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MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

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Chair: J. Wolowicz
Vice-Chair: J. Walsh
Committee Members:
B. Peña
L. Taverna
P. Flanagan
J. Foti
H. Vitale

PERSONNEL & COMPENSATION COMMITTEE MEETING

Date: Wednesday, December 11, 2024

Time: 10:00am

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

Photo ID required for entry.

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

Webex meeting link (Registration required):

https://mwra.webex.com/weblink/register/r24b5c032a9fb3c4b9cafe55993b52422

Meeting Number: 2346 428 4632 Password: 121124

AGENDA

A. Information

1. Compensation Study of Non-Union Management Salaries

B. Approvals

1. Appointment of John Parkhurst, Director, Wastewater Operations and Maintenance
2. Appointment of Rita C. Mercado, Special Assistant for Affirmative Action

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Personnel and Compensation Committee
of the MWRA the Board of Directors
June 26, 2024

A meeting of the Personnel and Compensation Committee of the Massachusetts Water Resources Authority ("MWRA") Board of Directors was held on June 26, 2024 at MWRA Headquarters at Deer Island, Boston, and via remote participation.

Committee Vice-Chair White-Hammond presided at MWRA Headquarters. Board Members Pappastergion, Peña, and Taverna also participated at MWRA Headquarters. Board Members Foti and Vitale participated remotely. Board Members Flanagan, Jack Walsh, Patrick Walsh and Wolowicz were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; Tunnel Program Director Kathy Murtagh; Toxic Reduction and Control Director Matthew Dam; Human Resources Director Wendy Chu; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsel Angela Atchue; Intern Bradley Marcosa; and, Assistant Secretary Kristin MacDougall attended at MWRA Headquarters.

Matt Romero, MWRA Advisory Board, also attended at MWRA Headquarters.

CALL TO ORDER

Committee Vice-Chair White-Hammond called the meeting to order at 11:31am. She announced that this Committee meeting would also include the Annual Meeting of the Personnel and Compensation Committee Independent of Management.

INFORMATION

Reorganization of the Toxic Reduction and Control Department

Matthew Dam, MWRA Toxic Reduction and Control ("TRAC") Director, explained that the next agenda item, *June 2024 PCR Amendments* (ref. P&C A.2), will request Board approval for a small reorganization of the TRAC Department. He noted that the proposed reorganization would combine TRAC's 8(m) and Traps Programs to create a new Construction Permitting group, which would focus on construction permitting and inspections associated with 8(m) and septage permits; traps inspections; and, new trap approvals.

Mr. Dam then explained that the recommended TRAC reorganization would include the creation of a new Program Manager for Construction Permitting, and create three new Traps Inspector positions. He briefly described the respective responsibilities of those positions, and the Construction Permitting Group's reporting structure, if approved. He added that the

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Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

proposed reorganization would promote career ladders within the TRAC Department; increase efficiency; and support succession planning; cross-functionality; and, redundancy as key personnel are expected to retire. (ref. P&C A.1)

June 2024 PCR Amendments

Wendy Chu, MWRA Human Resources Director, summarized four proposed amendments to the Position Control Register ("PCR"), including a title and grade change to one filled position, and three title and grade changes to vacant positions in the Operations Division, TRAC. She noted that all proposed PCR Amendments for June were related to the recommended TRAC Department reorganization as discussed in agenda item P&C A.1.

Board Member Taverna requested more information about the reporting structure for the proposed 8(m) permitting staff. Mr. Dam explained that permitting staff would report to the new Program Manager for Construction Permitting.

In response to a question from Board Member Pappastergion, Mr. Dam explained that the new Program Manager of Construction Permitting would report to the existing Senior Program Manager of Field Operations and Permitting, adding that two other Program Managers currently report to the same Senior Program Manager. Mr. Pappastergion asked if the entire TRAC Department would report to the new Program Manager. Mr. Dam explained that TRAC's Compliance and Enforcement Group, which is not affected by this proposed reorganization, reports to a different Senior Program Manager. Rebecca Weidman, MWRA Deputy Chief Operating Officer, further clarified the proposed reorganization; the reporting structure; and, the benefits of the proposal. Mr. Pappastergion asked if internal staff would be considered for the new positions. Ms. Weidman responded in the affirmative.

There was brief, general discussion about how the recommended reorganization would make TRAC permitting more robust; support succession planning; and, allow the new Senior Program Manager for Construction Permitting to focus on emerging issues such as the NPDES permit. MWRA Executive Director Fred Laskey noted that the reorganization would provide better support for the time-sensitive permitting process.

Hearing no further discussion or questions from the Board, Rev. White-Hammond moved to the next Approval item. (ref. P&C B.1/VI A.10)

Extension of Employment Contract of the Director of the Tunnel Redundancy Program

Mr. Laskey discussed the work responsibilities and employment history of Kathleen Murtagh, the Director of MWRA's Tunnel Redundancy Program. He reported that Ms. Murtagh's job performance has been consistently excellent. He noted that she has recruited a very strong, multi-faceted team; maintains good relationships with Program stakeholders; and has excellent

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engineering skills. Finally, Mr. Laskey gave Ms. Murtagh his highest job performance rating.

Mr. Taverna asked if Ms. Murtagh would entertain a three-year contract extension, rather than the one-year extension as proposed. General Counsel Carolyn Francisco Murphy explained that a one year extension is the maximum allowed under the MWRA Enabling Act. Mr. Laskey thanked Mr. Taverna for serving on the Metropolitan Water Tunnel Program Working Group and Expert Review Panel.

Hearing no further discussion or questions from the Board, Rev. White-Hammond moved to the Annual Meeting of the Personnel and Compensation Committee Independent of Management. (ref. P&C B.2/VI A.11)

ANNUAL MEETING OF THE PERSONNEL AND COMPENSATION COMMITTEE INDEPENDENT OF MANAGEMENT

Committee Vice-Chair White-Hammond announced that the next order of business was for the Board to conduct the Annual Meeting of the Personnel and Compensation Committee Independent of Management.

Authority Accountability and Transparency Act Compliance

Rev. White-Hammond noted that MWRA non-union managers should not participate in the meeting.

MWRA General Counsel Francisco Murphy briefly explained the Authority Accountability and Transparency Act, and asked MWRA non-union managers to leave the meeting. Managers and Ms. Francisco Murphy then left the meeting.

There was brief discussion about the purpose of the meeting.

Board members reviewed and discussed the Staff Summary materials. They discussed Mr. Laskey's accomplishments and work performance, as well as executive compensation at comparable state and US water and sewer utilities, not-for-profit agencies, and private entities.

There was also discussion about compensation for MWRA's senior managers and staff; Mr. Laskey's pay rate history; the maximum extension allowed for Mr. Laskey's contract per the MWRA Enabling Act; the contract's terms; and, succession planning.

Board Members then discussed the potential formation of a parity study subcommittee; topics that could be considered by the subcommittee; and, ongoing collective bargaining negotiations.

Rev. White Hammond requested that General Counsel Francisco Murphy return to the meeting to answer Board Members' questions about the Enabling Act and contract parameters. When Ms. Francisco Murphy returned, there were questions and answers about the MWRA Enabling

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Act's requirements with respect to the Executive Director's contract extension, the timing of the Executive Director's salary increases and the parameters to be included in the Executive Director's upcoming review. Ms. Francisco Murphy left the meeting.

There was further discussion about Mr. Laskey's compensation, collective bargaining negotiations, inflation and timing.

(Mr. Pappastergion and Mr. Taverna briefly left and returned to the meeting during the discussion.)

After the discussion, an informal side vote was taken for the purpose of attaining a sense of the Board with respect to Mr. Laskey's upcoming review, which was scheduled to take place at the June 26, 2024 Board of Directors Meeting (ref. VII.1). Upon a motion and a second, a roll call vote was taken in which the Board members were recorded as follows:

Yes	No	Abstain
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
		White-Hammond

Voted: to recommend during the June 26, 2024 Board of Directors' meeting a rating of Excellent for the Fiscal Year 2024 performance of MWRA Executive Director Frederick A. Laskey; further, voted: to recommend the extension of the term of the Executive Director's employment agreement and his appointment as the Executive Director by one year; and, further, voted: to recommend an increase of the Executive Director's current salary by 5% effective July 1, 2024.

There was brief, general discussion with questions and answers about the timing for Non-Union managers' salary increase. (ref. P&C C.1)

ADJOURNMENT

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

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

Yes	No	Abstain
Foti		
Pappastergion		

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Yes	No	Abstain
Peña		
Taverna		
Vitale		
White-Hammond		

The meeting adjourned at 12:18pm.

LIST OF DOCUMENTS AND EXHIBITS USED

- June 26, 2024 Staff Summary – Reorganization of the Toxic Reduction and Control Department (ref. P&C A.1)
- June 26, 2024 Staff Summary – June 2024 PCR Amendments (ref. P&C B.1/VI A.10)
- June 26, 2024 Staff Summary – Extension of Employment Contract for Kathleen Murtagh, Director of Tunnel Redundancy (ref. P&C B.2/VI A.11)
- June 26, 2024 Staff Summary – Authority Accountability and Transparency Act Compliance (ref. P&C C.1)

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STAFF SUMMARY

TO: Personnel and Compensation Committee
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Compensation Study of Non-Union Management Salaries

COMMITTEE: Personnel and Compensation

_____ VOTE
__X__ INFORMATION

At previous meetings, the Board of Directors expressed interest in a non-union manager compensation study. This informational staff summary provides the Personnel and Compensation Committee with the decision points and possible next steps should the Committee wish to recommend a study to the full Board of Directors.

RECOMMENDATION:

For information only.

DISCUSSION:

At its June 26, 2024 meeting, during a discussion regarding the Executive Director's review and contract extension, the Board raised the possibility of engaging an independent, third-party to review the salary of the position of MWRA Executive Director relative to the salaries of other executives in comparable positions. The Board was concerned that the salary established for the current Executive Director could pose a recruitment challenge for a successor. During the following month's Board meeting, the topic of an executive compensation study was briefly mentioned, along with potential expansion of the scope to include the executive leadership of the Authority. Most recently, during the November 13, 2024 Board meeting, there was mention of a study for the Authority's non-union managers. To advance the Board's request for a study staff seek guidance regarding its scope.[1]

Positions to Include

Staff seek guidance regarding which positions to include in the study: the Executive Director position only; the Executive Director position and his executive leadership team (i.e., Division Directors); or all non-union managers.

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[1]Separately, a non-union managers internal pay equity assessment is underway to review the pay rates of MWRA employees performing comparable work (work that requires substantially similar skill, effort and responsibility) under the Massachusetts Pay Equity Act (MEPA). In March 2019, the Board voted to adjust certain salaries consistent with the pay equity analysis undertaken by a consultant under MEPA.

Comparators

Potential comparators should be identified for a compensation study in order to develop a full scope of work. Possible comparators may include: Commonwealth executive branch and agencies; Commonwealth quasi-governmental entities; utilities; and/or comparable water and wastewater organizations (public and/or private), within and/or outside the Commonwealth. There are various factors in determining comparability, including size of the entity, the level of services provided by the entity, the type of services, the size of the entity's operating budget, etc.

Compensation Structure and Philosophy

Another decision point is whether the scope should include review, assessment and/or recommendations regarding the Authority's non-union compensation structure, philosophy and strategy to attract and retain staff.

Upon determination of the scope of a compensation study of non-union management salaries, staff will proceed with procuring a consultant pursuant to the Authority's procurement requirements for professional services contracts.

BUDGET/FISCAL IMPACTS:

There are sufficient funds in the FY25 Current Expense Budget to fund a study.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Appointment of Director, Wastewater Operations and Maintenance

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COMMITTEE: Personnel & Compensation

_____ INFORMATION
__X__ VOTE

Stephen D. Cullen, Director, Wastewater
Wendy Chu, Director, Human Resources
Preparer/Title

David W. Coppes, PE
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. John Parkhurst to the position of Director, Wastewater Operations and Maintenance (Non-Union, Grade 15) in the Operations Division, at the recommended annual salary of $168,205**,** commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Director, Wastewater Operations and Maintenance will become vacant upon the retirement of the incumbent in January 2025. This position is responsible for directing the operations, maintenance, and support activities for all wastewater operations facilities (Headworks, Pump stations, CSO Treatment and Storage facilities and wastewater collections systems) in the Metropolitan Boston area. The position directs the maintenance planning and crew accountability for all field operations groups. The position also oversees the Wastewater Operations program (including the Chelsea Operations and Control Center), the Wastewater Pipeline program, and the Metro Maintenance program (including Trades Maintenance, Facilities and Grounds Maintenance, and Work Coordination). This position reports to the Director, Wastewater.

Selection Process

The position of Director, Wastewater Operations and Maintenance was posted internally and externally and a total of two qualified candidates submitted applications. One internal and one external candidate were referred for interviews. The Director of Wastewater, the Director of Metropolitan Operations and the acting Special Assistant for Affirmative Action conducted the interviews. Mr. Parkhurst was selected as the best candidate for the position based upon his qualifications and extensive experience.

Mr. Parkhurst was hired in May 2024 as MWRA's Manager of Wastewater Operations and is an excellent candidate. He has demonstrated that he is very knowledgeable about wastewater operations, process control, maintenance of critical equipment and safety in the workplace. He has shown skill in managing staff in a unionized environment. He has also demonstrated the ability to go into our facilities and quickly learn the critical aspects of its operation.

Mr. Parkhurst has worked in the wastewater field for the past 21 years. He spent his first two years in the field working as an Operator at the Lowell Regional Wastewater Facility. He spent the next four and a half years working as the Assistant Plant Manager and Plant Manager at the Acton Wastewater Facility, while employed by Woodard & Curran. While at Acton, Mr. Parkhurst was dispatched by his company to provide backup coverage and startup expertise for various plants and to assist in disaster recovery efforts. Mr. Parkhurst then moved to the Plant Manager position for a year and a half at the Concord Wastewater Facility, while still working for Woodard & Curran. This role included increased management responsibilities and leadership of company-wide initiatives utilizing tablet-based data collection and online monitoring.

For the next ten years, Mr. Parkhurst was the Superintendent of the Ipswich Wastewater Facility, supervising union staff in the operation and maintenance of the wastewater treatment plant and five wastewater pump stations. There, he expanded the utilities' use of formal standard operating procedures, instituted a maintenance tracking system, expanded SCADA control, and introduced tablet-based logs and lab software.

Mr. Parkhurst holds a Bachelor of Arts in Criminal Justice from the University of Lowell; an Emergency Medical Technician Certification from Middlesex Community College; a Massachusetts Grade 7C full Wastewater Operator License; a Grade 4 Collection Systems Certification and a Massachusetts Grade 2D water distribution operator in training license.

BUDGET/FISCAL IMPACTS:

There are sufficient funds in the Operations Division's FY25 Current Expense Budget to fund this position.

ATTACHMENTS:
Resume of John Parkhurst
Position Description
Organizational Chart

John T. Parkhurst

Objective
Position myself in a career, utilizing my education, training and diverse skill set.

Experience

MWRA-Chelsea
Manager of Wastewater Operations (05/24 – Present)

- Directs the twenty-four (24) hour operations of all wastewater facilities under the control of the Wastewater Operations Control Center (OCC).
- Ensures proper readiness, staffing and operation of all wastewater facilities during wet weather events. Responsible for creating and implementing wet weather staffing plans, and participating in management's storm coverage rotation.
- Coordinates with Operations Engineering staff on all wastewater pumping stations, Combined Sewer Overflow facility (CSO), and headworks facilities to optimize operations for proper treatment and flow control. Monitors facility flow control performance and identifies process control deficiencies. Plays an active role in the evaluation of long-range process control needs for the wastewater treatment and flow control.
- Establishes and updates operational procedures in accordance with control strategies. Works with SCADA and Operations Engineering staff to implement the wastewater facility SCADA changes.
- Works with MIS staff to establish priorities and ensure responsive computer systems and scanner hardware/software.
- Coordinates with the Maintenance Department and establishes priorities to assure successful facility operation.
- Plays an active role in capital project design, construction, and startup activities. Participates in the preparation of performance certification criteria and evaluation reports.
- Establishes and administers operational records and procedures required for all twenty-four (24) hour facilities.
- Oversees personnel management and staff hiring for the department. Ensures that major initiative and policy changes are properly communicated to all staff. Identifies organizational needs and proposes re-organization plans to address changing needs.
- Collaborates with the Manager, Training and Development to provide opportunities for technical, supervisory and managerial training and education for all Wastewater Operations employees.
- 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. Maximizes effective use of the Maximo maintenance software and related computer programs.

- Manages the department's safety programs, maximizing employee involvement, supporting the Authority-wide safety program, and making inspections. Acts as liaison to the Manager, Occupational Safety and Health. Immediately notifies Occupational Safety and Health of any safety issues or risks that need attention.
- Oversees development, periodic review, and updating of SOPs and Facility Operations and Maintenance (O&M) manuals, and ensures all staff are properly trained.
- Oversees budget management for Wastewater Operations. Ensures that budget resources are allocated appropriately between units. Monitors spending and ensures budget compliance.
- Establishes emergency response procedures and oversees training and practice drills.
- Ensures consistency and uniformity of work rules in accordance with established policies and procedures. Identifies needed improvements to work practices.
- Manages successful administration of collective bargaining agreement provisions to maintain harmonious labor management relations. Participates in grievance resolution, collective bargaining and contract negotiations. Serves as Step I hearing officer. Hears disciplinary actions.

Ipswich Wastewater Facility, Ipswich, MA
Superintendent (10/2013-05/2024)

- Provide reliable wastewater treatment in an environmentally sensitive and responsible manner for a 5MGD wastewater treatment facility and 5 pump stations with a $3million-dollar operating budget and additional upgrade budget.
- Completed or worked on multiple capital improvement upgrades.
- Applied and received multiple grants for state and federal programs.
- Introduced SOP's throughout the process and lab.
- Began a maintenance tracking system for staff to follow.
- Began reducing paper by using tablet-based logs and lab sheets software.
- Implemented SCADA technology to existing systems.
- Identified needs of the facility to remain compliant.
- Administration duties. Ex: state and federal reports, invoice and vendor tracking, town reports, state quote programs, contract renewals, budgeting, capital forecasting, ordering, accounts payable, and union staff supervision.
- Project manager of the utilities asset management system.
- Assist with the transition of retiring staff and working with new staff to keep both the water and wastewater treatment facilities running efficiently.
- Provided tours and training to town staff, residents, and students from surrounding vocational schools.

Concord Wastewater Facility, Concord, MA (Woodard & Curran)
Plant Manager II (5/2012-10/2013)

- Provided reliable wastewater treatment in an environmentally sensitive and responsible manner for a contract with an $850,000 operating budget and additional $100,000 toward capital improvements.
- Primary Emergency Coordinator.

- Focus on quality and process control to maintain clean and safe water for the Concord River.
- Management duties. Ex: Responsible for supervision of Maintenance Manager, Operator I, and an Intern. Including annual and semi-annual reviews, leadership, training, mentoring, raise and bonus program, and performance improvement plans when needed.
- Administration duties. Ex: state and federal reports, invoice and vendor tracking, client reports, state quote programs, contract renewals, visit potential clients, budgeting, ordering, and accounts payable.
- Laboratory duties. Ex: All state, local and federal requirements for a grade 5 municipal wastewater treatment facility with a NPDES water discharge permit.
- Worked with local business, federal organizations and other city utilities to increase public awareness, decrease environmental contaminations, and respond to emergency situations.
- Completed all necessary equipment and instrumentation maintenance and repairs while tracking the work on a third party hosted CMMS website. (SEMS Technology)
- Assisted with the start-up of a companywide program to implement the use of tablets and IPADS for data collection, online monitoring of facilities, and day-to-day functions at our 40 water and wastewater project within W&C.
- Worked alone or with others on a time limit to complete assignments.
- Upheld local, state, and federal environmental standards. (EPA, OSHA, DEP)
- On-Call 24/7, weekend coverage at the Concord Wastewater Treatment Facility in Concord, MA.
- Provided clear and accurate information to our client. (Concord, MA Public Works Department.)
- Supervised confined space entry events and trainings.
- Supervised new equipment start-up.
- Traveled to different wastewater plants throughout the country to provide back-up coverage.
- Recorded data and process control changes.
- Completed all site security and safety initiative programs and reviews.
- Safely used company owned equipment.
- Worked on new technology with the first in the world CO-MAG Treatment process.

Mentionable Accomplishments:

- Completed an over one-year corporate leadership development program that I graduated from June 2012 and continue to work on follow-up programs.
- Continued to work with the company intern program throughout the many service line groups.
- Continued to assist Acton, MA WWTF during the training transition of the new plant manager while learning my new role at the Concord, MA WWTF.

Acton Wastewater Facility Acton, MA (Woodard & Curran)

Plant Manager (10/2007-5/2012)

- Promoted to Plant Manager.
- Provide reliable wastewater treatment and collection service in an environmentally sensitive and responsible manner for a contract with a $500,000 operating budget and additional $60,000 toward capital improvements.

- Primary Emergency Coordinator.

- Focus on quality and process control to maintain a clean, healthy groundwater.
- Management duties. Ex: Responsible for supervision of an Assistant Plant Manager and an Intern. Including annual and semi-annual reviews, leadership, training, mentoring, raise and bonus program, and performance improvement plans when needed.
- Administration duties. Ex: state reports, invoice and vendor tracking, client reports, state quote programs, contract renewals, visit potential clients, budgeting, ordering, and accounts payable.
- Laboratory duties. Ex: All state, local and federal requirements for a grade 5 municipal wastewater treatment facility with a ground water discharge permit.
- Worked with local business, federal organizations and other city utilities to increase public awareness, decrease environmental contaminations, and respond to emergency situations.
- Complete all necessary equipment and instrumentation maintenance and repairs.
- Assisted with the implementation of a companywide maintenance/ asset management tracking software that is web based. (SEMS).
- Uphold local, state, and federal environmental standards. (EPA, OSHA, DEP)
- On-Call 24/7, weekend coverage at the Concord Wastewater Treatment Facility in Concord, MA
- Worked with Co-MAG technology at the Concord Wastewater Treatment Facility.
- Assisted with Victorville, CA. Wastewater Treatment Facility start-up.
- Assisted with site clean-up after Hurricane Irene at the Bound Brook Superfund Site in Somerset, NJ.
- Provide clear and accurate information to our client. (Acton, MA Board of Health)
- Record data and report process control functions.
- Completed all site security and safety initiative programs and reviews.
- Safely using company owned vehicles and equipment.
- Supervised confined space entry events, new equipment start-ups, and trainings.
- Traveled to different wastewater plants to provide back-up coverage.

Acton Wastewater Facility Acton, MA (Woodard & Curran)

Assistant Plant Manager (10/2006-10/2007)

- Provided reliable wastewater treatment and collection service in an environmentally sensitive and responsible manner.
- Emergency Coordinator.
- Focus on quality and process control to maintain a clean, healthy groundwater.
- Worked with local business, federal organizations and other city utilities to increase public awareness, decrease environmental contaminations, and respond to emergency situations.
- Administration duties. Ex: state reports, invoice and vendor tracking, client reports, budgeting, ordering, and accounts payable.
- Laboratory duties. Ex: All state, local and federal requirements for a grade 5 municipal wastewater treatment facility with a ground water discharge permit.
- Worked alone or with others on a time limit to complete assignments.
- Uphold local, state, and federal environmental standards. (EPA, OSHA, DEP)
- On-Call 24/7.

- Weekend coverage at the Concord Wastewater Treatment Facility in Concord, Ma.
- Provided clear and accurate information to our client. (Acton, MA Board of Health)
- Recorded data and reported process control functions.
- Site security and safety.
- Safely using company owned vehicles and equipment.

Mentionable Accomplishments:

- Became Massachusetts Grade 7-C Full Municipal Wastewater Certified.
- Became California Grade 2 Municipal Wastewater Certified
- Became Grade 4 New England Water Environment Association Collections Operator Certified
- Became New Hampshire Grade 3 Wastewater Facility Operator Certified.
- Completed OSHA's 40 Hazardous Waste Training
- Managing a Grade 5 Municipal Wastewater Treatment Facility.
- Received a Corporate Health and Safety award August 23rd, 2007.
- Received a Corporate Compliance award July, 15th, 2008.
- Proposed an abstract to the NEWEA Conference committee that was selected to be presented at the 2008 NEWEA Plant Operations Seminar & Exhibit.

Lowell Regional Wastewater Facility Lowell, MA

Operator (9/2004-10/2006)

- Provided reliable wastewater treatment and collection service in an environmentally sensitive and responsible manner.
- Focused on quality and process control to maintain a clean, healthy Merrimac River.
- Recorded data and reported process control functions.
- Site security and safety.
- Safely using city owned vehicles and equipment.
- Worked with local business, federal organizations and other city utilities to increase public awareness, decrease environmental contaminations, and respond to emergency situations.
- Worked the midnight shift while being able to take overtime.
- Worked alone or with others on a time limit to complete assignments.
- Upheld local, state and federal environmental standards. (EPA, OSHA, DEP)

Grounds Keeper (6/2000-9/2004)

- Completed all landscaping needs of a fifteen-acre treatment plant.
- Worked alone and with others with a time limit to complete assignments.
- Assisted with the coordination of the EPA Student Summer Work Program.
- Safely used city owned vehicles and equipment.
- Worked with a two-thousand-dollar budget for landscaping products.
- Assisted with routine operator preventative maintenance. Ex: Hosing down tanks, cleaning belt filter press room and polymer batching system. Assisted with waste haulers paperwork, pH test, and sample collection.

Mentionable Accomplishments:

- Worked with FEMA/ MEMA during the 2006 floods aiding local home owners and businesses.
- Became ISO 14001 Certified
- Became a Grade 4 Municipal Wastewater Operator.
- Working full-time and continue to be a full-time enrolled student.
- Worked at a Grade 6 Municipal Wastewater Treatment Facility
- Became a licensed fork lift operator.

Education

University of Massachusetts, Lowell, MA, 2002-2006
Degrees

- B.A., Criminal Justice.
- Minor, Sociology
- Graduated Magna Cum Laude- GPA 3.511

Middlesex Community College, Lowell, MA, 2003
Certification

- Emergency Medical Technician Certificate.

Central Catholic High School Lawrence, MA, 1998-2002

- Graduated with Honors

Current Licenses/Certifications

- Massachusetts Grade 7-C Full Wastewater Operator
- Massachusetts Grade 2D OIT Water Distribution Operator
- NEWEA Grade 4 Collections System Operator
- NH Driver’s License OPR-MC
- United States Coast Guard Charter Captains License

Microsoft Office Software

- Proficient with Excel, Outlook, Word and PowerPoint.
- Knowledgeable of, with basic skills, Access and SPSS.

MWRA
POSITION DESCRIPTION

POSITION: Director, Wastewater Operations & Maintenance

PCR#: **2470001**

DIVISION: Operations

DEPARTMENT: Operations

BASIC PURPOSE:

Directs operations, maintenance and support activities for all Metropolitan Wastewater Operations facilities. Plans for and ensures that the necessary resources and support are provided to meet operational needs and applicable regulatory requirements in a cost effective manner.

SUPERVISION RECEIVED:

Works under the general supervision of the Director, Wastewater.

SUPERVISION EXERCISED:

Exercises direct supervision of the Manager, Wastewater Operations, Manager, Metro Maintenance, Senior Program Manager of Inspection & Pipeline Maintenance, and indirect supervision of close to 200 staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Directs the operations and maintenance of all wastewater operations facilities and programs including 270 miles of sewer pipelines, 13 pump stations, 4 remote headworks, and 5 Combined Sewer Overflow (CSO) treatment/storage facilities.

- Oversees the preparation and updating of long range operation and maintenance planning for metropolitan sewer pipeline, pumping, headwork, and CSO storage facilities.

- Develops and implements staffing plans to improve productivity and achieve maximum utilization of staffing resources.

- Directs the facilities and equipment maintenance for over 45 critical water and wastewater facilities in the greater Boston area.

- Directs the maintenance programs related to the MWRA sewerage pipelines and appurtenances (siphons, headhouses, & manholes).

- Develops, directs and coordinates strategic plans with the Operations Division and MWRA managers to provide services to wastewater operations facilities.

- Oversees and directs the continual upgrading and improvement of facility-wide management systems.

- Directs department-wide efforts to track and improve crew efficiency and accountability in Operations.

- Advises the department and division directors on all Metropolitan wastewater operations and facilities issues.

- Establishes and participates in the development of applicable agency-wide wastewater policies.

- Reviews plans and specifications for facility and equipment improvements prepared by technical staff and consultants to ensure cost effectiveness and compatibility with existing systems and operating requirements.

- Directs the development, review and selection of new and/or improved equipment, processes and systems and their smooth transition into operation.

- Manages the development and updating of operations & maintenance manuals and systems, and station operating procedures. Works with the design consultants to ensure timely production of updates.

- Partners with the Manager, Training and Development to oversee and provide opportunities for technical, supervisory and managerial training and education for all department employees. Ensures that staff are trained properly to be ready to operate new facilities as they come on line.

- Directs the Wastewater Operations and Equipment Maintenance safety programs maximizing employee involvement, supporting the Authority-wide safety programs, and making inspections. Acts as liaison to the Director, Occupational Health and Safety.

- Maximizes effective use of the Maximo maintenance management software and related computer programs.

- Manages preparation of and exercises control over current expense budgets for Wastewater Operations.

- Represents the Wastewater Operations Section of the Operations Division as required with the Authority's Division Directors, Executive Director and Board of Directors.

- Acts as interagency liaison and public relations contact/spokesperson with regards to operation of Wastewater Facilities.

- Establishes emergency response procedures, training programs, and practice drills with the assistance of emergency response and safety staff.

- Assures consistency and uniformity of work rules in accordance with established policies and procedures. Provides feedback and coaching to managers to maximize successful performance.

- Reviews, analyzes and prepares managerial reports for operational, maintenance, process control, budget and personnel matters. Develops recommendations for ongoing improvements in facility operations and maintenance.

- Oversees successful administration of collective bargaining agreement provisions. Participates in grievance resolutions, collective bargaining and contract negotiations. Serves as Step I hearing officer. Hears disciplinary actions.

