policies and procedures.
- Conducted internal employment investigations. Interviewed witnesses. Analyzed and applied employment policies and relevant laws. Drafted investigation memoranda with findings of fact and conclusions. Recommended discipline, corrective actions, remedies and interim actions.
- Supervised Lead Investigator and Safety and Health Officer.

McMahon Law Group, Lowell, MA June, 2016 to October, 2021

Partner/Attorney

- Represented clients in court and before administrative agencies on matters involving employment contracts, discrimination, workers compensation, wage and hour laws compliance, negligence, restitution, criminal matters, mental health, civil commitment, competency, personal injury, disability, probate, guardianship, real estate, landlord tenant, tort and collection matters.
- Managed all aspects of litigation. Drafted and filed pleadings, motions, and discovery documents. Argued motions. Examined and cross-examined witnesses. Represented clients at mediation and investigation sessions. Negotiated settlements. Conducted legal research and drafted memoranda and correspondence. Served as lead counsel at trial.
- Counseled non-profit and corporate employers regarding various employment matters, including employment contracts, wage and hour laws, unemployment, torts, discrimination and various compliance matters. Conducted investigations and issued reports.
- Provided trainings to businesses and non-profit organizations concerning best employment practices, employment policies and preventing discrimination and harassment in the workplace.

Commonwealth of Massachusetts - Middlesex Community College May, 2013 to July, 2016 Director of Human Resources, January, 2015 to July, 2016; Assistant Director of Human Resources, May, 2013 to December, 2014

- Provided comprehensive leadership to the College on all Human Resources matters and within the Administration and Finance Division. Advised President, Vice Presidents, Department Heads and managers regarding various public employment matters.
- Implemented employee relations programs resulting from union contracts, personnel policies, grievance decisions, labor relations cases, and/or state and federal laws.
- Interpreted and administered union contracts and non-union personnel handbooks with respect to grievances, wages and salaries, benefits, compliance, employee welfare, union and management practices, and other contractual stipulations.
- Investigated workplace complaints. Collaborated with the Director of Compliance and the Affirmative Action Officer. Resolved issues involving employment, civil and criminal matters.
- Conducted formal employee grievance hearings and complaint proceedings under union contracts, non-union personnel handbooks, and state and federal employment and discrimination laws. Issue written findings and decisions. Represented College at labor-management meetings, mediation and arbitration.
- Implemented employee orientation programs and training programs on various topics including confidentiality of information, sexual harassment, new union contract provisions, sex offender information, criminal offender information, state ethics laws, and employee assistance program.
- Managed matters concerning employee injuries, disability, and accommodation requests in compliance with state and federal laws, policies and procedures.
- Oversaw compliance with the college hiring policy, including the recruitment, interview and selection process. Chaired search committees for Human Resources Department.
- Assisted Departments and Managers with the performance review process, performance improvement plans and performance management process for employees.
- Rendered advice and guidance to all levels of the college community on employee matters in collaboration with the Massachusetts Community College Counsel's office.
- Managed CORI/SORI process. Consulted with state officials and counsel to interpret information and adhere to state and federal laws, regulations, and policies concerning sharing and securing data; developed CORI/SORI protocols; coordinated responses to positive CORI/SORI reports, met with individuals to discuss positive reports, and participated in hiring and admission decisions at the conclusion of the CORI/SORI review.
- Addressed unemployment issues and claims.
- Responded to requests for employment verification information, court orders, discovery requests and subpoenas for employee information.
- Reviewed and evaluated job descriptions and conducted job audits to determine proper employee group classification and proper compensation.
- Drafted and amended college policies and procedures.

- Researched, surveyed, and investigated data sources to verify that college initiatives and projected activities complied with federal and state laws and best human resources practices.
- Participated in various auditing processes for systems, policies, practices and records.
- Supervised Human Resources Department Staff.

City of Lowell - Law Department August, 2000-May, 2013

First Assistant City Solicitor, July, 2004 - May 2013; Assistant City Solicitor, August, 2000 - June, 2004

- Represented the City and its representatives in all stages of litigation, including discovery, hearings, arbitration, trials and appeals before state and federal courts and administrative agencies. Investigated claims, researched and formulated legal defenses, interviewed clients and witnesses, conducted depositions and managed all aspects of litigation concerning matters of civil rights, police misconduct, employment, labor, collective bargaining, contract, privacy, bid protests, zoning, discrimination (including age, race, religion, national origin, gender, and disability), retaliation, accommodations, civil service, restitution, conflict of interest, workers' compensation, disability, construction, retirement, immunity and indemnification of public employees, property and tort. Drafted and filed pleadings, motions, and briefs. Developed strategy and arguments. Presented oral arguments at hearings. Conducted direct and cross-examinations of witnesses at trials and hearings. Presented opening statements and closing arguments at jury and bench trials.
- Analyzed and responded to subpoenas, public records requests and other document requests. Researched issues concerning disclosure of records, including public records laws, the Freedom of Information Act, the Right of Privacy Law, the Personnel Records Law, the federal Health Insurance Portability and Accountability Act and other laws and regulations pertaining to privacy, medical and personnel issues and personal identifying information.
- Reviewed, interpreted and amended City ordinances, Police Department Rules and Regulations and General Orders, executive orders and employment policies, including policies concerning sexual harassment, and use of drugs and alcohol. Provided counsel to city officials regarding human resources and personnel functions including hiring, discipline, termination, accommodation requests, personnel records, privacy issues and wage and hour laws. Provided advice concerning the implications of relevant state and federal statutes including civil rights laws, the Family and Medical Leave Act, the Americans with Disabilities Act, the Fair Employment Practices Act and the Wage Act. Issued opinions regarding internal policies and regulations.
- Negotiated, drafted and amended collective bargaining agreements. Identified issues for bargaining. Served as chief contact and liaison between city administration, managers and several collective bargaining units. Provided ongoing advice to city administration and managers concerning administration and implementation of collective bargaining agreements. Mediated and resolved grievances and claims at arbitration and mediation sessions. Reviewed grievances and advised administration as to potential liability and settlements. Negotiated and drafted settlement agreements. Litigated grievances before the Division of Labor Relations and/or the American Arbitration Association. Prosecuted and defended civil litigation concerning the terms of collective bargaining agreements. Represent City at labor-management meetings.
- Collaborated with personnel directors and department heads for investigations of complaints concerning employee conduct. Collaborated with police department's Professional Standards Division for internal investigations. Drafted investigation interview questions. Counseled staff regarding appropriate investigation methods and techniques to ensure compliance with all relevant state and federal laws and regulations. Advised as to legal standards concerning civil rights laws, hostile work environment, sexual harassment, retaliation, privacy, union issues, discrimination and appropriate discipline.
- Reviewed, advised and assisted in receipt and review of CORI in hiring, promotion and litigation processes. Counseled staff concerning the implementation of standards under CORI and SORI statutes for employees and public buildings. Provided advice for claims of CORI and SORI statute violations, and application of appropriate standards for CORI relating to employees, school department matters and private contractors.
- Advised and assisted staff with requests for leave under the Family and Medical Leave Act and requests for reasonable accommodation under Americans with Disabilities Act.
- Advised and assisted staff with unemployment claims under M.G.L. c. 151A. Defended the City at hearings in contested claims for unemployment assistance.
- Negotiated and drafted contracts for services and procurement of supplies with outside vendors and other public agencies. Reviewed contracts for compliance with local, state and federal laws and regulations, including the Public Procurement Law, M.G.L. c. 30B. Advised and trained managers and employees regarding public procurement requirements. Investigated issues of potential breaches of contract. Drafted standard contract formats and clauses.
- Provided legal opinions to City Manager, Human Relations Manager and other Department Heads on various issues. Interpret laws, rulings, ordinances and contract provisions. Investigate internal and external claims.

- Supervised Law Department staff for specific assignments and in the City Solicitor's absence. Collaborated with other department staff, including attorneys, paralegals, contract administrators, nurse case manager, and workers' compensations claims agent. Supervised, train and mentor assistant solicitors on project basis.

Commonwealth of Massachusetts - Office of the Treasurer and Receiver General January, 1996-August, 2000
Associate General Counsel, November, 1998 - August, 2000; Law Clerk, January, 1996 - November, 1998

- Represented State Board of Retirement before the Superior Court, Division of Administrative Law Appeals and Contributory Retirement Appeal Board for matters concerning retirement pensions and disability.
- Researched and investigated issues of age discrimination, escheat, wills, trusts, public pension and tax law.
- Participated at board meetings and provided counsel.
- Negotiated settlements of abandoned property cases.
- Researched and implemented sexual harassment policy.
- Drafted various legal opinions, memoranda and appellate briefs.
- Researched and provided opinions concerning the requirements for the Commonwealth's hiring of outside auditor under the Public Procurement Law. M.G.L. c. 30B.

Commonwealth of Massachusetts - Middlesex County Probate Court January - May, 1998

Student Attorney

Represented battered women, children and victims of domestic violence in proceedings for restraining orders, custody, child support and divorce under the direction of the Suffolk University Law School Clinical Program.

Commonwealth of Massachusetts - Middlesex County District Attorney Summer, 1996

Law Clerk

- Researched and drafted motions and memoranda of law for prosecutors; investigated evidentiary matters.
- Assisted prosecutors at trials, hearings and appeals.

EDUCATION

Suffolk University Law School, Boston, MA
 Juris Doctor

Boston College, Chestnut Hill, MA
 Bachelor of Arts, Political Science

ADDITIONAL TRAINING

- MCAD Certified Courses for Equal Employment Opportunity Professionals: (1) Introduction to Employment Discrimination Law; (2) The Lawyer as Trainer; (3) Introduction to Training Delivery Skills; (4) Applying Instructional Design Skills to Discrimination Prevention Training; (5) Preventing Discrimination in the Workplace; (6) Preventing Harassment in the Workplace; (7) Conducting Internal Discrimination Complaint Investigations; and (8) Responding to Accommodation Requests.
- MCLE - Zealous Advocacy in the District Court Certification Training
- Trainings through the Mass. Bar Association, Massachusetts Continuing Legal Education, Massachusetts Municipal Lawyers Association, Massachusetts Municipal Human Resources Association, Office of the Attorney General, Central Middlesex Bar Association, State Ethics Commission, Massachusetts Commission Against Discrimination, Middlesex Defense Attorneys, Greater Lowell Bar Association, Department of Industrial Accidents, Department of Labor Standards, Massachusetts Community College Counsel's Office, Worcester Chamber of Commerce.

BAR MEMBERSHIP - Massachusetts Bar and the United States District Court for the District of Massachusetts.

COMMUNITY INVOLVEMENT

Mock Trial Coach, Lowell Catholic High School, 2016-present; Mock Trial Assistant Coach, Lowell High School, 2000-2002; Kids Care Club, Community Service Coordinator 2016-2021; Ecumenical Athletic Association, Coach and Parent Liaison, 2013-present; Educator, Lector, Choir Member and general volunteer, St. Margaret of Scotland Parish, Lowell, 1987-

present; Lowell Irish Cultural Committee, co-chair member and awards chairperson, 2016-present; Greater Lowell Bar Association, intermittent membership 2001-2019.

ADDITIONAL SKILLS

Knowledge of Microsoft Office, LexisNexis, Westlaw, Google Docs, Oracle, Blackboard, PeopleSoft, Banner, Adobe, HERA, Webex, Zoom. Proficiency in keyboarding. Some proficiency in Spanish.

NOTE FOR REFERENCE CHECKS: Name change from Kimberley McCarty to Kimberley McMahan in 2001

**MWRA
POSITION DESCRIPTION**

POSITION: Associate General Counsel - Labor and Employment

DIVISION: Law

DEPARTMENT: Law

BASIC PURPOSE:

Handles and represents the Massachusetts Water Resources Authority in litigation and other legal matters, provides counsel and manages staff in the areas of responsibilities described below.

SUPERVISION RECEIVED:

Works under the general supervision of the General Counsel.

SUPERVISION EXERCISED:

Exercises close supervision of Senior Staff Counsel, Staff Counsel and administrative staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Acts as lead labor and employment counsel. Provides advice and counsel, and handles and represents the Authority in litigation and legal matters in state and federal courts, before regulatory and quasi-judicial agencies and administrative bodies and in mediations and arbitrations in all areas of federal and state labor, employment, wage and hour, unemployment, and state ethics law.
- Supervises staff including attorneys, paralegal and/or administrative personnel involved in the handling of legal issues.
- Analyzes and develops rules, regulations and policies, and provides advice, on interpretations of the MWRA Enabling Act.
- Apprises the Board of Directors, Executive Director and General Counsel of issues and developments in areas of responsibility.
- Manages MWRA's response to subpoenas, Public Records Act requests and other legal notices within areas of responsibility and ensures that such are handled in a timely, well-organized manner within the requirements of law.

- Researches and provides advice and counsel on federal, state and local laws, regulations, and case law, etc in areas of responsibility.
- Drafts and analyzes advice memoranda, pleadings, motions, briefs, claim documents, collective bargaining agreements and other legal documents.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in any field; and
- (B) JD from accredited law school; and
- (C) Understanding of legal areas of responsibility such as labor, employment, wage and hour, unemployment and state ethics law as acquired by seven (7) to ten (10) years of related experience; and
- (D) Any combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Strong supervisory skills are preferred.
- (B) Strong analytical, research, organizational and oral and written communication skills are required.

SPECIAL REQUIREMENTS:

Admission in good standing to practice law in Massachusetts state and federal courts.

A valid Massachusetts Class D Driver's License.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

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

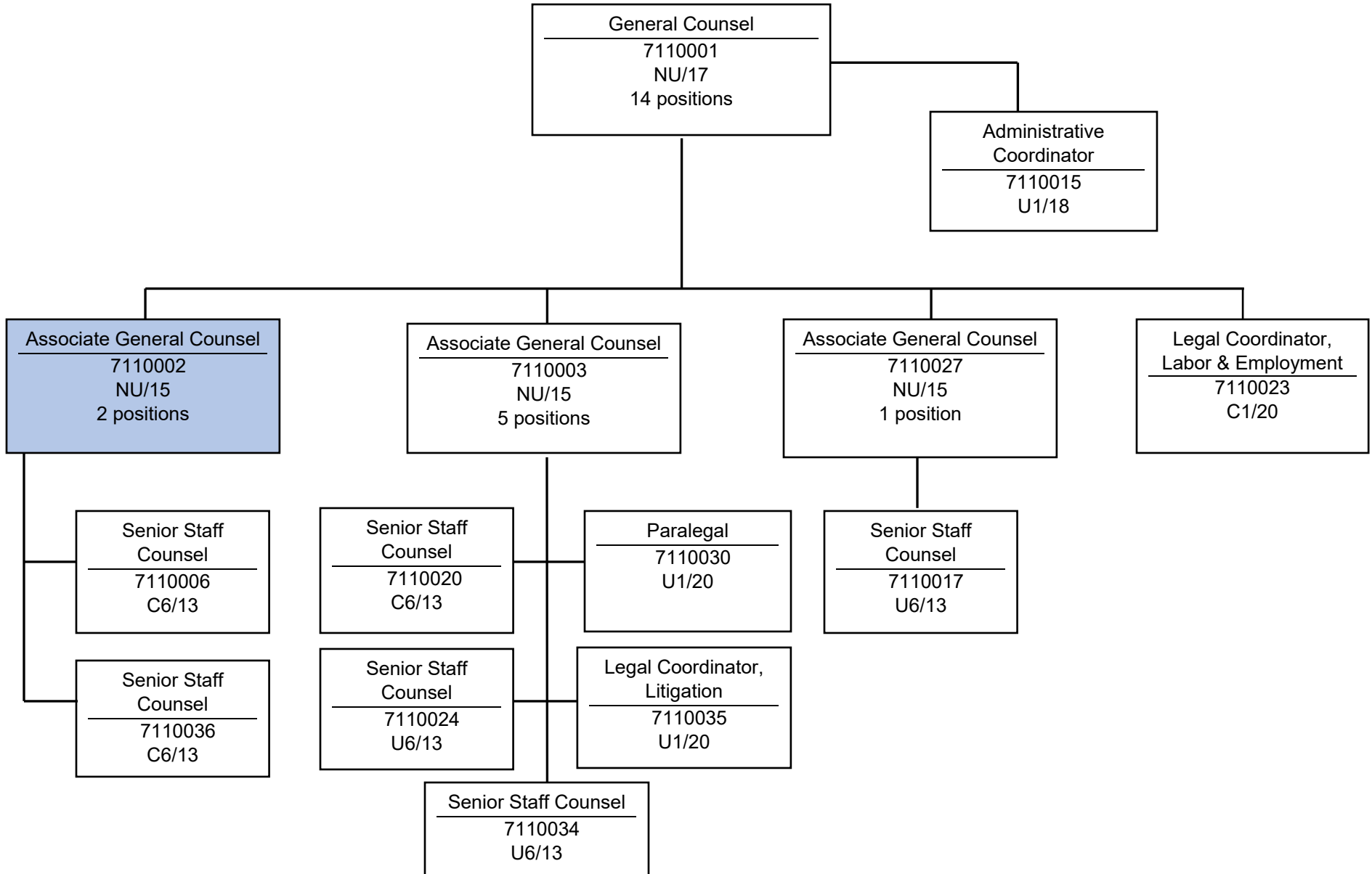
WORK ENVIRONMENT:

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

While performing the duties of this job, the employee regularly works in an office environment. The noise level in the work environment is usually a moderately quiet office setting.

October 2022

**Legal Division
March 2021**



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 18, 2023
SUBJECT: Delegated Authority Report – December 2022



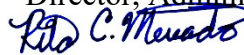
COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE

Barbara O'Connor, Admin. Systems Coordinator
Barbara Aylward, Administrator A & F
Preparer/Title



Michele S. Gillen
Director, Administration



Rita C. Mercado
Acting Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period December 1 – 31, 2022.