- Manages the Department in a manner that is consistent with MWRA's goals of Diversity, Equity, and Inclusion.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) Bachelor's degree in civil, environmental, mechanical, electrical, or chemical engineering or a related technical discipline; and

(B) Thorough knowledge of planning, design, operations and maintenance of major wastewater utilities as acquired through at least ten (10) years of related experience, of which at least five (5) years must be in the successful management of a large wastewater utility or related industrial process with multiple supervisory levels; or

(C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

(A) Excellent working knowledge of large wastewater collection and treatment facilities and associated systems and equipment,

(B) Demonstrated successful experience managing in a union environment with a diverse workforce.

(C) Knowledge of computerized maintenance management systems and procedures.

(D) Personal computer experience and familiarity with associated software programs such as MAXIMO.

(E) Excellent interpersonal, written and verbal communication skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.

A valid Grade 4 Municipal wastewater operator’s license.

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

TOOLS AND EQUIPMENT USED:

Office machines normally associated with a professional office environment including the use of telephones, personal computers, word processing and other software, email, videoconference applications, copiers, scanners and fax machines.

PHYSICAL DEMANDS:

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

While performing the essential functions the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee regularly is required to stand or talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch, or crawl.

The employee must frequently lift and/or move up to 10 pounds, occasionally lift and/or move up to 25 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 employee occasionally works in outside weather conditions. The employee works near moving mechanical parts is occasionally exposed to wet and/or humid conditions. The employee is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals, and risk of electric shock.

The noise level in the office environment is moderately quiet and is moderately loud in field settings.

September 2024

Wastewater Operations & Metro Maintenance - Summary

- **Director, Wastewater Oper. & Maint.**
  2470001
  NU/15
  197 Positions
  - **Manager, Operations**
    2470004
    NU/14
    65 Positions
    - **Program Manager, WW Operations**
      24700135
      9/29
    - **Operations Control Center**
      53 Positions
    - **Headworks**
      10 Positions
  - **Manager, Maintenance**
    5470072
    NU/14
    105 Positions
    - **Maintenance Support**
      2 Positions
    - **Sr. Program Mgr., Metro Trades**
      5470071
      9/30
      55 Positions
    - **Facilities & Grounds Maintenance**
      35 Positions
    - **Work Coordination Center Manager**
      5440013
      6/12
      12 Positions
  - **Sr. Program Manager, WW Pipe**
    5434033
    9/30
    26 Positions

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Appointment of Special Assistant for Affirmative Action and Compliance

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COMMITTEE: Personnel and Compensation

_____ INFORMATION
__X__ VOTE

Michele S. Gillen, Director, Administration
Preparer/Title

RECOMMENDATION:

To approve the appointment of Rita C. Mercado to the position of Special Assistant for Affirmative Action and Compliance (Non-Union, Grade 16) at annual salary of $175,219, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The Special Assistant for Affirmative Action and Compliance leads the Authority's Affirmative Action and Compliance Unit. The position supervises, administers, cultivates and monitors all activities, policies and programs necessary to advance and maintain the Massachusetts Water Resources Authority's affirmative action, equal opportunity and diversity, equity and inclusion (DEI) goals and objectives in employment, contracting and procurement and serves as the Authority's Chief Diversity and Equity Officer. This position became vacant with the retirement of Patterson Riley in June 2024.

Organizationally this position reports to the Chair of the MWRA Board of Directors and to the MWRA Executive Director on day-to-day administrative matters, which is reflective of the critical nature of this position.

Selection Process:

The job description was reviewed and updated to reflect MWRA's renewed and enhanced commitment to foster and sustain an excellent, engaged and diverse workforce and a safe and inclusive work environment; and to reinforce its commitment to advance environmental justice and contractor and supplier diversity policies and programs.

The position was posted both internally and externally. There were six qualified applicants. After review of their resumes and applications, the four most qualified applicants, including Ms. Mercado, were referred for interviews. Two of the four referred applicants withdrew before the interviews. MWRA Personnel and Compensation Committee Chair Jennifer Wolowicz, and MWRA Director of Administration Michele Gillen, interviewed Ms. Mercado and one external candidate. Upon completion of the interviews, Ms. Mercado was referred to Chairperson Tepper and Executive Director Frederick Laskey as the recommended candidate. Secretary Tepper and Mr. Laskey separately interviewed Ms. Mercado. Upon completion of this process, Ms. Mercado was determined to be the best candidate for this position based on her skills, abilities, education and knowledge of and commitment to MWRA's core values of affirmative action, equal opportunity and DEI.

Ms. Mercado has a Bachelor of Arts in both International Relations and Peace and Justice Studies from Tufts University and a Juris Doctor from Suffolk University Law School. Ms. Mercado's legal background includes extensive work and experience with minority and women owned business enterprises ("M/WBE's) in construction and contracting. That experience includes the critical role she played as the Division of Capital Asset Management and Maintenance ("DCAMM") Deputy General Counsel in the development and public vetting of the Commonwealth's Affirmative Marketing Plan. In her role as the DCAMM Deputy General Counsel, Ms. Mercado also provided legal review and guidance on the Commonwealth's business disparity study. This background and experience will be quite valuable as MWRA undertakes its own business disparity study.

Ms. Mercado joined the MWRA in 2018 as a Deputy Contract Manager in the Procurement Department. From June 2022 until May 2023, she served as the Acting Director of Procurement when Doug Rice was on special assignment with the Department of Conservation and Recreation. In July 2023, Ms. Mercado was promoted to Deputy Director of Procurement. In her role as Deputy Director and Acting Director of Procurement, Ms. Mercado demonstrated her thorough and extensive knowledge and understanding of complex construction laws and MWRA's related policies and procedures, including those concerning M/WBE's. Her legal background and ability to understand, interpret and apply complex laws will be valuable to MWRA's continued compliance with the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Massachusetts Equal Pay Act, federal EEO-1 reporting requirements and all related state and federal laws and regulations, as well as MWRA policies and procedures.

Ms. Mercado has the skills and experience to manage complex and complicated issues and projects. She has proven that she can effectively step into a leadership role as she did when she served as the Acting Director of Procurement. Her colleagues seek her leadership and guidance on any number of issues and she has prioritized guiding and mentoring the staff in the Procurement Department to prepare them for advancement opportunities. Finally, senior managers, including the Executive Director and MWRA's Division Directors have tremendous confidence in her skills and judgement and believe her appointment, coupled with the strength of the current AACU staff, will make for a balanced and extremely effective team.

BUDGET/FISCAL IMPACTS:

There are sufficient funds in the FY25 Current Expense Budget to fund this position.

ATTACHMENTS:
Resume of Rita C. Mercado
Position Description
Organizational Chart

RITA C. MERCADO

BAR INFORMATION:

Admitted to Practice in Massachusetts and the United States District Court for the District of Massachusetts.

COMMUNITY INVOLVEMENT:

Chair of Board of Appeals for the City of Melrose — Fall 2010 – Fall 2023
Member of Board of Appeals for the City of Melrose — Fall 2007 – Fall 2010

LEGAL EXPERIENCE:

MASSACHUSETTS WATER RESOURCES AUTHORITY — July 2023– Present

Deputy Director of Procurement

- Provides management and oversight to the contracts group, which consists of four Deputy Contract Managers, and three Assistant Contract Managers.
- Performs all functions of the Deputy Contract Manager, on more complex projects, including but not limited to all procurements associated with the Tunnel Redundancy Program (estimated at $2.1 billion).
- Serves as the Team Lead for the Procurement Department in connection with the upgrade of the Authority's Enterprise Sourcing Planning (ERP) software.
- Performs Director of Procurement duties in the absence of the Director.

Acting Director of Procurement — June 2022 – May 2023

- Managed the day to day operations of the Procurement department, and provided guidance and direction on procurement related matters to Operations, Finance and Law Divisions.
- Oversaw the contracts, purchasing and materials management (warehouse) unit to monitor compliance with all applicable state and federal laws and regulations as well as MWRA’s Policies and Procedures.
- Reviewed staff summaries recommending award of purchase order, construction or professional services contracts prior to submission to the Executive Director or Board of Directors for approval.
- Authorized purchase order contracts within the Procurement Director’s delegated authority.
- Reviewed and approved sole source or proprietary specifications requests related to goods, non-professional services, professional services, and construction materials or equipment.
- Represented the Procurement Department at monthly Board of Directors’ meetings.
- Centralized the procurement department’s review of staff summaries, contract requisitions, and change orders.

Deputy Contracts Manager — September 2018– July 2023

- Reviews, drafts, and negotiates contract terms and conditions for construction and professional services.
- Facilitates the procurement of construction, professional and non-professional service contracts.
- Prepares and updates standard bid and contract forms.
- Assembles and reviews contract documents, and post-award submittals, including Letters of Intent and Schedules of Participation in connection with the Authority's Minority and Women Business Enterprise Program.
- Facilitates compliance with policies and procedure associated with projects funded through MassDEP's State Revolving Fund Loan Program, including compliance goals for the Disadvantage Business Enterprise Program, and utilization of Minority-Owned (MBE) and Women-Owned Business Enterprises (WBE).
- Advises the Affirmative Action and Compliance Unit related to the MBE and WBE program for design and construction projects.
- Analyzes contract amendments, change orders, and contract close-out documents.
- Implements policies and procedures, and applicable laws, for all elements of contracting, including, but not limited to the creation, review and evaluation of contract documents, Request for Qualifications, Requests for Proposals, and bids.
- Supports the management of the electronic bidding platform.
- Directs Assistant Contract Managers in the performance of similar duties and functions.

COMMONWEALTH OF MASSACHUSETTS –
DIVISION OF CAPITAL ASSET MANAGEMENT AND MAINTENANCE February 2013 – September 2018
Deputy General Counsel

- Conducted legal review of the results of the business disparity study.
- Participated in the development of the Affirmative Marketing Program for Design and Construction including the drafting of regulations based on the proposed Affirmative Marketing Program.
- Coordinated and participated in the public hearings related to the Affirmative Marketing Program.
- Participated in the review and updated standard contract forms for construction, energy management services and design and engineering services.
- Prepared and negotiated energy service agreements procured under M.G.L. 25A, and design contracts.
- Provided advice related to procurement issues involving construction manager at risk, and design-bid-build projects.
- Provided pre-claim advice to project managers related to onsite conflicts and construction defect issues.
- Managed and coordinated litigation with the Attorney Generals' Office.
- Conducted mediations and settlement negotiations related to construction contract disputes.
- Managed paralegal in the preparation of energy management services contracts.

LIBERTY MUTUAL INSURANCE, Weston, MA July 2012 – January 2013
Senior Claims Consultant / Litigation Specialist

- Handled commercial general liability and automobile claims in litigation in the Northeast region.
- Analyzed relevant documents including but not limited to lease agreements, and service contracts to establish the insured's potential exposure and indemnity and defense obligations.
- Managed all aspects of litigation and coordinate strategy with local counsel.
- Analyzed and afforded coverage based on relevant insurance policy and identified any potential coverage issues.
- Conducted direct settlement negotiations with Plaintiff/Claimant.
- Established initial reserves and monitored adequacy of reserves.

DONOVAN HATEM LLP, Boston, MA July 2009- June 2012
Associate - Claims Management Department

- Evaluated and monitored complex professional liability claims nationally and engage in risk management of potential claims on behalf of architects, engineers and other design professionals.
- Analyzed design professionals' potential exposure through the detailed analysis of all relevant project documents including but not limited to the identification of relevant contract provisions (indemnity, dispute resolution, waiver of subrogation, waiver of consequential damages, choice of law and limitation of liability provisions).
- Managed all aspects of litigation including attendance of mediation with settlement authority provided by insurer, and coordination of strategy with local counsel.

HOGAN & MERCADO, P.C., Boston, MA October 2008- July 2009
Partner

- Handled construction law litigation cases, on behalf of general contractors and subcontractors, involving contract performance issues, surety bonds, and mechanic liens.
- Advised clients regarding contract issues.
- Drafted pleadings, discovery and dispositive motions. Attended hearings, and mediations.

CURTIN, MURPHY, & O'REILLY, P.C., Boston, MA October 2006- September 2008
Associate

- Handled the defense of premises liability cases.
- Participated in all aspects of litigation including, drafting pleadings, discovery, dispositive motions, and pre-trial memoranda. Attended hearings.
- Conducted and defended depositions.
- Negotiated settlements with opposing counsel. Participated in civil trials.

BOYLE, MORRISSEY, & CAMPO, Boston, MA September 2005- October 2006
Associate

- Handled the defense of construction defect and accident cases.
- Drafted pleadings, discovery, and dispositive motions.
- Analyzed and applied case law and statutes regarding contract indemnification and additional insured issues.
- Conducted depositions. Assisted in trial preparation.
- Communicated with client and insurance claims representative regarding case strategy.

EDUCATION:

SUFFOLK UNIVERSITY LAW SCHOOL, Boston, MA, Juris Doctor, *cum laude* May 2005

Class Rank:	Top 25%
Honors:	Dean's List, 2003-2005
	Honorable Mention, Best Brief Section Competition, 2003
	Distinguished Oral Advocate, Best Oral Advocate Section Competition, 2003
	Jessup International Law Moot Court Competition, 3rd Place Regional Memorial Ranking, 2005
Activities:	International Law Student Association (ILSA), co-vice president
	Rehnquist Inn, Phi Delta Phi International Legal Fraternity, member

TUFTS UNIVERSITY, Medford, MA, Bachelor of Arts May 2002

Double Major:	International Relations / Peace and Justice Studies
Honors:	Dean's List (3/8 semesters)
Awards:	Recipient of the *Anne E. Borghesani Memorial Prize* to research the role of non-governmental organizations in conflict resolution in the Philippines.
Community Service:	Leonard Carmichael Society, service organization

MWRA
POSITION DESCRIPTION

POSITION: Special Assistant for Affirmative Action and Compliance (Chief Diversity and Equity Officer)

PCR#: **8410001**

DIVISION: Executive Director's Office

DEPARTMENT: Affirmative Action and Compliance Unit

BASIC PURPOSE:

Leads the Massachusetts Water Resources Authority's (MWRA) Affirmative Action and Compliance Unit (AACU). Serves as MWRA's Chief Diversity and Equity Officer. Supervises, administers, cultivates and monitors all activities, policies and programs necessary to advance and maintain the Authority's affirmative action, equal opportunity and diversity, equity and inclusion (DEI) goals and objectives in employment, contracting and procurement.

SUPERVISION RECEIVED:

Works under the general supervision of the Chair of the MWRA Board of Directors; however, reports to the MWRA Executive Director on day-to-day administrative functions of the Affirmative Action and Compliance Unit.

SUPERVISION EXERCISED:

Exercises close supervision of the staff of the Affirmative Action and Compliance Unit.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and advances an annual affirmative action plan for the MWRA including systematic enumeration of goals and timetables consistent with applicable state and federal laws for equal opportunity and affirmative action programs.

- Develops and maintains the strategic vision and implements the operational plan to advance diversity, equity and inclusion for MWRA.

- Develops and implements policies and programs for affirmative action, equal employment opportunities and DEI in hiring, contracting and procurement, to meet the requirements, goals and objectives of the affirmative action plan, (Minority Business

Enterprise) MBE, WBE (Women Business Enterprise), and Disadvantaged Business Enterprise (DBE) goals and related statutory requirements.

- Works with the MWRA Executive Director, Director of Human Resources and Division Directors in setting, revising and achieving the affirmative action, equal opportunity and DEI objectives of the MWRA.

- Develops and provides support on business planning strategies and objectives, including affirmative action, equal opportunity and DEI.

- Works with the MWRA Law Division to keep the Executive Director, Director of Human Resources and Division Directors apprised of legislative initiatives and changes in legal requirements related to affirmative action, equal opportunity and DEI.

- Presents the annual affirmative action plan to the MWRA Board of Directors for review and approval. Provides the MWRA Board of Directors with updates on MWRA's affirmative action, equal opportunity and DEI policies, programs and initiatives. Files other required reports and updates.

- Informs the Board of Directors, Executive Director, Divisions and Units of current policies, principles and practices relative to affirmative action, equal opportunity and DEI. Reports on MWRA's performance measurements for all categories of positions within the MWRA.

- Serves as MWRA's Americans with Disabilities Act (ADA) chief compliance officer. Collaborates with appropriate staff to ensure the Authority's compliance with the ADA, including provision of training, employee notifications, the review of requests for reasonable accommodations and completion of interactive processes to respond to such requests.

- Advises all levels of MWRA staff on issues related to compliance with constitutional requirements, statutes and regulations pertaining to civil rights, affirmative action and equal opportunity.

- Monitors MWRA workforce compliance with the MWRA Code of Conduct, applicable policies and procedures and applicable state and federal laws.

- Promotes an understanding of the MWRA's commitment to DEI among its employees, those whom the MWRA serves, and those with whom it does business.

- In coordination with MWRA's Human Resources Department, develops and/or procures mandatory training for MWRA staff on DEI, fair employment practices and harassment prevention.

- Monitors and reports on all aspects of MWRA's responsibilities for equal opportunity, diversity, equity and inclusion, affirmative action and related matters of compliance under pertinent state and federal requirements, including maintaining statistical data and producing statutory reporting under the Enabling Act and other state and federal laws.

- Serves in a leadership role on MWRA's Environmental Justice Task Force.

- Serves as the co-chair of the MWRA Diversity, Equity and Inclusion Working Group and providing leadership, guidance and support.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A Bachelor's degree in public administration, political science/government, management, human resources, gender studies, ethnic studies, or other related field. Graduate degree preferred; and

(B) A strong understanding of state and federal employment grant compliance regulations and the principles and practices of affirmative action, contract compliance and personnel administration as acquired through at least ten (10) years' experience, of which five (5) years should be in a managerial or supervisory capacity; or

(C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Excellent interpersonal, oral and written communication skills.

(B) Demonstrated record of professional accomplishment and an ability to work with all levels of management and employees.

(C) Experience with construction and professional service contract management and compliance preferred.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.

Ability to work evenings or weekends for urgent business issues or respond to business calls on MWRA assigned phone after hours.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with professional administrative settings, including but not limited to the use of telephone**,** personal computer, word processing and other software, videoconferencing applications, copier, scanner 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 to reach with hands and arms. The employee frequently is required to stand and walk.

There are no requirements that weight is lifted or force is 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:

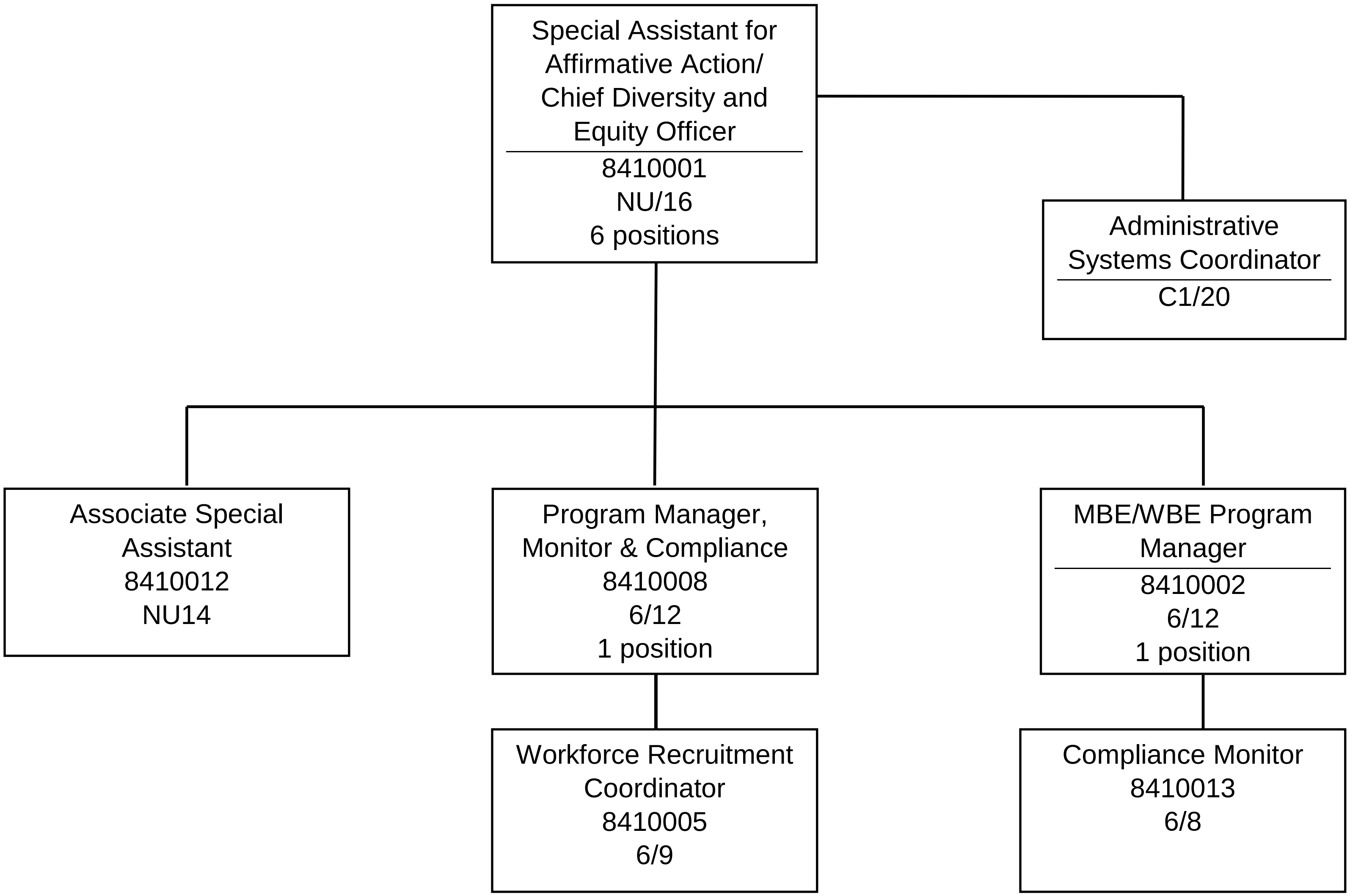
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job**,** the employee regularly works in an office environment.

The noise level in the work environment is usually a moderately quiet office setting. This position may be eligible for up to 50% telework.

July 2024

Affirmative Action

November 2024



MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

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

Chair: P. Flanagan
Vice-Chair: H. Vitale
Committee Members:
A. Pappastergion
L. Taverna
J. Walsh
P. Walsh
B. Swett

ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Date: Wednesday, December 11, 2024

Time: Immediately following the Personnel & Compensation Committee

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

Photo ID required for entry.

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

Webex meeting link (Registration required):

https://mwra.webex.com/weblink/register/r24b5c032a9fb3c4b9cafe55993b52422

Meeting Number: 2346 428 4632 Password: 121124

AGENDA

A. Information

1. Delegated Authority Report – November 2024
2. FY2025 Financial Update and Summary through November 2024

B. Approvals

1. First Amendment to the Memorandum of Agreement (MOA) with the City of Quincy
2. First Amendment to the Memorandum of Agreement (MOA) with the Town of Winthrop

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Administration, Finance and Audit Committee
of the MWRA the Board of Directors
June 26, 2024

A meeting of the Administration, Finance and Audit Committee of the Massachusetts Water Resources Authority ("MWRA") Board of Directors was held on June 26, 2024 at MWRA Headquarters at Deer Island, Boston, and via remote participation.

Committee Chair Foti presided via remote participation. Board Members Vitale and Patrick Walsh also participated remotely. Board Members Pappastergion, Peña, Taverna and White-Hammond participated at MWRA Headquarters. Board Members Flanagan, Jack Walsh and Wolowicz were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Special Assistant for Affirmative Action Patterson Riley; Budget Director Michael Cole; Deputy Director of Finance and Treasurer Matthew Horan; Project Manager for Real Property Colleen Guida; MIS Director Paula Weadick; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsel Angela Atchue; Intern Bradley Marcosa; and, Assistant Secretary Kristin MacDougall attended at MWRA Headquarters.

Matt Romero, MWRA Advisory Board ("Advisory Board"), also attended at MWRA Headquarters.

<u>ROLL CALL</u>

Before the meeting was called to order, Board Vice-Chair Pappastergion delivered brief opening remarks. He announced that the Annual Meeting of the Personnel and Compensation Committee Independent of Management would be the last item of the Personnel and Compensation Committee meeting, and that the Board of Directors Meeting would be held at 1:00pm. He requested a roll call of Board Members in attendance for the Committee meetings.

MWRA General Counsel Francisco Murphy took roll call and announced that Board Members Foti, Vitale and Patrick Walsh were participating remotely.

Mr. Pappastergion announced that the meeting was being held at MWRA Headquarters and virtually. He added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA's website.

<u>CALL TO ORDER</u>

Committee Chair Foti called the meeting to order at 10:02am.

Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

INFORMATION

Delegated Authority Report – May 2024

Michele Gillen, MWRA Director of Administration, requested the Board's consideration with respect to staff's suggestion that future Delegated Authority Reports include awards and purchase orders in excess of $90,000, rather than the current $25,000. She noted that this change would align with the Board's 2022 approval of increased delegated authority for the Executive Director, Director of Administration, and Director of Procurement to $90,000 consistent with inflationary increases, and allow Board Members more time to discuss larger policy matters.

There was a brief, general discussion with questions and answers, during which Mr. Foti supported staff's suggestion, and no Board Members objected. Ms. Gillen assured Board Members that staff's robust review and approval process will continue.

Mr. Foti asked if there were any questions or comments from the Board on the May 2024 Delegated Authority Report. Board Member Taverna asked if staff performed final balancing change orders on all construction contracts with spending amounts that are less than the contract value. David Coppes, MWRA Chief Operating Officer, responded in the affirmative.

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

FY24 Financial Update and Summary through May 2024

Thomas Durkin, MWRA Director of Finance, summarized financial highlights through May 2024. He noted that the budgetary expense profile for FY2024 is expected to continue through June. He reported that expenses were 3.5% under budget, and revenues, primarily driven by investment income, had increased by 1.2%, attributable in part to higher than expected earnings on money market investments. Finally, Mr. Durkin reported a positive variance. He noted that an upcoming agenda item (ref. VI A.4) recommends the use of the variance for a defeasance to reduce debt service in future years.

In response to a question from Board Member Pappastergion about the projected $51.7 million year-end favorable variance, Mr. Durkin suggested that variances that are expressed as percentages, rather than dollar amounts, could be more useful for long-term review and analysis. Mr. Pappastergion agreed. Mr. Laskey added that budget surplus defeasances are important tools; part of a coordinated program for keeping rates down and avoiding the use of reserves.

There was brief, general discussion about the DCR Watershed Division budget and invoicing process.

Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

Hearing no further discussion or questions from the Board, Mr. Foti moved Approvals. (ref. AF&A A.2)

APPROVALS

Approval of the FY25 Final Capital Improvement Program

Mr. Durkin discussed staff's proposed MWRA's Fiscal Year 2025 Final Capital Improvement Program ("Final FY25 CIP") for approval. He noted that no new projects have been added since staff presented the FY25 Proposed CIP to the Board on January 17, 2024 (ref. VII B.1); however, the Final FY25 CIP reflects slight changes to cost estimates and revised schedules due to project refinement and prioritization. Finally, Mr. Durkin reported that planned spending has changed from $256 million (Proposed FY25 CIP) to $202 million (Final FY25 CIP), and that the cap period had changed from $1.36 billion (Proposed FY25 CIP) to $1.32 billion (Final FY25 CIP), attributable to project timing adjustments.

Mr. Taverna asked if lags in construction contract awards affect the CIP. Mr. Durkin responded in the affirmative. He explained that the CIP's structure is intended to transparently convey MWRA's plans and priorities to all stakeholders, and that staff work diligently to execute projects according to the plan.

Mr. Pappastergion asked if the MWRA's expenditures continued to remain within the limits of the five-year spending Cap. Michael Cole, MWRA Budget Director, responded in the affirmative and explained the FY25 Draft Final Cap is $43 million less than last year's. There was brief, general discussion about the history of the spending Cap's implementation. Mr. Laskey noted that the Cap was recommended by the MWRA Advisory Board, and that it has proven to be an effective budgeting tool. Mr. Durkin agreed.

Hearing no further discussion or questions from the Board, Chair Foti moved to the next Approval item (ref. AF&A B.1/VI A.1)

Approval of the Final FY25 Current Expense Budget

Mr. Durkin described how staff's long-term budgeting strategies, including projections, defeasances, refundings, and careful consideration of direct and indirect costs work to control water and sewer assessment increases. He shared an example of a defeasance executed in 2015 for bonds that will mature in 2025, and noted that it will be used to reduce FY2025's debt service.

He then explained that the budget process is greatly impacted by input from stakeholders such as the Water Supply Citizens Advisory Committee (WSCAC), the Wastewater Advisory Committee (WAC), and especially the MWRA Advisory Board. He thanked Advisory Board staff for their constructive feedback, questions and comments, including a recommendation to adjust full-time equivalency (FTE) counts in the Final FY2025 Current Expense Budget ("Final

FY25 CEB").

Next, Mr. Durkin reported that the proposed Final FY25 CEB includes a 2.54% combined assessment increase that corresponds with Advisory Board recommendations, and represents a $4.1 million decrease to the FY25 Proposed Rate Revenue Requirement. Finally, he noted that MWRA staff achieved the 2.54% combined rate increase without the use of reserves.

Mr. Pappastergion noted that the Advisory Board had recommended a 2.53% increase, versus MWRA's proposed 2.54% increase, and complimented staff on the proposed CEB.

Board Member Peña requested more information about the difference in Investment Income estimates in the Final FY25 CEB (5.1%) versus the FY25 Proposed CEB (4.2%). Matthew Horan, MWRA Deputy Director of Finance and Treasurer, explained that staff had adjusted the methodology for projecting investment income to more accurately reflect the performance and trends of short-term, variable rate investments.

Matt Romero, MWRA Advisory Board Executive Director, echoed Mr. Durkin's remarks with respect to the collaborative nature of the budgeting process, and thanked Advisory Board staff for their contributions and assistance. He praised MWRA staff for their responsiveness and consideration of ratepayers.

Mr. Taverna asked if the budget for wages and salaries takes ongoing Collective Bargaining discussions into consideration. Mr. Durkin responded in the affirmative.