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 DECEMBER 1 - 31, 2022

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMEND/CO	COMPANY	FINANCIAL IMPACT
C-1.	12/01/22	AIR COMPRESSOR SYSTEM SERVICE INCREASE REPLACEMENTS PARTS ALLOWANCE FOR A THREE YEAR SERVICE CONTRACT.	OP-435	1	COOLING & HEATING SPECIALISTS, INC.	\$50,000.00
C-2.	12/01/22	NORTHERN EXTRA HIGH PRESSURE ZONE IMPROVEMENTS SECTION 63 (LEXINGTON) FURNISH AND INSTALL TAP, DUCTILE IRON PIPE AND ISOLATION VALVE; EXPOSE AND INVESTIGATE AN UNMARKED CONCRETE CULVERT, CORE THROUGH AND INSTALL DUCTILE IRON PIPE AND RESTORE CULVERT; ISOLATE AND REPAIR DAMAGED UNMARKED WATER SERVICES.	6522	2	ALBANESE D&S, INC.	\$63,692.14
C-3.	12/01/22	INSTRUMENTATION SERVICES - METROPOLITAN BOSTON AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR INSTRUMENTATION SERVICES FOR GAS MONITORING EQUIPMENT LOCATED AT 26 FACILITIES IN THE METROPOLITAN BOSTON AREA FOR A TERM OF 730 CALENDAR DAYS.	OP-448	AWARD	SAFETY, INC.	\$384,600.00
C-4.	12/06/22	DORCHESTER INTERCEPTOR SEWER REHABILITATION SECTIONS, 240/241/242 FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS: POLICE DETAIL SERVICE ALLOWANCE; PRICE ADJUSTMENT ALLOWANCE FOR COSTS OF DIESEL FUEL, GASOLINE, LIQUID ASPHALT, AND PORTLAND CEMENT.	7279	2	MICHELS CORPORATION	(\$546,484.91)
C-5.	12/06/22	WESTERN OPERATIONS CENTER, BUILDING #279 ROOF PAINTING AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR PAINTING THE ROOF OF THE WESTERN OPERATIONS CENTER (BUILDING #279) FOR A TERM OF 180 CALENDAR DAYS.	W346	AWARD	JB CLEANING & PAINTING SERVICES, INC.	\$79,000.00
C-6.	12/06/22	ELEVATOR MAINTENANCE AND REPAIR SERVICE - DEER ISLAND TREATMENT PLANT AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR ELEVATOR MAINTENANCE AND REPAIR SERVICES LOCATED AT THE DEER ISLAND TREATMENT PLANT FOR A TERM OF 1,095 CALENDAR DAYS,	5609	AWARD	UNITED ELEVATOR COMPANY, INC.	\$733,510.00
C-7.	12/14/22	WACHUSETT DAM LOWER GATEHOUSE PIPE REPLACEMENT AND SOUTHBOROUGH HEADQUARTERS ELECTRICAL SYSTEMS UPGRADE RE/I SERVICES AWARD OF A CONTRACT TO THE HIGHEST RANKED PROPOSER FOR RESIDENT ENGINEERING AND INSPECTION SERVICES FOR THE WACHUSETT DAM LOWER GATEHOUSE PIPE REPLACEMENT AND THE SOUTHBOROUGH HEADQUARTERS ELECTRICAL SYSTEMS UPGRADE CONSTRUCTION PROJECTS FOR A TERM OF 24 MONTHS.	7717	AWARD	HAZEN AND SAWYER P.C.	\$882,142.00

PURCHASING DELEGATED AUTHORITY ITEMS DECEMBER 1 - 31, 2022

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMENDMENT	COMPANY	
P-1	12/01/22	PURCHASE OF 26 CONTAMINANT WARNING SYSTEMS UNITS AWARD OF A SOLE SOURCE PURCHASE ORDER FOR 26 S::CAN CONTAMINANT WARNING SYSTEMS UNITS TO SUPPORT CONTINUED WATER QUALITY MONITORING ON A 24/7 BASIS.			BADGER METER, INC.	\$704,167.56
P-2	12/02/22	REPAIR OF 29 TRIMBLE, INC. RU-35-LIV LOGGERS AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REPAIR OF 29 TRIMBLE, INC. RU-35-LIV LOGGERS USED TO RECORD FLOW METER DATA IN THE WASTEWATER SYSTEM.			TRIMBLE, INC.	\$27,650.00
P-3	12/02/22	DELIVERY OF ULTRA LOW SULFUR DIESEL FUEL AWARD OF A PURCHASE ORDER UNDER MASS STATE CONTRACT ENE47 FOR ULTRA LOW SULFUR DIESEL FUEL FOR WARD STREET HEADWORKS.			DENNIS K. BURKE INC.	\$38,632.32
P-4	12/05/22	PURCHASE OF 60 HP WORKSTATIONS AND MONITORS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR 60 HEWLETT PACKARD WORKSTATIONS AND MONITORS FORTHE SCADA SYSTEM.	WRA-5222Q		HUB TECHNICAL SERVICES LLC	\$60,628.80
P-5	12/7/202	PURCHASE OF ONE FLYGT SUBMERSIBLE PUMP FOR CLINTON TREATMENT PLANT AWARD OF A SOLE SOURCE PURCHASE ORDER FOR ONE FLYGT SUBMERSIBLE PUMP FOR THE CLINTON TREATMENT PLANT. THIS PUMP SUPPLEMENTS 3 EXISTING INFLUENT AND 3 EXISTING INTERMEDIATE SCREW PUMPS DURING HIGH FLOWS AND MAINTENANCE.			XLEM WATER SOLUTIONS USA, INC.	\$41,214.64
P-6	12/08/22	CONSULTING SERVICES TO UPGRADE ORACLE DATABASE APPLIANCES AND DATABASES AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR CONSULTING SERVICES TO UPGRADE MWRA'S ORACLE DATABASE APPLIANCES AND DATABASES, INCLUDING DATABASE SUPPORT FOR THE LAWSON, MAXIMO, PIMS AND LIMS APPLICATIONS.	WRA-5214		MYTHICS, INC.	\$137,549.00
P-7	12/09/22	PURCHASE OF 500 VMWARE WORKSPACE ONE LICENSES, SUPPORT AND IMPLEMENTATION SERVICES AWARD OF A PURCHASE ORDER UNDER MASS STATE CONTRACT ITS74 TO THE LOWEST RESPONSIVE BIDDER FOR 500 VMWARE WORKSPACE ONE LICENSES, ONE YEAR OF SUPPORT, AND IMPLEMENTATION SERVICES. THIS SOFTWARE TOOL WILL REPLACE THREE SEPARATE TOOLS FOR TRACKING AND MANAGING ENDPOINT DEVICES.	WRA-5219Q		PRESIDIO NETWORKED SOLUTIONS, LLC	\$143,625.50
P-8	12/09/22	REPLACEMENT OF FAIRBANKS MORSE SPARE PARTS AND TWO SLUDGE PUMPS AT DEER ISLAND TREATMENT PLANT AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REPLACEMENT OF FAIRBANKS MORSE SPARE PARTS AND TWO SLUDGE PUMPS AT THE DEER ISLAND TREATMENT PLANT.			HAYES PUMP, INC.	\$185,265.60
P-9	12/13/22	PURCHASE OF ONE MUFFIN MONSTER GRINDER FOR DEER ISLAND TREATMENT PLANT AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REPLACEMENT OF ONE MUFFIN MONSTER GRINDER FOR THE DEER ISLAND TREATMENT PLANT.			JWC ENVIRONMENTAL, LLC	\$39,239.80
P-10	12/13/22	PROCESS INSTRUMENTATION AND CONTROL SYSTEM HUMAN-MACHINE INTERFACE FIELD ENGINEERING SUPPORT AWARD OF A SOLE SOURCE PURCHASE ORDER FOR PROCESS INSTRUMENTATION AND CONTROL SYSTEM HUMAN-MACHINE INTERFACE FIELD ENGINEERING SUPPORT FOR OPC SERVER COMMUNICATIONS INTERFACE UPGRADE AT THE DEER ISLAND TREATMENT PLANT			EMERSON PROCESS MANAGEMENT POWER & WATER SOLUTIONS, INC.	\$78,581.00
P-11	12/19/22	SUPPLY AND DELIVERY OF GRAVEL BORROW TO CLINTON TREATMENT PLANT AWARD OF A ONE YEAR PURCHASE ORDER CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR THE SUPPLY AND DELIVERY OF GRAVEL BORROW TO THE CLINTON TREATMENT PLANT TO MEET LANDFILL PERMIT REQUIREMENTS.	WRA-5215		RAMPKO COSNTRUCTION CO. INC.	\$195,250.00
P-12	12/19/22	MAXIMO SOFTWARE MAINTENANCE AND SUPPORT AWARD OF A ONE YEAR PURCHASE ORDER CONTRACT UNDER MASS STATE CONTRACT ITS75 TO THE LOWEST RESPONSIVE BIDDER FOR MAXIMO SOFTWARE MAINTENANCE AND SUPPORT. MAXIMO IS USED FOR MANAGING ASSET LIFE CYCLES AND MAINTENANCE ACTIVITIES, MATERIALS MANAGEMENT, WORK ORDERS, OVERALL COSTS AND PRIORITIZATION OF WORK SCHEDULES.	WRA-5223Q		INSIGHT PUBLIC SECTOR, INC.	\$399,477.26
P-13	12/21/22	PURCHASE OF ONE MUFFIN MONSTER GRINDER FOR SQUANTUM PUMP STATION AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REPLACEMENT OF ONE MUFFIN MONSTER GRINDER FOR THE SQUANTUM PUMP STATION.			JWC ENVIRONMENTAL, LLC	\$33,086.00
P-14	12/21/22	PURCHASE OF ONE AIR CONDITIONER CONDENSER UNIT FOR DEER ISLAND TREATMENT PLANT AWARD OF A PURCHASE ORDER FOR ONE AIR CONDITIONER CONDENSER UNIT FOR THE DEER ISLAND TREATMENT PLANT.	WRA-5230Q		HTS ENGINEERING, INC.	\$38,430.00
P-15	12/23/22	REPAIRS TO THE BIRD DETERRENCE SYSTEM ON DEER ISLAND AWARD OF A SOLE SOURCE PURCHASE ORDER FOR REPAIRS TO THE BIRD DETERRENCE SYSTEM ON DEER ISLAND.			INTERNATIONAL BIRD CONTROL SYSTEMS, INC.	\$120,351.00
P-16	12/23/22	PURCHASE OF TWO R-134A REFRIGERANT COMPRESSORS FOR DEER ISLAND TREATMENT PLANT AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR TWO R-134A REFRIGERANT COMPRESSORS FOR THE DEER ISLAND TREATMENT PLANT.	WRA-5217		MECS, INC.	\$133,600.00

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 18, 2023
SUBJECT: FY23 Financial Update and Summary through December 2022

COMMITTEE: Administration, Finance & Audit


X INFORMATION

 VOTE

Michael J. Cole, Budget Director

James J. Coyne, Budget Manager

Preparer/Title

Thomas J. Durkin 

Director, Finance

RECOMMENDATION:

For information only. This staff summary provides the financial results and variance highlights for Fiscal Year 2023 through December 2022, comparing actual spending to the budget.

DISCUSSION:

Starting this month, 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 December the year-to-date debt related savings of \$3.5 million was transferred to the Defeasance Account. This variance is primarily due to lower than budgeted variable interest expense.

The total Year-to-Date variance for the FY23 Current Expense Budget (CEB) is \$17.0 million, due to lower direct expenses of \$6.4 million and indirect expenses of \$0.7 million, as well as higher revenue of \$9.9 million.

FY23 Current Expense Budget

The CEB expense variances through December 2022 by major budget category were:

- Lower Direct Expenses of \$6.4 million or 4.8% under budget. Spending was lower for Wages & Salaries, Other Services, Fringe Benefits, Professional Services, Workers Compensation, Overtime, and Training & Meetings. Spending was higher than budget for Chemicals, Utilities, Maintenance, and Other Materials.
- Lower Indirect Expenses of \$0.7 million or 2.3% under budget due primarily to lower Watershed Reimbursements.

- Debt Service expenses were right on budget after the transfer to the defeasance account, driven by lower than budgeted variable interest expense and timing of the new money and SRF transactions.
- Revenue was \$9.9 million or 2.3% over budget driven by Other User Charges of \$4.7 million for water usage by the City of Cambridge and Investment Income of \$4.3 million due to higher than budgeted interest rates.

**FY23 Budget and FY23 Actual Variance by Expenditure Category
(in millions)**

	FY23 Budget	FY23 Actual	\$ Variance	% Variance
Direct Expenses	\$134.0	\$127.5	-\$6.4	-4.8%
Indirect Expenses	\$28.4	\$27.7	-\$0.7	-2.3%
Capital Financing	\$230.4	\$230.4	\$0.0	0.0%
Total	\$392.7	\$385.6	-\$7.1	-1.8%

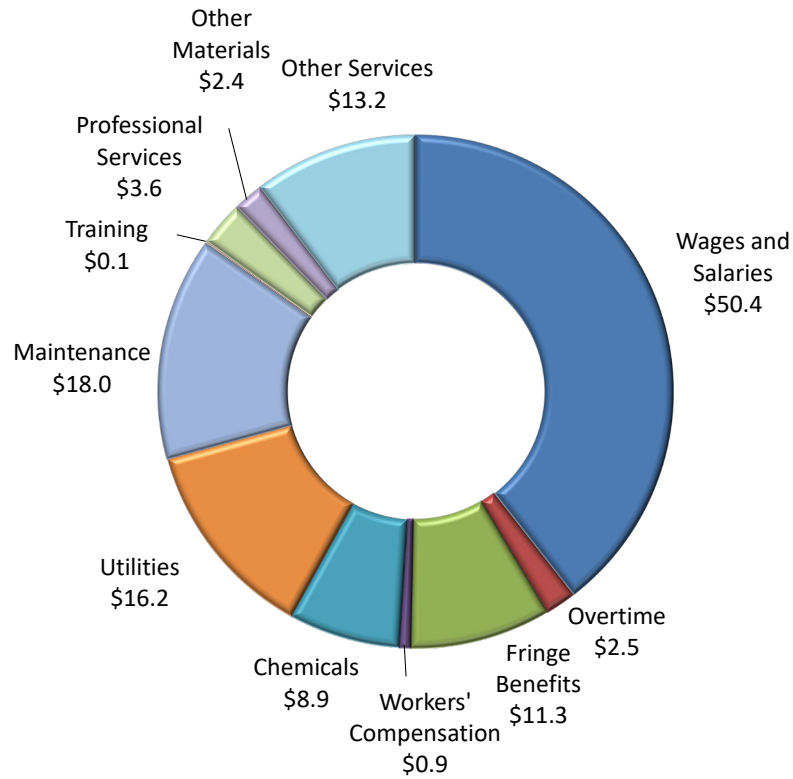
Totals may not add due to rounding

Please refer to Attachment 1 for a more detailed comparison by line item of the budget variances for FY23.

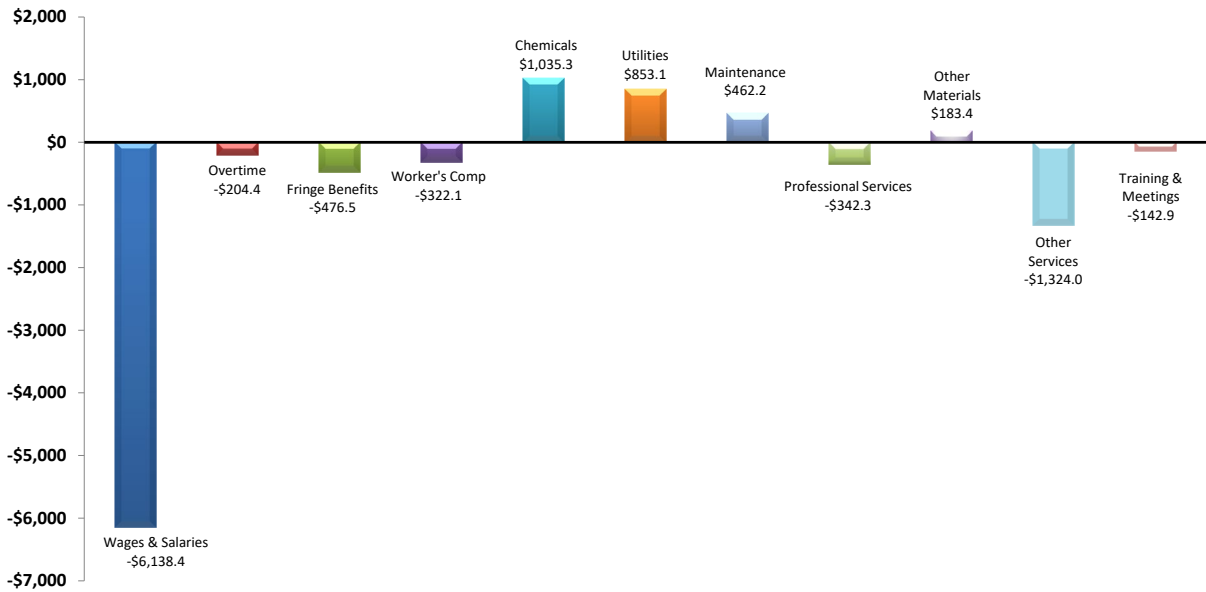
Direct Expenses

FY23 direct expenses through December totaled \$127.5 million, which was \$6.4 million or 4.8% less than budgeted.

**FY23 Direct Expenses
(in millions)**

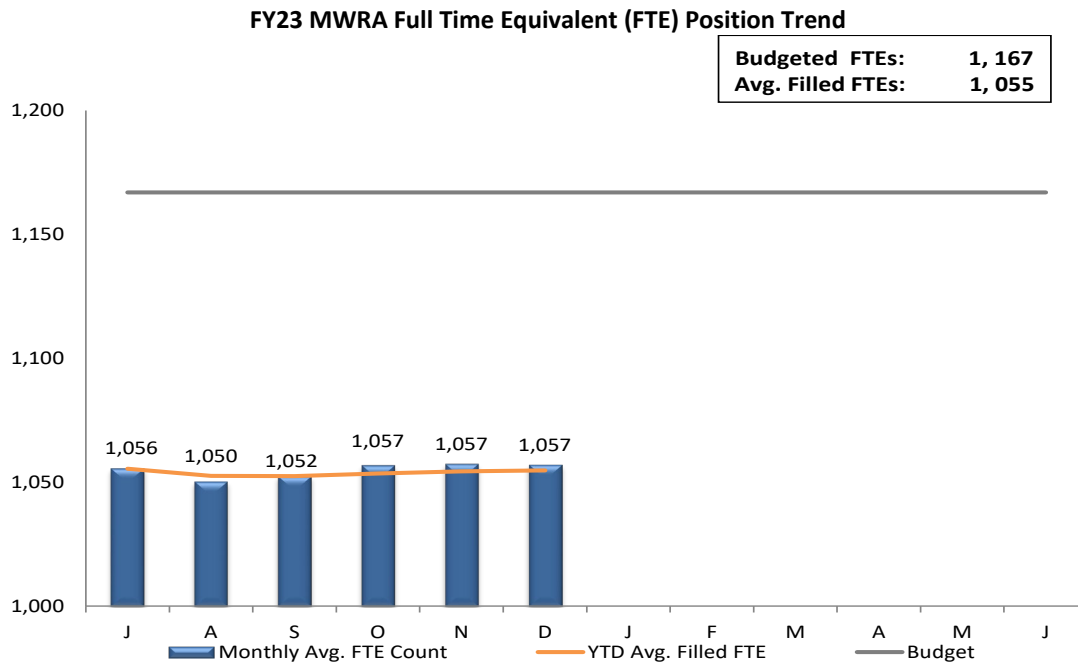


**FY23 Direct Expense Variance
(in thousands)**



Wages and Salaries

Wages and Salaries was under budget by \$6.1 million or 10.9%. Through December, there were 112 fewer average FTEs (1,055 versus 1,167 budget) or 9.6% and lower average salaries for new hires versus retirees. The timing of backfilling vacant positions also contributed to Regular Pay being under budget.