Hearing no further discussion or questions from the Board, Mr. Foti moved to the next agenda item. (ref. AF&A B.2/VI A.2)

Final FY25 Water and Sewer Assessments

Mr. Durkin reported that staff recommend a combined assessment increase of 2.54% for FY2025, and briefly described the annual rate-setting process. He noted that staff currently project 3.9% increases for water and 3.3% increases for sewer, on a combined basis, through FY2029, and emphasized staff's commitment to maintaining a sustainable and predictable rate schedule.

Mr. Pappastergion asked if the MWRA Retirement System had met its goals for investment returns. Matthew Horan responded in the affirmative, explaining that income came in at just under 10% for the year, with funding increasing from $88.4 million in FY23 to $88.9 million. There was brief, general discussion about the Retirement System's ongoing recovery of prior losses; investment return fluctuations; and, market variability.

Mr. Taverna asked if the previously-discussed water rate increases through FY2029 are actual or projected. Mr. Durkin explained they are projected, on a year over year basis, to promote rate sustainability and provide an adequate base for upcoming debt. Mr. Taverna noted that customer communities rely on accurate projections to prepare their own budgets. Mr. Durkin acknowledged this and suggested that a 3.9% increase would be a prudent figure for municipal budget projections.

Hearing no further discussion or questions from the Board, Mr. Foti moved to the next information item. (ref. AF&A B.3/VI A.3)

Bond Defeasance of Future Debt Service

Mr. Horan noted that MWRA has historically applied the prior fiscal year's projected positive budget variances to defease outstanding debt, as part of its multi-year rate management strategy.

He then explained that staff's nine planned defeasances for FY2025 (approximately $25.5 million) would be used to reduce future year rate increases. He noted that the FY25 combined water and sewer rate would have been over 6% (versus 2.54%) if prior defeasances had not been executed. He added that the currently-proposed defeasance is structured to yield prime benefits in FY27 and FY28, with additional modest benefits in FY29 and FY30.

Mr. Horan then reported that a 2024 Series B refunding transaction enabled MWRA to avoid $1.5 million in accrued interest; further, the proposed bond defeasance is projected to reduce accrued interest by $1.9 million, for a total savings of approximately $3.4 million in avoided interest costs.

Hearing no discussion or questions from the Board, Mr. Foti moved to the next Information item. (ref. AF&A B.4/VI A.4)

Surplus a Portion of the Abandoned Mystic Water Main Water Easement

Colleen Guida, MWRA Project Manager, Real Property, discussed surplussing a portion of an existing Commonwealth of Massachusetts water easement under the care, custody and control of the Authority located on a parcel of land with an address of 58 Main Street, Somerville, and to return it to the control of the Massachusetts Division of Capital Asset Management and Maintenance ("DCAMM") in accordance with Section 9(c) of Chapter 372 of the Acts of 1984, as amended ("Enabling Act").

Ms. Guida presented the location and history of the abandoned water pipelines within the easement. She noted that the lines were acquired by the Metropolitan Water Board in 1898, and subsequently abandoned due to the inability to maintain water quality in the Northern Low service area; the condition of the pipes; and low flows.

Next, Ms. Guida explained that the owner of a parcel located at 58 Main Street, Somerville requested that MWRA release the portion of the 17-foot-wide water easement that crosses the

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Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

parcel, for the purpose of property redevelopment. Finally, she reported that staff had determined that this portion of the easement was not needed by MWRA.

Mr. Taverna asked why the entire easement was not surplussed. Ms. Guida explained that easements are surplussed on a case-by-case basis due to the complexity of the process. Ms. Gillen added that MWRA's procedures for surplussing easements are intended to promote efficiency and to control ratepayer expense, and affirmed that economy of scale would not apply to the wholesale surplussing of easements. There was brief, general discussion with questions and answers about the steps for surplussing MWRA easements. (ref. AF&A B.5/VI A.5)

CONTRACT AMENDMENTS/CHANGE ORDERS

Maximo Lawson Interface Enhancements: Starboard Consulting, LLC, MWRA Contract No.7649, Amendment 4

Paula Weadick, MWRA MIS Director, briefly reviewed the scope of Contract 7649 with Starboard Consulting, LLC. She then described the terms of proposed Amendment 4, which, if approved, would extend the contract term by three months from June 26, 2024 to September 26, 2024 at no additional cost to the Authority, in order to complete the contract's warranty period. Finally, Ms. Weadick noted that minor adjustments to the user interface could potentially be performed under the proposed Amendment.

Mr. Pappastergion asked if there have been any downsides to extending the contract. Ms. Weadick explained that an internal scheduling conflict contributed to the contract's delays. There was brief, general discussion about the contract's warranty, which would be covered under the proposed Amendment. Mr. Taverna asked if the user interface is currently usable and reliable. Ms. Weadick responded in the affirmative and explained that MWRA typically includes a 90-day warranty for similar IT contracts, to allow staff to use the live product and identify any potential bugs or needed adjustments.

Hearing no further discussion or questions from the Board, Mr. Foti moved to adjourn. (ref. AF&A C.1/VI C.1)

ADJOURNMENT

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

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

Yes	No	Abstain
Foti		
Pappastergion		
Peña		

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Yes	No	Abstain
Taverna		
Vitale		
P. Wash		
White-Hammond		

The meeting adjourned at 10:29am.

LIST OF DOCUMENTS AND EXHIBITS USED

- June 26, 2024 Staff Summary – Delegated Authority Report – May 2024 (ref. AF&A A.1)
- June 26, 2024 Staff Summary – FY24 Financial Update and Summary through May 2024 (ref. AF&A A.2)
- June 26, 2024 Staff Summary – Approval of the FY25 Final Capital Improvement Program (ref. AF&A B.1/VI A.1)
- June 26, 2024 Staff Summary – Approval of the Final FY25 Current Expense Budget (ref. AF&A B.2/VI A.2)
- June 26, 2024 Staff Summary – Final FY25 Water and Sewer Assessments (ref. AF&A B.3/VI A.3)
- June 26, 2024 Staff Summary – Bond Defeasance of Future Debt Service (ref. AF&A B.4/VI A.4)
- June 26, 2024 Staff Summary and Presentation – Surplus a Portion of the Abandoned Mystic Water Main Water Easement (ref. AF&A B.5/VI A.5)
- June 26, 2024 Staff Summary – Maximo Lawson Interface Enhancements: Starboard Consulting, LLC, MWRA Contract No.7649, Amendment 4 (ref. AF&A C.1/VI C.1)

Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Delegated Authority Report – November 2024

COMMITTEE: Administration, Finance & Audit

X INFORMATION
___ VOTE

Michele S. Gillen
Director, Administration

Barbara Aylward, Administrator A & F
Julio Esperas, Assistant Buyer
Preparer/Title

Douglas J. Rice
Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period November 1-30, 2024.

This report is broken down into three sections:

- Awards of Construction, non-professional and professional services contracts and change orders and amendments in excess of $25,000, including credit change orders and amendments in excess of $25,000;
- Awards of purchase orders in excess of $90,000; 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 twelve 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 November 1 – 30, 2024

No.	Date of Award	Title and Explanation	Contract	Amend/CO	Company	Value
C-1	**11/01/24**	**Braintree-Weymouth Pump Station Improvements RE/I Services** Increase level of effort and extend contract term by eight months from October 31, 2024 to June 30, 2025 to provide resident engineering and inspection services.	**7683**	**1**	**CDM Smith, Inc.**	**$117,000.00**
C-2	**11/13/24**	**Northern Intermediate High Section 89 Replacement Pipeline** Furnish and install additional piping and bends for the connection from Section 89 to Section 89B; Furnish and install 20 linear feet of 2-inch copper pipe to replace water service at 313 Montvale Avenue; Furnish and install 35 linear feet of 8-inch PVC pipe to replace a damaged sewer; Furnish and install a 6-inch gate valve on the City of Woburn's water line at Montvale Avenue; Furnish and install 20 linear feet of 1-inch copper piping to replace unmarked water service on Washington Street; Furnish and install a new catch basin at Albany Street in Woburn; Furnish and install 70 linear feet of 12-inch PVC pipe to replace two existing RCP drain lines that cross MWRA's new water main on Washington Street in Woburn; Furnish and install 30 linear feet of 8-inch PVC Sewer on Albany Street in Woburn; Furnish and install an additional 144 square yards of overlay paving at the DCR entrance on Pond Street in Stoneham.	**7117**	**8**	**P. Gioioso & Sons, Inc,**	**$94,812.34**
C-3	**11/18/24**	**Sudbury Reservoir Dam Spillway and Gatehouse Repairs** Provide commercial dive services to remove unforeseen tuberculation from stop log groves to allow for safe access and proper installation of the deflector plate and vent pipe to address and reduce stop log leakage.	**7615A**	**1**	**Ardent Group, Inc.**	**$100,000.00**
C-4	**11/18/24**	**Steel Water Tank Painting & Improvements Design/ESDC** Increase level of effort to complete design of out of scope improvements that include water quality, security and operational design additions; Design the replacement of corroded fail-safe roof vents and a tank drain valve at the Deer Island steel water storage tank.	**6832**	**1**	**Hazen and Sawyer, P.C.**	**$151,750.83**
C-5	**11/18/24**	**Boiler & Water Heater Service** Final balancing change order to decrease bid item to reflect actual quantities used: Boiler preventive maintenance, water heater preventive maintenance, non-emergency and emergency repair services, replacement parts.	**OP-427**	**1**	**Cooling & Heating Specialists, Inc.**	**($65,430.98)**

C-6	**11/19/24**	**Installation of Energy Efficient LED Lighting at the Centrifuge Building - Deer Island** Award of energy efficient contract to Eversource prequalified vendor for the installation of energy efficient LED lighting at the Centrifuge Building for a term of 120 calendar days.	**S623**	**Award**	**Guardian Energy Management Solutions, LLC**	**$89,641.00**
C-7	**11/19/24**	**Installation of Energy Efficient LED Lighting at the Maintenance/Warehouse Building - Deer Island** Award of energy efficient contract to Eversource prequalified vendor for the installation of energy efficient LED lighting at the Maintenance/Warehouse Building - Deer Island for a term of 120 calendar days.	**S626**	**Award**	**Guardian Energy Management Solutions, LLC**	**$225,890.00**
C-8	**11/19/24**	**Installation of Energy Efficient LED Lighting at the North Main Pump Facility - Deer Island** Award of energy efficient contract to Eversource prequalified vendor for the installation of energy efficient LED lighting at the North Main Facility for a term of 120 calendar days.	**S626**	**Award**	**Guardian Energy Management Solutions, LLC**	**$95,948.00**
C-9	**11/19/24**	**Installation of Energy Efficient LED Lighting at the Winthrop Terminal Facility - Deer Island** Award of energy efficient contract to Eversource prequalified vendor for the installation of energy efficient LED lighting at the Winthrop Terminal Facility for a term of 120 calendar days.	**S628**	**Award**	**Guardian Energy Management Solutions, LLC**	**$49,614.00**
C-10	**11/27/24**	**Braintree-Weymouth Pump Station Improvements** Furnish and install a signal isolator inside control panel 2; Furnish and install a light fixture, conduit and wire adjacent to two new Variable Frequency Drives; Relocate existing light switch in electrical room; Provide construction detail for the installation of davit hoist to new building addition roof; Relocate uninterruptable power source from office to radio room, Relocate exit door sign; Furnish and install stainless steel sleeve at the roof penetration; Furnish labor and materials to revise input/output layout on control panel board; Remove and dispose of existing tree; Furnish and install a Local Control Station for the Screw Conveyor; Furnish and install necessary pipe, fittings, fixture and insulation to relocate water pipe in pump access room; Furnish and install necessary outlet boxes and conduit to extend lighting fixtures; Remove existing electric motor from Air Handling Unit and replace with new electric motor; Furnish and install one heat sensor in the Odor Carbon Adsorber; Furnish necessary pipe and fittings to relocate existing plumbing and fire protection pipe; Relocate existing conduit and wire for level element located in the influent junction chamber; Furnish and install conduit, fittings and wire to relocate four existing electrical conduits; Modify existing fire sprinkler piping and heads; Furnish and install insulation on installed copper piping; Furnish and install wire, conduit and	**7366**	**9**	**Walsh Construction Co. II, LLC**	**$191,531.71**

	accessories to reinstall "party page" communication handset; Furnish and install additional input/output cards; Furnish and install pipe, fittings and accessories to extend fire sprinkler system dry standpipe to revised location; Furnish and install overhead door.	

Purchasing Delegated Authority Items November 1-30, 2024

No.	Date of Award	Title and Explanation	Company	Value
P-1	**11/18/24**	**One-Year Purchase Order Contract for the Supply and Delivery of Sodium Bisulfite** Sodium bisulfite is used throughout MWRA's wastewater system for dechlorination. PVS Chemical Solutions, Inc. will deliver sodium bisulfite to Cottage Farm, Prison Point, and Union Park on an as-needed basis. Holland Company, Inc. will deliver sodium bisulfite to Somerville Marginal on an as-needed basis. Compared to the existing contract, PVS Chemical Solutions, Inc.'s bid prices represent a \$0.25 per gallon increase at Cottage Farm and Union Park CSO, and a \$0.80 per gallon decrease at Prison Point. Holland Company, Inc.'s existing contract price remains firm for Somerville Marginal.	**PVS Chemical Solutions, Inc.** **Holland Company, Inc.**	**\$192,050.00** **\$53,600.00**
P-2	**11/18/24**	**Two-Year Purchase Order Contract for the Supply and Delivery of Liquid Emulsion Polymer** Deer Island uses liquid emulsion polymer as a sludge thickening agent to improve solids separation and capture. Compared to the existing contract, the cost decreased by \$0.02 per pound.	**Polydyne, Inc.**	**\$1,089,000.00**
P-3	**11/20/24**	**One-Year Purchase Order Contract for Temporary Flow Monitoring and Data Collection** Temporary wastewater flow meters are used to run comparative tests at key meter locations, validating the data generated by MWRA's metering system. This information is used in developing the rates that MWRA's customer communities are charged.	**EST Associates, Inc.**	**\$149,106.70**

AF&A A.2
12/11/24

Please see
01/02/25
Addendum

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: FY25 Financial Update and Summary through November 2024

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.

DISCUSSION:

Due to the timing of the November month-end close (December 11, 2024), there will be no Monthly Financial Update Staff Summary presented at the MWRA Board of Directors Meeting on December 11, 2024. Once the books are closed, staff will develop the FY25 Financial Update and Summary through November 2024 and it will be distributed to the MWRA Board of Directors electronically and posted online shortly thereafter.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 20, 2024
SUBJECT: FY25 Financial Update and Summary through November 2024

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 2025 through November 2024, comparing actual spending to the budget.

DISCUSSION:

The total Year-to-Date variance for the FY25 CEB is $13.4 million, due to lower direct expenses of 7.2% or $9.3 million, indirect expenses of 1.4% or $0.5 million, and debt service costs of 0.8% or $1.4 million, and higher revenue of 0.6% or $2.1 million.

FY25 Current Expense Budget

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

- Lower Direct Expenses of $9.3 million or 7.2% under budget. Spending was lower for Wages & Salaries, Professional Services, Other Services Fringe Benefits, Utilities, Overtime, Training & Meetings, and Chemicals. Spending was higher than budget for Maintenance, Other Materials, and Workers' Compensation.

- Lower Indirect Expenses of $0.5 million or 1.4% under budget due primarily to lower Watershed reimbursements.

- Debt Service expenses were $1.4 million or 0.8% under budget driven by lower than budgeted variable interest expense.

- Revenue was $2.1 million or 0.6% over the estimate driven by Investment Income of $1.2 million due to higher than budgeted interest rates and other Revenue of $0.5 million and Other User Charges of $0.4 million.

FY25 Budget and FY25 Actual Variance by Expenditure Category
(In millions)

	FY25 Budget	FY25 Actual	$ Variance	% Variance
Direct Expenses	$129.8	$120.5	-$9.3	-7.2%
Indirect Expenses	$37.1	$36.6	-$0.5	-1.4%
Capital Financing	$188.6	$187.1	-$1.4	-0.8%
Total	**$355.5**	**$344.2**	**-$11.3**	**-3.2%**

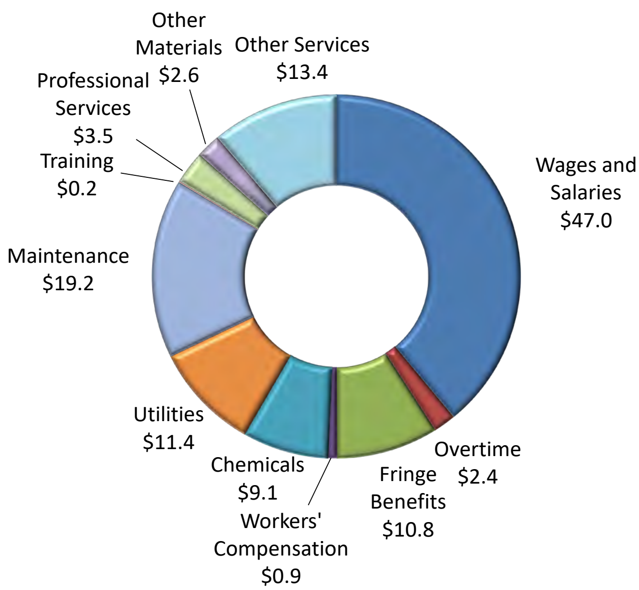
Totals may not add due to rounding

Please refer to Attachment 1 for a more detailed comparison by line item of the budget variances for FY25.

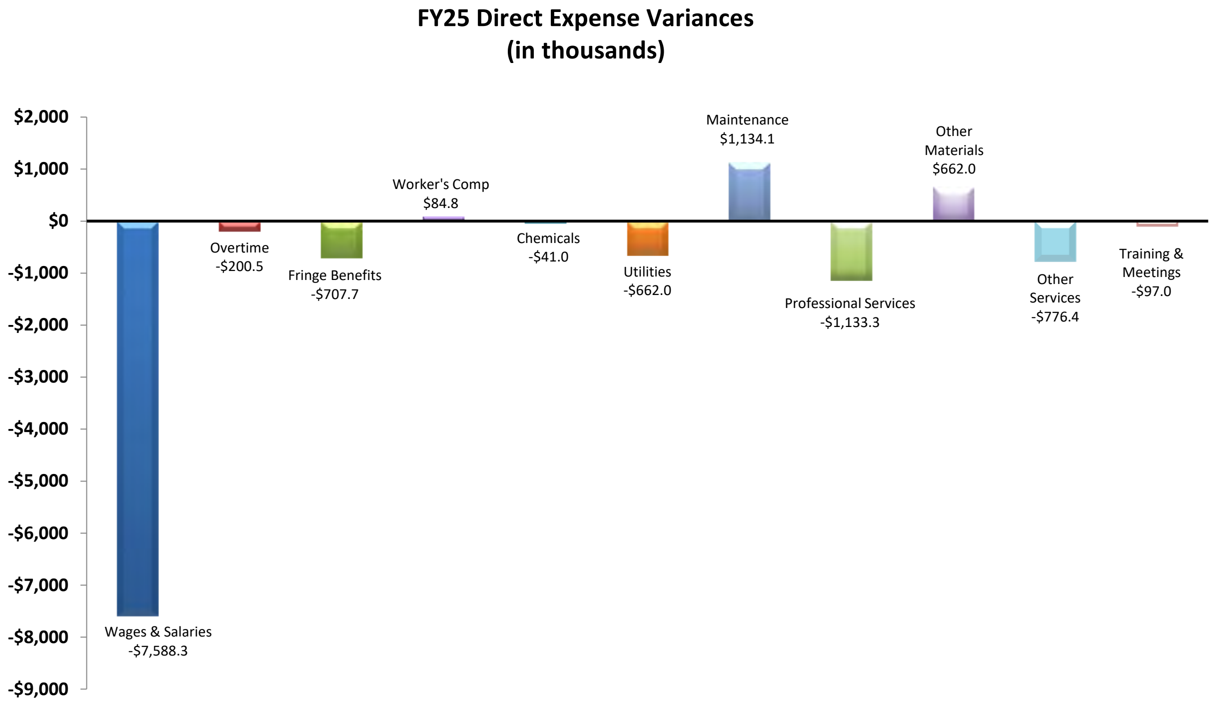
Direct Expenses

FY25 direct expenses through November totaled $120.5 million, which was $9.3 million or 7.2% less than budgeted.

FY25 Direct Expenses
(in millions)

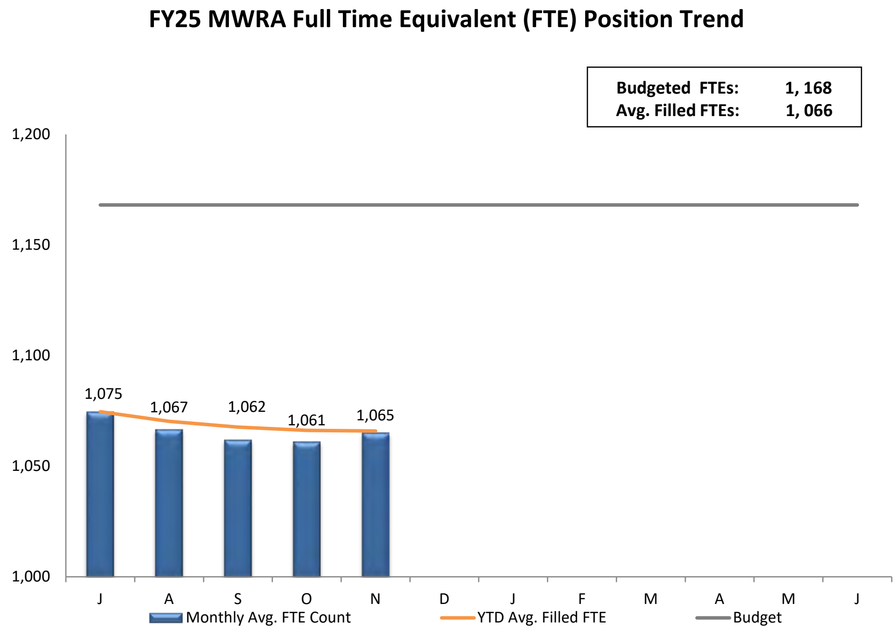


Spending was lower than budget for Wages & Salaries, Professional Services, Other Services, Fringe Benefits, Utilities, Overtime, Training & Meetings, and Chemicals. These were partially offset by higher than budgeted spending for Maintenance, Other Materials, and Workers' Compensation.



Wages and Salaries

Wages and Salaries was under budget by $7.6 million or 13.9%. Through November, there were 102 fewer average FTEs (1,066 versus 1,168 budget) or 8.7% and lower average salaries for new hires versus retirees. The timing of backfilling vacant positions also contributed to Regular Pay being under budget.



Maintenance

Maintenance was greater than budget by $1.1 million or 6.3%. Maintenance Services were greater than budget by $1.3 million driven by higher Plant & Machinery Services of $1.2 million due to greater than anticipated work performed for annual boiler maintenance and timing of the hydro wicket gate replacement project for the Deer Island Treatment Plant (DITP) Thermal Plant, Hydro Power and Wind Turbine maintenance contract, Deer Island Treatment Plant centrifuge maintenance, and earlier than anticipated work for the Norumbega Covered Storage tank cleaning contract. This was partially offset by lower Computer Services of $154,000 due to less than anticipated spending through November. Maintenance Materials were lower than budget by $161,000 driven by Special Equipment Materials of $498,000 due to the timing of purchasing hatch covers at Loring Road Covered Storage and HVAC Materials of $346,000 due to less than anticipated purchases through November including the Chelsea Facility roof top units. These are partially offset by higher Warehouse Inventory of $299,000 due to the need for spare parts and purchase of materials early due to long lead times, and Plant & Machinery Materials of $214,000 and Electrical Materials of $134,000 due to greater than anticipated purchases through November.

Professional Services

Professional Services were less than budget by $1.1 million or 24.5% driven by lower Other Services of $547,000 due to later than anticipated services which includes the Disparity Study, Computer Systems Consultant of $306,000 and Lab & Testing Analysis of $135,000, both due to less than anticipated spending through November.

Other Services

Other Services were lower than budget by $776,000 or 5.5% driven by lower Grit & Screenings Removal of $296,000 and Sludge Pelletization of $271,000 both primarily due to lower quantities, and lower than anticipated Telecommunication costs of $143,000.

Fringe Benefits

Fringe Benefits spending was lower than budget by $708,000 or 6.2%. This is primarily driven by lower Health Insurance costs of $662,000, 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.

Other Materials

Other Materials were greater than budget by $662,000 or 34.8% driven by higher Computer Hardware of $467,000 primarily due to additional purchasing of materials through November which include switches at DITP, storage replacements, and audiovisual upgrades at the Chelsea Facility. In addition, higher spending on Equipment/Furniture of $158,000 was due to greater than anticipated lab equipment purchases through November as well as Lab & Testing Supplies of $142,000. These were partially offset by lower Vehicle Expense of $115,000.

Utilities

Utilities were lower than budget by $662,000 or 5.5%. Lower than budgeted spending for Electricity of $890,000 primarily at Deer Island Treatment Plant (DITP) of $705,000 was driven primarily by lower pricing by Eversource. Electricity in Field Operations was less than budget by $254,000 primarily due to lower demand as a result of fewer wet weather events, resulting in less pumping.

Overtime

Overtime expenses were lower than budget by $201,000 or 7.6%. Lower than budgeted spending for the Field Operations Department (FOD) of $79,000 is primarily due to less emergency and planned overtime due to vacancies and less rain events, and Engineering & Construction of $35,000 and Occupational Health and Safety of $16,000 due to less than anticipated needs through November. Year-to-date rainfall was a major contributor for the less than anticipated overtime.

Training & Meetings

Training & Meetings was lower than budget by $97,000 or 38.7% primarily due to less than anticipated spending on meetings and conferences through November.

Worker's Compensation

Worker's Compensation expenses were greater than budget by $85,000 or 9.8%. The variance is due to higher than budgeted expenses for Medical Payments of $64,000, Administrative Expenses of $45,000, partially offset by lower Compensation Payments of $24,000. Due to uncertainties of when spending will happen, the budget was spread evenly throughout the year.

Chemicals

Chemicals were lower than budget by $41,000 or 0.4%. Lower than budgeted spending on Sodium Hypochlorite of $209,000 million was driven by DITP of $112,000 due to below average plant flows and Field Operations of $99,000 due to lack of wet weather events. Lower Activated Carbon of $184,000 due to timing of deliveries. Lower Liquid Oxygen of $163,000 due to lower dosing at the John Carroll Water Treatment Plant (JCWTP). Lower Sodium Bisulfite of $110,000 was primarily driven by Wastewater Operations of $79,000 due to lower dose and volume as a result of less than anticipated CSO activations, and lower volume at DITP of $20,000 due to lower quantities to dechlorinate the effluent. These are partially offset by higher Hydrogen Peroxide of $589,000 to reduce elevated H_2S levels for odor pretreatment and corrosion control and allows staff to perform maintenance activities more safely within the tanks due to the low flows. Higher Ferric Chloride of $192,000 to keep the orthophosphate levels within the target levels. DITP flows are 20.8% less than the budget and the JCWTP flows are 0.3% greater than the budget through November. 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.

Indirect Expenses

Indirect Expenses totaled $36.6 million, which is $530,000 or 1.4% lower than budget. The variance is driven by lower Watershed reimbursements.

Based on FY25 operating activity only, the Watershed Division is $533,000 or 6.5% under budget. Lower spending on Wages and Salaries, Maintenance, and Maintenance, Equipment, and Fringe Benefits are driving the variance. When factoring in the FY24 balance forward of $156,000 which was paid during Q1 of FY25, Watershed Reimbursement is $689,000 or 8.4% below budget through November 2024.

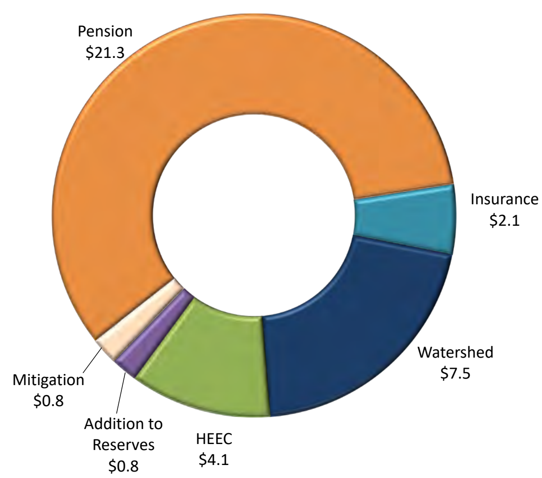
FY25 Watershed Protection Variance

$ in millions	YTD Budget	YTD Actual	YTD $ Variance	YTD % Variance
Operating Expenses	8.9	8.1	-0.8	-8.8%
Operating Revenues - Offset	0.7	0.4	-0.3	-38.8%
FY25 Operating Totals	**8.2**	**7.7**	**-0.5**	**-6.5%**
DCR Balance Forward (FY24 year-end accrual true-up)	0.0	-0.2	-0.2	
FY25 Adjusted Operating Totals	**8.2**	**7.5**	**-0.7**	**-8.4%**
PILOT	0.0	0.0	0.0	0.0%
Total Watershed Reimbursement	**8.2**	**7.5**	**-0.7**	**-8.4%**

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 arears. Accruals are being made monthly based on estimated expenses provided by DCR and trued-up monthly based on the monthly invoice. MWRA's budget is based on the annual Fiscal Year Work Plan approved by the Massachusetts Water Supply Protection Trust. The FTE count at the end of November was 145 (147.8 on a year-to-date basis) vs. a budget of 151.

FY25 Indirect Expenses
(in millions)

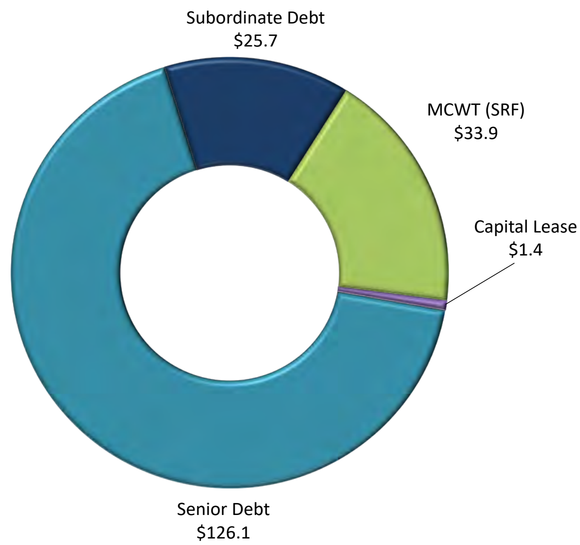


Capital Financing

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.

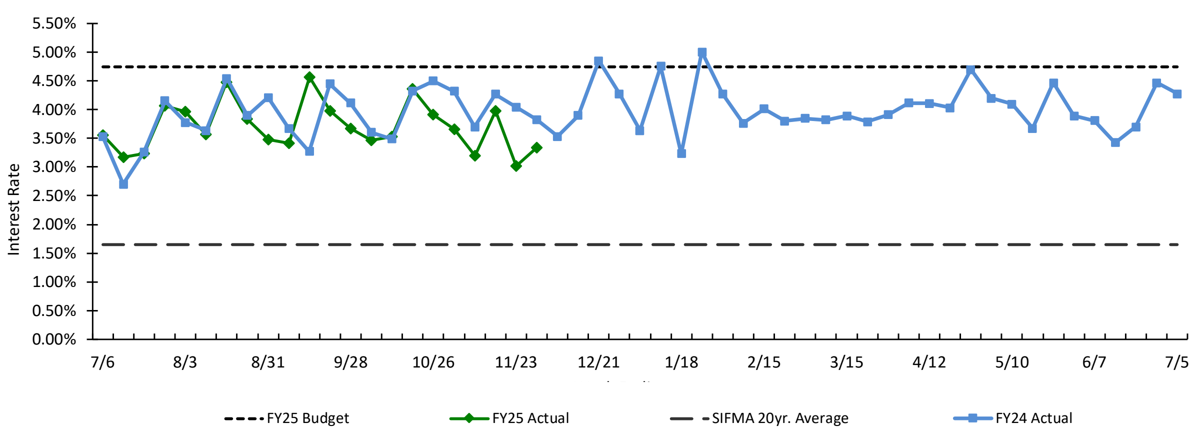
Capital Financing expenses for FY25 through November totaled $187.1 million, which is $1.4 million or 0.8% less than budget. This favorable variance is the result of lower than budgeted variable interest rates.

FY25 Capital Finance
($ in millions)



The graph below reflects the FY25 actual variable rate trend by week against the FY25 Budget.

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



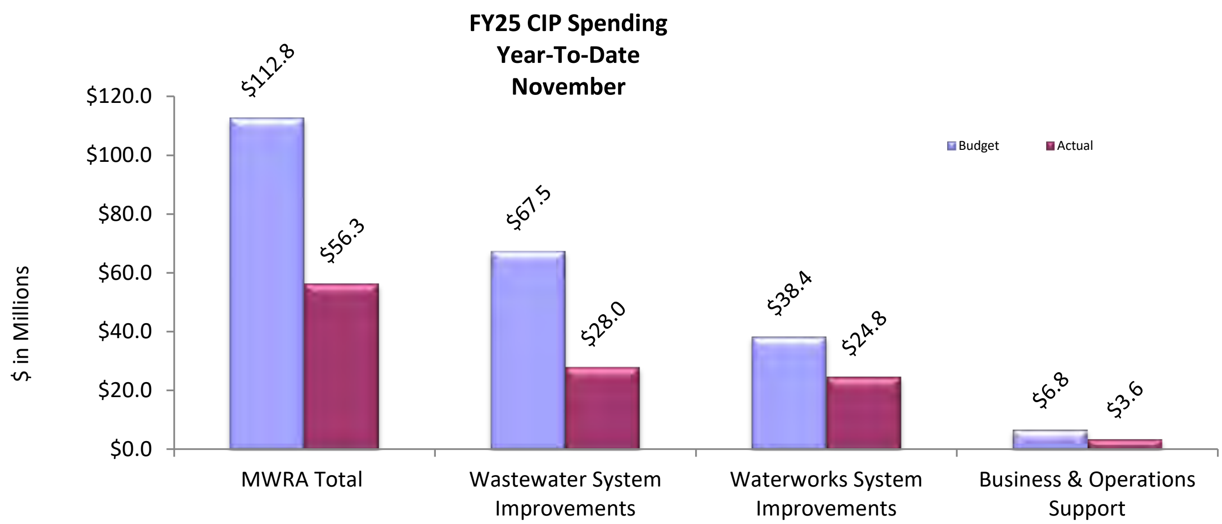
Revenue & Income

Revenues of $383.9 million were $2.1 million or 0.6% over the estimate driven by Investment Income which was $1.2 million or 11.0% over the estimate due to higher than assumed interest rates. Also, Other Revenue of $549,000 and Other User Charges of $375,000 contributed to this variance.

FY25 Capital Improvement Program

Capital expenditures in Fiscal Year 2025 through November total $56.3 million, $56.5 million or 50.0% 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 $60.4 million, $19.4 million or 24.3% under planned spending.



Overall, CIP spending reflects the less than planned spending in Wastewater Improvements ($39.5 million), Waterworks ($13.7 million) and Business and Operations Support ($3.3 million). Major variances in Wastewater are primarily due to less than anticipated requests for community grants and loans for the I/I Local Financial Assistance Program, equipment scheduled for FY25 received in FY24 for Deer Island Treatment Plant (DITP) Clarifier Rehab Phase 2, lower than projected task order work for DITP As-Needed Design contracts, work delayed due to contractor in process of submitting dive and safety plan for West Roxbury Tunnel Inspection, contractor behind original schedule due to delays with getting materials on a timely basis for DITP Roofing Replacement and planned FY25 work completed in FY24 for Nut Island Odor Control and HVAC Improvements. This was partially offset by greater than anticipated consultant progress for the Digester & Storage Tank Rehabilitation Design/ESDC, and work scheduled for FY24 performed in FY25 for Clinton Screw Pumps Replacement Phase 1 Construction.

Waterworks variances are primarily due to less than anticipated requests for community loans for the Water Loan Program, longer lead time on some larger items and a change in design for the multi-orifice valve for Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction, change in Notice-to-Proceed as contract was not awarded until October 23, 2024 for Metro Water Tunnel Program Final Design/ESDC, less than anticipated Metropolitan Water Tunnel Program administration, legal and public acquisition costs, less than planned consultant work for WASM 3 MEPA/Design/CA/RI, less than anticipated services for Metro Water Tunnel Program Support Services, contractor running behind on the concrete rehab work for Shaft 5, CP2 – Construction, and less than planned land purchases for Watershed Land. This was offset by greater than planned contractor progress for Waltham Water Pipeline Construction, and work scheduled for FY24 including final paving performed in FY25 for NEH Improvements CP-1 and New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation.

$ in Millions	Budget	Actuals	$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	6.2	3.5	(2.8)	-44.6%
Treatment	26.8	22.8	(4.1)	-15.2%
Residuals	0.0	0.0	0.0	0.0%
CSO	2.8	0.7	(2.1)	-75.6%
Other	31.6	1.1	(30.5)	-96.6%
Total Wastewater System Improvements	**$67.5**	**$28.0**	**($39.5)**	**-58.5%**
Waterworks System Improvements				
Drinking Water Quality Improvements	2.3	1.1	(1.1)	-50.5%
Transmission	23.1	17.9	(5.2)	-22.5%
Distribution & Pumping	11.9	9.4	(2.6)	-21.7%
Other	1.1	(3.6)	(4.7)	-415.9%
Total Waterworks System Improvements	**$38.4**	**$24.8**	**($13.7)**	**-35.5%**
Business & Operations Support	**$6.8**	**$3.6**	**($3.3)**	**-47.7%**
Total MWRA	**$112.8**	**$56.3**	**($56.5)**	**-50.0%**

FY25 Spending by Program:

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

Other Wastewater: Less than planned spending of $30.5 million

- $30.5 million for Community I/I due to less than anticipated requests for community grants and loans.

Waterworks Transmission: Less than planned spending of $5.2 million

- $1.9 million for Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction due to longer lead-time on some larger items and a change in design for the multi-orifice valve.
- $1.9 million for Final Tunnel Design/ESDC due to contract awarded later than anticipated.
- $1.3 million for Metro Water Tunnel Program Administration, Legal & Public Outreach due to less than anticipated costs.
- $1.3 million for Metro Water Tunnel Program Support and Geotechnical Services due to less than anticipated services.
- $0.8 million for WASM 3 MEPA/Design/CA/RI due to less than anticipated consultant work.

- $0.5 million for Shaft 5, CP2 – Construction due to contractor running behind on the concrete rehab work.
- $0.3 million for Watershed Land Acquisition due to less than anticipated land purchases.
- This under planned spending was partially offset by greater than planned contractor progress of $3.3 million for Waltham Water Pipeline.

Other Waterworks: Less than planned spending of $4.7 million

- $4.4 million for Local Financial Assistance due to greater than anticipated requests for community loans.
- $0.4 million for Beacon St. Line - Design/ESDC due to schedule change

Wastewater Treatment: Less than planned spending of $4.1 million

- $2.7 million for Clarifier Rehabilitation Phase 2 Construction due to equipment scheduled for FY25 received in FY24.
- $0.9 million for DITP As-Needed Design due to lower than projected task order work.
- This under planned spending was partially offset by greater than planned spending of $0.7 million for Digester & Storage Tank Rehabilitation Design/ESDC due to consultant progress greater than anticipated, and $0.2 million for Clinton Wastewater Treatment Plant Screw Pump Replacement due to work scheduled for FY24 performed in FY25.

Business & Operations Support: Less than planned spending of $3.3 million

- $1.0 million for As-Needed Design Contracts due to lower than projected task order work.
- $0.6 million for Security Equipment & Installation due to project delays including upgrades to communication circuits and Incident Management System, and less than anticipated fencing work.
- $0.3 million for MAXIMO Interface Enhancements due to less than anticipated completion of final work.
- $0.3 million for Oracle Database Appliance v.2 due to schedule shift.
- This under planned spending was partially offset by greater than planned spending of $0.8 million for Lawson Upgrade due to software subscription renewal that was forecasted over months when it is a one-time annual expense).

Interception & Pumping: Less than planned spending of $2.8 million

- $0.8 million for West Roxbury Tunnel Inspection due to work delayed due to contractor in process of submitting dive and safety plan.
- $0.5 million for Siphon Structure Rehabilitation Construction due schedule change.
- $0.4 million for Nut Island Odor Control & HVAC Improvements Design/CA/REI & Construction Phase 2 due to work scheduled for FY25 performed in FY24.

Combined Sewer Overflow: Less than planned spending of $2.1 million

- $2.1 million for Fort Point Channel & Mystic due to the timing of Community Managed CSO payments.

Water Distribution and Pumping: Less than planned spending of $2.6 million

- $1.1 million for Section 89/29 Replacement Construction due to less than planned contractor progress
- $1.0 million for Section 75 Extension - CP-1 Construction due to schedule change.

- $0.5 million for Northern Extra High Service (NEH) - New Pipelines Legal due to less than planned legal/easement expenses.
- $0.4 million for Section 56 Replacement/Saugus River - Design/CA due to a change in Construction schedule affecting Construction Administration services schedule.
- This under planned spending was partially offset by $1.1 million for CP-1 NEH Improvements and $0.6 million for New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation due to work scheduled for FY24 including paving performed in FY25.

Drinking Water Quality Improvements: Less than planned spending of $1.1 million

- $0.8 million for the John Carroll Water Treatment Plant (JCWTP) Technical Assistance due to lower than projected task order work.
- $0.3 million for JCWTP Parapet Wall Repairs due to contractor progress being less than planned.

Construction Fund Balance

The construction fund balance was $120.2 million as of the end of November. Commercial Paper/Revolving Loan available capacity was $250 million.

ATTACHMENTS:

Attachment 1 – Variance Summary November 2024
Attachment 2 – Current Expense Variance Explanations
Attachment 3 – Capital Improvement Program Variance Explanations

ATTACHMENT 1
FY25 Actuals vs. FY25 Budget

	Nov 2024 Year-to-Date				
	Period 5 YTD Budget	**Period 5 YTD Actual**	**Period 5 YTD Variance**	**%**	**FY25 Approved**
EXPENSES					
WAGES AND SALARIES	$ 54,568,735	$ 46,980,471	$ (7,588,264)	-13.9%	$ 133,658,955
OVERTIME	2,628,407	2,427,876	(200,531)	-7.6%	6,133,078
FRINGE BENEFITS	11,467,090	10,759,368	(707,722)	-6.2%	27,834,124
WORKERS' COMPENSATION	863,931	948,764	84,833	9.8%	2,073,434
CHEMICALS	9,155,602	9,114,595	(41,007)	-0.4%	19,706,033
ENERGY AND UTILITIES	12,090,273	11,428,308	(661,965)	-5.5%	32,048,176
MAINTENANCE	18,021,682	19,155,814	1,134,132	6.3%	46,653,201
TRAINING AND MEETINGS	250,411	153,393	(97,018)	-38.7%	568,346
PROFESSIONAL SERVICES	4,624,606	3,491,354	(1,133,252)	-24.5%	11,121,730
OTHER MATERIALS	1,902,101	2,564,101	662,000	34.8%	7,270,879
OTHER SERVICES	14,213,728	13,437,378	(776,350)	-5.5%	33,945,804
TOTAL DIRECT EXPENSES	**$ 129,786,566**	**$ 120,461,422**	**$ (9,325,144)**	**-7.2%**	**$ 321,013,760**
INSURANCE	$ 1,891,596	$ 2,050,950	$ 159,354	8.4%	$ 4,471,045
WATERSHED/PILOT	8,231,334	7,542,330	(689,004)	-8.4%	32,507,642
HEEC PAYMENT	4,148,330	4,148,325	(5)	0.0%	8,185,722
MITIGATION	771,508	771,507	(1)	0.0%	1,823,564
ADDITIONS TO RESERVES	806,503	806,503	-	0.0%	1,906,278
RETIREMENT FUND	21,264,519	21,264,519	-	0.0%	21,264,519
POST EMPLOYEE BENEFITS	-	-	-	---	5,280,806
TOTAL INDIRECT EXPENSES	**$ 37,113,790**	**$ 36,584,134**	**$ (529,656)**	**-1.4%**	**$ 75,439,576**
STATE REVOLVING FUND	$ 33,909,743	$ 33,909,743	$ -	0.0%	$ 85,449,151
SENIOR DEBT	126,136,918	126,136,918	-	0.0%	315,206,721
DEBT SERVICE ASSISTANCE	-	-	-	---	-
CURRENT REVENUE/CAPITAL	-	-	-	---	20,200,000
SUBORDINATE MWRA DEBT	27,148,838	27,148,838	-	0.0%	64,768,074
LOCAL WATER PIPELINE CP	-	-	-	---	9,827,661
CAPITAL LEASE	1,361,064	1,361,064	-	0.0%	3,217,060
VARIABLE DEBT	-	(1,429,839)	(1,429,839)	---	-
DEFEASANCE ACCOUNT	-	-	-	---	-
DEBT PREPAYMENT	-	-	-	---	5,500,000
TOTAL CAPITAL FINANCE EXPENSE	**$ 188,556,563**	**$ 187,126,724**	**$ (1,429,839)**	**-0.8%**	**$ 504,168,667**
TOTAL EXPENSES	**$ 355,456,919**	**$ 344,172,280**	**$ (11,284,639)**	**-3.2%**	**$ 900,622,003**
REVENUE & INCOME					
RATE REVENUE	$ 361,937,231	$ 361,937,231	$ -	0.0%	$ 855,488,000
OTHER USER CHARGES	4,939,631	5,315,014	375,383	7.6%	10,668,572
OTHER REVENUE	4,041,326	4,589,886	548,560	13.6%	6,066,670
RATE STABILIZATION	-	-	-	---	-
INVESTMENT INCOME	10,873,839	12,072,525	1,198,686	11.0%	28,398,761
TOTAL REVENUE & INCOME	**$ 381,792,027**	**$ 383,914,656**	**$ 2,122,629**	**0.6%**	**$ 900,622,003**

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget YTD November	FY25 Actuals November	FY25 Actual vs. FY25 Budget		Explanations
			$	%	
Direct Expenses					
Wages & Salaries	54,568,735	46,980,471	(7,588,264)	-13.9%	Wages and Salaries were lower than budget by $7.6 million or 13.9%. Year to date, there have been 102 fewer average FTEs (1,066 versus 1,168 budget), lower average new hire salaries versus retirees, the timing of backfilling vacant positions.
Overtime	2,628,407	2,427,876	(200,531)	-7.6%	Overtime expenses were lower than budget by $201,000 or 7.6%. Lower than budgeted spending for the Field Operations Department (FOD) of $79,000 is primarily due to less emergency and planned overtime due to vacancies and less rain events, and Engineering & Construction of $35,000 and Occupational Health and Safety of $16,000 due to less than anticipated needs through November. Year-to-date rainfall was a major contributor for the less than anticipated overtime.
Fringe Benefits	11,467,090	10,759,368	(707,722)	-6.2%	Fringe Benefits spending was lower than budget by $708,000 or 6.2%. This is primarily driven by lower **Health Insurance** costs of $662,000, 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.
Worker's Compensation	863,931	948,764	84,833	9.8%	Worker's Compensation expenses were greater than budget by $85,000 or 9.8%. The variance is due to higher than budgeted expenses for **Medical Payments** of $64,000, **Administrative Expenses** of $45,000**,** partially offset by **Compensation Payments** of $24,000. Due to uncertainties of when spending will happen, the budget was spread evenly throughout the year.
Chemicals	9,155,602	9,114,595	(41,007)	-0.4%	Chemicals were lower than budget by $41,000 or 0.4%. Lower than budget spending on **Sodium Hypochlorite** of $209,000 million was driven by DITP of $112,000 due to below average plant flows and Field Operations of $99,000 due to lack of wet weather events. Lower **Activated Carbon** of $184,000 due to timing of deliveries. Lower **Liquid Oxygen** of $163,000 due to lower dosing at Carroll Water Treatment Plant. Lower **Sodium Bisulfite** of $110,000 was primarily driven by Wastewater Operations of $79,000 due to lower dose and volume as a result of less than anticipated CSO activations, and lower volume at DITP of $20,000 due to lower quantities to dechlorinate the effluent. Higher **Hydrogen Peroxide** of $589,000 to reduce elevated H2S levels for odor pretreatment and corrosion control and allows staff to perform maintenance activities more safely within the tanks due to the low flows. Higher **Ferric Chloride** of $192,000 to keep the orthophosphate levels within the target levels. DITP flows are 20.8% less than the budget and the CWTP flows are 0.3% greater than the budget through November. It is important to note that Chemical variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget YTD November	FY25 Actuals November	FY25 Actual vs. FY25 Budget		Explanations
			$	%	
Utilities	12,090,273	11,428,308	(661,965)	-5.5%	Utilities were lower than budget by $662,000 or 5.5%. Lower than budgeted spending for **Electricity** of $890,000 primarily at Deer Island Treatment Plant (DITP) of $705,000 was driven primarily by lower pricing by Eversource. Electricity in Field Operations was less than budget by $254,000 primarily due to lower demand as a result of fewer wet weather events, resulting in less pumping.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget YTD November	FY25 Actuals November	FY25 Actual vs. FY25 Budget		Explanations
			$	%	
Maintenance	18,021,682	19,155,814	1,134,132	6.3%	Maintenance was greater than budget by $1.1 million or 6.3%. *Maintenance Services* were greater than budget by $1.3 million driven by higher **Plant & Machinery Services** of $1.2 million due to greater than anticipated work performed for annual boiler maintenance and timing of hydro wicket gate replacement project for the Deer Island Treatment Plant (DITP) Thermal Plant, Hydro Power and Wind Turbine maintenance contract, Deer Island Treatment Plant centrifuge maintenance, and earlier than anticipated work for the Norumbega Covered Storage tank cleaning contract. This was partially offset by **Computer Services** of $154,000 due to less than anticipated spending through November. *Maintenance Materials* were lower than budget by $161,000 driven by **Special Equipment Materials** of $498,000 due to the timing of purchasing hatch covers at Loring Road Covered Storage and **HVAC Materials** of $346,000 due to less than anticipated purchases through November including the Chelsea Facility roof top units. These are partially offset by higher **Warehouse Inventory** of $299,000 due to the need for spare parts and purchase of materials early due to long lead times, and **Plant & Machinery Materials** of $214,000 and **Electrical Materials** of $134,000 due to greater than anticipated purchases through November.
Training & Meetings	250,411	153,393	(97,018)	-38.7%	Training & Meetings was lower than budget by $97,000 or 38.7% primarily due to less than anticipated spending on meetings and conferences through November driven by MIS ($77,000), and Procurement ($11,000), partially offset by higher spending in Operations Administration of $21,000.
Professional Services	4,624,606	3,491,354	(1,133,252)	-24.5%	Professional Services were less than budget by $1.1 million or 24.5% driven by lower **Other Services** of $547,000 due to later than anticipated services which includes the Disparity Study, **Computer Systems Consultant** of $306,000 and **Lab & Testing Analysis** of $135,000, both due to less than anticipated spending through November.
Other Materials	1,902,101	2,564,101	662,000	34.8%	Other Materials were greater than budget by $662,000 or 34.8% driven by **Computer Hardware** of $467,000 primarily due to additional purchases of materials through November which include switches at DITP, storage replacements, and audiovisual upgrades at the Chelsea Facility. In addition, higher spending on **Equipment/Furniture** of $158,000 was due to greater than anticipated lab equipment purchases through November as well as **Lab & Testing Supplies** of $142,000. These were partially offset by **Vehicle Expense** of $115,000 and **Other Materials** of $96,000 due to less than anticipated spending through November.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget YTD November	FY25 Actuals November	FY25 Actual vs. FY25 Budget		Explanations
			$	%	
Other Services	14,213,728	13,437,378	(776,350)	-5.5%	Other Services were lower than budget by $776,000 or 5.5% driven by **Grit & Screenings Removal** of $296,000 and **Sludge Pelletization** of $271,000 both primarily due to lower quantities, and lower than anticipated **Telecommunications** of $143,000.
Total Direct Expenses	**129,786,566**	**120,461,422**	**(9,325,144)**	**-7.2%**	
Indirect Expenses					
Insurance	1,891,596	2,050,950	159,354	8.4%	Higher payments/claims of $95,000 and premiums of $65,000 than budgeted.
Watershed/PILOT	8,231,334	7,542,330	(689,004)	-8.4%	Lower Watershed Reimbursement of $689,000 driven by lower spending on Wages & Salaries, Maintenance, Equipment, and Fringe Benefits.
HEEC Payment	4,148,330	4,148,325	(5)	0.0%	
Mitigation	771,508	771,507	(1)	0.0%	
Addition to Reserves	806,503	806,503	-	0.0%	
Pension Expense	21,264,519	21,264,519	-	0.0%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	**37,113,790**	**36,584,134**	**(529,656)**	**-1.4%**	
Debt Service					
Debt Service	188,556,563	187,126,724	(1,429,839)	-0.8%	Capital Financing was $1.4 million less than budget as a result of lower than budgeted variable interest rates.
Debt Service Assistance	-	-	-		
Total Debt Service Expenses	**188,556,563**	**187,126,724**	**(1,429,839)**	**-0.8%**	
Total Expenses	**355,456,919**	**344,172,280**	**(11,284,638)**	**-3.2%**	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget YTD November	FY25 Actuals November	FY25 Actual vs. FY25 Budget		Explanations
			$	%	
Revenue & Income					
Rate Revenue	361,937,231	361,937,231	-	0.0%	
Other User Charges	4,939,631	5,315,014	375,383	7.6%	Town of Burlington Entrance Fee of $200,000 and Ashland of $18,000. Also, higher than estimated DI Water of $150,000.
Other Revenue	4,041,326	4,589,886	548,560	13.6%	Other Revenue was $549,000 or 13.6% greater than budget due to **Miscellaneous Revenue** of $157,000, **Permit Fees** of $153,000, **Energy Revenue** of $104,000, **Emergency Water Supply** of $101,000 for the Town of Wayland, **Energy Rebates** of $80,000, partially offset by **Profit & Loss on Disposal of Equipment** of $107,000.
Rate Stabilization	-	-	-		
Investment Income	10,873,839	12,072,525	1,198,686	11.0%	Investment Income is over budget due to higher than budgeted interest rates and higher average balances.
Total Revenue	**381,792,027**	**383,914,656**	**2,122,629**	**0.6%**	
Net Revenue in Excess of Expenses	**26,335,108**	**39,742,376**	**13,407,267**		

ATTACHMENT 3
FY25 CIP Variance Report ($000s)

	FY25 Budget November	FY25 Actuals November	Actuals vs. Budget $	Actuals vs. Budget %	Explanations
Wastewater					
Interception & Pumping (I&P)	$6,239	$3,457	($2,782)	-44.6%	Less than planned spending West Roxbury Tunnel Inspection: $800k (work delayed due to contractor in process of submitting dive and safety plan) Siphon Structure Rehabilitation Construction: $539k (schedule change) Nut Island Odor Control & HVAC Improvements - Design/CA/REI & Construction Phase 2: $424k (work scheduled for FY25 performed in FY24) Columbus Park Headworks Air Handling Equipment: $313k (delivery of the new makeup air units was delayed) Ward St. & Columbus Park Headworks Design/CA: $271k (schedule shift)
Treatment	$26,844	$22,776	($4,068)	-15.2%	Less than planned spending Clarifier Rehabilitation Phase 2 Construction: $2.7M (equipment scheduled for FY25 received in FY24) DITP As-Needed Design: $930k (lower than projected task order work) DITP Roofing Replacement: $672k (Contractor is behind original schedule due to delays with getting materials on a timely basis) Greater than planned spending Digester & Storage Tank Rehabilitation - Design/ESDC: $678k (consultant progress greater than anticipated) Clinton Wastewater Treatment Plant Screw Pump Replacement: $200k (work scheduled for FY24 performed in FY25)
Residuals	$0	$1	$1	0.0%	
CSO	$2,832	$691	($2,140)	-75.6%	Less than planned spending Fort Point Channel & Mystic: $2.1M (timing of Community Managed CSO payments) Somerville Marginal New Pipe Connection: $250k (Notice-to-Proceed issued later than anticipated) Greater than planned spending CSO Performance Assessment: $378k (consultant progress greater than originally planned)
Other Wastewater	$31,601	$1,063	($30,538)	-96.6%	Less than planned spending I/I Local Financial Assistance: $30.5M (less than anticipated requests for community grants and loans)
Total Wastewater	**$67,516**	**$27,988**	**($39,526)**	**-58.5%**	

ATTACHMENT 3

FY25 CIP Variance Report ($000s)

	FY25 Budget November	FY25 Actuals November	Actuals vs. Budget $	Actuals vs. Budget %	Explanations
Waterworks					
Drinking Water Quality Improvements	$2,258	$1,118	($1,140)	-50.5%	<u>Less than planned spending</u> CWTP Technical Assistance: $825k (lower than projected task order work) CWTP Parapet Wall Repairs: $300k (contractor progress less than planned)
Transmission	$23,091	$17,900	($5,191)	-22.5%	<u>Less than planned spending</u> Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction and REI: $1.9M (longer lead time on some larger items and a change in design for the multi-orifice valve) Metropolitan Water Tunnel Program Final Design/ESDC: $1.9M (change in Notice-to-Proceed as contract was not awarded until October 23, 2024 Board meeting) Metropolitan Water Tunnel Program Administration, Legal & Public Outreach: $1.3M (less than anticipated costs) WASM 3 - MEPA/Design/CA/RI: $823k (less than planned consultant work) Program Support Services: $823k and Geotechnical Support Services: $464k (less than anticipated services) Shaft 5, CP2 - Construction: $454k (contractor running behind on the concrete rehab work) Watershed Land Acquisition: $250k (less than planned land purchases) <u>Greater than planned spending</u> Waltham Water Pipeline Construction: $3.3M (greater than planned contractor progress)
Distribution & Pumping	$11,946	$9,357	($2,589)	-21.7%	<u>Less than planned spending</u> Section 89/29 Replacement Construction: $1.2M (less than planned contractor progress) Section 75 Extension - CP-1 Construction: $1.0M (schedule change) Northern Extra High Service (NEH) - New Pipelines Legal: $488k (less than planned legal/easement expenses) Section 56 Replacement/Saugus River - Design/CA: $365k (change in Construction schedule affects CA services schedule) <u>Greater than planned spending</u> NEH Improvements CP-1: $1.1M and New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation: $567k (work scheduled for FY24 including final paving performed in FY25)

ATTACHMENT 3

FY25 CIP Variance Report ($000s)

	FY25 Budget November	FY25 Actuals November	Actuals vs. Budget $	Actuals vs. Budget %	Explanations
Other Waterworks	$1,139	($3,597)	($4,735)	n/a	<u>Less than planned spending</u> Local Water Pipeline Financial Assistance Program: $4.4M (less than anticipated requests for community loans) Steel Tank Improvements: $336k (less than planned consultant progress) Beacon St. Line - Design/ESDC: $397k (schedule change)
Total Waterworks	**$38,434**	**$24,779**	**($13,656)**	**-35.5%**	
Business & Operations Support					
Total Business & Operations Support	**$6,849**	**$3,579**	**($3,269)**	**-47.7%**	<u>Less than planned spending</u> As-Needed Design Contracts: $991k (lower than projected task order work) Security Equipment & Installation: $720k (delays with projects including upgrades to communication circuits and Incident Management System, and less than anticipated fencing work) Cabling: $487k (delays in the development of the scope of work caused by challenges in locating available conduit paths on Deer Island) MAXIMO Interface Enhancements: $309k (less than anticipated completion of final work) Oracle Database Appliance v.2: $307k (schedule shift) PI Vision Process Book Replacement: $221k (schedule change) <u>Greater than planned spending</u> Lawson Upgrade: $790k (cost for software subscription renewal was forecasted over months when it is a one-time annual expense)
Total MWRA	**$112,799**	**$56,348**	**($56,451)**	**-50.0%**	

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: First Amendment to the Memorandum of Agreement with the City of Quincy

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COMMITTEE: Administration, Finance & Audit

____ INFORMATION
__X__ VOTE

Katherine Ronan, Chief of Staff
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute the First Amendment to the Memorandum of Agreement with the City of Quincy, substantially in the form attached hereto, to extend the term of the agreement for an additional ten years and to continue to provide mitigation to the City of Quincy as further detailed herein.