Other Services

Other Services was less than budget by \$1.3 million or 9.1% for Sludge Pelletization of \$443,000 and Grit & Screenings Removal \$139,000 due to lower quantities, and lower Telecommunications costs of \$366,000.

Fringe Benefits

Fringe Benefit spending was lower than budget by \$477,000 or 4.1%. This was primarily driven by lower than budgeted Health Insurance of \$362,000 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. In addition, there was lower spending on Paid Family Medical Leave of \$44,000 and Unemployment Insurance of \$26,000.

Professional Services

Professional Services were less than budget by \$342,000 or 8.6% driven by lower Other Services of \$210,000, Engineering of \$100,000, and Computer Systems Consultant of \$64,000 all primarily due to timing.

Worker's Compensation

Worker's Compensation expenses were lower than budget by \$322,000 or 25.6%. The lower expenses were due to favorable variances in Compensation Payments of \$246,000, Medical Payments of \$42,000, and Administrative Expenses of \$33,000. Due to uncertainties of when spending will happen, the budget is spread evenly throughout the year.

Overtime

Overtime expenses were less than budget by \$204,000 or 7.6%. Lower spending mainly in Field Operations of \$275,000 primarily for planned overtime (due to vacancies) and emergency overtime being under budget, and minimal bad weather conditions, and Engineering & Construction of \$64,000. This is partially offset by higher spending at Deer Island of \$149,000 for shift coverage due to vacancies for Deer Island Operations positions.

Training & Meetings

Training & Meetings expenses were lower than budget by \$143,000 or 52.6% driven by the timing of spending.

Chemicals

Chemicals were greater than budget by \$1.0 million or 13.1%. Higher than budgeted spending on Sodium Hypochlorite of \$548,000 is driven by Deer Island Treatment Plant of \$397,000 due to higher pricing and additional usage for disinfection and odor control due to lower flows, \$77,000 at the Carroll Water Treatment Plant mostly due to higher contract pricing, and \$64,000 in Wastewater Operations primarily at Nut Island Headworks. Higher spending on Hydrogen Peroxide of \$162,000 is driven by Deer Island to reduce elevated Hydrogen Sulfide (H₂S) levels for pretreatment and odor control, Ferric Chloride of \$156,000 driven by Deer Island due to higher than usual secondary waste sludge, Activated Carbon of \$106,000 driven by Deer Island (\$43,000) and Wastewater Operations (\$64,000) due to the timing of replacements, and Carbon Dioxide of \$106,000 primarily due to increased contract pricing. Deer Island flows are 17.8% lower than the budget and Carroll flows are 6.0% greater than the budget through December. 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 \$853,000 or 5.6%. Overspending in Electricity of \$816,000 or 7.0% primarily at Deer Island (\$810,000) is driven by higher real time pricing as well as higher usage and peak demand charges.

Maintenance

Maintenance was greater than budget by \$462,000 or 2.6%, largely driven by the timing of projects. Maintenance Materials are over budget by \$344,000 driven by higher Electrical Materials of \$128,000, Plant & Machinery Materials of \$118,000, and HVAC Materials of \$66,000 all mainly due to timing. Maintenance Services are over budget by \$118,000 due to higher Plant &

Machinery Services of \$952,000 due to the timing of some service contracts as well as the Norumbega Tank Cleaning award being greater than budgeted. In addition, higher Computer Software Licenses of \$309,000 is due to timing (and includes the Windows Exchange renewal and the multi-factor authentication software support renewal that was greater than budgeted). These are partially offset by lower Building & Grounds Services of \$711,000 due to timing and includes the Eastern Ave Traffic Light and Shaft 8 Retaining Wall work, and lower Computer Services of \$393,000 also due to timing.

Other Materials

Other Materials were higher than budget by \$183,000 or 8.1% driven by higher Vehicle Purchase/Replacements of \$391,000 due to the timing of purchases as a result of supply chain disruptions, partially offset by lower Computer Software of \$86,000, Lab & Testing Supplies of \$50,000, and Other Materials of \$42,000 all due to timing.

Indirect Expenses

Indirect Expenses totaled \$27.7 million, which is \$666,000 or 2.3% lower than budget. The variance is driven by lower Watershed reimbursements.

Based on FY23 operating activity only, the Watershed Division is \$981,000 or 11.4% under budget. Lower spending on Wages and Salaries and Fringe Benefits are slightly offset by higher spending on Maintenance and Equipment due to timing. When factoring in the FY22 balance forward of \$273,000 which was paid during Q1 of FY23, Watershed Reimbursement is \$707,000 or 8.2% below budget through December 2022.

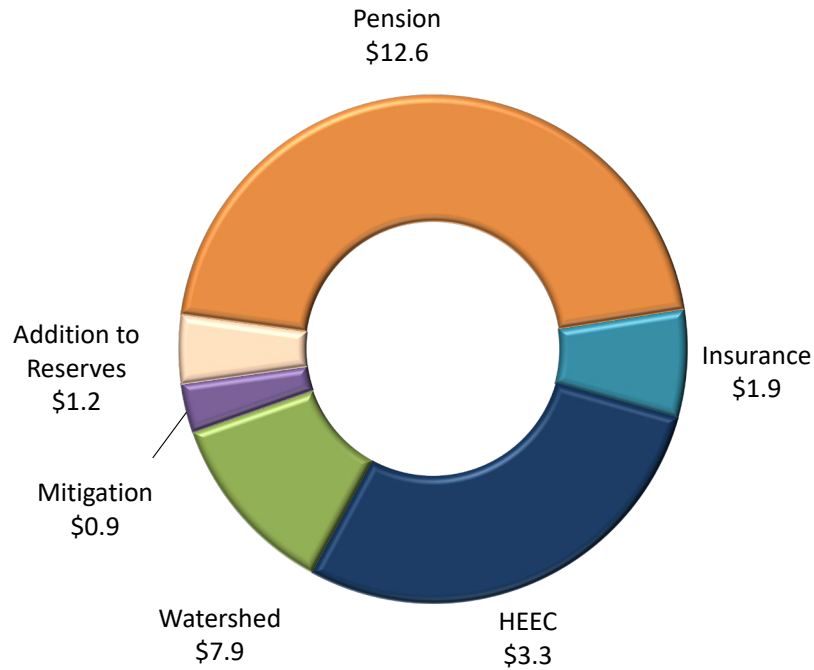
FY23 Watershed Protection Variance

\$ in millions	YTD Budget	YTD Actual	YTD \$ Variance	YTD % Variance
Operating Expenses	9.1	8.7	-0.4	-4.8%
Operating Revenues - Offset	0.5	1.1	0.5	102.6%
FY23 Operating Totals	8.6	7.6	-1.0	-11.4%
DCR Balance Forward (FY22 year-end accrual true-up)	0.0	0.3	0.3	
FY23 Adjusted Operating Totals	8.6	7.9	-0.7	-8.2%
PILOT	0.0	0.0	0.0	0.0%
Total Watershed Reimbursement	8.6	7.9	-0.7	-8.2%

Totals may not add due to rounding

MWRA reimburses the Commonwealth of Massachusetts Department of Conservation (DCR) and Recreation - Division of Water Supply Protection – Office of Watershed Management for expenses. The reimbursements are presented for payment monthly in arrears. Accruals are being made monthly based on estimated expenses provided by DCR and true-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 December was 143 (and 141.5 on a year-to-date basis) vs. a budget of 150.

**FY23 Indirect Expenses
(in millions)**

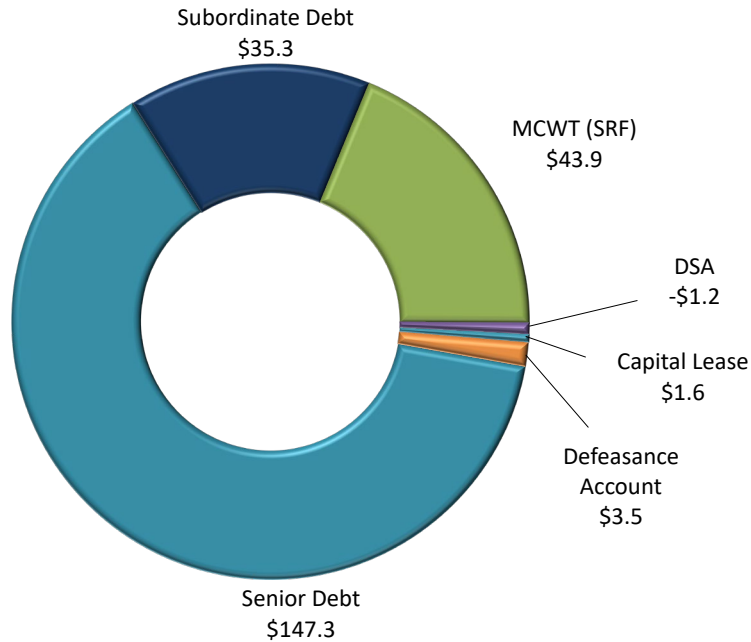


Capital Financing

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.

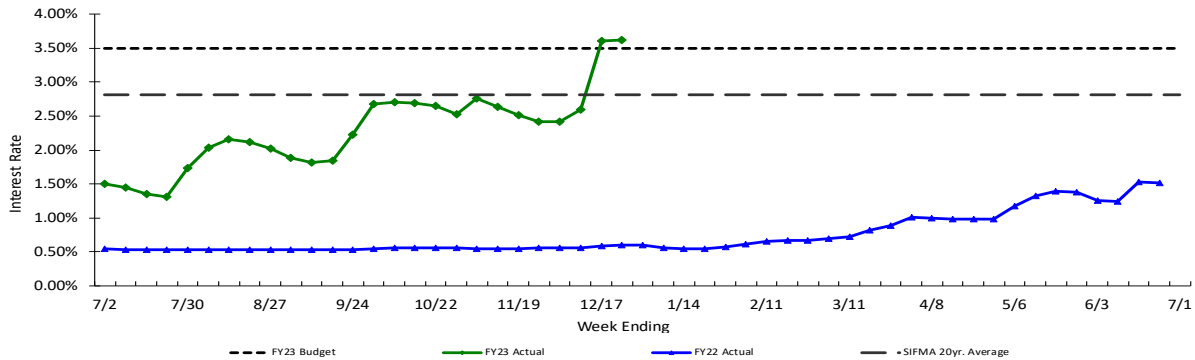
Capital Financing expenses for FY23 through December totaled \$230.4 million which matches the budget after the transfer of \$3.5 million to the Defeasance account, driven by lower than budgeted variable interest expense of \$2.5 million and lower Senior Debt spending of \$1.1 million as a result of the new money transaction, offset by higher SRF spending of \$121,000 based on timing.

**FY23 Capital Finance
(\$ in millions)**



The graph below reflects the FY23 actual variable rate trend by week against the FY23 Budget.

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



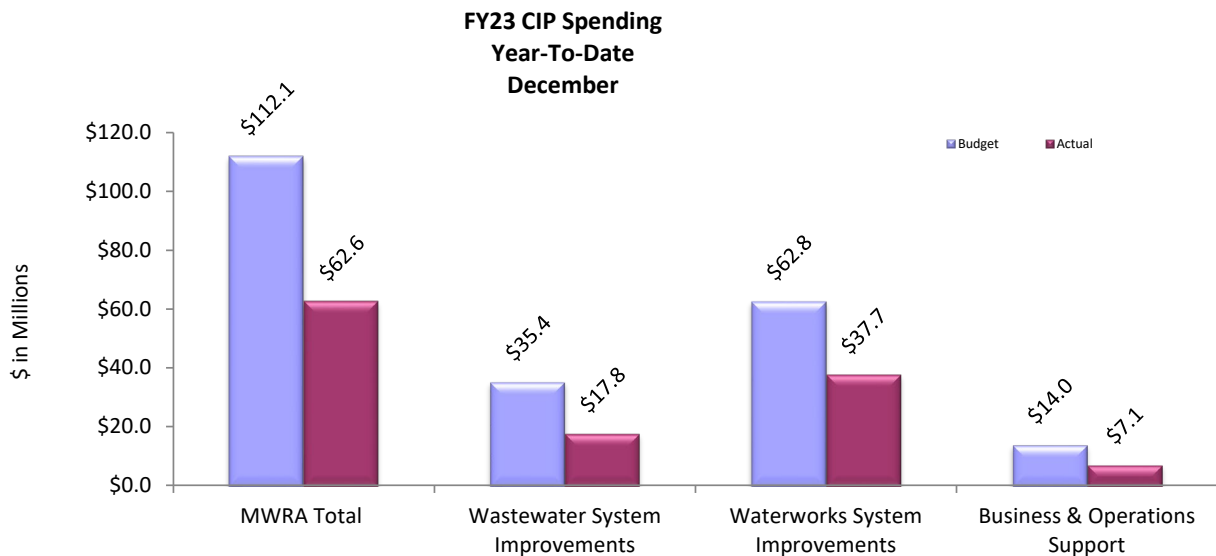
Revenue & Income

Revenues of \$430.9 million were \$9.9 million or 2.3% over budget. Other User Charges were \$4.7 million over budget primarily due to water usage by the City of Cambridge. Investment Income was \$4.3 million over budget due to higher than budgeted interest rates (2.42% actual vs 1.11% budget). Other Revenue was \$876,000 or 20.2% over budget due to Miscellaneous Revenue of \$372,000, Energy Revenue of \$270,000, and Permit Fees of \$141,000, all primarily due to timing.

FY23 Capital Improvement Program

Capital expenditures in Fiscal Year 2023 through December total \$62.6 million, \$49.5 million or 44.2% 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 \$59.3 million, \$29.4 million or 33.2% under planned spending.



Overall, CIP spending reflects the underspending in Wastewater Improvements (\$17.6 million), Waterworks (\$25.0 million) and Business and Operations Support (\$6.9 million). Major variances in Wastewater are primarily due to timing of community grants and loans for the I/I Local Financial Assistance Program, contractor behind schedule on Nut Island Odor Control and HVAC Improvements, completion of some design and inspection tasks later than anticipated for the Ward Street and Columbus Park Headworks Upgrades Design/ESDC, schedule change for Deer Island Roofing Replacement, and lower than projected task order work on Deer Island As-needed Design contracts.

Waterworks variances are primarily due to timing of community loan distributions for the Water Loan Program, long lead-time for piping material for Waltham Water Pipeline, timing of contractors work for WASM/SPSM West PRV and WASM 3 Rehabilitation, and timing of purchases for Watershed Land. This was partially offset by timing of consultants work for Section 53 and 99 Improvements - Design/CA and NEH Improvements Design – ESDC, and contractor progress for Section 89/29 Replacement.

**FY23 Budget and FY23 Actual Variance by Program
(in millions)**

\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	19.0	12.3	(6.7)	-35.1%
Treatment	2.3	0.5	(1.9)	-79.4%
Residuals	0.0	0.0	0.0	0.0%
CSO	0.9	0.6	(0.4)	-41.1%
Other	13.1	4.4	(8.7)	-66.5%
Total Wastewater System Improvements	\$35.4	\$17.8	(\$17.6)	-49.8%
Waterworks System Improvements				
Drinking Water Quality Improvements	2.0	1.0	(1.1)	-53.4%
Transmission	26.2	15.3	(10.8)	-41.4%
Distribution & Pumping	18.5	18.1	(0.4)	-2.0%
Other	16.0	3.3	(12.7)	-79.5%
Total Waterworks System Improvements	\$62.8	\$37.7	(\$25.0)	-39.9%
Business & Operations Support	\$14.0	\$7.1	(\$6.9)	-49.1%
Total MWRA	\$112.1	\$62.6	(\$49.5)	-44.2%

Totals may not add due to rounding

FY23 Spending by Program:

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

Other Waterworks: Net underspending of \$12.7 million

- \$11.4 million for Local Financial Assistance due to timing of community loan distributions.
- \$1.3 million for Carroll SCADA Upgrades due to timing of work and long lead time for materials.

Waterworks Transmission: Net underspending of \$10.8 million

- \$ 6.9 million for Waltham Water Pipeline due to long lead time for piping material.
- \$0.8 million for WASM/Spot Pond Supply Main Pressure Reducing Valves Improvements and \$0.6 million for WASM 3 Rehabilitation due to timing of contractors work.
- \$0.7 million for Watershed Land due to timing of purchases.
- \$0.5 million for Maintenance Garage/Wash Bay/Storage Building - Construction due to schedule change.
- This underspending was partially offset by overspending of \$0.4 million for Preliminary Design & MEPA Review due to timing of consultant work.

Other Wastewater: Net underspending of \$8.7 million

- \$8.7 million for Community I/I due to timing of community distributions of grants and loans.

Business & Operations Support: Net underspending of \$6.9 million

- \$1.6 million for Office Space Modifications due to timing of work.

- \$1.0 million for FY19-23 Vehicle Purchases due to timing of purchases and supply chain issues.
- \$0.8 million for Oracle Database Appliance due to timing of work.
- \$0.8 million for Security Equipment & Installation due to timing of security initiatives.
- This underspending was partially offset by \$0.4 million for As-Needed Design Contracts and \$0.4 million for Edge Switches due to timing of work.