DISCUSSION:

Background

When construction began on the $3.8 billion Boston Harbor Project at Deer Island and the Fore River Shipyard, the bulk of the impacts fell mainly on two communities, Quincy and Winthrop. In 1988, MWRA developed a mitigation agreement with the City of Quincy for the amelioration of direct construction impacts of the pelletizing plant and Nut Island Headworks. In addition to monetary provisions, the agreement also contained extensive environmental and safety mitigation for noise, odor control, traffic, and fire and police services. Total payments to the City of Quincy under that agreement were $33.2 million.

The second mitigation agreement, for the period 2002 to 2011, provided an annual payment to the City beginning at $650,000 and adjusted annually for inflation at a rate of 2.5%, or the change in the Consumer Price Index - All Items for Boston from the previous year, whichever was less. The agreement was amended twice, in 2011 and 2014, to extend the term through June 2015. Total payments under this agreement including amendments were $9.78 million.

Current Agreement and Proposed Agreement

When the City agreed to allow the sludge processing plant to be sited at the Shipyard, it was under the assumption that mitigation payments would continue as long as the facility remained in operation. The current agreement, copy of which is attached, covers the period FY2016 through FY2025. This agreement was intended to provide mitigation with respect to special fire services for the protection of persons and property at MWRA's facilities, including the pelletizing plant, and to provide mitigation for MWRA's facilities and operations upon properties that remain exempt from the imposition of local property taxes. The initial annual payment under the agreement was $760,00 which was again adjusted each year for inflation at a rate of 2.5% or the change in the Consumer Price Index - All Items for Boston from the previous year, whichever was less. Through FY2025, total payments to the City under this agreement are $8,293,389. MWRA staff now proposes to amend this agreement to extend it for five years, through FY2035.

The Quincy Fire Department is the sole responder to the pelletizing plant and has responded to numerous alarms as it would for a private, tax-paying entity. The Quincy Fire Department also responds to Nut Island Headworks, including responding to and eventually extinguishing the 2016 odor control fire.

Payment Schedule

Staff propose amending the existing agreement with the following payment schedule:

Fiscal Year	Maximum Payment	Maximum Inflation Factor
2026	$934,576	2.5%
2027	$957,940	2.5%
2028	$981,889	2.5%
2029	$1,006,436	2.5%
2030	$1,031,597	2.5%
2031	$1,057,387	2.5%
2032	$1,083,822	2.5%
2033	$1,110,918	2.5%
2034	$1,138,691	2.5%
2035	$1,167,158	2.5%

The payment of $911,781 made by MWRA to the City of Quincy for FY2025 will be adjusted for inflation beginning in FY2026 at 2.5%, or the change from the previous year as published in the Consumer Price Index - All Items for Boston, whichever is less.

BUDGET/FISCAL IMPACTS:

Funding for this agreement will be included in the FY2026 Current Expense Budget and would be included in subsequent budgets though FY2035.

ATTACHMENTS:

Current Memorandum of Agreement By and Between MWRA and the City of Quincy
Draft First Amendment to the Memorandum of Agreement By and Between MWRA and the City of Quincy

MEMORANDUM OF AGREEMENT
BY AND BETWEEN
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE CITY OF QUINCY

This Memorandum of Agreement entered into by and between the Massachusetts Water Resources Authority ("MWRA"), a body politic and corporate, a public instrumentality and an independent public authority created by chapter 372 of the Massachusetts Acts of 1984, having a principal place of business at the Charlestown Navy Yard, 100 First Avenue, Boston, Massachusetts 02129 and the City of Quincy (the "City" or "Quincy"), a duly constituted municipality of the Commonwealth, with offices at 1305 Hancock Street, Quincy, MA 02169 (collectively referred to as the "Parties").

WHEREAS, the Parties wish to enter into this Memorandum of Agreement ("MOA") with respect to special fire services to be rendered by the City relative to the protection of persons and property at MWRA's facilities, including the Pelletizing Plant, such services to be provided by the City in exchange for a schedule of payments from MWRA to the Town for a period of ten (10) fiscal years commencing on July 1, 2015 and ending on June 30, 2025; and

WHEREAS, the Parties wish to continue to provide mitigation for MWRA's facilities and operations upon properties which remain exempt from the imposition of local property taxes; and

WHEREAS, the Parties agree that all payments required to be made by MWRA under any prior agreements, and any amendments thereto, have been fully paid and that all other requirements of any and all prior periods performed by and between the City and MWRA have been fully and satisfactorily performed; and

WHEREAS, MWRA and the City now wish to terminate all prior mitigation agreements between them and to enter into this new mitigation agreement; and

WHEREAS, MWRA's Board of Directors voted on July 15, 2015 to authorize MWRA, through its Executive Director, to execute this MOA; and

WHEREAS, the Parties wish to memorialize herein the terms of this new mitigation agreement as authorized by the July 15, 2015 Board action.

NOW THEREFORE, the Parties agree as follows:

1. <u>Term</u>. The term of this MOA shall commence on July 1, 2015 and shall continue in effect for ten fiscal years and shall expire, if not amended, on June 30, 2025.

2. No Claims. The Parties agree that each has fully performed all obligations required by the provisions of any and all prior mitigation agreements between them and that there are no outstanding or unsatisfied claims by either Party with respect to any payments or any other obligations of the Parties under any said prior agreements.

3. Cross-Releases for All Prior Obligations. Both MWRA and the City release each other from any and all claims, whether or not now known or in existence, which arise out of or relate to any prior mitigation agreements between them.

4. Municipal Services. The City shall continue to provide such fire services to MWRA at the MWRA Quincy Facilities as it has in recent past years.

5. Schedule of Payments/Escalation. Subject to all the provisions of this paragraph, including provisions governing annual escalation, MWRA shall make an annual payment to the City for each fiscal year which shall be due on or before July 31 of each fiscal year. The amount payable by MWRA in FY 2016 (i.e., $760,000) shall be adjusted for inflation in each of the next nine subsequent fiscal years (FY 2017 – FY2025) by a factor which is the lesser of: (i) the actual inflation factor change from the prior year as published by the Bureau of Labor Statistics "CPI-U Boston All Items" or (ii) 2.5%. The projected payment amounts shown under the column "Maximum Payment" shall equal the payment due to the City in any given fiscal year only if the maximum inflation factor has been used as the inflation factor in each of the fiscal years from FY 2017 – FY2025. Otherwise, the calculation of the actual payment due shall depend upon whether the inflation factor to be applied to the prior fiscal year's payment is the actual published CPI percentage or 2.5% as shown in the chart below.

Fiscal Year	Maximum Payment	Max. Inflation Factor
2016	$760,000	
2017	$779,000	2.5%
2018	$798,475	2.5%
2019	$818,437	2.5%
2020	$838,898	2.5%
2021	$859,870	2.5%
2022	$881,367	2.5%
2023	$903,401	2.5%
2024	$925,986	2.5%
2025	$949,136	2.5%

6. Interpretation. The provisions of this MOA shall be interpreted in accordance with and shall be governed by the laws of the Commonwealth of Massachusetts,

including by and with the provisions of MWRA's Enabling Act as found in chapter 372 of the Acts of 1984.

IN WITNESS WHEREOF, the Parties, intending to be bound hereby, have caused this MOA to be executed by their duly authorized representatives.

Massachusetts Water Resources Authority

By:______________________

Frederick A. Laskey, Executive Director

Dated: 7/23/15

City of Quincy

By:______________________

Thomas P. Koch, Mayor

Dated: 7/31/15

FIRST AMENDMENT TO THE
MEMORANDUM OF AGREEMENT
BY AND BETWEEN THE
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE CITY OF QUINCY

This First Amendment to the Memorandum of Agreement is entered into by and between the Massachusetts Water Resources Authority, a body politic and corporate, a public instrumentality and an independent public authority created by chapter 372 of the Massachusetts Acts of 1984, as amended, having a principal place of business at Deer Island, 33 Tafts Avenue, Boston, Massachusetts 02128 ("MWRA") and the City of Quincy, a duly constituted municipality of the Commonwealth, with offices at 1305 Hancock Street, Quincy, MA 02169 ("City") (collectively, MWRA and the City are referred to as the "Parties").

WHEREAS, in July 2015, the Parties entered into a Memorandum of Agreement ("MOA") with respect to special fire services to be rendered by the City relative to the protection of persons and property at MWRA's facilities, including the Pelletizing Plant, such services to be provided by the City in exchange for a schedule of payments from MWRA to the City for a period of ten (10) fiscal years commencing on July 1, 2015, and ending on June 30, 2025;

WHEREAS, the Parties now wish to amend the MOA in order to extend the term therein by an additional ten (10) fiscal years beginning on July 1, 2025, and ending on June 30, 2035; and

WHEREAS, on December ____, 2024, the MWRA Board of Directors authorized the MWRA Executive Director to execute this First Amendment to the MOA.

NOW THEREFORE, the Parties agree to amend the MOA as follows:

A. The above recitals are hereby incorporated by reference in the MOA.

B. The first paragraph of the MOA is deleted and replaced with the following new paragraph:

   1. Term. The term of this MOA shall commence on July 1, 2015, and shall continue in effect for twenty fiscal years and shall expire, if not amended, on June 30, 2035.

C. The fifth paragraph of the MOA is deleted and replaced with the following new paragraph:

   5. Schedule of Payments/ Escalation. Subject to all the provisions of this paragraph, including provisions governing annual escalation, MWRA shall make an annual payment to the City for each fiscal year, which shall be due on or before July 31 of each fiscal year. The Parties acknowledge that MWRA has previously made timely payments, in full, to the City for fiscal years 2017-2025 totaling $8,293,389. The amount paid by MWRA for FY2025 (*i.e.*, $911,781) shall be adjusted for inflation in each of the next ten subsequent fiscal years (FY2026, FY2027, FY2028, FY2029 FY2030, FY2031, FY2032, FY2023, FY2034 and FY2035) by a factor which is the

lesser of: (i) the actual inflation factor change from the prior year as published by the Bureau of Labor Statistics "CPI-U Boston All Items" or (ii) 2.5%. The projected payment amounts shown under the column "Maximum Payment" shall equal the payment due to the City in any given fiscal year only if the maximum inflation factor has been used as the inflation factor in each of the fiscal years from FY2026 - FY2035. Otherwise, the calculation of the actual payment due shall depend upon whether the inflation factor to be applied to the prior fiscal year's payment is the actual published CPI percentage or 2.5% as shown in the chart below.

Fiscal Year	Maximum Payment	Max. Inflation Factor
2026	$934,576	2.5%
2027	$957,940	2.5%
2028	$981,889	2.5%
2029	$1,006,436	2.5%
2030	$1,031,597	2.5%
2031	$1,057,387	2.5%
2032	$1,083,822	2.5%
2033	$1,110,918	2.5%
2034	$1,138,691	2.5%
2035	$1,167,158	2.5%

D. All of the other terms of the MOA are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Parties, intending to be bound hereby, have caused this first amendment to the MOA to be executed by their duly authorized representatives.

Massachusetts Water Resources Authority

By: ________________________________
Frederick A. Laskey, Executive Director

Dated:____________________________

City of Quincy

By: ________________________
Thomas P. Koch, Mayor

Dated:__________________

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: First Amendment to the Memorandum of Agreement with the Town of Winthrop

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COMMITTEE: Administration, Finance & Audit

______INFORMATION
___X_ VOTE

Katherine Ronan, Chief of Staff
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute the First Amendment to the Memorandum of Agreement with the Town of Winthrop, substantially in the form attached hereto, to extend the term of the agreement for an additional ten years and to continue to provide mitigation to the Town of Winthrop as further detailed herein.

DISCUSSION:

Background

When construction began on the $3.8 billion Boston Harbor Project at Deer Island and the Fore River Shipyard, the bulk of the impacts fell mainly on two communities, Quincy and Winthrop. In 1988, MWRA developed a mitigation agreement with the Town of Winthrop for the amelioration of direct construction impacts of the Deer Island facilities. In addition to monetary provisions, this agreement also contained extensive environmental and safety mitigation for noise, odor control, traffic, and fire and police services. Total payments to the Town of Winthrop under that agreement were $34.6 million.

Once major construction of the Deer Island plant was completed, MWRA entered into a successor agreement with the Town of Winthrop for the period FY2000 to FY2005 to mitigate the impacts of the last construction packages associated with the Boston Harbor Project and the operational impacts of such a large facility, including fire and police response, and traffic. Total payments to the Town under that agreement were $3.5 million.

The subsequent agreement, for the period FY2006 through FY2015, was intended to mitigate the long-term, day-to-day operations and maintenance of the facility, again including fire and police response, and traffic impacts. The initial annual payment under the agreement was $650,000, which was adjusted each year for inflation at a rate of 2.5%, or the change in the Consumer Price Index - All Items for Boston from the previous year, whichever was less. Total payments under this agreement were $7.06 million. Under this agreement, MWRA also reimbursed the Town for the purchase of a replacement fire engine ladder truck in the amount of $753,000. In addition, until 2013, MWRA contracted for ambulance services for both the Deer Island Treatment Plant and the

Town of Winthrop at a cost of $250,000 per year. At that time, the Town took over the contract and now provides ambulance services to Deer Island.

Current Agreement and Proposed Amendment

The current agreement, a copy of which is attached, covers the period FY2016 through FY2025, was intended to mitigate the long-term, day-to-day operations and maintenance of the facility, including fire and police response, and traffic impacts. The initial annual payment under the agreement was $760,00 which was again adjusted each year for inflation at a rate of 2.5% or the change in the Consumer Price Index - All Items for Boston from the previous year, whichever was less. Through FY2025, total payments to the Town under this agreement were $8,293,389. MWRA staff now propose to amend this agreement to extend it for a term of ten years, through FY2035. The services provided by the Town for which MWRA provides payments under the agreement are described below.

Fire Response

When there is an alarm on Deer Island, both the Boston Fire Department and Winthrop Fire Department receive the call. Given the proximity to Deer Island, Winthrop Fire is the first responder. The Winthrop Fire Department usually responds within 5 minutes. By contrast, the closest fire station in Boston is in East Boston and the average response time to Deer Island is 15 minutes. In 2023, the Winthrop Fire Department responded to 11 calls at Deer Island. It is in MWRA's best interest that the Winthrop Fire Department continue to provide fire protection and emergency response services for the Deer Island facilities and the MWRA staff working there.

Due to the large industrial nature of the facilities and the chemicals and processes used at the plant, MWRA has spent a significant amount of time and effort to provide hazmat and specialty response training to both the Winthrop and Boston Fire Departments. All agreements with the Town have included payments to Winthrop for providing fire protection and emergency response, and for maintaining the preparedness to do so.

Traffic Mitigation

During plant construction, much of the building materials and construction personnel were brought to Deer Island over the water. However, with the completion of the plant, the ferry system was decommissioned. It had been planned to transport fuel oil and sodium hypochlorite by barge to the Island, but in 2010, the prices for barging skyrocketed and those deliveries now come through the streets of Winthrop. On average, Deer Island receives 10 vehicles with deliveries each day. That number can rise during the periods of large construction projects, like the ongoing Clarifier Rehabilitation project and upcoming energy projects.

With the closing of the Charlestown Navy Yard location, Deer Island has become the Authority's official headquarters. There are approximately 300 employees working at Deer Island as their primary location, most of whom work Monday through Friday from 7:00 am to 3:00 pm. As it is difficult to reach Deer Island via public transportation, nearly all of these employees drive to work.

Further, all deliveries and construction contractors must follow a designated truck route to lessen the impact on the whole Town. Even so, the streets along the route are mostly narrow, residential streets and these large vehicles often have trouble making sharp turns en route to the plant.

Part of the treatment plant has now been in service for over 30 years. Significant capital work is on-going and will continue to maintain, repair, and replace equipment and systems as they age. It is unlikely that traffic will be reduced over the next five years.

Police Protections

The State Police have jurisdictional authority over property of MWRA and also respond to calls for assistance for public safety services from any other police force in the Commonwealth. However, given the proximity of Deer Island to Winthrop, it is in MWRA's best interest to maintain an agreement with Winthrop to provide supplemental police protection services at Deer Island. In addition to the plant, the Winthrop Police are often the first responders for issues within the public access area. The Winthrop Police also provide escorts for all fuel deliveries through the Town.

Payment Schedule

Staff propose amending the existing agreement with the following payment schedule:

Fiscal Year	Maximum Payment	Maximum Inflation Factor
2026	$934,576	2.5%
2027	$957,940	2.5%
2028	$981,889	2.5%
2029	$1,006,436	2.5%
2030	$1,031,597	2.5%
2031	$1,057,387	2.5%
2032	$1,083,822	2.5%
2033	$1,110,918	2.5%
2034	$1,138,691	2.5%
2035	$1,167,158	2.5%

The payment of $911,781 made by MWRA to the Town of Winthrop for FY2025 will be adjusted for inflation beginning in FY2026 at 2.5%, or the change from the previous year as published in the Consumer Price Index - All Items for Boston, whichever is less.

BUDGET/FISCAL IMPACTS:

Funding for this extension to the Memorandum of Agreement will be included in the FY2026 Current Expense Budget and would be included in subsequent budgets though FY2035.

ATTACHMENTS:

Current Memorandum of Agreement By and Between MWRA and the Town of Winthrop Draft First Amendment to the Memorandum of Agreement By and Between the MWRA and the Town of Winthrop

MEMORANDUM OF AGREEMENT
BY AND BETWEEN
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF WINTHROP

This Memorandum of Agreement entered into by and between the Massachusetts Water Resources Authority ("MWRA"), a body politic and corporate, a public instrumentality and an independent public authority created by chapter 372 of the Massachusetts Acts of 1984, having a principal place of business at the Charlestown Navy Yard, 100 First Avenue, Boston, Massachusetts 02129 and the Town of Winthrop (the "Town" or "Winthrop"), a duly constituted municipality of the Commonwealth, with offices at One Metcalf Square, Winthrop, Massachusetts 02152 (collectively referred to as the "Parties").

WHEREAS, the Parties wish to enter into this Memorandum of Agreement ("MOA") with respect to special police and fire services to be rendered by the Town hereunder arising out of a variety of impacts upon the Town, its residents, its infrastructure and its resources, all of which impacts grow out of the continued operation of MWRA's facilities and activities at the Deer Island Wastewater Treatment Plant, such services to be provided by the Town in exchange for a schedule of payments from MWRA to the Town for a period of ten (10) fiscal years commencing on July 1, 2015 and ending on June 30, 2025; and

WHEREAS, the Parties agree that all payments required to be made by MWRA under any prior agreements, and any amendments thereto, have been fully paid and that all other requirements of any and all prior periods performed by and between the Town and MWRA have been fully and satisfactorily performed; and

WHEREAS, MWRA and the Town now wish to terminate all prior mitigation agreements between them and to enter into this new mitigation agreement; and

WHEREAS, MWRA's Board of Directors voted on July 15, 2015 to authorize MWRA through its Executive Director, to execute this MOA; and

WHEREAS, the Parties wish to memorialize herein the terms of this new mitigation agreement as authorized by the July 15, 2015 Board action.

NOW THEREFORE, the Parties agree as follows:

1. Term. The term of this MOA shall commence on July 1, 2015 and shall continue in effect for ten fiscal years and shall expire, if not amended, on June 30, 2025.

2. No Claims. The Parties agree that each has fully performed all obligations required by the provisions of any and all prior mitigation agreements between them and that

there are no outstanding or unsatisfied claims by either Party with respect to any payments or any other obligations of the Parties under any said prior agreements.

3. Cross-Releases for All Prior Obligations. Both MWRA and the Town release each other from any and all claims, whether or not now known or in existence, which arise out of or relate to any prior mitigation agreements between them.

4. Municipal Services. The Town shall continue to provide such police and fire services to MWRA at the Deer Island Waste Water Treatment Plant as it has in recent past years.

5. Schedule of Payments/Escalation. Subject to all the provisions of this paragraph, including provisions governing annual escalation, MWRA shall make an annual payment to the Town for each fiscal year which shall be due on or before July 31 of each fiscal year. The amount payable by MWRA in FY 2016 (i.e., $760,000) shall be adjusted for inflation in each of the next nine subsequent fiscal years (FY 2017 – FY2025) by a factor which is the lesser of: (i) the actual inflation factor change from the prior year as published by the Bureau of Labor Statistics "CPI-U Boston All Items" or (ii) 2.5%. The projected payment amounts shown under the column "Maximum Payment" shall equal the payment due to the Town in any given fiscal year only if the maximum inflation factor has been used as the inflation factor in each of the fiscal years from FY 2017 – FY2025. Otherwise, the calculation of the actual payment due shall depend upon whether the inflation factor to be applied to the prior fiscal year's payment is the actual published CPI percentage or 2.5% as shown in the chart below.

Fiscal Year	Maximum Payment	Max. Inflation Factor
2016	$760,000	
2017	$779,000	2.5%
2018	$798,475	2.5%
2019	$818,437	2.5%
2020	$838,898	2.5%
2021	$859,870	2.5%
2022	$881,367	2.5%
2023	$903,401	2.5%
2024	$925,986	2.5%
2025	$949,136	2.5%

6. Interpretation. The provisions of this MOA shall be interpreted in accordance with and shall be governed by the laws of the Commonwealth of Massachusetts, including by and with the provisions of MWRA's Enabling Act as found in in chapter 372 of the Acts of 1984.

IN WITNESS WHEREOF, the Parties, intending to be bound hereby, have caused this MOA to be executed by their duly authorized representatives.

Massachusetts Water Resources Authority	Town of Winthrop
By:________________	By:________________
Frederick A. Laskey, Executive Director	Peter T. Gill, Council President
Dated: 7/30/15	Dated: 7/30/15

FIRST AMENDMENT TO THE
MEMORANDUM OF AGREEMENT
BY AND BETWEEN THE
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF WINTHROP

This First Amendment to the Memorandum of Agreement is entered into by and between the Massachusetts Water Resources Authority, a body politic and corporate, a public instrumentality and an independent public authority created by chapter 372 of the Massachusetts Acts of 1984, as amended, having a principal place of business at Deer Island, 33 Tafts Avenue, Boston, Massachusetts 02128 ("MWRA") and the Town of Winthrop, a duly constituted municipality of the Commonwealth, with offices at One Metcalf Square, Winthrop, MA 02152 ("Town") (collectively, MWRA and the Town are referred to as the "Parties").

WHEREAS, in July 2015, the Parties entered into a Memorandum of Agreement ("MOA") with respect to special police and fire services to be rendered by the Town hereunder arising out of a variety of impacts upon the Town, its residents, its infrastructure and its resources, all of which impacts grow out of the continued operation of MWRA's facilities and activities at the Deer Island Wastewater Treatment Plant, such services to be provided by the Town in exchange for a schedule of payments from MWRA to the Town for a period of ten (10) fiscal years commencing on July 1, 2015, and ending on June 30, 2025;

WHEREAS, the Parties now wish to amend the MOA in order to extend the term therein by an additional ten (10) fiscal years beginning on July 1, 2025, and ending on June 30, 2035; and

WHEREAS, on December____, 2024, the MWRA Board of Directors authorized the MWRA Executive Director to execute this First Amendment to the MOA.

NOW THEREFORE, the Parties agree to amend the MOA as follows:

A. The above recitals are hereby incorporated by reference in the MOA.

B. The first paragraph of the MOA is deleted and replaced with the following new paragraph:

   1. Term. The term of this MOA shall commence on July 1, 2015, and shall continue in effect for twenty fiscal years and shall expire, if not amended, on June 30, 2035.

C. The fifth paragraph of the MOA is deleted and replaced with the following new paragraph:

   5. Schedule of Payments/ Escalation. Subject to all the provisions of this paragraph, including provisions governing annual escalation, MWRA shall make an annual payment to the Town for each fiscal year, which shall be due on or before July 31 of each fiscal year. The Parties acknowledge that MWRA has previously made timely payments in full to the Town for fiscal years 2017-2025 totaling $8,293,389. The amount paid by MWRA for FY2025 (*i.e.*, $911,781) shall be adjusted for inflation in

each of the next ten subsequent fiscal years (FY2026, FY2027, FY2028, FY2029, FY2030, FY2031, FY2032, FY2033, FY2024, and FY2035) by a factor, which is the lesser of: (i) the actual inflation factor change from the prior year as published by the Bureau of Labor Statistics "CPI-U Boston All Items" or (ii) 2.5%. The projected payment amounts shown under the column "Maximum Payment" shall equal the payment due to the Town in any given fiscal year only if the maximum inflation factor has been used as the inflation factor in each of the fiscal years from FY2026 - FY2035. Otherwise, the calculation of the actual payment due shall depend upon whether the inflation factor to be applied to the prior fiscal year's payment is the actual published CPI percentage or 2.5% as shown in the chart below.

Fiscal Year	Maximum Payment	Max. Inflation Factor
2026	$934,576	2.5%
2027	$957,940	2.5%
2028	$981,889	2.5%
2029	$1,006,436	2.5%
2030	$1,031,597	2.5%
2031	$1,057,387	2.5%
2032	$1,083,822	2.5%
2033	$1,110,918	2.5%
2034	$1,138,691	2.5%
2035	$1,167,158	2.5%

D. All of the other terms of the MOA are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Parties, intending to be bound hereby, have caused this first amendment to the MOA to be executed by their duly authorized representatives.

Massachusetts Water Resources Authority

By: ______________________________
Frederick A. Laskey, Executive Director

Dated:____________________________

Town of Winthrop

By: ______________________________
Jim Letterie, Council President

Dated:____________________________

MASSACHUSETTS WATER RESOURCES AUTHORITY
Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
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Chair: P. Walsh
Vice-Chair: J. Foti
Committee Members:
A. Pappastergion
B. Peña
H. Vitale
B. Swett
J. Wolowicz

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

Date: Wednesday, December 11, 2024

Time: Immediately following the Administration, Finance & Audit Committee

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

Photo ID required for entry.

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

Webex meeting link (Registration required):

https://mwra.webex.com/weblink/register/r24b5c032a9fb3c4b9cafe55993b52422

Meeting Number: 2346 428 4632 Password: 121124

AGENDA

A. Contract Awards

1. Hayes Pump Station Rehabilitation Resident Engineering/Resident Inspection Services: Hazen and Sawyer, Contract 7668

B. Contract Amendments/Change Orders

1. Ward Street and Columbus Park Headworks Upgrade: CDM Smith, Contract 7429, Amendment 1
2. Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and Unstaffed Pump Stations: Woodard & Curran, Contract S606, Amendment 1
3. Braintree-Weymouth Pump Station Improvements: Walsh Construction Co. II, LLC, Contract 7366, Change Order 10
4. Braintree-Weymouth Pump Station Improvements Design and ESDC Services: Wright-Pierce, Contract 7435, Amendment 4
5. Harbor and Outfall Monitoring, Benthic, Fish and Shellfish Monitoring: Normandeau Associates, Inc., Contract OP-401B, Amendment 3

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Wastewater Policy & Oversight Committee
of the MWRA the Board of Directors
June 26, 2024

A meeting of the Wastewater Policy and Oversight Committee of the Massachusetts Water Resources Authority ("MWRA") Board of Directors was held on June 26, 2024 at MWRA Headquarters at Deer Island, Boston, and via remote participation.

Committee Member Peña presided at MWRA Headquarters. Board Members Pappastergion, Taverna and White-Hammond also participated at MWRA Headquarters. Board Members Foti, Vitale and Patrick Walsh participated remotely. Board Members Flanagan, Jack Walsh and Wolowicz were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; Tunnel Program Director Kathy Murtagh; Director of Procurement; Public Affairs Director Sean Navin; Project Manager for Engineering and Construction Shannon Matuschak; Chief Engineer Brian Kubaska; Senior Program Manager for Engineering and Construction Meredith Norton; Construction Director Martin McGowan; Construction Coordinator Jeffrey Bina; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsel Angela Atchue; Intern Bradley Marcosa; and, Assistant Secretary Kristin MacDougall attended at MWRA Headquarters.

Matt Romero, MWRA Advisory Board ("Advisory Board"), also attended at MWRA Headquarters.

CALL TO ORDER
Mr. Peña called the meeting to order at 10:30am.

APPROVALS
Wastewater Advisory Committee Contract
Sean Navin, MWRA Public Affairs Director, summarized the terms of a proposed renewal of the Water Supply Citizens Advisory Committee (WSCAC) contract, for a one-year period from July 1, 2024 to June 30, 2025, at a total cost of $125,043.00. He noted that the proposed FY2025 contract represents a 1.26% increase over FY2024; that WSCAC's health insurance costs increased by 8.8%; and, that other reimbursable items, including payroll services costs, increased by $450.

Hearing no discussion or questions from the Board, Mr. Peña moved to Contract Awards. (ref.

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WW A.1/VI A.7)

CONTRACT AWARDS

West Roxbury Tunnel Inspection, Sections 637 & 637A: Black Dog Divers, Inc., Contract 6898

Shannon Matuschak, MWRA Project Manager, Engineering and Construction, presented an overview of a proposed contract for the inspection of West Roxbury Tunnel ("WRT") Sections 637 and 637A. She described the tunnel's age; characteristics; service area; and, the proposed project's location. She then briefly discussed the project's scope, which includes the inspection of 1,400 feet of tunnel and pipeline, and noted the location of a tunnel shaft that would serve as an access point.

Next, Ms. Matuschak discussed two prior WRT inspections, and the findings. She explained that a 1999 inspection resulted in a rehabilitation project that was completed in 2002, and that this project was disruptive to local residents.

Ms. Matuschak then discussed a 2010 inspection, which found negligible further deterioration since 1999. She explained that a decision was made that the WRT's condition did not immediately require costly and disruptive rehabilitation work; rather, staff recommended the implementation of an inspection program to monitor the tunnel's condition. She noted that the last WRT inspection took place nearly 14 years ago.