Interception & Pumping: Net underspending of \$6.7 million

- \$3.5 million for Nut Island Odor Control & HVAC Improvements Phase 2 – Construction due to contractor behind schedule.
- \$1.7 million for Ward Street & Columbus Park Headworks - Design/CA due to completion of some design and inspection tasks later than anticipated.
- \$0.4 million for Remote Headworks Shaft Access Improvements due to slower than anticipated start-up.

Wastewater Treatment: Net underspending of \$1.9 million

- \$0.8 million for Deer Island Roofing Replacement due to schedule change.
- \$0.5 million for As-needed Design due to lower than projected task order work.

Drinking Water Quality Improvements: Net underspending of \$1.1 million

- \$0.6 million for Carroll Chemical Feed System Improvements – Construction due to timing of work.
- \$0.2 million for Marlborough Pumping Station Construction due to timing of work.

Combined Sewer Overflow: Net underspending of \$0.4 million

- \$0.4 million for Chelsea 008 Pipe Replacement due to schedule change and long lead time for materials.

Water Distribution and Pumping: Net underspending of \$0.4 million

- \$0.6 million for Cathodic Protection Shafts N & W due to scope changes.
- \$0.6 million for Section 56 Replacement/Saugus River - Design/CA due to permitting delays.
- \$0.5 million for CP3-Sections 23, 24, 47 Rehabilitation due to timing of work.
- This underspending was partially offset by overspending of \$0.5 million for Section 53 and 99 Improvements - Design/CA, \$0.4 million NEH Improvements Design – ESDC and \$0.4 million for Sections 25, 75, 24, 47, 59 & 60 - Design/CA due to timing of consultants work, and \$0.4 million for CP-1 NEH Improvements and \$0.4 million for Section 89/29 Replacement – Construction due to contractors progress.

Construction Fund Balance

The construction fund balance was \$122.6 million as of the end of December. Commercial Paper/Revolving Loan available capacity was \$110 million.

ATTACHMENTS:

Attachment 1 – Variance Summary December 2022

Attachment 2 – Current Expense Variance Explanations

Attachment 3 – Capital Improvement Program Variance Explanations

ATTACHMENT 1
FY23 Actuals vs. FY23 Budget

	Dec 2022 Year-to-Date				
	Period 6 YTD Budget	Period 6 YTD Actual	Period 6 YTD Variance	%	FY23 Approved
EXPENSES					
WAGES AND SALARIES	\$ 56,497,672	\$ 50,359,252	\$ (6,138,420)	-10.9%	\$ 118,980,689
OVERTIME	2,696,431	2,492,061	(204,370)	-7.6%	5,337,896
FRINGE BENEFITS	11,757,965	11,281,439	(476,526)	-4.1%	23,961,641
WORKERS' COMPENSATION	1,259,876	937,783	(322,093)	-25.6%	2,519,751
CHEMICALS	7,904,349	8,939,627	1,035,278	13.1%	14,994,036
ENERGY AND UTILITIES	15,331,553	16,184,632	853,079	5.6%	30,896,365
MAINTENANCE	17,529,378	17,991,536	462,158	2.6%	33,241,023
TRAINING AND MEETINGS	271,858	128,940	(142,918)	-52.6%	492,197
PROFESSIONAL SERVICES	3,965,968	3,623,646	(342,322)	-8.6%	8,197,575
OTHER MATERIALS	2,255,447	2,438,818	183,371	8.1%	6,728,862
OTHER SERVICES	14,485,930	13,161,951	(1,323,979)	-9.1%	28,372,237
TOTAL DIRECT EXPENSES	\$ 133,956,427	\$ 127,539,685	\$ (6,416,742)	-4.8%	\$ 273,722,272
INSURANCE	\$ 1,958,001	\$ 1,906,053	\$ (51,948)	-2.7%	\$ 3,916,002
WATERSHED/PILOT	8,608,583	7,901,462	(707,121)	-8.2%	28,890,762
HEEC PAYMENT	3,166,062	3,258,941	92,879	2.9%	6,225,566
MITIGATION	867,847	867,846	(1)	0.0%	1,735,694
ADDITIONS TO RESERVES	1,209,227	1,209,227	-	0.0%	2,418,453
RETIREMENT FUND	12,555,203	12,555,203	-	0.0%	12,555,203
POST EMPLOYEE BENEFITS	-	-	-	---	4,754,061
TOTAL INDIRECT EXPENSES	\$ 28,364,923	\$ 27,698,732	\$ (666,191)	-2.3%	\$ 60,495,741
STATE REVOLVING FUND	\$ 43,792,576	\$ 43,914,470	\$ 121,894	0.3%	\$ 96,342,495
SENIOR DEBT	148,426,636	147,298,430	(1,128,206)	-0.8%	302,169,940
DEBT SERVICE ASSISTANCE	(1,182,494)	(1,182,494)	-	0.0%	(1,182,494)
CURRENT REVENUE/CAPITAL	-	-	-	---	18,200,000
SUBORDINATE MWRA DEBT	37,733,455	37,733,455	-	0.0%	75,491,975
LOCAL WATER PIPELINE CP	-	-	-	---	6,233,882
CAPITAL LEASE	1,608,530	1,608,530	-	0.0%	3,217,060
VARIABLE DEBT	-	(2,459,605)	(2,459,605)	---	-
DEFEASANCE ACCOUNT	-	3,465,918	3,465,918	---	-
DEBT PREPAYMENT	-	-	-	---	5,500,000
TOTAL CAPITAL FINANCE EXPENSE	\$ 230,378,703	\$ 230,378,703	\$ -	0.0%	\$ 505,972,858
TOTAL EXPENSES	\$ 392,700,053	\$ 385,617,120	\$ (7,082,933)	-1.8%	\$ 840,190,871
REVENUE & INCOME					
RATE REVENUE	\$ 407,324,000	\$ 407,324,000	\$ -	0.0%	\$ 814,648,000
OTHER USER CHARGES	4,759,460	9,443,156	4,683,696	98.4%	9,836,507
OTHER REVENUE	4,338,247	5,214,687	876,440	20.2%	6,139,104
RATE STABILIZATION	490,000	490,000	-	0.0%	980,000
INVESTMENT INCOME	4,134,243	8,463,577	4,329,334	104.7%	8,587,260
TOTAL REVENUE & INCOME	\$ 421,045,950	\$ 430,935,420	\$ 9,889,470	2.3%	\$ 840,190,871

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY23 Budget YTD December	FY23 Actuals December	FY23 YTD Actual vs. FY23 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	56,497,672	50,359,252	(6,138,420)	-10.9%	Wages and Salaries are under budget by \$6.1 million. Year to date, there have been 112 fewer average FTEs (1,055 versus 1,167 budget), lower average new hire salaries versus retirees, the timing of backfilling vacant positions.
Overtime	2,696,431	2,492,061	(204,370)	-7.6%	Overtime expenses were less than budget by \$204,000 or 7.6%. Lower spending mainly in Field Operations of \$275,000 primarily for planned overtime due to vacancies, emergency overtime being under budget and minimal bad weather conditions, and Engineering & Construction of \$64,000, are partially offset by higher spending at Deer Island of \$149,000 for shift coverage due to vacancies for DITP Operations positions.
Fringe Benefits	11,757,965	11,281,439	(476,526)	-4.1%	Fringe Benefit spending was lower than budget by \$477,000 or 4.1%. Lower than budget in Health Insurance of \$362,000, 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. Also, Paid Family Medical Leave of \$44,000 and Unemployment Insurance of \$26,000 were less than budget.
Worker's Compensation	1,259,876	937,783	(322,093)	-25.6%	Worker's Compensation expenses were lower than budget by \$322,000 or 25.6%. The lower expenses were due to favorable variances in Compensation Payments of \$246,000, Medical Payments of \$42,000, and Administrative Expenses of \$33,000. Due to uncertainties of when spending will happen, the budget is spread evenly throughout the year.
Chemicals	7,904,349	8,939,627	1,035,278	13.1%	Chemicals were greater than budget by \$1.0 million or 13.1%. Higher than budget spending on Sodium Hypochlorite of \$548,000 driven by DITP of \$397,000 due to additional usage for disinfection and odor control due to lower flows, \$77,000 at JCWTP mostly due to higher contract price, and \$64,000 in Wastewater Operations primarily at Nut Island Headworks, Hydrogen Peroxide of \$162,000 driven by DITP to reduce elevated H2S levels for pretreatment and odor control and provide maintenance safely, Ferric Chloride of \$156,000 driven by DITP due to higher than unusual secondary waste sludge, Activated Carbon of \$106,000 driven by DITP of \$43,000 and \$64,000 in Wastewater Operations due to timing of replacements, Carbon Dioxide of \$106,000 primarily due to increased contract price, partially offset by Sodium Bisulfite of \$111,000 primarily in Wastewater Operations. DITP flows are 17.8% lower than the budget and CWTP flows are 6.0% greater than the budget through December. 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	15,331,553	16,184,632	853,079	5.6%	Utilities were greater than budget by 853,000 or 5.6%. Overspending in Electricity of \$816,000 primarily at DITP of \$810,000 driven by higher real time pricing as well as higher usage and peak demand charges.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY23 Budget YTD December	FY23 Actuals December	FY23 YTD Actual vs. FY23 Budget		Explanations
			\$	%	
Maintenance	17,529,378	17,991,536	462,158	2.6%	Maintenance was greater than budget by \$462,000 or 2.6%, largely driven by the timing of projects. <i>Maintenance Materials</i> are over budget by \$344,000 driven by higher Electrical Materials of \$128,000, Plant & Machinery Materials of \$118,000, and HVAC Materials of \$66,000 mainly due to timing. <i>Maintenance Services</i> are over budget by \$118,000 due to higher Plant & Machinery Services of \$952,000 due to timing of some service contracts and the Norumbega Tank Cleaning award being greater than budgeted, Computer Software Licenses of \$309,000 due to timing including Windows Exchange renewal, and OKTA support renewal that was greater than budgeted, partially offset by lower Building & Grounds Services of (\$711,000) due to timing (including Eastern Ave Traffic Light and Shaft 8 Retaining Wall work) and Computer Services of (\$393,000) also due to timing,
Training & Meetings	271,858	128,940	(142,918)	-52.6%	Training & Meetings was lower than budget by \$143,000 or 52.6% is primarily due to timing driven by MIS (\$103,000), DITP (\$16,000), Water Redundancy (\$9,000), Procurement (\$8,000), and Engineering & Construction (\$7,000), partially offset by higher spending in Field Operations (\$12,000).
Professional Services	3,965,968	3,623,646	(342,322)	-8.6%	Professional Services were less than budget by \$342,000 or 8.6% driven by lower Other Services of \$210,000, Engineering Services of \$100,000, and Computer Systems Consultant of \$64,000 primarily due to timing, and Security of \$61,000, partially offset by higher Legal Services of \$85,000, also due to timing and Lab & Testing Analysis of \$24,000 primarily due to spending related to the Red Tide Alert.
Other Materials	2,255,447	2,438,818	183,371	8.1%	Other Materials were higher than budget by \$183,000 or 8.1% driven by Vehicle Purchase/Replacements of \$391,000 due to timing of purchases, partially offset by Computer Software of \$86,000, Lab & Testing Supplies of \$50,000, and Other Materials of \$41,000 also due to timing.
Other Services	14,485,930	13,161,951	(1,323,979)	-9.1%	Other Services was less than budget by \$1.3 million or 9.1% for Sludge Pelletization of \$443,000 and Grit & Screenings Removal \$139,000 due to lower quantities, Telecommunications of \$366,000, Memberships/Dues/Subscriptions of \$33,000 primarily due to timing. Also, lower Police Details of \$59,000 was due to less than anticipated as-needed details.
Total Direct Expenses	133,956,427	127,539,685	(6,416,742)	-4.8%	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY23 Budget YTD December	FY23 Actuals December	FY23 YTD Actual vs. FY23 Budget		Explanations
			\$	%	
Indirect Expenses					
Insurance	1,958,001	1,906,053	(51,948)	-2.7%	Lower Payments/Claims of \$85,000 and higher Premiums of \$33,000 than budgeted.
Watershed/PILOT	8,608,583	7,901,462	(707,121)	-8.2%	Lower Watershed Reimbursement of \$707,000 favorable variance to budget driven by lower spending on Wages & Salaries and Fringe Benefits, partially offset by higher spending on Maintenance and Equipment due to timing.
HEEC Payment	3,166,062	3,258,941	92,879	2.9%	HEEC True Up.
Mitigation	867,847	867,846	(1)	0.0%	
Addition to Reserves	1,209,227	1,209,227	-	0.0%	
Pension Expense	12,555,203	12,555,203	-	0.0%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	28,364,923	27,698,732	(666,191)	-2.3%	
Debt Service					
Debt Service	230,378,703	231,561,198	1,182,495	0.5%	Debt Service matches the budget after the transfer of \$3.5 million to the Defeasance account, driven by lower than budgeted variable interest expense of \$2.5 million, lower Senior Debt spending of \$1.1 million as a result of the refunding and new money transactions.
Debt Service Assistance	-	(1,182,494)	(1,182,494)		
Total Debt Service Expenses	230,378,703	230,378,704	1	0.0%	
Total Expenses					
Total Expenses	392,700,053	385,617,121	(7,082,931)	-1.8%	

**ATTACHMENT 2
Current Expense Variance Explanations**

Total MWRA	FY23 Budget YTD December	FY23 Actuals December	FY23 YTD Actual vs. FY23 Budget		Explanations
			\$	%	
Revenue & Income					
Rate Revenue	407,324,000	407,324,000	-	0.0%	
Other User Charges	4,759,459	9,443,156	4,683,697	98.4%	Water usage by the City of Cambridge.
Other Revenue	4,338,247	5,214,687	876,440	20.2%	Other Revenue was \$876,000 or 20.2% over budget due to Miscellaneous Revenue of \$372,000, Energy Revenue of \$270,000, Permit Fees of \$141,000, and Energy Rebates of \$59,000 primarily due to timing.
Rate Stabilization	490,000	490,000	-	0.0%	HEEC Reserve.
Investment Income	4,134,243	8,463,577	4,329,334	104.7%	Investment Income is over budget due to higher than budgeted interest rates (2.42% actual vs 1.11% budget).
Total Revenue	421,045,949	430,935,420	9,889,471	2.3%	
Net Revenue in Excess of Expenses	28,345,896	45,318,299	16,972,402		

**ATTACHMENT 3
FY23 CIP Year-to-Date Variance Report (\$000's)**

	FY23 Budget YTD December	FY23 Actuals YTD December	YTD Actuals vs. Budget		Explanations
			\$	%	
Wastewater					
Interception & Pumping (I&P)	\$19,021	\$12,342	(\$6,680)	-35.1%	<u>Underspending</u> Nut Island Odor Control & HVAC Improvements Phase 2 - Construction: \$3.5M (contractor behind schedule) Ward Street & Columbus Park Headworks Upgrades - Design/CA: \$1.7M (completed some design and inspection tasks later than anticipated) Remote Headworks Shaft Access Improvements - Construction: \$415k (slower than anticipated start-up) Wastewater Meter System Equipment Replacement: \$324k (timing of work)
Treatment	\$2,337	\$481	(\$1,855)	-79.4%	<u>Underspending</u> DITP Roofing Replacement: \$750k (schedule change) As-Needed Design: \$462k (lower than projected task order work)
Residuals					
CSO	\$938	\$552	(\$385)	-41.1%	<u>Underspending</u> Chelsea 008 Pipe Replacement: \$0.4 million (updated schedule and long lead time for materials)
Other Wastewater	\$13,086	\$4,383	(\$8,703)	-66.5%	<u>Underspending</u> I/I Local Financial Assistance: \$8.7M (timing of community distributions of grants and loans)
Total Wastewater	\$35,381	\$17,758	(\$17,623)	-49.8%	

**ATTACHMENT 3
FY23 CIP Year-to-Date Variance Report (\$000's)**

	FY23 Budget YTD December	FY23 Actuals YTD December	YTD Actuals vs. Budget		Explanations
			\$	%	
Waterworks					
Drinking Water Quality Improvements	\$2,045	\$953	(\$1,092)	-53.4%	<u>Underspending</u> CWTP Chemical Feed System Improvements - Construction: \$552k, and Marlboro Pump Station Construction: \$163k (timing of work)
Transmission	\$26,190	\$15,344	(\$10,846)	-41.4%	<u>Underspending</u> Waltham Water Pipeline - Construction: \$6.9M (long lead time for piping material) WASM/SPSM West Pressure Reducing Valves - Construction: \$766k, and WASM 3 Rehabilitation, CP-1 : \$628k (timing of contractors work) Watershed Land: \$662k (timing of purchases) Metropolitan Redundancy Interim Improvements CP2 Shafts 5: \$544k, and Quabbin Maintenance Garage/Wash Bay/Storage Building - Construction: \$483K (schedule changes) Program Support Services: \$268k (timing of consultant work) <u>Offset Overspending</u> Preliminary Design & MEPA Review: \$390k (timing of consultant work)
Distribution & Pumping	\$18,525	\$18,149	(\$376)	-2.0%	<u>Underspending</u> Cathodic Protection Shafts N & W: \$600k (scope changes) CP3-Sections 23, 24, 47 Rehabilitation: \$469k (timing of work) Section 56 Replacement/Saugus River - Design/CA: \$553k (permitting delays) <u>Offset Overspending</u> Section 53 and 99 Improvements - Design/CA: \$503k, Sections 25, 75, 24, 47, 59 & 60 - Design/CA: \$397k, and NEH Improvements Design - ESDC: \$426k, and (timing of consultants work) CP-1 NEH Improvements: \$441k, and Section 89/29 Replacement - Construction: \$406k (contractors progress)
Other Waterworks	\$15,995	\$3,280	(\$12,715)	-79.5%	<u>Underspending</u> Local Water Pipeline Financial Assistance Program: \$11.4M (timing of community distributions) CWTP SCADA Upgrades: \$1.3M (timing of work and long lead time for materials) Electrical Distribution Upgrades at Southborough: 667k (timing of work) <u>Offset Overspending</u> New Roofs at Water Pump Stations - Construction: \$621k (timing of work)
Total Waterworks	\$62,754	\$37,726	(\$25,029)	-39.9%	

**ATTACHMENT 3
FY23 CIP Year-to-Date Variance Report (\$000's)**

	FY23 Budget YTD December	FY23 Actuals YTD December	YTD Actuals vs. Budget		Explanations
			\$	%	
Business & Operations Support					
Total Business & Operations Support	\$13,969	\$7,116	(\$6,853)	-49.1%	<u>Underspending</u> Cabling: \$1.9M, Office Space Modifications: \$1.6M, Oracle Database Appliance: \$775k, and MAXIMO Interface Enhancements: \$432k (timing of work) FY19-23 Vehicle Purchases: \$950k (timing of purchases and supply chain issues) Security Equipment & Installation: \$806k (timing of security initiatives) MSSP/SIEM: \$627k (reduction of scope of work) <u>Offset Overspending</u> Edge Switches: \$444k, and As-Needed Design Contracts: \$425k (timing of work)
Total MWRA	\$112,105	\$62,599	(\$49,506)	-44.2%	

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director *Frederick A. Laskey*
DATE: January 18, 2023
SUBJECT: Transmittal of the FY24 Proposed Capital Improvement Program and Proposed FY24-28 Spending Cap to the MWRA Advisory Board

COMMITTEE: Administration, Finance & Audit

 INFORMATION
 X VOTE

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

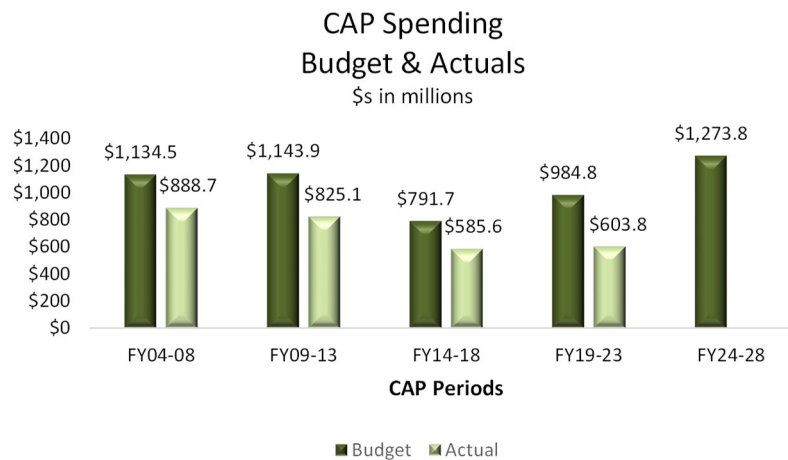
Thomas J. Durkin
Thomas J. Durkin
 Director, Finance

RECOMMENDATION:

To approve the transmittal of the FY24 Proposed Capital Improvement Program and the Proposed FY24-28 Cap spending to the MWRA Advisory Board for its 60-day review and comment period.

DISCUSSION:

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 will be the fifth cap established by the Authority. 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 graph below describes the history of the past four five-year caps and the Proposed FY24-28 Cap, both in terms of the Cap levels and actual spending.



It is important to note that the spending on capital programs is largely determined by the nature, magnitude, and number of upcoming projects. In the prior five-year Caps, specifically FY04-08 and FY09-13, the majority of spending was driven by court-mandated projects and building new facilities whereas the FY19-23 period began to focus on Asset Protection and Water Redundancy. Based on the FY23 approved Capital Improvement Program (CIP), the spending projection for the FY24-28 period was \$2.2 billion, which was already built into the long-term planning estimates. This has since been reduced to \$1.7 billion during the FY24 Proposed CIP process.

Today, the Authority is well positioned to reinvest in rehabilitation and replacement of aging facilities, reflecting conservative fiscal management which includes judicious control of expenses, and targeted defeasances utilizing available funds to prepay future debt service for rates management purposes.

MWRA project spending (excluding water and wastewater loan programs) has been 25% under plan levels on average since FY04. Underspensing for the past two Cap periods, FY14-18 and projected FY19-23, were 26% and 39% respectively. To try to better predict future spending, the Authority proposes to discount 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 Proposed FY24-28 Cap cash flows total \$1.7 billion and net to \$1.3 billion after applying the 25% Spend Rate Adjustment. Annual cash flows for the proposed Cap period are shown in the following table in millions:

FY24 Proposed		FY24	FY25	FY26	FY27	FY28	FY24-28
	Projected Expenditures excl. Metro Tunnel	\$327.3	\$318.1	\$299.7	\$321.7	\$300.1	\$1,566.8
	Metropolitan Tunnel	\$15.6	\$15.3	\$19.2	\$18.4	\$73.0	\$141.3
	I/I Program	(41.7)	(36.7)	(26.5)	(27.3)	(34.1)	(166.3)
	Water Loan Program	(15.2)	(11.2)	(5.0)	(2.6)	8.6	(25.4)
	MWRA Spending	\$286.0	\$285.4	\$287.3	\$310.2	\$347.5	\$1,516.5
	Contingency	18.2	18.6	19.5	21.3	27.9	105.6
	Inflation on Unawarded Construction	3.3	7.9	12.8	21.0	32.0	76.9
	Chicopee Valley Aqueduct Projects	(0.3)	(0.3)	0.0	0.0	0.0	(0.6)
	Projected Spending before Adjustment	\$307.2	\$311.7	\$319.5	\$352.5	\$407.5	\$1,698.4
Spend Rate Adjustment (25%)*	(76.8)	(77.9)	(79.9)	(88.1)	(101.9)	(424.6)	
FY24 Proposed FY24-28 Spending	\$230.4	\$233.8	\$239.7	\$264.3	\$305.6	\$1,273.8	

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

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

The Fiscal Year 2024 Proposed Capital Improvement Program represents an update to the FY23 CIP Program approved by the Board in June 2022 for Fiscal Year 2023. The Proposed CIP includes the latest cost estimates, revised schedules, and new projects.

The FY24 Proposed Capital Improvement Program projects \$342.9 million spending for FY24, of which \$167.0 million supports Wastewater System Improvements, \$154.6 million supports Waterworks System Improvements, and \$21.2 million is for Business and Operations Support. The projects with significant spending in FY24 include Deer Island Clarifier Rehabilitation Phase 2 Construction (\$22.6 million), Waltham Water Pipeline Construction (\$13.5 million), Wachusett Lower Gate House Pipe & Boiler Replacement (\$11.2 million), and NIH Redundancy and Storage - Section 89 & 29 Replacement Construction (\$10.8 million).

The Capital Improvement Program includes on-going Combined Sewer Overflow improvements in Boston, Chelsea and Somerville, rehabilitation of MWRA's Somerville Marginal, Prison Point and Cottage Farm CSO treatment facilities, and a new placeholder at the end of the cap period for design of any projects that come out of the Variance Water updated CSO Long Term Control Plan process. MWRA continues to evaluate the needs of the program and will refine cost projections as more information becomes available.

The Capital Improvement Program continues to address critical redundancy improvements including the Metropolitan Water Tunnel Program. When this program was initially added to the CIP in FY17, estimated program costs totaled \$1.5 billion, since that time some actual contracts have been awarded and costs are known and additional inflation has been applied. The FY24 Proposed CIP includes approximately \$1.8 billion in projected project spending, an increase of \$237.6 million due primarily to inflation. As the design of the tunnel progresses, the associated costs will continue to be refined.

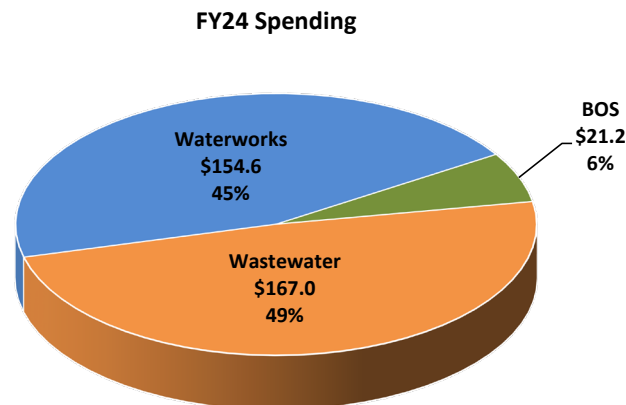
The initial contract for Program Support Services was awarded in March 2019 with a budget of \$17.5 million and spanning over a nine-year period. The second contract, Preliminary Design and MEPA Review (Massachusetts Environmental Policy Act), for \$15.7 million was awarded in May 2020 with projected spending through FY24. 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 is critical to identifying geological conditions and selecting the optimal tunnel route.

The FY24 Proposed Capital Program reaffirms MWRA's commitment to the community financing assistance programs on both the water and wastewater sides.

Today, the Authority is better positioned to reinvest in rehabilitation and replacement of aging facilities as 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 period.

Proposed FY24 Spending

The FY24 Proposed Capital Improvement Program projects \$342.9 million in spending for FY24, of which \$167.0 million supports Wastewater System Improvements, \$154.6 million supports Waterworks System Improvements, and \$21.2 million is for Business and Operations Support.



The FY24 Proposed CIP includes \$56.8 million for community assistance programs, which are a combination of loan and partial grant programs, with net expenditures of \$41.7 million for the local Infiltration/Inflow program and net expenditures of \$15.2 million for the local water pipeline program.

The \$342.9 million in projected spending is driven by 45 active wastewater and water projects. Of this \$342.9 million in spending, project contracts with spending greater than \$5.0 million in FY24, excluding local community assistance programs, total \$141.5 million and account for 41.3% of the total annual spending. These projects are presented in the following table:

Project	Subphase	FY24 \$s in Millions	% of Total
DI Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$22.6	6.6%
Metro Redundancy Interim Improvements	Waltham Water Pipeline Construction	\$13.5	3.9%
Quabbin Transmission System	Wach LGH Pipe & Boiler Replacement Construction	\$11.2	3.3%
NIH Redundancy & Storage	Section 89 & 29 Repl - Construction	\$10.8	3.1%
New Connecting Mains-Shaft 7 to WASM 3	CP3-Sect 23,24,47, Rehabilitation	\$9.8	2.8%
Braintree-Weymouth Relief	B/W Improvements - Construction	\$9.1	2.7%
New Connecting Mains-Shaft 7 to WASM 3	Sect 25 & 24 - Construction CP-2	\$9.0	2.6%
DI Treatment Plant Asset Protection	Fire Alarm System Replacement - Construction	\$7.5	2.2%
DI Treatment Plant Asset Protection	DITP Roofing Replacement	\$7.0	2.0%
Siphon Structure Rehabilitation	Construction	\$6.3	1.8%
DI Treatment Plant Asset Protection	MCC & Switchgear Replace Construction	\$6.0	1.8%
Facility Asset Protection	Hayes Pump Station Rehab Construction	\$6.0	1.8%
New Connecting Mains-Shaft 7 to WASM 3	Section 75 Extension - Construction CP-1	\$6.0	1.8%
Metro Tunnel Redundancy	Geotechnical Support Services	\$6.0	1.7%
Metro Redundancy Interim Improvements	CP3 Shafts 7, 7B, 7C, 7D	\$5.7	1.7%
Metro Tunnel Redundancy	Preliminary Design & MEPA Review	\$5.1	1.5%
Total Contracts > \$5 million (excl. Loan Programs)		\$141.5	41.3%
Other Project Spending		\$201.4	58.7%
Total FY24 Spending		\$342.9	100.0%

Clarifier Rehabilitation Phase 2 Construction - \$22.6 million (\$195.0 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 - \$13.5 million (\$27.6 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.

Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction - \$11.2 million (\$19.3 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.

Northern Intermediate High Redundancy Section 89 and 29 Replacement Construction - \$10.8 million (\$33.7 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.

CP3 Sections 23, 24 and 47 Rehabilitation - \$9.8 million (\$24.4 million total construction cost). This contract includes cleaning and cement mortar lining approximately 4,500 linear feet of Section 23, which is a 36-inch diameter cast iron water main, 10,800 feet of 20-inch Section 24 and Section 47 cast iron water mains, and 500 feet of 20-inch steel water main along Section 24. The construction work will also include installing, by open-cut, 3,600 feet of 36-inch ductile iron Section 23 water main, 6,400 feet of 24-inch ductile iron Section 24 water main, and new valves and appurtenances, and replacing the check valve assembly at Boston Meter 120. Additionally, the construction contract will include replacing approximately 2,400 linear feet of City of Newton 20-inch diameter, 140 year old cast iron water main on Ward Street between Manet Road and Waverly Avenue. This contract was awarded in October 2021.

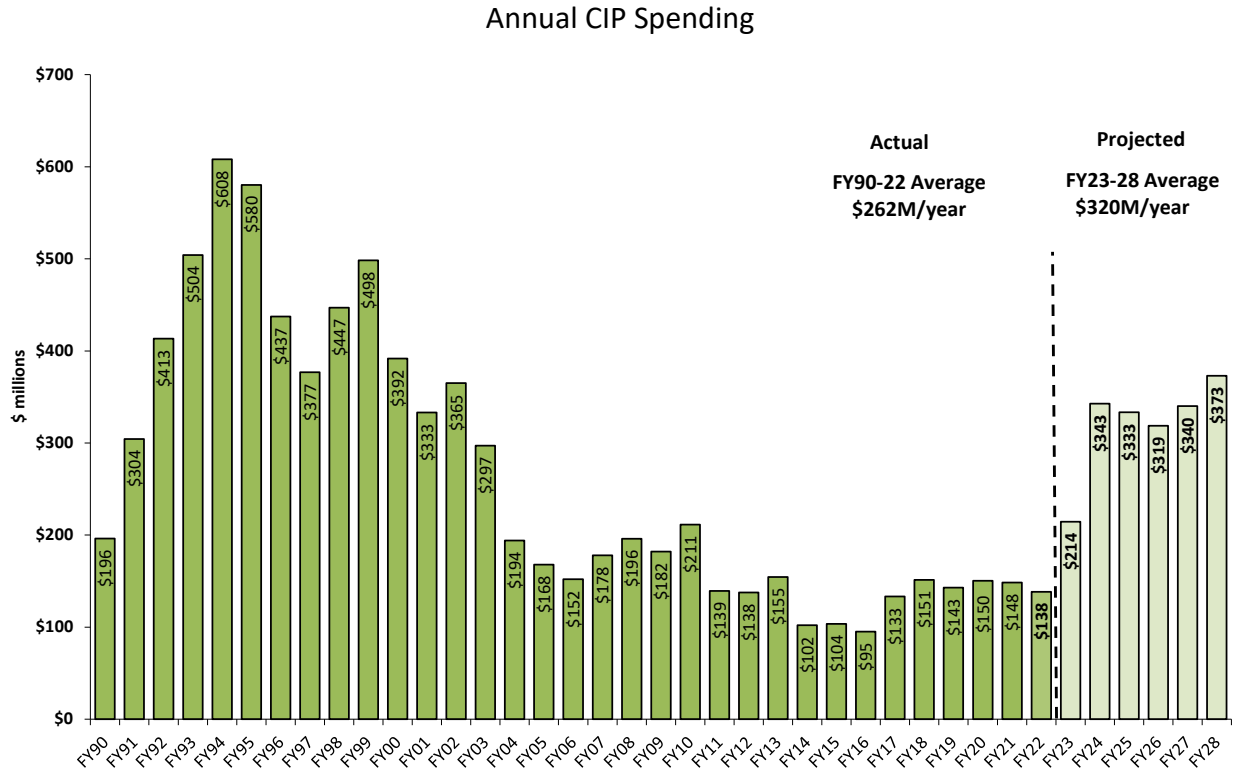
Braintree-Weymouth Improvements Construction - \$9.1 million (\$13.5 million total construction cost). Modifications needed to improve facility safety, reliability and performance. Construction improvements are required to address deficiencies in odor control, monitoring/instrumentation systems, solids screenings/handling and pumping operations.

Sections 24 & 25 – Construction CP-1 - \$9.0 million (\$22.0 million total construction cost). Replacement of the existing Watertown 4,900ft Section 25, a 16-in CI pipe, with 5,900ft of 20-in DI pipe and valves. Relocation/replacement of Watertown revenue Meter 2 and replacement of Watertown Meter 40 and new PRV for interconnection of the intermediate high to southern high systems. Cleaning and lining 3,300ft of Section 24, a 20-inch CI pipe, including valve replacements. Work in Newton includes the cleaning and lining of the southern crossing of the Charles River (part of Section 24) and valve replacements.

Fire Alarm System Replacement - \$7.5 million (\$31.0 million total construction cost) Project will replace obsolete fire alarm monitoring & control systems. Design awarded October 2015; construction phase to commence in FY23 and approximately every 20 years thereafter.

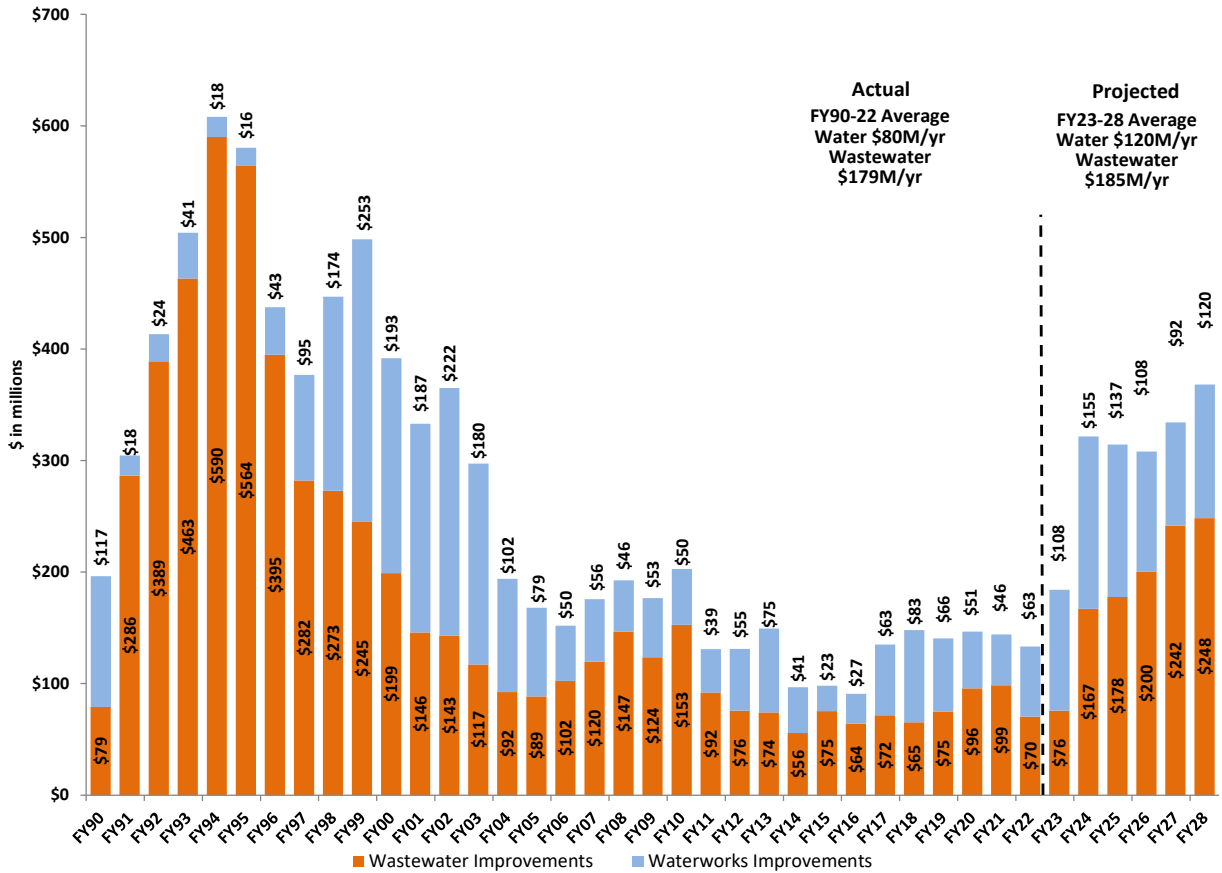
Historical & Projected Spending

The chart below captures the historical CIP spending through FY22 and projects spending through FY28 based on the FY24 Proposed CIP. Average annual CIP spending through FY22 was \$262 million. Average annual CIP spending for the proposed FY23-28 period is projected to be \$320 million.