Next, Ms. Matuschak summarized the scope of the proposed WRT inspection project. She explained that the goal of the inspection was to evaluate the condition of the WRT to the extent that a rehabilitation design can be developed if determined appropriate, and to determine an appropriate inspection schedule moving forward. She noted that a dry weather bypass will be in place, and a tunnel rescue team will be on site, and provided more detail on the dry weather bypass.

Ms. Matuschak then discussed the schedule and procurement process for the project, and a summary of the bids received. She reported that Black Dog Divers, Inc. had submitted the lowest bid ($1,656,930), which was higher than the Engineer's Estimate ($1,156,335) due to tunnel inspection rates; the costs associated with the installation of the weir gates and plugs for the bypass system; the costs of the fiber optic cable required to complete the inspection work; and, mobilization bid items.

Board Member White-Hammond expressed concern that bid pricing is trending higher than Engineering Estimates. Brian Kubaska, MWRA Chief Engineer, explained that for the WRT project the Engineer's Estimate was based on the 2010 inspection project's costs, with adjustments for inflation. He further explained that in general bid prices are rising across the construction industry due to an abundance of work, combined with reduced competition

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among qualified contractors. MWRA Executive Director Fred Laskey noted that MWRA's analysis of bid prices versus Engineer Estimates, show accuracy overall. There was brief, general discussion about potential new methodologies for developing estimates. MWRA Chief Operating Officer David Coppes added that bid price differentials, and the low number of bidders, are currently an industry-wide phenomenon. He expressed appreciation that for this project there was more than one bidder.

Board Member Pappastergion asked if it would be more cost-effective to rehabilitate the WRT, rather than perform repeated inspections. Mr. Kubaska explained that the goal of this project is to collect enough information to support the design of a future rehabilitation project if necessary. He noted some factors for consideration, including community impacts; and the risks and work on a critical water tunnel. Mr. Pappastergion asked if staff had collaborated with the Boston Water and Sewer Commission (BWSC) on this project, and recommended that staff reach out to BWSC's Chief Engineer. Mr. Kubaska agreed.

Board Member Taverna requested more information about the purpose of the fiber optic cable. Ms. Matuschak explained that the cable will be used for communications with inspectors and for video recording of the inspections. There was brief general discussion about the cable's specifications and cost, and its importance to project safety. Mr. Taverna asked if the Upper Neponset Valley Sewer has sufficient capacity for diverted flows, especially during storms. Ms. Matuschak explained that the flows will be closely timed, coordinated and monitored. Mr. Taverna asked if the tunnel will be vented through the construction and terminal shafts. Mr. Kubaska advised that staff will confirm and provide this information at a later date.

Hearing no further discussion or questions from the Board, Mr. Peña moved to Contract Amendments/Change Orders. (ref. WW B.1/ VI B.1)

<u>CONTRACT AMENDMENTS/CHANGE ORDERS</u>

<u>Agency-Wide Technical Assistance Consulting Services: Hazen and Sawyer, P.C., Contract 7990, Amendment 1</u>

<u>Agency-Wide Technical Assistance Consulting Services: Kleinfelder Northeast, Inc., Contract 7991, Amendment 1</u>

Mr. Kubaska briefly described the purpose of technical assistance contracts, and their importance to MWRA projects for such tasks as studies and designs; engineering services during construction; and, resident engineering/inspection. He explained that technical assistance contracts are typically used for high-priority, unanticipated, or smaller projects, and to support longer-term projects. He noted that staff are requesting cost and time amendments for Task Order Contracts 7990 and 7991 because a two-year contract is insufficient given the design, permitting and construction complexities of some MWRA ongoing projects.

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Next, Meredith Norton, MWRA Senior Program Manager, Engineering and Construction, provided more details about the tasks typically performed by MWRA's technical assistance contractors, and presented the terms of the proposed amendments to Task Order Contracts 7990 and 7991. She noted that as of June 2024, both contracts were nearing the limits for time and funding.

Ms. Norton then presented examples of projects completed under Task Order Contract 7990, including work on the installation of hydraulic relief at Combined Sewer Overflow (CSO) CHE008 and Prison Point CSO facility discharge pipe repair. She also discussed work performed under Task Order Contract 7991, including Winsor Dam intake masonry repairs.

Next, Ms. Norton presented examples of ongoing work being performed under Task Order Contract 7990, including Norumbega Covered Storage Tank cleaning and Top of Shaft 5 Improvements.

The presentation also included discussion of future projects that could be supported by these technical assistance contracts, such as Belle Isle sand catcher and head house rehabilitation, as well as structural evaluations of the Bellevue Standpipe 1 and the Arlington Heights storage tank. Ms. Norton noted that no proposals were received in response to MWRA's recent RFQ/P for full design and construction services for the Belle Isle project. She explained that in staff's view, MWRA would receive more responses to a future RFQ/P if the required design and construction services for the project were defined via task order. Ms. Norton added that the Bellevue/Arlington Heights project RFQ/P also received no bids, and that splitting the project into two task orders would allow work on this critical water infrastructure to move forward in a timely manner.

Mr. Taverna requested more information about how MWRA's task orders are negotiated. Ms. Norton explained that they are negotiated on a level of effort by task basis. Mr. Taverna asked if labor and inflation are factored into the task order contract budgets. Ms. Norton responded in the affirmative. Mr. Taverna requested more information about how MWRA awards task orders to technical assistance consultants, with respect to water versus wastewater projects. Mr. Kubaska explained that staff provide scopes to both consulting firms, and awards the work based on proposal review. Mr. Taverna asked if MWRA would benefit from an additional technical assistance contract. Mr. Kubaska explained that Contracts 7990 and 7991 are for agency-wide services, while two contracts are in place for the Carroll Water Treatment Plant, and three for the Deer Island Treatment Plant. Mr. Coppes added that staff are considering the future addition of a third contract for agency-wide technical assistance services.

Mr. Peña asked for more information about the current contracts' encumbrances that have not been expended. Ms. Norton explained that the task order contracts are currently within budget at approximately 30% invoiced, but this status would change if additional projects were approved.

Hearing no further discussion or questions from the Board, Mr. Peña moved to the next agenda item. (ref. WW C.1/ VI C.2 and WW C.2/ VI C.3)

Nut Island Headworks Odor Control and HVAC Improvements: Walsh Construction Company II, LLC, Contract 7548, Change Order 18

Martin McGowan, MWRA Construction Director, reported that the Nut Island Headworks Odor Control and HVAC Improvements project with Walsh Construction Company II, LLC had achieved substantial completion, and that the facility's odor control and HVAC systems have been placed into service. He noted that this was a large project, and thanked MWRA Construction Coordinator Jeffrey Bina and the project team for their excellent work.

Mr. McGowan then reported that punch list work remains, and that staff are requesting the redelegation of $200,000 to cover these costs, which are currently under negotiation. He noted that the remaining work includes HVAC training for MWRA staff, as well as additional fireproofing and wiring.

Mr. McGowan explained that staff anticipate that the cumulative value of all project change orders will total slightly less than 7.5% of the original contract. He noted that this amount is slightly higher than the average for MWRA's Chapter 149 projects, but in line with typical rehabilitation projects. He then explained that a balancing change order is anticipated in the future, noting that balancing change orders are common for MWRA construction projects.

Next, Mr. Bina presented examples of work performed under this contract's change orders, including additional surface preparation for a new floor coating system, and odor control roof modifications, including plantings.

Finally, Mr. Bina presented highlights of the completed Nut Island Odor Control and HVAC Improvements project, including updates to the odor control room; new carbon adsorber units and air handling units; and, site restoration and landscaping. He noted that the landscaping includes over a dozen species of plantings that are compatible with native species.

There was brief, general discussion about the three-year warranty on the plantings.

Mr. Taverna asked if staff would have the opportunity to discuss design errors and omissions with the project's design engineer, Hazen and Sawyer. Mr. McGowan explained that a MWRA committee reviews the change orders for all construction contracts upon completion, to determine any appropriate actions with respect to cost recovery.

Board Vice-Chair Pappastergion noted that this was a challenging project. Mr. McGowan added that the facility needed to remain running throughout construction. Rev. White-Hammond complimented staff on their presentation, especially the helpful photographs.

Matt Romero, MWRA Advisory Board Executive Director, invited Board Members to participate in a tour of the Nut Island facility at the annual Advisory Board field trip in August, 2024. Mr. Pappastergion congratulated staff on a job well done.

Hearing no further discussion or questions from the Board, Mr. Peña moved to Adjournment. (ref. WW C.3/VI C.4)

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:

Yes	No	Abstain
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
J. Walsh		
P. Wash		
White-Hammond		

The meeting adjourned at 11:16am.

LIST OF DOCUMENTS AND EXHIBITS USED

- June 26, 2024 Staff Summary – Wastewater Advisory Committee Contract (ref. WW A.1/VI A.7)
- June 26, 2024 Staff Summary and Presentation – West Roxbury Tunnel Inspection, Sections 637 & 637A, Black Dog Divers, Inc., Contract 6898 (ref. WW B.1/VI B.1)
- June 26, 2024 Staff Summary and Presentation – Agency-Wide Technical Assistance Consulting Services: Hazen and Sawyer, P.C., Contract 7990, Amendment 1 (ref. WW C.1/VI C.2)
- June 26, 2024 Staff Summary and Presentation – Agency-Wide Technical Assistance Consulting Services: Kleinfelder Northeast, Inc., Contract 7991, Amendment 1 (ref. WW C.2/VI C.3)
- June 26, 2024 Staff Summary and Presentation – Nut Island Headworks Odor Control

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and HVAC Improvements: Walsh Construction Company II, LLC, Contract 7548, Change Order 18 (ref. WW C.3/VI C.4)

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Hayes Pump Station Rehabilitation
Resident Engineering/Resident Inspection Services
Hazen and Sawyer, P.C.
Contract 7668

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
__X__ VOTE

Michele Gillen
Director of Administration

Patricia Mallett, P.E., Senior Program Manager
Brian Kubaska, P.E., Chief Engineer
Preparer/Title

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

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award Contract 7668, Hayes Pump Station Rehabilitation Resident Engineering/Resident Inspection Services, to Hazen and Sawyer, P.C. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not to exceed $1,759,118, for a contract term of 39 months from the Notice to Proceed.

DISCUSSION:

This contract will provide Resident Engineering/Resident Inspection Services for construction Contract 7375, Hayes Pump Station Rehabilitation that was awarded at the October 23, 2024 Board meeting. The designer of record for construction Contract 7375 is the selected firm of Hazen and Sawyer, P.C.

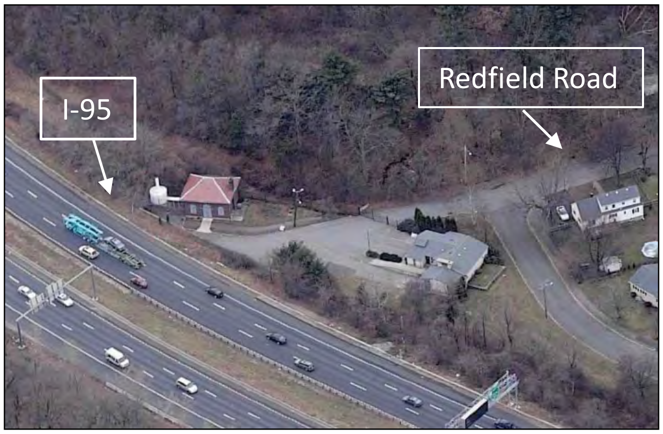


Figure 1: Hayes Pump Station Location

The Hayes Pump Station was built in 1987 to replace the old Reading Pump Station. It is located adjacent to I-95 on the Reading/Wakefield line at the end of Redfield Road, as shown in Figure 1. The station receives wastewater flows from Reading, the northwest corner of Wakefield and portions of Stoneham. The station pumps flows of approximately three mgd on a typical day and is able to pump peak flows of approximately 9.4 mgd. Pumped flows are conveyed through a force main under I-95 to MWRA's Reading Extension Relief Sewer. The old Reading Pump Station building located on the southern end of the property is currently used to house the odor control fan, which draws air from the Hayes Pump Station and discharges through a carbon vessel.


Figure 2: Influent Gate

The majority of the Hayes Pump Station equipment and facility components are over 30 years old (see Figure 2), or are at the end of their service life. These assets are in need of repair or replacement to help ensure MWRA's ability to continue to provide uninterrupted wastewater service. Contract 7375 will upgrade the following major facility components: facility gates; solids handling equipment; primary wastewater pumps and motors; SCADA equipment; odor control systems; and electrical equipment, including the emergency generator.

Given changes in the Massachusetts State Building Code since the facility was constructed, Contract 7375 also includes upgrades to address the following code compliance issues: HVAC and plumbing; architectural; and fire protection system improvements.

During the replacement of wastewater process equipment, a temporary bypass pumping system will be installed to allow uninterrupted wastewater service.

Procurement Process

On September 28, 2024, MWRA issued a one-step Request for Qualifications Statements/Proposals (RFQ/P) that was publicly advertised in the Central Register, the Boston Herald, Banner Publications and El Mundo, and on the MWRA Supplier Portal. There were 239 registrants on the notification list, which resulted in 17 plan holders. No further outreach was conducted due to the composition of the plan holders.

The RFQ/P included the following evaluation criteria and points: Cost (30 points); Qualifications and Key Personnel (30 points); Relevant Experience/Past Performance (30 points); and Technical Approach, Capacity/Organization, and Management Approach (10 points).

On November 1, 2024, MWRA received one proposal from Hazen and Sawyer, P.C. The following table represents the cost and level of effort proposed by Hazen and Sawyer:

Proposer	Proposed Cost	Proposed Hours
Engineer's Estimate	*$2,268,000*	*13,746*
Hazen and Sawyer, P.C.	$1,759,118	14,355

The Selection Committee met on November 7, 2024 to review and evaluate Hazen and Sawyer's proposal. The $508,882 difference between the Engineer's Estimate and Hazen and Sawyer's proposal is primarily due to a lower hourly rate of the Hazen and Sawyer resident engineer and resident inspector than what was carried in the Engineer's Estimate. A higher hourly rate representative of senior resident engineers/resident inspectors as seen in recent MWRA contracts was used in the Engineer's Estimate to ensure that sufficient funding was included in the CIP.

The proposed Resident Engineer exceeds the minimum experience requirement for the contract, and received a positive reference for performance as a Resident Engineer on MWRA Contract 7380, Wachusett Dam Lower Gatehouse Pipe Replacement. The proposed Project Manager is the design project manager for construction Contract 7375. They also received a positive reference from MWRA staff for work on Contract 7380Wachusett Dam Lower Gatehouse Pipe Replacement, and Contract 7157 Nut Island Headworks Odor Control and HVAC Improvements, where similar work was performed. Hazen and Sawyer has demonstrated a full understanding of the project requirements in its Technical Approach. The proposal was clearly presented, and the team has the capacity, organization and management approach necessary to successfully complete the project.

The Selection Committee recommends award of this contract to Hazen and Sawyer, P.C. in an amount not to exceed $1,759,118.

BUDGET/FISCAL IMPACTS:

The FY25 CIP includes a budget of $1,100,000 for Contract 7668. The contract award is $1,759,118 or $659,118 over the CIP amount. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

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

STAFF SUMMARY

Fred A. Laskey

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Ward Street and Columbus Park Headworks Upgrade
CDM Smith, Inc.
Contract 7429, Amendment 1

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
___X_ VOTE

Brian L. Kubaska, P.E., Chief Engineer
Margery J. Johnson, Program Manager
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7429, Ward Street and Columbus Park Headworks Upgrade, with CDM Smith, Inc. in an amount not to exceed $4,023,000, increasing the contract amount from $28,896,530 to $32,919,530 and extending the contract term by 32 months from January 22, 2030 to September 22, 2032.

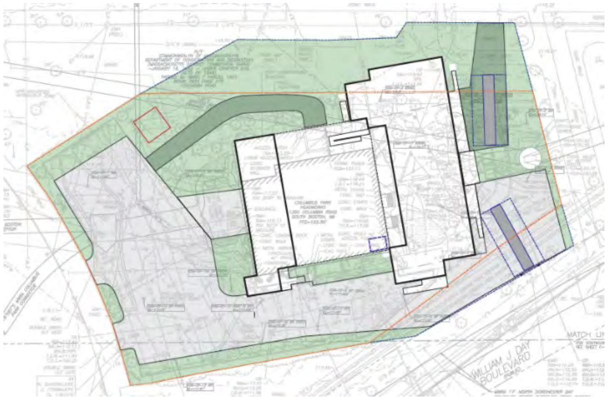
DISCUSSION:

On December 16, 2020, the Board approved the award of Contract 7429 to CDM Smith, Inc. to provide Design and Engineering Services during Construction (ESDC) for the upgrade of the Ward Street and Columbus Park Headworks.

Columbus Park Headworks in South Boston and Ward Street Headworks in Roxbury provide: flow control, so as not to exceed the capacity of the downstream Boston Main Drainage Tunnel and Deer Island Treatment Plant; removal of screenings and grit from the wastewater to prevent debris buildup in the tunnel; and reduction of equipment wear and maintenance problems at Deer Island. Wastewater flow is also measured and used for billing member communities.

Ward Street and Columbus Park Headworks Facilities

The upgrades, under design, include: replacement and automation of all solids handling equipment, including screens, grit collection systems, and solids conveyance systems; replacement of all influent and effluent gates and stop planks, odor control and HVAC systems, instrumentation and control systems; and repair of the concrete surfaces of the headworks channels, settling basins, influent conduits and effluent shafts. Redundancy is being added to the HVAC and odor control systems. Utilizing lessons learned from the upgrade at Chelsea Creek Headworks, this project includes construction of a new superstructure that will ease some of the sequencing constraints associated with keeping the facilities operating at wet-weather capacity during construction.



New Superstructure Buildings

Wet Weather Operation Improvements:

Scale Model of Energy Dissipation System

During preliminary design, an extreme wet weather event caused concern with the operation of the screens at the newly rehabilitated Chelsea Creek Headworks. When the influent gates were partially closed to limit flow through the facility, the resulting high velocities and turbulence within the screening channels caused the rakes to bounce around, resulting in inefficient removal of materials, damage to equipment and equipment tripping off-line during critical times of the storm event.

Task orders were issued to evaluate alternative screen technologies, and to perform computer modeling to evaluate methods to dissipate the energy upstream of the screens. These evaluations led to the design and construction of a physical scale model of the influent channels, gates and screens within the headworks to determine the best configuration to dissipate the velocities and reduce turbulence. Staff will be piloting the recommended system of blocks and baffles at Ward Street or Columbus Park for incorporation into Final Design. Although this additional work extended the project's preliminary design phase, the hydraulic improvements resulting from this effort will provide more resilient upgraded facilities that are better able to withstand the impacts of extreme wet weather events.

Efforts to Reduce Large Carbon Footprint:

Following execution of this contract, *Leading by Example Executive Order No. 594: Decarbonizing and Minimizing Environmental Impacts of State Government* was issued, which "set goals and requirements that will accelerate the decarbonization of fuels used to heat and cool state facilities" and "help to demonstrate new technologies and strategies necessary to meet the Commonwealth's energy goals." MWRA supports the efforts to achieve state-wide net zero emissions (85% reductions) by 2050 as set forth in the Executive Order. The headworks facilities have a substantial heat demand during the colder months of the year. To meet health and safety standards, 12 air changes per hour of 100% outside air are required in the facility due to the presence of hazardous or explosive gases in the large areas exposed to wastewater (the "classified spaces"). This heating demand is currently met with the use of large oil-fired boilers. Extensive additional evaluations of wastewater heat recovery systems were performed during the preliminary design phase of this contract to explore the possibility of reducing the significant carbon footprint of these facilities. While conceptually promising, after much effort the systems were not deemed viable for this application due to the large and variable wet weather flows where the systems would be installed; additionally, there was a lack of demonstrated experience with installed systems of similar magnitude and complexity.

While this effort has not yet resulted in a workable solution to this problem, evaluations of heat recovery systems at MWRA's wastewater facilities and development of a successful prototype could have long-reaching implications for the Authority's ability to reduce the carbon footprint at its many facilities. Staff believe these efforts are worthwhile and are committed to continue the pursuit of the reduction of MWRA's carbon footprint at other facilities. Further, the upgrade will include the ability to tap into the channel to extract flow if a new heat recovery technology is developed that would be workable at the headworks facilities at a future time.

Consideration was also given to the use of air source heat pumps for the facilities' large classified spaces. However, the space and power requirements of the large number of units to meet heating demands made the use of such heat pumps at these locations infeasible. Further evaluations determined that air source heat pumps are feasible for areas of the facilities that are not exposed to the wastewater stream or grit and screenings, such as administrative areas and electrical rooms (the 'non-classified spaces'). Therefore, they will be incorporated into the Final Design for these spaces only.

The potential for inclusion of wastewater heat recovery or heat pumps for the classified areas had significant Final Design implications and potential impacts for many other facility design components, including site layout and noise control; and electrical, structural, architectural and HVAC systems. Staff and the consultant agreed that until these evaluations were completed and decisions were made, commencement of the Final Design should not move forward to avoid potential design rework and/or poor coordination of disciplines; thereby reducing the risk of later construction change orders.

This Amendment:

The original schedule for the Preliminary Design Report was very aggressive given the complexity of the project and the number of activities that had to occur sequentially at each of the headworks sites. Final Design will lead to award of construction contracts with a combined value of approximately $300 million to critically important operational facilities that will provide service for decades. Staff believed that it was important to tie down and finalize the significant design considerations regarding energy use and the reliable operation of the facilities in more frequent, high-intensity storm conditions before commencing Final Design.

The evaluation of alternative screen technologies and modeling of energy dissipation methods occurred during development of the Preliminary Design Report, and impacted completion of the Report. The evaluations performed to determine whether the carbon footprint could be reduced delayed the full start of Final Design by 32 months. This amendment will add funding for escalation for Final Design and ESDC services that are occurring later than originally scheduled, out-of-scope items that are being incorporated into the design and additional administrative services for the extended design duration, and a 32-month extension to the contract duration. This amendment also includes an allowance for items that will be added to Final Design as a result of evaluations and piloting. The Final Design impacts of these items are anticipated but the level of effort and resulting costs for such cannot be estimated at this time.

Escalation for Final Design and Engineering Services During Construction $2,219,000

CDM Smith's proposed number of hours to complete Final Design and ESDC have not changed since the original contract was established. To maintain the proposed hours, at higher than anticipated salaries and 32 months later than the original schedule, escalation is required. The proposal phase of this contract occurred at the beginning of the COVID-19 pandemic, a time of significant uncertainty for the design and consulting industry. Industry salaries have increased at a greater rate than anticipated due to changes in market conditions, higher levels of inflation over the past four years, as well as a need to retain employees who are changing jobs at a higher rate than before the pandemic. Escalation has been included at four percent a year for the 32-month delay, and is $952,000 for Final Design and $1,267,000 for ESDC. Based on recent proposals received, four percent is a reasonable value for escalation. CDM Smith is committed to performing the current scope of work within the proposed escalated budget.

Administrative Costs $738,000

Additional administration and management costs are associated with the 32-month extended Preliminary Design period. The Contract includes these services and associated budget for the originally anticipated design duration. In addition to general project management of staff and subconsultants, this work includes monthly reporting and invoicing, annual salary adjustments, and assistance and coordination with other projects. Meetings, including monthly progress meetings, and meetings with MWRA staff to utilize lessons learned during the construction at Chelsea Creek Headworks, are also included. The proposed Administrative Costs include escalation at the same four percent salary rate for the 32-month extended duration.

Additional Design Items $184,000

As discussed above, MWRA staff will be pilot testing energy dissipating elements that will be located in an influent channel of one of the headworks. Support during the piloting will include review of information gathered during the test period, and development of a conceptual design of recommendations for a system to move into Final Design.

This amendment also includes funding for additional evaluations to be performed and included in the Notice of Intent required to meet new City of Boston wetlands performance standards for land subject to coastal flooding. These standards include an expanded consideration of changes in sea-level rise, storm intensity and stormwater flooding, and extreme heat; as well as requirements for abutter notifications. Additional level of effort has also been included for the detailed evaluation of proprietary manufacturers for the influent gate actuators.

Staff have been coordinating with an ongoing City of Boston project (Resilient Moakley Park Connectors) to design a floodwall that will protect Columbus Park Headworks and the North Dorchester Bay CSO Ventilation Building against potential flooding resulting from sea level rise. This floodwall will be provided as part of, or in conjunction with, Boston's project for flood protection of Moakley Park. The Columbus Park Headworks is on the north side of Moakley Park and the North Dorchester Bay CSO Ventilation Building is on the south side. Support will include coordination with Boston, the project designer and project stakeholders; and assessment of possible impacts to the Columbus Park Headworks upgrades.

Pneumatic Ejection System $382,000

WesTech Engineering has historically provided complete systems for the pneumatic ejection system that conveys grit and screenings from the operating level to disposal containers on the ground level. WesTech provided the existing systems at Ward Street and Columbus Park and more recently, the new system for Chelsea Creek Headworks. WesTech is no longer providing these systems as a complete package. This amendment will provide a level of effort to design and specify the individual system components, development of SCADA logic to allow the individual components to function as an integrated system, and programming and startup services during construction.

Allowance $500,000

The outcomes of ongoing evaluations and piloting will have impacts on the Final Design, which cannot be estimated at this time. In order to allow staff the flexibility to address these items, as well as other out-of-scope issues as they arise during Final Design, and to reduce the possibility of further delay, staff are requesting an allowance of $500,000. All Task Orders will undergo an internal review and approval process before work will be authorized to proceed; with Task Orders above $25,000, $50,000 and $100,000 requiring approval by the Deputy COO, the COO, and the Executive Director, respectively.

Time Extension

The time extension in this amendment is for the 32-month delay in starting the Final Design phase.

CONTRACT SUMMARY:

	Amount	Time	Dated
Original Contract:	$28,896,530	3,287 Days	01/21/21
Proposed Amendment 1:	$4,023,000	974 Days	Pending
Amended Contract:	$32,919,530	4,261 Days	

BUDGET/FISCAL IMPACTS:

The FY25 CIP includes a budget of $28,896,530 for Contract 7429. Including this amendment for $4,023,000, the adjusted subphase total will be $32,919,530 or $4,023,000 over the CIP amount. This difference will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this contract are 7.36% and 5.77%, respectively, and will be unchanged by this amendment.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Management, Operation, and Maintenance of the Union Park Pump Station/CSO Facility and the Unstaffed Pump Stations
Woodard & Curran, Inc.
Contract S606, Amendment 1

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
__X__ VOTE

Stephen D. Cullen, Director, Wastewater
Charles B. Ryan, Director, Wastewater O&M
Nathan H. Little, Sr. Program Manager, Ops Engineering
Preparer/Title

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

Contract S606 was approved by the Board on January 19, 2022 and was jointly executed by MWRA and BWSC with the lowest responsible bidder, Woodard & Curran, Inc., for a period of three years. The contract allowed for two, one-year extensions of the contract term upon approval by the Board. The Contractor has performed satisfactorily. Negotiations resulted in Woodward & Curran's agreement, subject to Board approval, that the annual service fee portion of the contract will be funded by a 1.5% increase per extension year. MWRA staff and BWSC jointly recommend that both one-year extensions be approved at this time.

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract S606, Management, Operation, and Maintenance of the Union Park Pump Station/CSO Facility and the Unstaffed Pump Stations, with Woodard & Curran, Inc., exercising the two-year extension, and to execute said Amendment jointly with the Boston Water and Sewer Commission to: (i) increase the contract service fee by $4,339,180, of which MWRA will pay $1,171,578.60 (27%) and Boston Water and Sewer Commission will pay $3,167,601.40 (73%), and to increase the allowance for preventative and corrective maintenance and repairs by $700,000, which includes $200,000 for MWRA and $500,000 for Boston Water and Sewer Commission, for a total Amendment amount of $5,039,180, increasing the contract sum from $7,231,262 to a total not to exceed amount of $12,270,442, and (ii) to extend the contract term by two-years, from March 1, 2025 to February 28, 2027.

DISCUSSION:

The Union Park Detention/Treatment (or CSO) Facility was constructed to treat combined sewer overflows (CSO) from the South End of Boston before being discharged from the Boston Water and Sewer Commission's (BWSC) Union Park Pump Station to the Fort Point Channel. Construction and operation of this wet-weather Facility are part of the court-approved CSO control plan. Construction of the facility was substantially complete in 2006 and it is jointly-owned by BWSC and MWRA. Management, operation, and maintenance of the Facility is performed by a contractor, and the facility is staffed 24 hours per day, seven days per week.

The Union Park CSO Facility includes screens and a screenings removal area, a disinfection system, a dechlorination system, influent channels, an emergency bypass into the pump station, detention tanks, odor control equipment and an operation control system that is integrated with BWSC's pump station control system. The Facility typically takes CSO flow into its detention tanks approximately 26 times per year and discharges treated water to Fort Point Channel approximately eight times per year (See Figures 1 and 2 below).

Figure 1 - Aerial View of the Facility


Figure 2 - Exterior View of the Facility from Malden Street

MOA Between MWRA and BWSC

On January 16, 2002, MWRA and BWSC executed a Memorandum of Agreement (MOA), which includes terms pertaining to ownership responsibilities for the equipment and structural elements associated with the Union Park Pump Station and the Facility constructed on an adjacent BWSC parcel of land.

On December 17, 2003, the Board approved Amendment 1 to the MOA that: (a) updated ownership and financial responsibilities to accurately reflect the final equipment list; (b) established the percentage of cost for the facilities for each respective party; and (c) revised the terms related to agency oversight of construction and protocols associated with processing change orders. On July 18, 2007, the Board approved Amendment 2 to the MOA, which made certain updates related to the: (a) apportionment of the fixed annual fee; (b) apportionment of costs not covered by the annual fee; (c) apportionment of the utility and supply costs; (d) accounts payable procedures; and (e) miscellaneous items between MWRA and BWSC. On January 19, 2022, the Board approved Amendment 3 to the MOA to update and formalize the arrangements between MWRA and BWSC related to: (a) incorporating invoicing and related compensation payment processes set forth in the contract, including the monthly split invoicing and direct payment of the funding allowances and fixed annual fee by MWRA and BWSC to the contractor at the respective proportional shares formalized under Amendment 2, in lieu of BWSC first paying the contractor invoices and MWRA ultimately reimbursing BWSC for MWRA's portion of each invoice; and (b) miscellaneous changes to terms, conditions, and exhibits referencing the new shared operation and maintenance contract.

Management, Operations and Maintenance Contract

In 2007, 2012, 2017, and 2022, the two agencies worked jointly to procure a contract to manage, operate and maintain the Facility, as well as the nine smaller, unstaffed pump stations, which are owned exclusively by BWSC. The current contract – MWRA Contract S606/ BWSC Contract

21-203-001 - was procured in 2021. On December 21, 2021, BWSC's Board of Commissioners voted to approve the award of BWSC Contract No. 21-203-001 Management, Operation and Maintenance of Union Park and the Unstaffed Pump Stations (pending approval by MWRA's Board of Directors) to Woodard & Curran, Inc. On January 19, 2022, MWRA's Board approved the award of MWRA Contract S606, Management, Operation, and Maintenance of the Union Park Pump Station/CSO Facility and the Unstaffed Pump Stations, to Woodard & Curran, Inc. and authorized MWRA's Director to jointly execute the replacement contract along with BWSC for a total contract amount not-to-exceed $7,231,262, and for a contract term of three years, from March 1, 2022 through February 28, 2025, with options to extend the term for up to two additional years, subject to future Board approval. Table 1 provides a breakdown of the service fees, funding allowances, and total original contract amounts.

Table 1 –Total Original Contract Amounts
(MWRA Contract S606 and BWSC Contract No. 21-203-001)

	BWSC	MWRA	Total
Service Fees	$ 4,512,321.26	$1,668,940.74	$6,181,262
Funding Allowance	$750,000	$300,000	$1,050,000
Total	$5,262,321.26	$1,968,940.74	$7,231,262

Through the end of September 2024, MWRA has spent $154,703 of the $300,000 total original contract funding allowance for corrective maintenance and repair. In addition, there are ongoing corrective maintenance and repair projects totaling $108,459 that are anticipated to be completed within the next year, bringing the total spent to $263,162, or approximately 87.7% of the original funding allowance, leaving $36,838, or approximately 12.3%, of the original funding allowance for corrective maintenance and repair for the remainder of the original contract.

This Proposed Amendment

As previously noted, the current contract allows for an extension of two additional years, subject to MWRA Board and BWSC approvals. With the approaching contract expiration date on February 28, 2025, MWRA and BWSC entered into negotiations with Woodard & Curran on the feasibility of exercising both of the one-year options. Those negotiations resulted in Woodard & Curran's agreement, subject to the Agencies approval, that the first one-year extension option would be exercised at an increase of 1.5% on the annual fee paid during the final year of the original contract; and the second one-year extension would also be exercised at an additional increase of 1.5%. The total increase in the annual service fee, pending the Agencies approval, would be $4,339,180, of which MWRA would be responsible for $1,171,578.60 (27%) and BWSC would be responsible for $3,167,601.40 (73%). Staff for BWSC and MWRA agree that the proposed annual service fee increases are reasonable. Also, as previously noted, almost all of the original allowance has been spent or is anticipated to be spent before the end of the original contract term. The proposed funding allowance for corrective maintenance and repairs for the two, one-year extensions is $700,000 (which includes $200,000 for MWRA and $500,000 for BWSC). Tables 2 through 4 provide a breakdown of the annual service fees, funding allowances, and total amounts proposed for the two, one-year extensions. The BWSC Board of Commissioners approved this Amendment at its November 27, 2024 meeting.

Table 2 – Service Fees for Management, Operation, and Preventative Maintenance for the Two, One-Year Extensions

Year	BWSC (73%)	MWRA (27%)	Total
4	$1,572,010.47	$581,428.53	$2,153,439
5	$1,595,590.93	$590,150.07	$2,185,741
Total	$3,167,601.40	$1,171,578.60	$4,339,180

Table 3 –Funding Allowance for Corrective Maintenance and Repair for the Two, One-Year Extensions

Year	BWSC	MWRA	Total
4	$250,000	$100,000	$350,000
5	$250,000	$100,000	$350,000
Total	$500,000	$200,000	$700,000

Table 4 –Total Amounts for the Two, One-Year Extensions

Year	BWSC	MWRA	Total
4	$1,822,010.47	$681,428.53	$2,503,439
5	$1,845,590.93	$690,150.07	$2,535,741
Total	$3,667,601.40	$1,371,578.60	$5,039,180

Woodard & Curran operated these existing facilities for six years (2001-2006) prior to the jointly-owned Union Park Pump Station/CSO Facility coming online and has since operated all the facilities for 17 years under the current and previous contracts, which were competitively bid and procured. Over the years that Woodard & Curran has been performing these services, both MWRA and BWSC staff have been satisfied with the firm’s performance.

MWRA and BWSC staff have reviewed Woodard & Curran’s current and continuing contract staffing levels, as well as the qualifications of key staff, and have determined that they meet or exceed contract requirements and are sufficient and appropriate to adequately meet the Facility's operational and maintenance needs for the next two years. Staff also reviewed Woodard & Curran’s operation and maintenance efforts at the Facility (and the nine unstaffed BWSC-owned pump stations) and have determined that the firm has performed satisfactorily and has met all contractual requirements to date.

In summary, staff recommend the Board's approval of Amendment 1 to MWRA Contract S606, which includes two, one-year contract extensions. A summary of the costs is shown in Table 5. This Amendment would increase the contract by two years and establish a new contract end date of February 28, 2027.

Table 5 – Contract Summary including Proposed Amendment 1

Description	BWSC	MWRA	Total	Duration
Original Contract	$5,262,321.26	$1,968,940.74	$7,231,262	Three Years
Proposed Amendment 1	$3,667,601.40	$1,371,578.60	$5,039,180	Two Years
Proposed Adjusted Contract Total	$8,929,922.66	$3,340,519.34	$12,270,442	Five years

BUDGET/FISCAL IMPACTS:

The Proposed FY25 Current Expense Budget (CEB) currently includes adequate funds for MWRA's portion of the operation and maintenance of the Union Park Pumping Station/CSO Facility. The Proposed FY25 through FY28 CEBs will include adequate funds for the scope identified and presented in this Amendment.

MBE/WBE PARTICIPATION:

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

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Braintree-Weymouth Pump Station Improvements
Walsh Construction Co. II, LLC
Contract 7366, Change Order 10

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
__X__ VOTE

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

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 10 to Contract 7366, Braintree-Weymouth Pump Station Improvements, with Walsh Construction Co. II, LLC for an amount not to exceed $100,000, increasing the contract amount from $14,289,550.90 to $14,389,550.90, and extending the contract term by 120 calendar days from November 28, 2024 to March 28, 2025.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7366 in an amount not to exceed the aggregate of $1,000,000, and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

The Braintree-Weymouth Pump Station, located on Kilby Street in Quincy adjacent to the Rock Island Cove Salt Marsh tributary to the Weymouth Fore River, was completed in 2008. This 4,600-square-foot facility replaced the original Braintree-Weymouth Pump Station built in 1937. The facility is designed to lift up to 28 mgd of wastewater from the upstream Braintree-Weymouth Interceptor and local Quincy sewer into the High Level Sewer, which flows to the Nut Island Headworks. Major equipment components at the pump station include two influent channels with hydraulic influent sluice gates; two screenings grinders (to shred rags and debris before pumping); three 14-mgd submersible pumps; an activated carbon odor control system; and a diesel-powered emergency generator.

This contract provides process and mechanical upgrades, as well as security, structural, architectural, electrical and instrumentation improvements to the Braintree-Weymouth Pump Station. Major components include the construction of a new 26-foot-wide by 42-foot-long building addition on a drilled micro-pile foundation that will house a new odor control system and screening loading area. The two existing channel grinders are being replaced with two new mechanical screens, and accompanying screenings wash presses and screw conveyors to alleviate chronic clogging of the existing grinders due to the large amount of rags that accumulate at this facility. Two new 60 Hp centrifugal jockey pumps for conveying dry weather flow and associated suction/discharge piping will be installed that will reduce electrical usage by over 200,000 kW-hours per year. Additional upgrades to HVAC, SCADA, instrumentation, gas detection and electrical systems will be completed. The facility will remain operational during construction with temporary bypass pumping and odor control systems in place while permanent systems are off line.

Commissioning activities for the first process channel are in progress with completion anticipated this month. Once all the testing is complete, and training for staff has been delivered, the Contractor will begin work on the second process channel. Construction of the new odor control system is nearing completion and commissioning is scheduled to begin in January 2025. The Contractor and MWRA have been actively reviewing and evaluating proposed costs for compensability under the contract, along with potential time impacts, for change order items identified to date. The priority had been determining eligible time delays before the contract expired on November 28, 2024. Staff planned to request a time extension at the November Board of Directors' meeting, but were unable to substantiate the Contractor's requested durations in sufficient time before the meeting. In addition, staff are requesting $1,000,000 in re-delegation authority based on known change order requests received to date and the potential for additional change orders that may be encountered during commissioning.

This Change Order

Change Order 10 consists of the following two items:

<u>Extend the Contract Time by 53 Calendar Days</u> $0.00

The Contractor is required to furnish and install an interim odor control system to treat odorous air from the facility because the existing odor control system is located in the footprint of the new mechanical bar screens and the new odor control system will not be complete until the end of the project. The interim odor control system uses activated carbon media similar to the existing system and is comprised of temporary ductwork, a centrifugal fan and a carbon adsorber vessel. To ensure continuous odor control treatment, the interim system must be in place and tested to confirm hydrogen sulfide removal efficiency prior to allowing demolition of the existing system. When the interim system was being tested, the hydrogen sulfide levels were lower than expected, making it difficult to assess the system's performance. The Authority required that the system testing period be extended by approximately one month, when the hydrogen sulfide levels increased to a typical value. This additional testing impacted the critical path, but provided confirmation and assurance that the interim system has the capacity to treat the odors at the facility while the new odor control system is being constructed.

Interim Carbon Adsorber & Fan

Temporary Bypass Pumping System

Similar to the interim odor control system, the Contractor is also required to furnish and install a temporary bypass pumping system to complete the facility upgrades inside the pump station. This system is sized to match maximum facility flow to ensure there is no reduction in conveyance capacity while the individual process channels and common channels are out of service during construction. The temporary bypass system draws raw wastewater from the sewer immediately upstream of the facility and discharges directly to the high level sewer. Prior to isolating the first process channel, the Contractor is required to test the temporary bypass system to ensure it is capable of pumping the required flows. However, due to an unusually lengthy dry period with little to no precipitation, upstream flows and levels were not sufficient to demonstrate the capacity of the temporary bypass pump system. MWRA Operations staff made several attempts to manipulate the upstream sewer levels to provide enough water to complete the testing. In addition, an existing mechanical grinder serving the in-service process channel malfunctioned, requiring MWRA maintenance staff to remove and replace the grinder in its entirety. Eventually, the temporary bypass pumping system was tested to MWRA's satisfaction and the mechanical grinder was replaced, allowing the Contractor to isolate the first process channel and begin construction. The impact from these two delays was approximately three weeks. This, along with the month delay for the extended odor control testing, has a cumulative time delay of approximately seven weeks.

Given that the low hydrogen sulfide levels, low wastewater flows and grinder failure were unforeseen and beyond the Contractor's reasonable control, a time extension of 53 calendar days is warranted at no additional cost to the Authority.

This item was identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to extend the contract term by 53 calendar days, from November 28, 2024 to January 20, 2025, with no increase in contract amount.

<u>Extend the Contract Time by 67 Calendar Days</u> Not-to-Exceed $100,000

In addition to the unforeseen events mentioned above, there have been several changes requiring additional work that have impacted the overall project schedule. MWRA and the Contractor are still negotiating final costs for these additional items, but the schedule impacts have been reviewed and approved by the Authority. The following changes have directly impacted the critical path beyond the unforeseen conditions noted above.

When constructing the new building addition, revisions to the plumbing drains and trap primers were required to eliminate conflicts and allow future maintenance and repairs. Completion of the building slab was delayed while a revised design was finalized and drain piping modifications were implemented. Additionally, once the first process channel was turned over to the Contractor, several existing electrical conduits designated to be reused for new equipment were found in direct conflict with the new mechanical screens. Since these conduits feed equipment in both process channels, the Contractor was delayed in installing the new mechanical screen until these conduits could be replaced. Finally, the contract documents only specify four vendor training sessions for the new equipment furnished under this contract; however, nine sessions are required to train the staff. To ensure all operations staff are trained prior to placing the new equipment into continuous service and turning over the only other process channel to the Contractor for work, the Contractor must provide an additional five training sessions for each piece of new equipment. The additional training sessions must occur before taking the second process channel out of service, and thus the Contractor is prevented from beginning work on the second process channel until the training is scheduled and delivered.

As a result of the schedule evaluation, staff have determined the cumulative delays associated with these changes warrant a time extension of 67 calendar days. The Contractor is requesting additional compensation for certain additional costs pursuant to Article 13 of the contract's general conditions. For example, other direct costs may include the extended rental for temporary bypass pumping equipment, interim odor control equipment, office space, and staging areas, as well as further utilities, bonds and insurance costs. Staff will carefully review the requested costs to determine what is compensable under the terms of the contract. The costs to perform the additional work will be included in a future change order once the negotiations are complete. Such change order will only include the additional 67 calendar days of time, along with compensable other direct costs.

This item was identified by MWRA staff as a design error. MWRA staff, the Consultant, and the Contractor have agreed to a not-to-exceed amount of $100,000, for allowable other direct costs and to extend the contract term by 67 calendar days, from January 20, 2025 to March 28, 2025. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

CONTRACT SUMMARY:

	AMOUNT	TIME	DATED
Original Contract:	$13,473,075.00	639 Days	09/06/22
CHANGE ORDERS:			
Change Order 1*	$16,200.15	0 Days	11/29/23
Change Order 2*	$275,299.15	14 Days	01/16/24
Change Order 3*	$20,000.00	0 Days	02/07/24
Change Order 4*	$18,376.76	0 Days	05/07/24
Change Order 5*	$7,197.44	0 Days	05/31/24
Change Order 6*	$250,000.00	161 Days	06/28/24
Change Order 7*	$21,431.27	0 Days	07/25/24
Change Order 8*	$16,439.42	0 Days	09/30/24
Change Order 9*	$191,531.71	0 Days	Pending
Change Order 10	$100,000.00	120 Days	Pending
Total Change Orders:	$916,475.90	295 Days	
Adjusted Contract:	$14,389,550.90	934 Days	

*Approved under delegated authority

If Change Order 10 is approved, the cumulative value of all change orders will be $916,475.90 or 6.8% of the original contract. Work on this contract is 87% complete.

BUDGET/FISCAL IMPACTS:

The FY25 CIP includes a budget of $14,274,023 for Contract 7366. Including this change order for $100,000, the adjusted subphase total will be $14,389,550.90, or $115,527.90 greater than the amount in the CIP. This amount will be absorbed in the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this project were established at 7.24% and 3.6%, respectively. Walsh exceeded the WBE goal in attaining 4.34% in WBE participation and submitted a partial waiver for MBE participation requirements. MWRA's Affirmative Action and Compliance Unit reviewed Walsh's bid and granted a partial waiver for MBE, reducing the participation requirement to 1.32%. The Contractor was notified that it is still expected to meet these requirements.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Braintree-Weymouth Pump Station Improvements, Design and Engineering Services During Construction
Wright-Pierce
Contract 7435, Amendment 4

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
__X__ VOTE

Brian L. Kubaska, P.E., Chief Engineer
Patrick Smith, P.E., Program Manager
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to Contract 7435, Braintree-Weymouth Pump Station Improvements, Design and Engineering Services During Construction, with Wright-Pierce, increasing the contract amount by $207,700 from $2,488,567 to $2,696,267, and the contract term by 16 months from December 17, 2024 to April 17, 2026.

DISCUSSION:

Figure 1 – BWPS Construction Progress (October 2024)

Contract 7435 provides design and Engineering Services During Construction for the Braintree-Weymouth Pump Station Improvements construction project, Contract 7366. On October 17, 2018, the Board approved the award of Contract 7435 to Wright-Pierce in an amount not to exceed $2,085,169.83, for a term of 60 months. The final contract was executed on December 17, 2018 for the amount of $2,084,918.

The Braintree-Weymouth Pump Station, located on Kilby Street in Quincy, was constructed in 2008. This 4,600 square foot facility replaced the original Braintree-Weymouth Pump Station built in 1937. The facility is designed to lift up to 28 mgd of wastewater from the upstream

Braintree-Weymouth Interceptor and local Quincy sewer into the High Level Sewer, which flows to the Nut Island Headworks. Several operational and maintenance problems have surfaced throughout the life of this facility, including clogging and ineffective grinders; solids buildup in the wet well leading to reduced pumping performance; challenges with equipment removal; and ventilation and odor control limitations resulting in high hydrogen sulfide levels.

Construction Contract 7366

The Wright-Pierce design for construction Contract 7366, Braintree-Weymouth Pump Station Improvements, provides major facility rehabilitation, including the construction of a new 26-foot-wide by 42-foot-long building addition (shown in Figure 1) that will house a new odor control system and screening loading area, replacement of the two existing channel grinders with new mechanical screens and accompanying screening wash presses and screw conveyors. The design also included two new 60 Hp centrifugal jockey pumps for conveying dry weather flow and associated suction/discharge piping. The jockey pumps are expected to improve facility operations during low flow and reduce electrical usage by over 200,000 kW hours per year. Additional design improvements and upgrades are included for the HVAC, SCADA, instrumentation, gas detection and electrical systems.

Contract 7366 was competitively bid and awarded to Walsh Construction Co. II, LLC, in the amount of $13,473,075 for a term of 21 months, from September 6, 2022 through June 6, 2024. Prior change orders to Contract 7366 extended the construction contract duration by six months. A further four-month extension to Contract 7366 is recommended for approval under a separate staff summary, which would extend that contract term to March 28, 2025.

Prior Amendments to Design/ESDC Contract 7435

Amendment 1 to Contract 7435 was executed on September 26, 2023, extending the term by 12 months with additional costs for project management services. Additional out-of-scope design work was added to the facility improvements through task orders, including the addition of jockey pumps and associated valves, flow meter and dedicated discharge to improve pump performance and reduce energy consumption, and additional facility improvements, including: screenings; screw conveyors; generator day tank pumping/controls; and building management operating system. These improvements required additional design that extended the completion of the contract documents. Amendment 1 also included additional cost and salary escalation increases for the longer time period that engineering services were required to support the completion of the construction.

Amendment 2 was executed on April 9, 2024 for additional engineering services during construction for costs to review a greater number of contractor submittals than included in the original scope of services. This was partly the result of systems and equipment added during the design phase.

Amendment 3 was executed on October 30, 2024 and provides additional costs for reviewing and responding to a greater number of requests for information/clarifications (RFIs) from the contractor than included in the original scope of services. This was partly the result of additional systems and equipment added during the design phase.

This Amendment

This proposed Amendment 4 is comprised of the following:

Additional Time to Provide Engineering Services During Construction 16 months

Construction Contract 7366 has taken longer than originally anticipated to complete, and is now expected to be substantially complete in March 2025; ten months beyond the original contract date. This adjusted date is approximately four months beyond the current design/ESDC Contract 7435 end date. As included in the scope of services, the consultant will evaluate the facility's performance and advise MWRA on operations, maintenance and warranty issues for a one-year period after substantial completion, submitting a first-year certification report at year's end. Therefore, a total of 16 months to April 2026 is required to extend Contract 7366 through substantial completion and a 12-month warranty period.

Project Administration and Management $39,600

Continued project administration and management services are needed for daily project management, coordination and management of staff and subconsultant progress and Minority and Women Business Enterprise (MBE/WBE) reports, invoicing, accruals, responses to Authority requests, and project filing. The amendment includes funds for these activities extending ten months from July 2024 through May 2025 (two months following substantial completion), after which minimal services are anticipated during the warranty period.

Management Services During Construction $41,100

Continued Management Services During Construction are needed for daily work coordination; bi-weekly online construction meetings; additional online coordination meetings with MWRA/REI consultant and contractor staff; communication with state and local agencies; and weekly construction reports. The amendment includes funds for these activities extending ten months from July 2024 through May 2025 (two months following substantial completion), providing time for consultant support of construction punchlist activities.

Onsite Meetings/Inspections/Observations $36,000

Continued onsite meetings with contractor, resident engineer and outside agencies and field inspections/observations are expected during the additional ten months of construction work, and for installation and operation of additional equipment and systems added during the design phase through use of task order allowances (jockey pumps, screening wash press, screw conveyors, day tank pumps etc.).

Start-Up Services $61,000

The Amendment includes additional startup services for equipment added during the design phase. These services include: assistance during startup; operation training; facility handbook and operating procedure update; and systems performance evaluation and certification. The additional out of scope design work was added to the facility improvements through task order allowances including the design enhancement of jockey pumps to improve pump performance and reduce energy consumption and associated valves, flow meter and dedicated discharge. Systems were also added per MWRA request including: screenings screw conveyors; generator day tank pumping/controls; and building management operating system.

Special Services During Construction $30,000

The Amendment includes additional services for SCADA system integration and programming, additional HMI screen development, testing documentation, SCADA operations and maintenance manual, and SCADA training and support services associated with equipment and systems added to the facility improvements during the design phase.

CONTRACT SUMMARY:

	AMOUNT	TIME	EXECUTED DATE
Original Contract Amount:	$2,084,918	60 months	12/12/18
Amendment 1*:	$154,649	12 months	09/26/23
Amendment 2*:	$121,000	0 months	04/09/24
Amendment 3*:	$128,000	0 months	10/30/24
Proposed Amendment 4:	$207,700	16 months	Pending
Adjusted Contract Amount:	$2,696,267	88 months	

*Approved under delegated authority

BUDGET/FISCAL IMPACT:

The Final FY25 CIP includes a budget of $2,360,568 for Contract 7435. Including this Amendment in the amount of $207,700, the adjusted contract total will be $2,696,267 or $335,699 over the CIP amount. This difference will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this contract are 7.18% and 5.77%, respectively, and will remain unchanged by this Amendment.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Harbor and Outfall Monitoring, Benthic, Fish, and Shellfish Monitoring
Contract OP-401B, Amendment 3
Normandeau Associates, Inc.

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
__X__ VOTE

Rebecca Weidman, Deputy Chief Operating Officer
David Wu, Director, Environmental Quality
Christopher Goodwin, Program Manager, Env. Monitoring
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 3 to Contract OP-401B, Harbor and Outfall Monitoring, Benthic, Fish and Shellfish Monitoring, with Normandeau Associates, Inc., increasing the contract amount by $488,799.27 from $2,498,043.34 to $2,986,842.61 and extending the contract term by one year from October 31, 2025 to October 31, 2026.

DISCUSSION:

The Deer Island Treatment Plant's outfall discharges into Massachusetts Bay. Environmental monitoring of the Bay is a component of Deer Island's NPDES discharge permit issued in 2000 and is therefore legally required and enforceable. The monitoring plan is structured around a set of specific, testable monitoring questions addressing various aspects of the Bay ecosystem. Monitoring is conducted under two contracts: one for water column monitoring, currently held by Battelle Memorial Institute; and, the other for benthic (seafloor), fish and shellfish monitoring with Normandeau Associates. The benthic, fish and shellfish monitoring includes: observing seafloor communities in Massachusetts Bay and Boston Harbor; completing a video survey of the seafloor near the outfall; and collection and testing of flounder, mussels, and lobster from several locations in Boston Harbor and Massachusetts Bay. MWRA's monitoring has answered a number of EPA's original questions, and has shown that the outfall has had minimal impact on the environmental health of the Bay.

In May 2023, EPA issued a draft NPDES permit for Deer Island, which removed the benthic, fish, and shellfish monitoring requirements. (The water column monitoring elements were retained, and the MWRA Board of Directors approved a new 48-month contract for water column monitoring at its November 2023 meeting.)

The timing of the draft permit becoming a final permit is uncertain. MWRA, along with other parties, submitted comments on the draft permit in November 2023. EPA must respond to all comments in writing before potentially modifying the draft permit. After those steps, EPA will issue the final permit. Until EPA finalizes and issues the new permit, the current permit requirements remain in force; this amendment is to cover the upcoming season of required benthic, fish, and shellfish monitoring and reporting pursuant to the current permit.

The original contract included three years of field data collection (2020, 2021, and 2022), and one "wrap-up" year to conclude data analysis work and report writing (2023). Amendments 1 and 2 added additional field work in 2023 and 2024, and moved the "wrap-up" year to 2025. Amendment 3 will add another field work year (2025) and move the "wrap-up" year to 2026, thereby meeting the monitoring requirements in the current NPDES permit for another year.

The original contract was awarded in November 2019, Amendment 1 was approved in November 2022, and Amendment 2 was approved in February 2024. The cost of Amendment 3 is 12.3% less than Amendment 2 because 2024 included permit-required fish and shellfish tissue chemistry that occurs every three years. For tasks that are consistent between Amendments 2 and 3, the cost escalation is 2.9%. Staff believe this cost escalation is reasonable. Details of Amendment 3 follow.

<u>Additional Project Management</u> $55,977.00

Amendment 3 requires additional project management that includes setup for the additional work performed under the amendment, as well as additional monthly progress meetings and quarterly quality assurance/quality control reports in 2025 and 2026.

<u>Benthic, Fish and Shellfish Surveys and Survey Data Management</u> $258,720.70

The core of Contract OP-401B is the benthic, flounder, lobster, and mussel surveys in Boston Harbor and Massachusetts Bay. The 2000 permit requires annual analysis of flounder health and benthic habitat near the outfall. Those surveys will need to be completed in 2025. Amendment 3 will add those surveys for calendar year 2025, with the requisite time for testing, data review, and data management. Normandeau Associates, Inc.'s subcontractors are responsible for most of the data analysis. Management of the collected data is also included in this cost.

<u>Task Order Allocation</u> $75,000.00

Contract OP-401B has traditionally included a yearly allocation of funds for task order work. The original contract included $75,000 per year for the field work years, and Amendment 3 continues that funding with $75,000 for 2025. Traditionally, MWRA does not use a large portion of this allocation, but it has been useful for additional data analysis tasks and emergency laboratory work.

<u>Analysis and Reporting</u> $99,101.57

Contract OP-401B also includes several subtasks for writing technical reports for submission to EPA and MassDEP, and posting on MWRA.com. As Amendment 3 extends sample collection into 2025, Normandeau will write reports on 2025 data in 2026. This sum includes funding for the 2025 annual technical workshop.

CONTRACT SUMMARY:

	Amount	Time	Dated
Contract Amount:	$1,399,332.30	46 months	2/10/20
Amendment 1:	$541,480.10	12 months	4/7/23
Amendment 2:	$557,230.94	12 months	4/17/24
Proposed Amendment 3:	$488,799.27	12 months	Pending
Adjusted Contract:	$2,986,842.61		

BUDGET/FISCAL IMPACTS:

Adequate funding is included in the FY25 Current Expense Budget under 22500-10602. Appropriate funding will be included in subsequent CEB requests.

MBE/WBE PARTICIPATION:

AACU established a zero percent MBE or WBE participation requirement for this contract, and this remains unchanged for this amendment.

MASSACHUSETTS WATER RESOURCES AUTHORITY
Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
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Chair: L. Taverna
Vice-Chair: B. Swett
Committee Members:
J. Foti
P. Flanagan
J. Walsh
P. Walsh
J. Wolowicz

WATER POLICY & OVERSIGHT COMMITTEE MEETING

Date: Wednesday, December 11, 2024

Time: Immediately following the Wastewater Policy & Oversight Committee

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

Photo ID required for entry.

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

Webex meeting link (Registration required):

https://mwra.webex.com/weblink/register/r24b5c032a9fb3c4b9cafe55993b52422

Meeting Number: 2346 428 4632 Password: 121124

AGENDA

A. Approvals

1. Renewal of Water Supply Continuation Agreements

B. Contract Awards

1. Intermediate High Pipeline Improvements CP1, Section 75A and Section 47, Belmont, Boston, Newton and Watertown: P. Gioioso & Sons Inc., Contract 7484
2. Intermediate High Pipeline Improvements CP1, Section 75A and Section 47 Resident Engineering and Resident Inspection Services: CDM Smith Inc., Contract 8067

C. Contract Amendments/Change Orders

1. Northern Intermediate High Section 89 Replacement Pipeline: P. Gioioso & Sons, Inc., Contract 7117, Change Order 10

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Water Policy and Oversight Committee
of the MWRA the Board of Directors
June 26, 2024

A meeting of the Water Policy and Oversight Committee of the Massachusetts Water Resources Authority ("MWRA") Board of Directors was held on June 26, 2024 at MWRA Headquarters at Deer Island, Boston, and via remote participation.

Committee Chair Vitale presided via remote participation. Board Members Foti and Patrick Walsh also participated remotely. Board Members Pappastergion, Peña, Taverna and White-Hammond participated at MWRA Headquarters. Board Members Flanagan, Jack Walsh and Wolowicz were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Special Assistant for Affirmative Action Patterson Riley; Director of Planning and Sustainability Stephen Estes-Smargiassi; Public Affairs Director Sean Navin; Senior Program Manager, Reservoir Operations John Gregoire; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsel Angela Atchue; Intern Bradley Marcosa; and, Assistant Secretary Kristin MacDougall attended at MWRA Headquarters.

Matt Romero, MWRA Advisory Board ("Advisory Board"), also attended at MWRA Headquarters.

CALL TO ORDER

Committee Chair Vitale called the meeting to order at 11:16am.

INFORMATION

2023 Annual Water Quality Report (Consumer Confidence Report)

Mr. Vitale shared positive customer feedback on the 2023 CCR received by Boston Water and Sewer Commission (BWSC) staff, and thanked MWRA staff for their efforts.

Next, Stephen Estes-Smargiassi, MWRA Director of Planning and Sustainability, discussed key findings and features of the 2023 MWRA CCR, which was prepared and distributed as required under the EPA's Consumer Confidence Rule. He noted that the CCR is developed and produced by a cross-agency team in coordination with MWRA's water service communities, and that a community-specific page is included in each report.