The following chart shows the historical CIP spending from FY90 through FY22 by utility with projections through FY28. Average annual CIP spending through FY22 was \$80 million for Waterworks and \$179 million for Wastewater. Average annual CIP spending for FY23-28 is projected to be \$120 million for Waterworks and \$185 million for Wastewater.

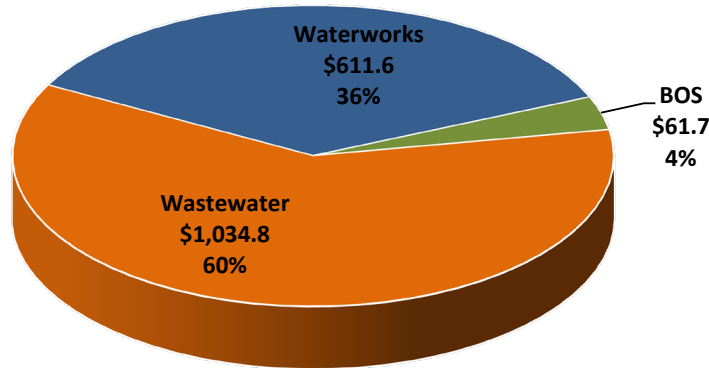
Annual CIP Spending by Utility



FY24-28 Spending

Spending during the FY24-28 timeframe is planned to be \$1.7 billion, including local community spending of \$166.3 million for the I/I loan and grant program and \$25.4 million for the water pipeline loan program. Spending under the Wastewater and Waterworks programs is projected at \$1,034.8 million and \$611.6 million, respectively, followed by Business and Operations at \$61.7 million. The spending projections set forth here include updates to the approved FY23 CIP with the latest cost estimates, revised schedules, and new projects.

FY24-28 Spending



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

	Future Spending Beyond FY22	FY24	FY25	FY26	FY27	FY28	Total FY24-28	Beyond 28
Wastewater System Improvements	\$2,127.7	\$167.0	\$177.6	\$200.2	\$241.7	\$248.3	\$1,034.8	\$1,017.2
Interception & Pumping	729.0	42.8	34.8	62.2	82.8	58.6	281.2	411.2
Treatment	1,142.6	74.4	99.5	110.7	128.2	152.1	564.9	564.5
Residuals	90.6	0.8	0.8	0.8	3.5	3.1	9.0	81.6
CSO	17.9	7.4	5.7	0.0	0.0	0.3	13.4	1.7
Other Wastewater	147.5	41.7	36.7	26.5	27.3	34.1	166.3	-41.8
Waterworks System Improvements	\$2,704.9	\$154.6	\$136.8	\$107.9	\$92.5	\$119.8	\$611.6	\$1,984.9
Drinking Water Quality Improvements	71.5	5.1	6.2	5.0	3.7	7.8	27.9	39.4
Transmission	2,060.0	72.6	38.2	25.0	28.4	83.6	247.8	1,762.1
Distribution & Pumping	621.2	49.9	60.5	48.1	41.6	30.1	230.3	355.0
Other Waterworks	(47.7)	27.0	31.9	29.7	18.7	-1.7	105.6	-171.7
Business & Operations Support	\$93.6	\$21.2	\$19.0	\$10.7	\$5.9	\$4.9	\$61.7	\$1.6
Total MWRA	\$4,926.2	\$342.9	\$333.4	\$318.8	\$340.1	\$373.0	\$1,708.2	\$3,003.7

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. Project contracts with expenditures greater than \$19 million for the FY24-28 period total \$632.1 million, which excludes local community assistance programs. These 15 projects account for 37.0% of total period spending. Largest construction initiatives in terms of FY24-28 spending include the Clarifier Rehabilitation at Deer Island of \$152.7 million (total cost \$195.0 million), Combined Heat & Power Construction of \$54.3 million (total cost \$114.0 million), Tunnel Construction of \$50.0 million (total cost \$1.3 billion), Ward Street Headworks of \$46.2 million (total cost \$67.2 million), South System PS VFD Replacement of \$45.5 million (total cost \$60.5 million), and Prison Point Rehabilitation of \$38.7 million (total cost \$38.7 million), respectively between FY24-28.

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

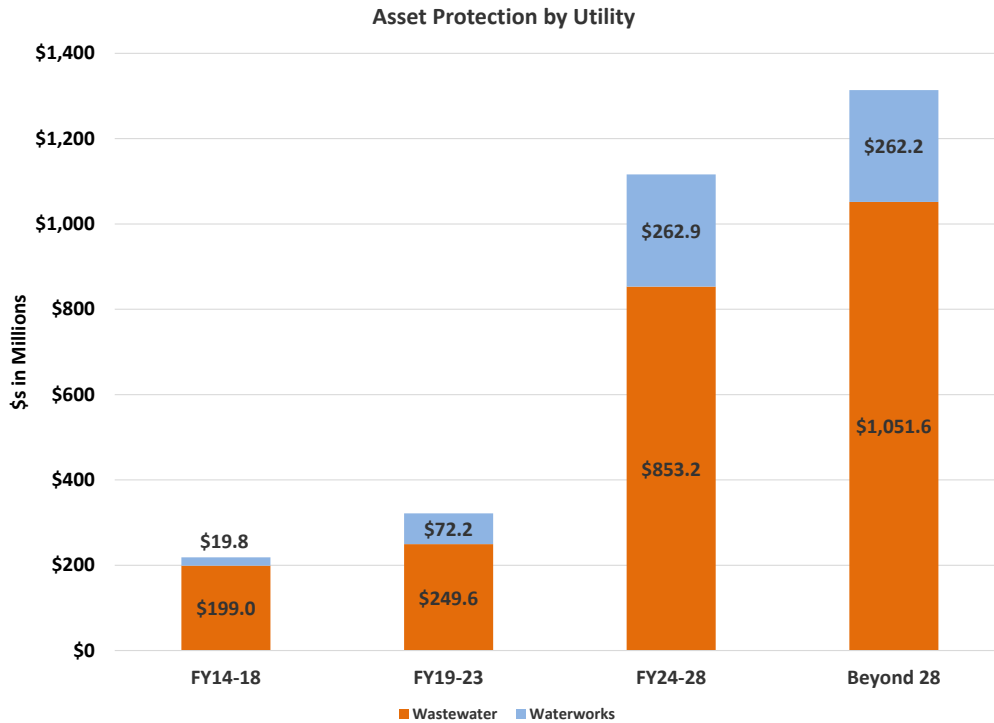
Project	Subphase	FY24-FY28 \$s in Millions
DI Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$152.7
DI Treatment Plant Asset Protection	Combined Heat & Power - Construction	\$54.3
Metro Tunnel Redundancy	Tunnel Construction	\$50.0
Facility Asset Protection	Ward Street Headworks Construction	\$46.2
DI Treatment Plant Asset Protection	SSPS VFD Replace Construction	\$45.5
Facility Asset Protection	Prison Point Rehabilitation	\$38.7
Facility Asset Protection	Columbus Park HW Construction	\$37.8
Metro Tunnel Redundancy	Admin Legal & Public Outreach	\$37.1
DI Treatment Plant Asset Protection	Digester/Storage Tank Rehab Construction	\$31.9
DI Treatment Plant Asset Protection	Fire Alarm System Replacement - Construction	\$31.0
DI Treatment Plant Asset Protection	MCC & Switchgear Replace Construction	\$23.5
New Connecting Mains-Shaft 7 to WASM 3	Sect 25 & 24 - Construction CP-2	\$22.0
Metro Redundancy Interim Improvements	Waltham Water Pipeline Construction	\$21.2
Northen Extra High Service New Pipelines	CP-2 NEH Improvements	\$20.7
Facility Asset Protection	Hayes Pump Station Rehab Construction	\$19.5
Top 15 Subphase Spending (excl. Loan Programs)		\$632.1
% of FY24-28 Spending		37.0%
FY24-28 Spending		\$1,708.2

Asset Protection accounts for the largest share of capital expenditures for the FY24-28 period. The FY24 Proposed CIP includes \$1.1 billion for asset protection initiatives, representing 66.2% of total MWRAs spending in this timeframe. Asset protection spending by program is as follows: Wastewater (\$853.2 million), Waterworks (\$262.9 million), and Business and Operations Support (\$15.4 million). Deer Island Treatment Plant Asset Protection accounts for \$551.1 million in spending. Spending for water system redundancy projects totals \$299.1 million in the same FY24-28 period, accounting for 17.5% of total spending.

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

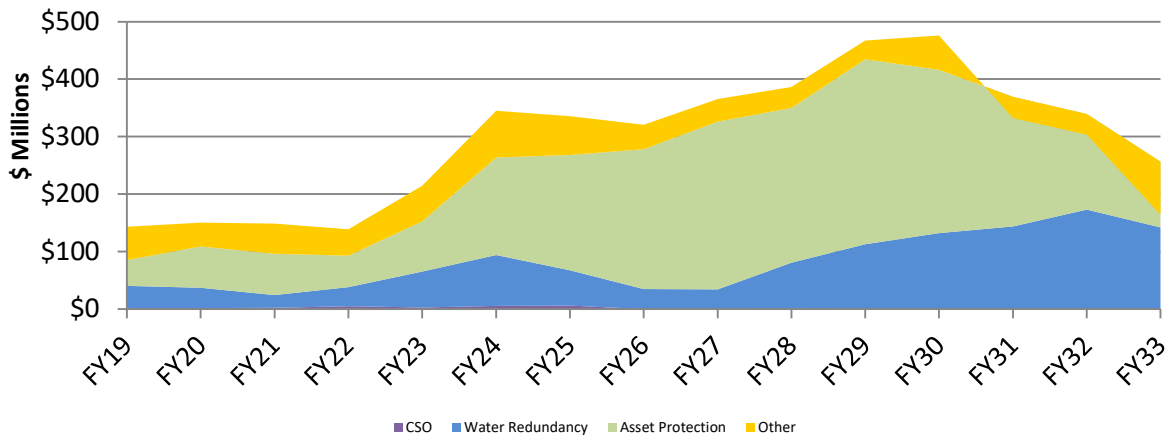
Project Category	FY14-18	FY19-23	FY24-28	Beyond 28
Asset Protection	\$222.8	\$331.1	\$1,131.5	\$1,315.4
Water Redundancy	\$174.6	\$191.6	\$299.1	\$1,861.3
CSO	\$64.7	\$12.3	\$11.3	\$1.7
Other	\$123.5	\$259.4	\$266.3	-\$174.7
Total	\$585.6	\$794.5	\$1,708.2	\$3,003.7
Asset Protection	38.0%	41.7%	66.2%	43.8%
Water Redundancy	29.8%	24.1%	17.5%	62.0%
CSO	11.0%	1.6%	0.7%	0.1%
Other	21.1%	32.7%	15.6%	-5.8%
Total	100.0%	100.0%	100.0%	100.0%

In terms of utility spending, wastewater asset protection accounts for 75.4% of the FY24-28 projected asset protection spending at \$853.2 million of which \$551.1 million is designated for the Deer Island Wastewater Treatment Plant and \$302.1 million for headworks and pipelines. The \$262.9 million targeted for waterworks asset protection includes \$134.8 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. Total asset protection spending for FY24-28 is projected at \$1.1 billion or 66.2% of projected spending. Similarly, water redundancy spending for FY24-28 is projected at \$299.1 million or 17.5% of projected FY24-28 spending. For the FY29-33 spending window, total asset protection expenditures are projected at \$1.2 billion of projected spending. Similarly, water redundancy spending for FY29-33 is projected at \$702.6 million.

**FY24 Proposed
Expenditure Forecast by Major Category**



FY24 Proposed CIP Future Expenditures

The FY24 Proposed CIP contains future spending (beyond FY22) estimated at \$4.9 billion, including \$2.1 billion for Wastewater (primarily Asset Protection of \$2.0 billion) and \$2.7 billion for Waterworks (primarily Redundancy projects of \$2.2 billion). Wastewater Asset Protection includes \$1.1 billion for Deer Island and \$608.8 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 \$1.8 billion and \$148.3 million, respectively. FY24-FY28 spending is projected at \$1.7 billion or 34.7% of future spending.

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

	Future Spending Beyond FY22	Total FY19-23	Total FY24-28	Beyond 28
Wastewater System Improvements	\$2,127.7	\$415.1	\$1,034.8	\$1,017.2
Interception & Pumping	729.0	173.7	281.2	411.2
Treatment	1,142.6	60.4	564.9	564.5
Residuals	90.6	15.6	9.0	81.6
CSO	17.9	12.3	13.4	1.7
Other Wastewater	147.5	153.0	166.3	-41.8
Waterworks System Improvements	\$2,704.9	\$333.4	\$611.6	\$1,984.9
Drinking Water Quality Improvements	71.5	12.4	27.9	39.4
Transmission	2,060.0	120.4	247.8	1,762.1
Distribution & Pumping	621.2	123.8	230.3	355.0
Other Waterworks	(47.7)	76.8	105.6	-171.7
Business & Operations Support	\$93.6	\$45.9	\$61.7	\$1.6
Total MWRA	\$4,926.2	\$794.5	\$1,708.2	\$3,003.7

FY24 New Projects

The FY24 Proposed CIP adds 10 new projects at a total cost of \$242.5 million with projected spending of \$78.3 million over the FY24-28 period. There are 8 wastewater projects totaling \$229.5 million and 2 waterworks projects at \$13.0 million. The largest new project is the Rehab of the Braintree-Weymouth Intermediate Pump Station at \$46.5 million. Other new wastewater projects include rehab of four pump stations: Squantum PS, Quincy PS, Framingham, and New Neponset PS at \$24 million each. The largest water project is the Butterfly Valve Replacement project at the Carroll Water Treatment Plant for \$12 million. A complete listing of projects is included as Attachment C.

\$ in Millions

Project	Total Contract Amount	FY24-28 Spending	Beyond 28
Wastewater (#8)	\$229.5	\$65.3	\$156.1
Waterworks (#2)	\$13.0	\$13.0	\$0.0
Total New Projects	\$242.5	\$78.3	\$156.1

CIP Review and Adoption Process

The Advisory Board will have no less than 60 days from the transmittal of the FY24 Proposed CIP to review the budget and prepare comments and recommendations. During the review period, Advisory Board and MWRA staff will continue to meet and discuss the changes to the capital budget. The Advisory Board will then transmit its comments and recommendations to MWRA in the spring after its review. Staff will prepare draft responses to the Advisory Board's recommendations for discussion at the budget hearing. During the spring, MWRA will update the CIP to incorporate the latest information into the Final budget. In June, staff will present the FY24 Final to the Board for adoption.

ATTACHMENTS:

- A. FY24 Proposed Project Level Expenditure Forecast
- B. Overview of the FY24 Proposed CIP and Changes from the FY23 Final CIP
- C. FY24 Proposed New Projects

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
Total MWRA				9,780,082,775	4,853,845,122	4,926,237,653	214,406,496	794,489,315	1,708,175,967	3,003,655,160
Wastewater				4,528,494,043	2,400,808,811	2,127,685,232	75,633,527	415,125,228	1,034,835,397	1,017,216,304
Interception & Pumping				1,468,512,145	739,472,445	729,039,699	36,619,917	173,692,230	281,215,855	411,203,922
102 Quincy Pump Facilities Total	completed project			25,907,202	25,907,202	-				
104 Braintree-Weymouth Relief Facilities Total				247,819,618	228,893,447	18,926,170	5,056,371	6,245,197	10,421,478	3,448,313
105 New Neponset Valley Relief Total	completed project			30,300,304	30,300,304	-				
106 Wellesley Extension Replacement Total	completed project			64,358,543	64,358,543	-				
107 Framingham Extension Relief Sewer Total	completed project			47,855,986	47,855,986	-				
127 Cummingsville Replacement Sewer Total	completed project			8,998,768	8,998,768	-				
130 Siphon Structure Rehabilitation Total				24,362,222	2,794,171	21,568,051	698,051	2,552,452	13,201,000	7,669,001
131 Upper Neponset Valley Sewer System Total	completed project			54,174,077	54,174,077	-				
132 Corrosion & Odor Control Total				103,441,071	54,675,364	48,765,706	17,327,027	65,822,451	1,525,328	29,913,351
136 West Roxbury Tunnel Total				11,313,573	10,313,573	1,000,000			1,000,000	
137 Wastewater Central Monitoring Total				27,482,141	19,925,878	7,556,263		143,842	3,322,000	4,234,263
139 South System Relief Project Total				4,939,244	3,439,244	1,500,000				1,500,000
141 Wastewater Process Optimization Total				8,310,171	2,172,224	6,137,947	32,987	703,444		6,104,960
142 Wastewater Meter System - Equipment Replacement Total				21,029,908	11,961,279	9,068,630	394,937	6,631,848		8,673,693
143 Regional I/I Management & Planning Total	completed project			168,987	168,987	-				
145 Facility Asset Protection Total				782,352,831	173,533,397	608,819,436	13,110,543	91,592,995	246,048,550	349,660,341
146 D.I. Cross Harbor Tunnel Total				5,000,000	-	5,000,000			5,000,000	
147 Randolph Trunk Sewer Relief Total				697,500	-	697,500			697,500	

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
Treatment				1,490,973,896	348,359,988	1,142,613,908	13,212,635	60,415,836	564,879,462	564,521,809
182 DI Primary and Secondary Treatment Total	completed project			(957,878)	(957,878)	-				
200 DI Plant Optimization Total	completed project			33,278,598	33,278,598	(1)				
206 DI Treatment Plant Asset Protection Total				1,420,813,808	297,106,768	1,123,707,036	10,589,635	55,336,967	551,089,843	562,027,558
210 Clinton Wastewater Treatment Plant Total				35,627,696	16,720,825	18,906,870	2,623,000	5,078,869	13,789,619	2,494,251
211 Laboratory Services Total	completed project			2,211,674	2,211,674	-				
Residuals				171,325,663	80,696,482	90,629,181		15,649,460	8,986,093	81,643,088
261 Residuals Total	completed project			63,810,848	63,810,848	-				
271 Residuals Asset Protection Total				107,514,816	16,885,635	90,629,181	-	15,649,460	8,986,093	81,643,088
CSO				929,816,459	911,926,942	17,889,516	2,800,000	12,330,528	13,422,831	1,666,667
CSO MWRA Managed				437,267,309	433,534,308	3,733,001	1,000,000	1,000,000	2,733,000	
339 North Dorchester Bay Total	completed project			221,509,794	221,509,793	-				
347 East Boston Branch Sewer Relief Total	completed project			85,637,164	85,637,164	-				
348 BOS019 Storage Conduit Total	completed project			14,287,581	14,287,581	-				
349 Chelsea Trunk Sewer Total				31,349,319	29,779,320	1,570,000	1,000,000	1,000,000	570,000	
350 Union Park Detention Treatment Facility Total	completed project			49,583,407	49,583,407	-				
353 Upgrade Existing CSO Facilities Total	completed project			22,385,200	22,385,200	-				
354 Hydraulic Relief Projects Total				4,457,549	2,294,549	2,163,000			2,163,000	
355 MWR003 Gate & Siphon Total	completed project			4,424,220	4,424,219	-				
357 Charles River CSO Controls Total	completed project			3,633,077	3,633,077	-				

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
CSO Community Managed				433,780,126	423,780,109	10,000,017	625,000	4,388,053	9,375,000	
340 Dorchester Bay Sewer Separation (Fox Point) Total	completed project			55,028,985	55,028,985	-				
341 Dorchester Bay Sewer Separation (Commercial Point) Total	completed project			61,443,027	61,443,026	2	-	1,581,386		
342 Neponset River Sewer Separation Total	completed project			2,491,747	2,491,747	-				
343 Constitution Beach Sewer Separation Total	completed project			3,731,315	3,731,315	-				
344 Stony Brook Sewer Separation Total	completed project			44,319,314	44,319,314	-				
346 Cambridge Sewer Separation Total	completed project			104,552,056	104,552,054	2				
351 BWSC Floatables Controls Total	completed project			945,936	945,936	-				
352 Cambridge Floatables Controls Total	completed project			1,126,708	1,126,708	-				
356 Fort Point Channel Sewer Separation Total				21,507,257	11,507,256	10,000,001	625,000	625,000	9,375,000	
358 Morrissey Boulevard Drain Total	completed project			32,181,036	32,181,034	2				
359 Reserved Channel Sewer Separation Total	completed project			70,524,212	70,524,205	8				
360 Brookline Sewer Separation Total	completed project			24,715,291	24,715,291	-				
361 Bulfinch Triangle Sewer Separation Total	completed project			9,031,576	9,031,575	1				
362 East Boston CSO Control Total				2,181,667	2,181,667	-		2,181,667		
CSO Planning & Support				58,769,024	54,612,525	4,156,498	1,175,000	6,942,475	1,314,831	1,666,667
324 CSO Support Total				58,769,024	54,612,525	4,156,498	1,175,000	6,942,475	1,314,831	
Other Wastewater				467,865,880	320,352,953	147,512,928	23,000,975	153,037,174	166,331,155	(41,819,182)
128 I/I Local Financial Assistance Total				467,585,004	320,072,077	147,512,928	23,000,976	153,037,174	166,331,156	(41,819,182)
138 Sewerage System Mapping Upgrades Total	completed project			280,876	280,876	-				

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
Waterworks				5,041,324,667	2,336,392,416	2,704,932,250	108,459,967	333,437,126	611,595,902	1,984,876,357
Drinking Water Quality Improvements				729,742,620	658,226,185	71,516,435	4,155,117	12,408,929	27,945,310	39,416,000
542 Carroll Water Treatment Plant Total				443,308,819	428,969,715	14,339,104	1,593,884	7,447,174	3,495,220	9,250,000
543 Quabbin Water Treatment Plant Total	completed project			19,972,883	19,972,879	3				
544 Norumbega Covered Storage Total	completed project			106,674,147	106,674,146	-				
545 Blue Hills Covered Storage Total	completed project			40,082,837	40,082,837	-				
550 Spot Pond Covered Storage Facility Total	completed project			60,126,092	60,126,087	5				
555 Carroll Water Treatment Plant (CWTP) Asset Protection Total				59,577,845	2,400,522	57,177,324	2,561,233	4,961,755	24,450,090	30,166,000
Transmission				2,955,499,723	895,522,889	2,059,976,833	50,042,418	120,365,037	247,796,731	1,762,137,674
597 Winsor Station Pipeline Total				70,152,206	7,517,805	62,634,402	(16,000)	1,767,920		62,650,398
601 Sluice Gate Rehabilitation Total	completed project			9,158,411	9,158,411	-				
604 MetroWest Tunnel Total				700,184,178	697,182,356	3,001,823			3,001,822	
615 Chicopee Valley Aqueduct Redundancy Total	completed project			8,666,292	8,666,291	-				
616 Quabbin Transmission System Total				39,790,371	10,649,581	29,140,790	11,588,333	13,571,072	17,062,456	490,000
617 Sudbury/Weston Aqueduct Repairs Total				12,912,900	4,870,148	8,042,752		2,638,420	7,375,752	667,000
620 Wachusett Reservoir Spillway Improvements Total	completed project			9,287,460	9,287,460	-				
621 Watershed Land Total				34,000,000	27,406,900	6,593,100	1,593,100	6,153,600	5,000,000	
622 Cosgrove Tunnel Redundancy Total	completed project			58,618,586	58,618,586	-		6,600,691		
623 Dam Projects Total				8,723,474	3,583,345	5,140,130	187,768	655,367	4,952,358	
625 Metropolitan Tunnel Redundancy Total				1,795,292,960	18,715,460	1,776,577,499	9,008,364	24,267,857	141,348,859	1,626,220,276
628 Metropolitan Redundancy Interim Improvements Total				185,704,476	37,402,574	148,301,901	26,140,314	60,705,598	54,761,588	67,400,000
630 Watershed Division Capital Improvements Total				23,008,409	2,463,974	20,544,435	1,540,539	4,004,513	14,293,896	4,710,000

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
Distribution And Pumping				1,173,420,295	552,270,440	621,149,855	35,907,237	123,820,191	230,260,000	354,982,613
618 Peabody Pipeline Project Total	completed project			1,447,968	1,447,967	1	-	388,886		
677 Valve Replacement Total				26,080,969	12,016,378	14,064,591	-	-	8,932,042	5,132,544
678 Boston Low Service - Pipe & Valve Rehabilitation Total	completed project			23,690,863	23,690,863	-				
683 Heath Hill Road Pipe Replacement Total	completed project			19,358,036	19,358,036	-				
689 James L. Gillis Pump Station Total	completed project			33,419,007	33,419,008	-				
692Northern High Service (NHS) - Section 27 Improvements Total				2,140,598	123,646	2,016,952	4,325	4,325	2,012,627	
693 NHS - Revere & Malden Pipeline Improvements Total				84,856,372	34,023,620	50,832,752	1,627,082	7,089,395	32,845,664	16,360,005
702 New Connecting Mains - Shaft 7 to WASM 3 Total				100,021,842	18,942,880	81,078,962	14,102,342	20,120,609	66,976,619	
704 Rehabilitation of Other Pump Stations Total				51,572,308	30,090,462	21,481,846	-	32,610	2,180,000	19,301,846
706 NHS - Connecting Mains from Section 91 Total	completed project			2,360,194	2,360,194	-				
708 Northern Extra High Service (NEH) - New Pipelines Total				58,421,569	7,160,737	51,260,833	6,414,621	9,943,239	36,783,081	8,063,130
712 Cathodic Protection Of Distribution Mains Total				25,214,029	1,160,129	24,053,900		890,500	19,870,692	4,183,208
713 Spot Pond Supply Mains Rehabilitation Total				66,815,809	65,627,075	1,188,734	388,734	526,500		800,000
714 Southern Extra High Sections 41 & 42 Total	completed project			3,657,244	3,657,244	-				
719 Chestnut Hill Connecting Mains Total				54,432,862	18,286,518	36,146,344				36,146,344
720 Warren Cottage Line Rehabilitation Total	completed project			1,204,821	1,204,821	-				
721 Southern Spine Distribution Mains Total				113,604,827	38,445,344	75,159,483	241,707	2,003,949	7,334,837	67,582,940
722 Northern Intermediate High (NIH) Redundancy & Storage Total				152,513,720	79,372,711	73,141,009	12,769,607	43,247,163	20,641,615	39,729,787
723 Northern Low Service Rehabilitation - Section 8 Total				69,300,454	5,591,574	63,708,880	294,691	2,931,650	18,950,828	44,463,361
725 Hydraulic Model Update Total	completed project			598,358	598,358	-				
727 Southern Extra High (SEH) Redundancy & Storage Total				169,287,945	65,022,051	104,265,895	63,190	36,640,430	12,384,916	91,817,789
730 Weston Aqueduct Supply Mains Total	completed project			80,402,977	80,402,977	-				
731 Lynnfield Pipeline Total	completed project			5,625,829	5,625,828	-				

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
732 Walnut St. & Fisher Hill Pipeline Rehabilitation Total		completed project		2,717,141	2,717,141	-				
735 Section 80 Rehabilitation Total				24,674,559	1,924,884	22,749,675	938	938	1,347,079	21,401,659
Other Waterworks				182,662,029	230,372,902	(47,710,873)	18,355,195	76,842,969	105,593,862	(171,659,930)
753 Central Monitoring System Total				43,305,282	26,186,504	17,118,778	6,887,373	12,369,301	10,231,405	
763 Distribution Systems Facilities Mapping Total				3,087,386	1,295,426	1,791,960	389,648	648,705	1,402,313	
764 Local Water Infrastructure Rehabilitation Total		completed project		7,487,762	7,487,762	-				
765 Local Water System Assistance Program Total				-	183,009,038	(183,009,038)	6,847,635	49,583,461	25,352,643	(215,209,316)
766 Waterworks Facility Asset Protection Total				128,781,599	12,394,173	116,387,426	4,230,539	14,241,502	68,607,501	43,549,386

Attachment A
FY24 Proposed Capital Expenditure Forecast
at Project Level

Program / Project Name	Contract No.	Notice to Proceed	Substantial Completion	Total Program/Project Budget Amount	Spending through FY22	Remaining Balance	FY23	FY19-FY23	FY24-FY28	Beyond FY28
Business & Operations Support				210,264,065	116,643,895	93,620,170	30,313,002	45,926,960	61,744,667	1,562,499
881 Equipment Purchase Total				42,438,405	26,154,257	16,284,148	1,725,741	6,023,088	14,558,405	
925 Technical Assistance Total				1,300,000	-	1,300,000	359,833	359,833	940,167	
930 MWRA Facility - Chelsea Total	completed project			9,812,071	9,812,071	-				
931 Business Systems Plan Total	completed project			24,562,104	24,562,104	-		(500)		
932 Environmental Remediation Total	completed project			1,478,602	1,478,602	-				
933 Capital Maintenance Planning/Development Total				39,102,051	20,120,485	18,981,566	2,998,587	8,918,410	14,420,480	1,562,499
934 MWRA Facilities Management & Planning Total				22,677,558	379,363	22,298,195	19,598,193	19,607,024	2,700,003	
935 Alternative Energy Initiatives Total				26,183,717	18,183,712	8,000,004		(233,852)	8,000,000	
940 Applications Improvements Program Total				21,067,106	4,852,742	16,214,363	3,607,778	5,568,390	12,606,586	
942 Information Security Program (ISP) Total				3,708,976	2,860,632	848,346	255,981	1,408,708	592,365	
944 Information Technology Management Program Total	completed project			1,566	1,566	-	-	1,566		
946 IT Infrastructure Program Total				17,931,911	8,238,363	9,693,549	1,766,888	4,274,294	7,926,662	

ATTACHMENT B
Overview of the FY24 Proposed CIP and Changes from the Final FY23 CIP

Program and Project	FY23 Final			
	Total Budget Amount	FY19-23	FY24-28	Beyond 28
Total MWRA	9,053,707	884,476	2,223,256	1,672,217
Wastewater	4,153,426	461,069	1,228,234	402,803
Interception & Pumping	1,294,212	180,142	376,409	135,262
102 Quincy Pump Facilities	25,907	-	-	-
104 Braintree-Weymouth Relief Facilities	243,825	5,584	9,675	861
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	19,423	4,659	13,824	-
131 Upper Neponset Valley Sewer	54,174	-	-	-
132 Corrosion & Odor Control	101,977	66,227	28,695	876
136 West Roxbury Tunnel	11,314	-	1,000	-
137 Wastewater Central Monitoring	27,482	234	7,368	98
139 South System Relief Project	4,939	-	1,500	-
141 Wastewater Process Optimization	8,310	701	2,954	3,154
142 Wastewater Meter System-Equipment	21,030	6,179	-	9,126
143 Regional I/I Management Planning	169	-	-	-
145 Facility Asset Protection	618,450	96,558	305,695	121,147
146 D.I. Cross Harbor Tunnel Inspection	5,000	-	5,000	-
147 Randolph Trunk Sewer Relief	698	-	698	-
Treatment	1,378,267	92,682	730,848	253,578
182 DI Primary and Secondary	(958)	-	-	-
200 DI Plant Optimization	33,279	-	-	-
206 DI Treatment Plant Asset Protection	1,308,809	84,632	718,989	252,828
210 Clinton Wastewater Treat Plant	34,925	8,050	11,859	751
211 Laboratory Services	2,212	-	-	-
Residuals	171,338	15,662	8,986	81,643
261 Residuals	63,811	-	-	-
271 Residuals Asset Protection	107,527	15,662	8,986	81,643

FY24 Proposed			
Total Budget Amount	FY19-23	FY24-28	Beyond 28
9,780,085	794,486	1,708,180	3,003,655
4,528,496	415,122	1,034,835	1,017,215
1,468,513	173,691	281,216	411,203
25,907	-	-	-
247,820	6,245	10,421	3,448
30,300	-	-	-
64,359	-	-	-
47,856	-	-	-
8,999	-	-	-
24,362	2,552	13,201	7,669
54,174	-	-	-
103,441	65,822	1,525	29,913
11,314	-	1,000	-
27,482	144	3,322	4,234
4,939	-	-	1,500
8,310	703	-	6,105
21,030	6,632	-	8,674
169	-	-	-
782,353	91,593	246,049	349,660
5,000	-	5,000	-
698	-	698	-
1,490,975	60,416	564,880	564,521
(958)	-	-	-
33,279	-	-	-
1,420,814	55,337	551,090	562,028
35,628	5,079	13,790	2,494
2,212	-	-	-
171,326	15,649	8,986	81,643
63,811	-	-	-
107,515	15,649	8,986	81,643

Change from Final FY23			
Total Budget Amount	FY19-23	FY24-28	Beyond 28
726,376	(89,991)	(515,075)	1,331,435
375,070	(45,947)	(193,399)	614,412
174,301	(6,451)	(95,193)	275,941
-	-	-	-
3,995	661	746	2,587
-	-	-	-
-	-	-	-
-	-	-	-
4,939	(2,107)	(623)	7,669
-	-	-	-
1,464	(405)	(27,170)	29,037
-	-	-	-
-	(90)	(4,046)	4,136
-	-	(1,500)	1,500
-	2	(2,954)	2,951
-	453	-	(452)
-	-	-	-
163,903	(4,965)	(59,646)	228,513
-	-	-	-
-	-	-	-
112,708	(32,266)	(165,968)	310,943
-	-	-	-
-	-	-	-
112,005	(29,295)	(167,899)	309,200
703	(2,971)	1,931	1,743
-	-	-	-
(12)	(13)	-	-
-	-	-	-
(12)	(13)	-	-

ATTACHMENT B
Overview of the FY24 Proposed CIP and Changes from the Final FY23 CIP

Program and Project	FY23 Final				FY24 Proposed				Change from Final FY23			
	Total Budget Amount	FY19-23	FY24-28	Beyond 28	Total Budget Amount	FY19-23	FY24-28	Beyond 28	Total Budget Amount	FY19-23	FY24-28	Beyond 28
CSO	916,743	12,278	2,067	-	929,816	12,329	13,422	1,667	13,073	51	11,355	1,667
324 CSO Support	56,769	7,116	808	-	58,769	6,942	1,315	1,667	2,000	(174)	507	1,667
339 North Dorchester Bay	221,510	-	-	-	221,510	-	-	-	-	-	-	-
340 Dorchester Bay Sewer Separation (Fox Point)	55,029	-	-	-	55,029	-	-	-	-	-	-	-
341 Dorchester Bay Sewer Separation (Commercial Point)	61,443	1,581	-	-	61,443	1,581	-	-	-	-	-	-
342 Neponset River Sewer Separation	2,492	-	-	-	2,492	-	-	-	-	-	-	-
343 Constitution Beach Sewer Separation	3,731	-	-	-	3,731	-	-	-	-	-	-	-
344 Stony Brook Sewer Separation	44,319	-	-	-	44,319	-	-	-	-	-	-	-
346 Cambridge Sewer Separation	104,552	-	-	-	104,552	-	-	-	-	-	-	-
347 East Boston Branch Sewer Relief	85,637	-	-	-	85,637	-	-	-	-	-	-	-
348 BOS019 Storage Conduit	14,288	-	-	-	14,288	-	-	-	-	-	-	-
349 Chelsea Trunk Sewer	31,179	1,400	-	-	31,349	1,000	570	-	170	(400)	570	-
350 Union Park Detention Treatment Facility	49,583	-	-	-	49,583	-	-	-	-	-	-	-
351 BWSC Floatables Controls	946	-	-	-	946	-	-	-	-	-	-	-
352 Cambridge Floatables Control	1,127	-	-	-	1,127	-	-	-	-	-	-	-
353 Upgrade Existing CSO Facilities	22,385	-	-	-	22,385	-	-	-	-	-	-	-
354 Hydraulic Relief Projects	3,555	-	1,260	-	4,458	-	2,163	-	903	-	903	-
355 MWR003 Gate & Siphon	4,424	-	-	-	4,424	-	-	-	-	-	-	-
356 Fort Point Channel Sewer Separation	11,507	-	-	-	21,507	625	9,375	-	10,000	625	9,375	-
357 Charles River CSO Controls	3,633	-	-	-	3,633	-	-	-	-	-	-	-
358 Morrissey Boulevard Drain	32,181	-	-	-	32,181	-	-	-	-	-	-	-
359 Reserved Channel Sewer Separation	70,524	-	-	-	70,524	-	-	-	-	-	-	-
360 Brookline Sewer Separation	24,715	-	-	-	24,715	-	-	-	-	-	-	-
361 Bulfinch Triangle Sewer Separation	9,032	-	-	-	9,032	-	-	-	-	-	-	-
362 East Boston CSO Control	2,182	2,182	-	-	2,182	2,182	-	-	-	-	-	-
Other Wastewater	392,866	160,305	109,924	(67,680)	467,866	153,037	166,331	(41,819)	75,000	(7,268)	56,407	25,861
128 I/I Local Financial Assistance	392,585	160,305	109,924	(67,680)	467,585	153,037	166,331	(41,819)	75,000	(7,268)	56,407	25,861
138 Sewerage System Mapping Upgrade	281	-	-	-	281	-	-	-	-	-	-	-
Total Waterworks	4,698,980	366,083	952,075	1,269,417	5,041,324	333,438	611,601	1,984,878	342,344	(32,645)	(340,474)	715,461
Drinking Water Quality	732,200	12,775	41,182	28,271	729,743	12,409	27,945	39,416	(2,457)	(366)	(13,237)	11,145
542 Carroll Water Treatment Plant	442,141	7,571	11,454	-	443,309	7,447	3,495	9,250	1,168	(124)	(7,959)	9,250
543 Quabbin Water Treatment Plant	19,973	-	-	-	19,973	-	-	-	-	-	-	-
544 Norumbega Covered Storage	106,674	-	-	-	106,674	-	-	-	-	-	-	-
545 Blue Hills Covered Storage	40,083	-	-	-	40,083	-	-	-	-	-	-	-
550 Spot Pond Storage Facility	60,126	-	-	-	60,126	-	-	-	-	-	-	-
555 CWTP Asset Protection	63,203	5,204	29,728	28,271	59,578	4,962	24,450	30,166	(3,625)	(242)	(5,278)	1,895

ATTACHMENT B
Overview of the FY24 Proposed CIP and Changes from the Final FY23 CIP

Program and Project	FY23 Final				FY24 Proposed				Change from Final FY23			
	Total Budget Amount	FY19-23	FY24-28	Beyond 28	Total Budget Amount	FY19-23	FY24-28	Beyond 28	Total Budget Amount	FY19-23	FY24-28	Beyond 28
Transmission	2,677,081	132,698	379,133	1,340,055	2,955,499	120,368	247,799	1,762,139	278,418	(12,330)	(131,334)	422,084
597 Winsor Station Pipeline	59,087	1,943	50,757	653	70,152	1,768	-	62,651	11,065	(175)	(50,757)	61,998
601 Sluice Gate Rehabilitation	9,158	-	-	-	9,158	-	-	-	-	-	-	-
604 MetroWest Tunnel	700,184	-	3,002	-	700,184	-	3,002	-	-	-	-	-
615 Chicopee Valley Aqueduct Redundancy	8,666	-	-	-	8,666	-	-	-	-	-	-	-
616 Quabbin Transmission System	24,126	9,920	5,489	50	39,790	13,571	17,062	490	15,664	3,651	11,573	440
617 Sudbury/Weston Aqueduct Repairs	12,815	2,638	7,278	667	12,913	2,638	7,376	667	98	-	98	-
620 Wachusett Reservoir Spillway Improvement	9,287	-	-	-	9,287	-	-	-	-	-	-	-
621 Watershed Land	29,000	6,154	-	-	34,000	6,154	5,000	-	5,000	-	5,000	-
622 Cosgrove/Wachusett Redundancy	58,619	6,601	-	-	58,619	6,601	-	-	-	-	-	-
623 Dam Projects	8,323	773	4,434	-	8,723	655	4,952	-	400	(118)	518	-
625 Metro Tunnel Redundancy	1,557,718	25,730	196,709	1,331,823	1,795,293	24,268	141,349	1,626,219	237,575	(1,462)	(55,360)	294,396
628 Metro Redundancy Interim Improvement	176,731	72,140	99,154	2,600	185,704	60,706	54,762	67,400	8,973	(11,434)	(44,392)	64,800
630 Watershed Division Capital Improvement	23,365	6,797	12,308	4,260	23,008	4,005	14,294	4,710	(357)	(2,792)	1,986	450
Distribution & Pumping	1,107,743	124,366	439,346	79,678	1,173,420	123,819	230,263	354,982	65,677	(547)	(209,083)	275,304
618 Peabody Pipeline	1,448	389	-	-	1,448	389	-	-	-	-	-	-
677 Valve Replacement	22,635	-	6,747	3,872	26,081	-	8,932	5,133	3,446	-	2,185	1,261
678 Boston Low Service-Pipe & Valve Rehabilitation	23,691	-	-	-	23,691	-	-	-	-	-	-	-
683 Heath Hill Road Pipe Replacement	19,358	-	-	-	19,358	-	-	-	-	-	-	-
689 James L. Gillis Pump Station Rehabilitation	33,419	-	-	-	33,419	-	-	-	-	-	-	-
692 NHS - Section 27 Improvements	2,164	28	2,013	-	2,141	4	2,013	-	(23)	(24)	-	-
693 NHS - Revere & Malden Pipeline Improvement	84,861	7,058	46,590	2,652	84,856	7,089	32,846	16,360	(5)	31	(13,744)	13,708
702 New Connect Mains-Shaft 7 to WASM 3	88,293	20,679	54,690	-	100,022	20,121	66,977	-	11,729	(558)	12,287	-
704 Rehabilitation of Other Pump Stations	51,572	33	19,500	1,982	51,572	33	2,180	19,302	-	-	(17,320)	17,320
706 NHS-Connecting Mains from Section 91	2,360	-	-	-	2,360	-	-	-	-	-	-	-
708 Northern Extra High Service New Pipelines	51,304	10,895	36,437	340	58,422	9,943	36,783	8,063	7,118	(952)	346	7,723
712 Cathodic Protection Of Distrubution Mains	39,284	3,422	34,769	824	25,214	891	19,871	4,183	(14,070)	(2,531)	(14,898)	3,359
713 Spot Pond Supply Mains Rehabilitation	66,697	408	800	-	66,816	526	-	800	119	118	(800)	800
714 Southern Extra High Sections 41 & 42	3,657	-	-	-	3,657	-	-	-	-	-	-	-
719 Chestnut Hill Connecting Mains	43,504	-	24,941	277	54,433	-	-	36,146	10,929	-	(24,941)	35,869
720 Warren Cottage Line Rehabilitation	1,205	-	-	-	1,205	-	-	-	-	-	-	-
721 South Spine Distribution Mains	104,191	2,285	64,515	708	113,605	2,004	7,335	67,583	9,414	(281)	(57,180)	66,875
722 NIH Redundancy & Storage	141,221	38,839	53,487	-	152,514	43,247	20,642	39,730	11,293	4,408	(32,845)	39,730
723 Northern Low Service Rehabilitation Section 8	69,346	2,988	62,174	1,229	69,300	2,932	18,951	44,463	(46)	(56)	(43,223)	43,234
724 Northern High Service - Pipeline Rehabilitation	-	-	-	-	-	-	-	-	-	-	-	-
725 Hydraulic Model Update	598	-	-	-	598	-	-	-	-	-	-	-
727 Southern Extra High Redundancy & Storage	146,425	37,287	19,968	60,725	169,288	36,640	12,385	91,817	22,863	(647)	(7,583)	31,092
730 Weston Aqueduct Supply Mains	80,457	54	-	-	80,403	-	-	-	(54)	(54)	-	-
731 Lynnfield Pipeline	5,626	-	-	-	5,626	-	-	-	-	-	-	-
732 Walnut St. & Fisher Hill Pipeline Rehabilitation	2,717	-	-	-	2,717	-	-	-	-	-	-	-

ATTACHMENT B
Overview of the FY24 Proposed CIP and Changes from the Final FY23 CIP

Program and Project	FY23 Final				FY24 Proposed				Change from Final FY23			
	Total Budget Amount	FY19-23	FY24-28	Beyond 28	Total Budget Amount	FY19-23	FY24-28	Beyond 28	Total Budget Amount	FY19-23	FY24-28	Beyond 28
733 NHS Pipeline Rehabilitation 13-18 & 48	-	-	-	-	-	-	-	-	-	-	-	-
734 Southern Extra High Pipelines-Sections 30, 39,40, & 44	-	-	-	-	-	-	-	-	-	-	-	-
735 Section 80 Rehabilitation	21,711	2	12,714	7,069	24,675	1	1,347	21,402	2,964	(1)	(11,367)	14,333
Other	181,956	96,244	92,414	(178,589)	182,662	76,842	105,594	(171,661)	706	(19,402)	13,180	6,928
753 Central Monitoring System	43,157	12,512	9,940	-	43,305	12,369	10,231	-	148	(143)	291	-
763 Distribution Systems Facilities Mapping	3,087	649	1,402	-	3,087	649	1,402	-	-	-	-	-
764 Local water infrastructure Rehabilitation Assistance	7,488	-	-	-	7,488	-	-	-	-	-	-	-
765 Local Water Pipeline Improvement Loan Program	-	68,391	1,531	(210,195)	-	49,583	25,353	(215,210)	-	(18,808)	23,822	(5,015)
766 Waterworks Facility Asset Protection	128,224	14,693	79,541	31,606	128,782	14,242	68,608	43,549	558	(451)	(10,933)	11,943
Business & Operations Support	201,301	57,324	42,947	-	210,265	45,926	61,744	1,562	8,962	(11,399)	18,798	1,562
881 Equipment Purchase	42,357	9,970	10,530	-	42,438	6,023	14,558	-	81	(3,947)	4,028	-
925 Technical Assistance	1,300	865	435	-	1,300	360	940	-	-	(505)	505	-
930 MWRA Facility - Chelsea	9,812	-	-	-	9,812	-	-	-	-	-	-	-
931 Business Systems Plan	24,562	(1)	-	-	24,562	(1)	-	-	-	-	-	-
932 Environmental Remediation	1,479	-	-	-	1,479	-	-	-	-	-	-	-
933 Capital Maintenance Planning	28,764	10,418	4,146	-	39,102	8,918	14,420	1,562	10,338	(1,500)	10,274	1,562
934 MWRA Facilities Management	18,375	15,307	2,698	-	22,678	19,607	2,700	-	4,303	4,300	2	-
935 Alternative Energy Initiatives	26,184	(234)	8,000	-	26,184	(234)	8,000	-	-	-	-	-
940 Applicat Improv Program	21,459	8,060	10,506	-	21,067	5,568	12,607	-	(392)	(2,492)	2,101	-
942 Info Security Program ISP	8,428	2,690	4,030	-	3,709	1,409	592	-	(4,719)	(1,281)	(3,438)	-
944 Info Tech Mgmt Program	2	2	-	-	2	2	-	-	-	-	-	-
946 IT Infrastructure Program	18,581	10,248	2,601	-	17,932	4,274	7,927	-	(649)	(5,974)	5,326	-

**Attachment C
New Capital Projects Added to the FY24 CIP**

Program	Project	Subphase	Project Duration	NTP	SC	FY24	FY25	FY26	FY27	FY28	FY24-28	Beyond FY28	Total Expenditures
Interception & Pumping	Facility Asset Protection	New Neponset Pump Station Rehab Design/ESDC	5 years	Jul-30	Jul-35						\$ -	\$ 3,000,000	\$ 3,000,000
Interception & Pumping	Facility Asset Protection	New Neponset Pump Station Rehab Construction	2 years	Jul-32	Jul-34						\$ -	\$ 20,000,000	\$ 20,000,000
Interception & Pumping	Facility Asset Protection	New Neponset Pump Station Rehab REI	2 years	Jul-32	Jul-34						\$ -	\$ 1,000,000	\$ 1,000,000
Interception & Pumping	Facility Asset Protection	Framingham Pump Station Rehab Design/ESDC	5 years	Jul-30	Jul-35						\$ -	\$ 3,000,000	\$ 3,000,000
Interception & Pumping	Facility Asset Protection	Framingham Pump Station Rehab Construction	2 years	Jul-32	Jul-34						\$ -	\$ 20,000,000	\$ 20,000,000
CSO MWRA Managed	Hydraulic Relief Projects	Framingham Pump Station Rehab REI	2 years	Jul-32	Jul-34						\$ -	\$ 1,000,000	\$ 1,000,000
Interception & Pumping	Facility Asset Protection	Quincy Pump Station Rehab Design/ESDC	5 years	Jul-28	Jul-33						\$ -	\$ 3,000,000	\$ 3,000,000
Interception & Pumping	Facility Asset Protection	Quincy Pump Station Rehab Construction	2 years	Jul-30	Jul-32						\$ -	\$ 20,000,000	\$ 20,000,000
Interception & Pumping	Facility Asset Protection	Quincy Pump Station Rehab REI	2 years	Jul-30	Jul-32						\$ -	\$ 1,000,000	\$ 1,000,000

**Attachment C
New Capital Projects Added to the FY24 CIP**

Program	Project	Subphase	Project Duration	NTP	SC	FY24	FY25	FY26	FY27	FY28	FY24-28	Beyond FY28	Total Expenditures
Interception & Pumping	Facility Asset Protection	Squantum Pump Station Rehab Design/ESDC	5 years	Jul-28	Jul-33						\$ -	\$ 3,000,000	\$ 3,000,000
Interception & Pumping	Facility Asset Protection	Squantum Pump Station Rehab Construction	2 years	Jul-30	Jul-32						\$ -	\$ 20,000,000	\$ 20,000,000
Interception & Pumping	Facility Asset Protection	Squantum Pump Station Rehab REI	2 years	Jul-30	Jul-32						\$ -	\$ 1,000,000	\$ 1,000,000
Interception & Pumping	Facility Asset Protection	Intermediate Pump Station Rehab Design/ESDC	5 years	Jul-28	Jul-33						\$ -	\$ 5,000,000	\$ 5,000,000
Interception & Pumping	Facility Asset Protection	Intermediate Pump Station Rehab Construction	2 years	Jul-30	Jul-32						\$ -	\$ 40,000,000	\$ 40,000,000
Interception & Pumping	Facility Asset Protection	Intermediate Pump Station Rehab REI	2 years	Jul-30	Jul-32						\$ -	\$ 1,500,000	\$ 1,500,000
CSO Community Managed	356 Fort Point Channel Sewer S	Fort Point Channel & Mystic		Nov-22	Nov-25	\$ 3,812,500	\$ 5,562,500				\$ 9,375,000	\$ -	\$ 10,000,000
CSO Planning & Support	324 CSO Support	CSO Updated Control Plan Des		Jun-27	Jun-32					\$ 333,333	\$ 333,333	\$ 1,666,667	\$ 2,000,000

**Attachment C
New Capital Projects Added to the FY24 CIP**

Program	Project	Subphase	Project Duration	NTP	SC	FY24	FY25	FY26	FY27	FY28	FY24-28	Beyond FY28	Total Expenditures
Other Wastewater	I/I Local Financial Assistance	Phase XIV Grants	7 years and 8 months	Oct-22	Jun-30	\$ 15,000,000	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$ 45,000,000	\$ 24,380,000	\$ 75,000,000
Other Wastewater	I/I Local Financial Assistance	Phase XIV Loans	7 years and 8 months	Oct-22	Jun-30	\$ 5,000,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 15,000,000	\$ 8,120,000	\$ 25,000,000
Other Wastewater	I/I Local Financial Assistance	Phase XIV Repayments	16 years and 6 months	Nov-23	May-40	\$ (190,000)	\$ (690,000)	\$ (940,000)	\$ (1,190,000)	\$ (1,440,000)	\$ (4,450,000)	\$ (20,550,000)	\$ (25,000,000)
Drinking Water Quality Improvements	CWTP Asset Protection	CWTP Butterfly Valve 4 - Design	4 years	7/1/2024	7/1/2028		750,000	\$ 1,000,000	\$ 250,000		\$ 2,000,000		\$ 2,000,000
Drinking Water Quality Improvements	CWTP Asset Protection	CWTP Butterfly Valve 4 - Construction	2 years	7/1/2025	7/1/2027			\$ 3,000,000	\$ 3,000,000	\$ 4,000,000	\$ 10,000,000		\$ 10,000,000
Drinking Water Quality Improvements	CWTP Asset Protection	CWTP Butterfly Valve 4 - REI	2 years	7/1/2025	7/1/2027			100,000	300,000	\$ 100,000	\$ 500,000		\$ 500,000
Other Waterworks	Waterworks Facility Asset Protection	Brutsch T.P. Sodium Hypo Upgr.	2 years	Oct-23	Oct-24	\$ 277,000	242,000				\$ 519,000		\$ 519,000
SUMMARY:													
Total Wastewater Projects						\$ 23,622,500	\$ 14,872,500	\$ 9,060,000	\$ 8,810,000	\$ 8,893,333	\$ 65,258,333	\$ 156,116,667	\$ 229,500,000
Total Water Projects						\$ 277,000	\$ 992,000	\$ 4,100,000	\$ 3,550,000	\$ 4,100,000	\$ 13,019,000	\$ -	\$ 13,019,000
Total Projects						\$ 23,899,500	\$ 15,864,500	\$ 13,160,000	\$ 12,360,000	\$ 12,993,333	\$ 78,277,333	\$ 156,116,667	\$ 242,519,000