Mr. Estes-Smargiassi explained that MWRA mails the CCR to every household, rather than only to those who pay water bills as is permitted by the EPA regulation, in order to reach all

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Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

customers, including those in harder-to-reach, lower income populations. He noted that MWRA produces Spanish-language and larger-print versions of the CCR, and that the online report is accessible in multiple languages through Google Translate. Mr. Estes-Smargiassi briefly described the 2023 CCR's theme, which highlights the people and skills needed to deliver MWRA's drinking water. He added that this theme is a complement to the MWRA's 2023 poster and essay contest topic, and invited Board Members to view the content entries at the Waterworks Museum and on MWRA's website.

Mr. Estes-Smargiassi then discussed upcoming changes to the EPA's CCR regulations, including a requirement that larger water systems (including MWRA) issue two CCRs each year, in June and December. He explained that the December CCR would provide an update on any important water quality information since June. He noted that staff would work with the Advisory Board to implement the new requirements. Finally, he described staff's preliminary thoughts on the reports' formats, including a longer report in June, and a postcard in December. He noted the postcard would provide summary-level information and direct customers to the full, online update, with hardcopies available on request.

Board Member Taverna requested more information for the rationale behind EPA's new requirement for two CCRs. Mr. Estes-Smargiassi explained that the CCR Rule changes were prompted primarily by new requirements mandated by Congress in the America's Water Infrastructure Act of 2018, and described some information that could change between June and December, such as lead testing results and water quality violations. There was brief, general discussion about various water quality parameters that could be included in the second annual CCR, and the etymology of the symbol for lead (Pb, from the Latin *plumbum*).

Hearing no further discussion or questions from the Board, Mr. Vitale moved to Approvals. (ref. W A.1)

<u>APPROVALS</u>

<u>Annual Renewal of Water Supply Citizens Advisory Committee (WSCAC) Contract</u>

Sean Navin, MWRA Public Affairs Director, summarized the terms of a proposed renewal of the Water Supply Citizens Advisory Committee contract, for a one-year period from July 1, 2024 to June 30, 2025, at a total cost of $125,043.00. He noted that the proposed FY2025 contract represents a 1.26% increase over FY2024; that WSCAC's health insurance costs increased by 8.8%; and, that other reimbursable items, including payroll services costs, increased by $450.

Hearing no discussions or questions from the Board, Mr. Vitale moved to the next information item. (ref. W B.1/VI A.9)

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CONTRACT AMENDMENTS/CHANGE ORDERS

Dam Safety Compliance and Consulting Services – Repairs, Design and Engineering Services During Construction, GZA GeoEnvironmental, Inc., Contract 7614, Amendment 3

John Gregoire, MWRA Senior Program Manager, Reservoir Operations, presented reasons for proposed Amendment 3 to a dam safety and consulting services contract (Contract 7614) with GZA GeoEnvironmental Inc.

Mr. Gregoire provided a brief overview of Contract 7614's scope, which includes repairs, design, and engineering services during construction ("ESDC") at several MWRA reservoir dams. He reported that most of the contract's tasks have been completed to date. He explained that staff sought an amendment to increase time and funding to address changes in scope per recent Office of Dam Safety ("ODS") regulatory feedback and requirements.

Next, Mr. Gregoire presented an overview of work to be performed under the proposed amendment, including design and ESDC services for Sudbury Reservoir spillway masonry repair; overtopping protection for the Wachusett Reservoir North Dike and Foss Dam; and Chestnut Hill Dam seepage repairs.

Mr. Gregoire then discussed MWRA's plan to address the new ODS regulatory requirements and recommendations, including design changes for limited embankment raising and more robust overtopping, and piezometer design at the Foss Reservoir Dam. He noted that GZA's updated analysis had resulted in significant cost savings for the Wachusett Reservoir North Dike embankment raising.

Finally, Mr. Gregoire explained that a previously unidentified slight topographic low spot at the North Dike was discovered during a confirmatory survey to support the embankment raising, and that proposed Amendment 3 includes design and specification of the low spot.

(Board Member Patrick Walsh left the meeting during the presentation.)

Mr. Taverna asked if Contract 7614's scope includes piezometer installation. Mr. Gregoire explained that installation would be advertised for bid in a separate contract. He further explained that staff plan to package piezometer instrumentation and overtopping protection into one construction contract in order to attract a wider range of bidders. Mr. Taverna requested more information about the number of active MWRA dam safety contracts. Mr. Gregoire explained that there are two active contracts, with a third out for bid.

Hearing no further discussion or questions from the Board, Mr. Vitale complimented staff on their presentations and moved to Adjournment. (ref. W C.1/VI C.5)

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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:

Yes	No	Abstain
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

The meeting adjourned at 11:31am.

LIST OF DOCUMENTS AND EXHIBITS USED

- June 26, 2024 Staff Summary and Presentation – 2023 Annual Water Quality Report (Consumer Confidence Report) (ref. W A.1)
- June 26, 2024 Staff Summary – Water Supply Citizens Advisory Committee Contract (ref. W B.1/VI A.9)
- June 26, 2024 Staff Summary and Presentation – Dam Safety Compliance and Consulting Services – Repairs, Design and Engineering Services During Construction: GZA GeoEnvironmental, Inc., Contract 7614, Amendment 3 (ref. W C.1/VI C.5)

Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Water Supply Continuation Agreements for Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston and Winchester

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COMMITTEE: Water Policy & Oversight

_____ INFORMATION
__X__ VOTE

Colleen Rizzi, P.E, Director, Env and Regulatory Affairs
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute Water Supply Continuation Agreements with Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston, and Winchester, each for a term of ten years, substantially in the form filed as Attachments One through Nine of this staff summary.

DISCUSSION:

Twenty-seven of MWRA's water communities are "contract communities" that receive MWRA water pursuant to Water Supply Continuation Agreements (Agreements). The differentiation between contract and non-contract communities dates back to prior to the Enabling Act. Eight contract communities are fully served (including Framingham, Northborough, and Weston), 16 are partially supplied by MWRA and regularly use local sources to meet some portion of demand (including Canton, Lynn Water and Sewer Commission, Needham, Peabody, and Winchester), and three rely on MWRA only in unusual or emergency situations (including Cambridge). The nine Water Supply Continuation Agreements currently at issue are set to expire on December 31, 2024.

The development of new Agreements is predicated upon the satisfaction of certain criteria set forth in the MWRA Enabling Act and completion of a process outlined in MWRA regulations *360 C.M.R. 11.00 Continuation of Contract Water Supply* (Regulation). The Regulation requires the preparation of a Supplementary Report by each community that includes supply and demand analyses, documentation of conservation and demand management efforts, and a description of various aspects of the community's water supply system. The Regulation also prescribes the execution of a written agreement between MWRA and each community for up to a ten-year period. Over the past five months, MWRA staff have worked with the nine communities to complete the prescribed renewal process and Supplementary Reports, and to identify obligations to be fulfilled by both MWRA and the communities for the next contract term.

Proposed Agreements

Proposed Agreements have been prepared for Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston, and Winchester, which are now recommended for Board approval. The Agreements serve multiple purposes. First, they specify how water supply needs of the communities will be met in a manner consistent with the capabilities of MWRA's water supply system. Second, they compel demand management and planning efforts. Third, they constitute a record of compliance with the factors and requirements specified in Section 8(d) of the Enabling Act and the Regulation.

Each proposed Agreement recites the facts establishing that the applicable criteria set forth in Section 8(d) of the Enabling Act as necessary conditions for the continuation of water supply have been satisfied; these criteria relate to safe yield, not abandoning local sources, implementing effective demand management measures, and conducting water use surveys. Each Agreement also states the maximum annual water volumes and maximum daily water volumes that MWRA agrees to provide the community over the next ten years. Table 1 presents the highest annual demand for the subject contract communities within the last five years, the existing contract annual maximum withdrawals, and the proposed contract maximum withdrawals over the contract period, and further information regarding each proposed Agreement are provided below.

Table 1 Contract Limits and Usage

Community	**Demand (million gallons)**			
	Highest Annual Demand 2019-2023[1]	**Existing Contract Annual Maximum Withdrawal**	**Proposed Contract Annual Maximum Withdrawal 2025**	**2034**
Cambridge	1,020.96[2]	0 in typical year	0 in typical year	0 in typical year
Canton	550.0[3]	460	640[4]	434
Framingham	2,116.95	2,836	2,286	2,275
LWSC	92	300	285	280
Needham	427.1	420	420	420
Northborough	401.2[5]	342	325	343
Peabody	871.4[6]	534	511	576
Weston	646.8	718	718	718
Winchester	518	610	610	610

1. Highest annual flows taken from Supplementary Reports submitted as part of the contract renewal process.
2. Cambridge used MWRA water in 2022 during PFAS treatment installation.
3. Canton used more in 2023 because their Sullivan (Neponset) Water Treatment Facility was down for maintenance.
4. The Sullivan (Neponset) Water Treatment Facility will be offline for filter replacement in 2025-2026.
5. Northborough had a water main break in 2020 and experienced higher than average flows because of COVID.
6. Winona Water Treatment Plant underwent construction in 2021/2022 and the reservoirs reached extremely low levels in 2022. More MWRA water was purchased to compensate.

Cambridge

As with previous contracts, there is no annual contract limit for Cambridge, as it has been and continues to be impractical to arrive at a number given its sporadic use. Cambridge relies on MWRA only in unusual or emergency situations, and the safe yield of its local sources is sufficient to meet projected population and employment growth. By the terms of its contract with MWRA, Cambridge is required to provide written notification to MWRA of any unusual water demand or supply conditions that require withdrawals from MWRA prior to withdrawing water.

Canton

Canton's proposed Agreement reflects projected construction at its Sullivan (Neponset) Water Treatment Facility in fall 2025 through spring 2026. The Town will purchase more water from MWRA during this period. The projected demands for the ten-year contract term fluctuate based on projections included in its 2023 water distribution master plan and the Town's plans regarding how to use its sources.

Framingham

Framingham's proposed Agreement reflects the City continuing to be fully supplied by MWRA. Projected demands are based on historical water usage, population and employment projections, and future housing developments. Projected demands, however, have decreased since the prior Agreement based on observed trends toward lower average day demands per capita. Framingham's prior Agreement contemplated reactivating one of its well fields, but that has been dismissed as an option.

Lynn Water and Sewer Commission

Lynn Water and Sewer Commission's new contract limit is slightly less than the historical contract limit. Typically, the only Lynn customer served by MWRA is General Electric; approximately 93% of City demand is anticipated to be met by surface withdrawals in the North Coastal and Ipswich River Basins in the contract term. The proposed contract limit is based on data that the Lynn Water and Sewer Commission received from General Electric.

Needham

Needham's proposed Agreement includes projected increases from MWRA. The Town's prior contract included an increase from 400 million gallons per year to 420 million gallons per year over the term of the contract (2015-2024). The proposed Agreement reflects an annual limit of 420 million gallons for the duration. Needham has a Water Management Act Registration of 959.95 million gallons per year and supplements with MWRA water. Needham forfeited its Water Management Act Permit flow of 0.31 mgd in 2018.

Northborough

Northborough has traditionally been considered a partially supplied community. Prior to construction of the John J. Carroll Water Treatment Plant, Northborough used local wells to meet the majority of its demand and withdrew water from the Wachusett Aqueduct to supplement local sources. With MWRA's treatment and system modifications, the intent was for Northborough to temporarily become fully supplied by MWRA, while it undertook studies and made provisions for new treatment facilities to address both groundwater treatment and compatibility concerns with blending groundwater and MWRA treated water. Some local improvements were made, and a replacement well was returned to service, only to be removed again in 2012 because of bacteria. Northborough has been consistently fully supplied by MWRA since 2012. While Northborough evaluated the potential to bring its Lyman Street well back online during the last contract period, it was found to be infeasible. Accordingly, the proposed Agreement reflects MWRA fully supplying Northborough.

Peabody

Peabody's proposed Agreement reflects projected increases in MWRA withdrawals. Peabody projected its current use of local sources will remain constant, and water demands associated with projected population increases, assuming a 1.5% increase each year, will be met by MWRA. Peabody's Water Management Registration limits withdrawals to 3.89 mgd in the Ipswich River Basin and 1.89 in the North Coastal Basin. Peabody was previously authorized to withdraw an additional 0.82 mgd from the Ipswich River Basin pursuant to a Water Management Act Permit, but surrendered its permitted flow in 2011.

Weston and Winchester

Weston's and Winchester's contract limits remain the same as existing for the next ten years. For both communities, demand is currently below contract limits. Both communities did not want to give up their historical contract limits, established when the communities' demands were higher and growth was projected.

Renewal Process, Accomplishments and Future Obligations

Through this contract renewal process, staff revised the standard contract language, which has evolved over time and was slightly different across communities, to be consistent throughout as much as possible. By nature, these contracts have community-specific terms but staff standardized the general terms and conditions. These changes were editorial and did not change the substance or intent of the prior terms.

The contract renewal process also provided an opportunity to not only consider future community demands from MWRA, but to assess the progress the communities have made to implement demand management programs and protect local sources, pursuant to the requirements for Continuation of Water Supply and Enabling Act mandates. The accomplishments and future obligations are summarized below.

- All nine communities have ongoing leak detection and repair programs, and all report that 100% of their systems are metered. Over the last five years, Framingham, Lynn Water and Sewer Commission, Weston, and Winchester consistently averaged at or below the 10% unaccounted-for water (UAW) standard contained in the *2018 Massachusetts Water Conservation Standards*. Needham averaged above 10% over the past five years attributed to an aging water billing system and is continuing its annual leak detection and repair program. Northborough averaged above 10% and will continue to conduct leak detection surveys of the entire distribution system every two years. While Peabody's UAW continues to be high, it is taking several measures to reduce UAW, including the replacement of old, leaky distribution pipes, better tracking of municipal uses (*e.g.*, flushing), and gradual replacement of residential meters. Canton has increased UAW over the last five years but projects that UAW will be at or below 10% by 2029. They will continue to perform leak detection surveys and are working with their consultants to assess their model.

- All nine communities are compliant with the requirement that they have a public information and evaluation program for conservation measures, which includes distribution of Authority provided materials.

- The recommendations of the DEP Source Water Assessment and Protection Program provide a framework for the partially supplied communities' local source protection efforts. All communities except Winchester have ordinances for the protection of local sources lying within the community boundaries. For Winchester, local sources are primarily protected through land ownership by the Town for water supply purposes and, in part, by ownership through the Commonwealth and by rules and regulations of the Commonwealth, which meet the intent of MWRA's requirements for enactment of local ordinances for the protection of local water supplies. In short, the proposed Agreements reflect continued commitment to implementation of current and proposed local demand management programs and local source protection. Staff recommend the Board's approval.

BUDGET/FISCAL IMPACTS:

The communities' water withdrawals are assessed in accordance with MWRA's Community Charge Determination Policy. MWRA's Community Charge Determination Policy computes charges for water services on the basis of each community's metered water flows.

ATTACHMENTS:

Attachments One through Nine: Draft Water Supply Continuation Agreements

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE CITY OF CAMBRIDGE

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the City of Cambridge, having an address of 250 Fresh Pond Parkway, Cambridge, MA 02138 ("City"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the City will continue to purchase a portion of its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the City executed a contract dated May 27, 1954, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act.

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1990, 1995, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on August 21, 2024, the City submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates.

R8. Whereas, the MWRA has reviewed the City's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the City;
(2) No existing or potential water supply source for the City has been abandoned;
(3) Effective demand management measures have been developed by the City;
(4) A local water supply source feasible for development has not been identified by either the City or the DEP; and
(5) A water use survey has been completed, which identifies all users within the City that consume in excess of twenty million gallons a year;

R9. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the City and to provide system-wide assistance to help protect and conserve water supplies;

R10. Whereas, the MWRA and the City wish to formalize their rights and obligations regarding the continuation of supply of water to the City and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the City agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The City agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.

3. The City and MWRA agree that the City does not anticipate using water from MWRA's supplies on a regular basis, based on projected demand and projected supply from local sources. The MWRA shall during the Term provide the City with water on an as-needed basis, subject to all other terms and provisions of this Agreement.

   In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining those conditions, MWRA agrees that it will use its best efforts to supply the City with those quantities of water as are necessary to meet its legitimate needs. In that event, the City anticipates that it would require up to 24 million gallons per day on a maximum daily water volume basis.

4. Prior to the City taking any water from the MWRA system, the City must request and receive approval from the MWRA's Chief Operating Officer or his designee. Such approval may be obtained verbally and shall not be unreasonably withheld. If verbal approval is given, the MWRA will confirm its approval in writing to the City within five working days.

5. In the event that revised circumstances regarding local demand and/or supply should occur and the City determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the City's newly projected demand, the City may petition the MWRA to amend this Agreement pursuant to 360 CMR § 11.11.

6. The City agrees that the MWRA will not be liable for any disruption of water service to the City attributable to the City's water distribution system.

7. The MWRA shall bill the City and the City shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

8. The City agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

9. The City shall implement and maintain a full cost pricing system for water received from the MWRA system.

10. The City agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for City-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the City's distribution system, including all municipal facilities; and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

11. The City agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

12. The City agrees to continue in full force and effect during the Term its local ordinance for the protection of local water sources and to attempt through cooperative steps to have

ordinances for the protection of the City's water sources enacted in the communities where sources are located.

13. Any dispute arising between the MWRA and the City concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the City under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this ___ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________

Frederick A. Laskey
Executive Director

CITY OF CAMBRIDGE

By:______________________

Yi-An Huang
City Manager

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;
- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and
- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF CANTON

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the Town of Canton, having an address of 801 Washington Street, Canton, MA 02021 ("Town"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the Town will continue to purchase a portion of its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the Town executed a contract dated November 2, 1967, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1989, 1996, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on July 18, 2024, the Town submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates.

R8. Whereas, the MWRA has reviewed the Town's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the Town;
(2) No existing or potential water supply source for the Town has been abandoned;
(3) Effective demand management measures have been developed by the Town;
(4) A local water supply source feasible for development has not been identified by either the Town or the DEP; and
(5) A water use survey has been completed, which identifies all users within the Town that consume in excess of twenty million gallons a year;

R9. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies;

R10. Whereas, the MWRA and the Town wish to formalize their rights and obligations regarding the continuation of supply of water to the Town and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The Town agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.

3. The MWRA shall, during the Term, provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

2025	**2026**	**2027**	**2028**	**2029**
640	550	510	468	423

2030	**2031**	**2032**	**2033**	**2034**
428	478	480	432	434

MWRA will supply the Town with up to 4.15 million gallons per day ("mgd") on a maximum daily basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

4. In the event revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

5. The Town agrees that the MWRA will not be liable for any disruption of water service to the Town attributable to the Town's water distribution system.

6. The MWRA shall bill the Town, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

7. The Town agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

8. The Town agrees to continue in effect a full cost pricing system for water received from the MWRA water supply system.

9. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for Town-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the Town's distribution system, including all municipal facilities; and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

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to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

11. The Town agrees to continue in full force and effect during the Term its local ordinance for the protection of local water sources.

12. Any dispute arising between the MWRA and the Town concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the Town under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________

Frederick A. Laskey
Executive Director

TOWN OF CANTON

By:______________________

Charles E. Doody
Town Administrator

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

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MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

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Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

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Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;
- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and
- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE CITY OF FRAMINGHAM

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the City of Framingham, having an address of 100 Western Avenue, Framingham, MA 01702 ("City"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the City will continue to purchase its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the City executed a contract dated February 17, 1966, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1989, 2002, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on September 16, 2024, the City submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates;

R8. Whereas, the MWRA has reviewed the City's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the City;
(2) No existing or potential water supply source for the City has been abandoned;
(3) Effective demand management measures have been developed by the City;
(4) A local water supply source feasible for development has not been identified by either the City or the DEP; and
(5) A water use survey has been completed, which identifies all users within the City that consume in excess of twenty million gallons a year;

R9. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the City and to provide system-wide assistance to help protect and conserve water supplies;

R10. Whereas, the MWRA and the City wish to formalize their rights and obligations regarding the continuation of supply of water to the City and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the City agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The MWRA shall, during the Term, provide the City with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

2025	2026	2027	2028	2029
2,286	2,283	2,280	2,277	2,274

2030	2031	2032	2033	2034
2,271	2,272	2,273	2,274	2,275

MWRA will supply the City up to 9.27 millions of gallons per day ("mgd") on a maximum day (non-emergency) basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the City with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above.

3. In the event revised circumstances regarding local demand and/or supply should occur and the City determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the City's new demand, the City may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

4. The City agrees that the MWRA will not be liable for any disruption of water service to the City attributable to the City's water distribution system.

5. The MWRA shall bill the City, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

6. The City agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

7. The City shall implement and maintain a full cost pricing system for water received from the MWRA water system.

8. The City agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for City-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the City's distribution system, including all municipal facilities; and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

9. The City agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

10. The City Agrees to use its best efforts to continue in full force and effect during the Term its local Ordinance for the protection of local water sources.

11. The City agrees to continue in full force and effect during the Term its local Ordinance for water conservation and water use restrictions during periods of drought.

12. Any dispute arising between the MWRA and the City concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution

Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the City under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________
Frederick A. Laskey
Executive Director

CITY OF FRAMINGHAM

By:______________________
Charlie Sisitsky
Mayor

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;
- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and
- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

**WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
LYNN WATER AND SEWER COMMISSION (LWSC)**

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the Lynn Water and Sewer Commission, having an address of 400 Parkland Avenue, Lynn, MA 01905 ("LWSC"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the LWSC will continue to purchase a portion of its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the LWSC executed a contract dated December 30, 1982, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1990, 1995, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on August 12, 2024, LWSC submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system, which meet the Regulation's requirement for conservation based rates;

R8. Whereas, LWSC has a Water Supply Protection Plan approved by DEP, addressing protection of four LWSC sources in multiple communities;

R9. Whereas, the MWRA has reviewed LWSC's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the LWSC;
(2) No existing or potential water supply source for the LWSC has been abandoned;
(3) Effective demand management measures have been developed by the LWSC;
(4) A local water supply source feasible for development has not been identified by either the LWSC or the DEP; and
(5) A water use survey has been completed, which identifies all users within the LWSC that consume in excess of twenty million gallons a year;

R10. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the LWSC and to provide system-wide assistance to help protect and conserve water supplies; and

R11. Whereas, the MWRA and the LWSC wish to formalize their rights and obligations regarding the continuation of supply of water to the LWSC and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the LWSC agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. LWSC agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.

3. The MWRA shall, during the Term, provide the LWSC with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

2025	2026	2027	2028	2029
285	285	285	280	280
2030	**2031**	**2032**	**2033**	**2034**
280	280	280	280	280

MWRA shall supply to the LWSC up to 2.0 millions of gallons per day ("mgd") on a maximum day (non-emergency) basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply LWSC with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for the unexpected shortfalls in the available yield of local sources.

4. In the event revised circumstances regarding local demand and/or supply should occur and the LWSC determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the LWSC's new demand, the LWSC may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

5. LWSC agrees that the MWRA will not be liable for any disruption of water service to the LWSC attributable to the LWSC's water distribution system.

6. The MWRA shall bill the LWSC, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

7. The LWSC agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

8. The LWSC shall implement and maintain a full cost pricing system for water received from the MWRA water system.

9. The LWSC agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for LWSC territory leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the LWSC's distribution system, including all municipal facilities, and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

10. The LWSC agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

11. The LWSC agrees that it will work cooperatively with appropriate City of Lynn officials to continue in full force and effect its local ordinance for the protection of local water sources.

12. Any dispute arising between the MWRA and the LWSC concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the LWSC under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________
Frederick A. Laskey
Executive Director

LYNN Water and Sewer Commission

By:______________________
Daniel F. O'Neill
Executive Director, Lynn Water and Sewer Commission

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community’s share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;

- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and

- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA‘s Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF NEEDHAM

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the Town of Needham, having an address of 500 Dedham Avenue, Needham, MA 02492 ("Town"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the Town will continue to purchase a portion of its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the Town executed a contract dated November 7, 1957, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1990, 1996, 2006, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on September 23, 2024, the Town submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates;

R8. Whereas the Town reviewed its Water Management Act Permit with MassDEP and surrendered its right to the permitted volume of 0.31 million gallons per day (mgd) water in 2018 but maintained its registered volume of 2.63 mgd (total annual volume of 959.95 million gallons per year).

R9. Whereas, the MWRA has reviewed the Town's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the Town;
(2) No existing or potential water supply source for the Town has been abandoned;
(3) Effective demand management measures have been developed by the Town;
(4) A local water supply source feasible for development has not been identified by either the Town or the DEP; and
(5) A water use survey has been completed, which identifies all users within the Town that consume in excess of twenty million gallons a year;

R10. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies; and

R11. Whereas, the MWRA and the Town wish to formalize their rights and obligations regarding the continuation of supply of water to the Town and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The Town agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.

3. The MWRA shall, during the Term, provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

Maximum Annual Volume
420 million gallons

MWRA will supply the Town up to 6.5 millions of gallons per day ("mgd") on a maximum day (non-emergency) basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

4. In the event revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

5. The Town agrees that the MWRA will not be liable for any disruption of water service to the Town attributable to the Town's water distribution system.

6. The MWRA shall bill the Town, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

7. The Town agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

8. The Town agrees to continue in effect a full cost pricing system for water received from the MWRA water supply system.

9. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for Town-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the Town's distribution system, including all municipal facilities; and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

10. The Town agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

11. The Town agrees to use its best efforts to continue in full force and effect during the Term its local bylaw for the protection of local water sources, or, at the Town's discretion, to adopt any more stringent measures. The Town also agrees to continue dialogue with officials in the Towns of Dover, Natick, and Wellesley regarding their cooperation to protect wellhead areas that extend into those towns.

12. Any dispute arising between the MWRA and the Town concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the Town under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________

Frederick A. Laskey
Executive Director

TOWN OF NEEDHAM

By:______________________

Kate Fitzpatrick
Town Manager

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community’s share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;

- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and

- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF NORTHBOROUGH

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the Town of Northborough, having an address of 63 Main Street, Northborough, MA 01532 ("Town"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the Town will continue to purchase its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act permits the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the Town executed a contract dated May 27, 1954, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1990, 1995, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on August 13, 2024, the Town submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates.

R8. Whereas, the MWRA has reviewed the Town's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the Town;
(2) No existing or potential water supply source for the Town has been abandoned;
(3) Effective demand management measures have been developed by the Town;
(4) A local water supply source feasible for development has not been identified by either the Town or the DEP; and
(5) A water use survey has been completed, which identifies all users within the Town that consume in excess of twenty million gallons a year;

R9. Whereas, the Town brought its Lyman Street replacement well online in 2009 and took it off-line in 2012 due to bacteria detection, which required the Town to use MWRA water to meet all of the Town's water needs. For the purpose of the Regulation and this Agreement, the Town's projection of MWRA water use reflects use of MWRA water for all of the Town's water needs.

R10. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies; and

R11. Whereas, the MWRA and the Town wish to formalize their rights and obligations regarding the continuation of supply of water to the Town and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The MWRA shall, during the Term, provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

2025	2026	2027	2028	2029
325	327	329	331	333

2030	2031	2032	2033	2034
335	337	339	341	343

MWRA will supply the Town up to 1.89 millions of gallons per day ("mgd") on a maximum day (non-emergency) basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

3. In the event revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

4. The Town agrees that the MWRA will not be liable for any disruption of water service to the Town attributable to the Town's water distribution system.

5. The MWRA shall bill the Town, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

6. The Town agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

7. The Town shall implement and maintain a full cost pricing system for water received from the MWRA water system.

8. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for Town-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the Town's distribution system, including all municipal facilities, and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

9. The Town agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has

been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

10. Unless abandonment of the Town's local source is permitted by DEP, the Town agrees to continue in full force and effect during the Term its local ordinance for the protection of local water sources.

11. Any dispute arising between the MWRA and the Town concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the Town under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________
Frederick A. Laskey
Executive Director

TOWN OF NORTHBOROUGH

By:______________________
Stephanie Bacon
Town Administrator

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;

- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and

- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE CITY OF PEABODY

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the City of Peabody, having an address of 50 Farm Avenue, Peabody, MA 01960 ("City"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the City will continue to purchase a portion of its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the City executed a contract dated December 9, 1965, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1989, 1996, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on October 23, 2024, the Town submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates;

R8. Whereas, the MWRA reviewed the City's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the City;
(2) No existing or potential water supply source for the City has been abandoned;
(3) Effective demand management measures have been developed by the City;
(4) A local water supply source feasible for development has not been identified by either the City or the DEP; and
(5) A water use survey has been completed, which identifies all users within the City that consume in excess of twenty million gallons a year;

R9. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the City and to provide system-wide assistance to help protect and conserve water supplies; and

R10. Whereas, the MWRA and the City wish to formalize their rights and obligations regarding the continuation of supply of water to the City and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the City agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The City agrees that during the Term it will operate its local water supply system in such a manner so as to make maximum use of local water supply sources.

3. The MWRA shall, during the Term, provide the City with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

2025	**2026**	**2027**	**2028**	**2029**
511	518	525	533	540
2030	**2031**	**2032**	**2033**	**2034**
547	555	562	569	576

MWRA will supply the City on a maximum daily water volume basis, consistent with the hydraulic capabilities of MWRA's distribution system, stated in millions of gallons, as follows:

2025	2026	2027	2028	2029
4.5	4.57	4.64	4.71	4.78
2030	**2031**	**2032**	**2033**	**2034**
4.85	4.92	4.99	5.06	5.14

In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the City with those quantities of water to meet its legitimate needs in excess of the maximum annual volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

In the event that revised circumstances regarding local demand and/ or supply should occur and the City determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the City's newly projected demand, the City may petition the MWRA to amend this Agreement pursuant to 360 C.M.R. 11.11.

4. The City agrees that the MWRA will not be liable for any disruption of water service to the City attributable to the City's water distribution system.

5. The MWRA shall bill the City and the City shall pay to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate(s). All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

6. The City agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

7. The City shall implement and maintain a full cost pricing system for water received from the MWRA water system.

8. The City agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for City-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the City's distribution system, including all municipal facilities; and (e) maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

9. The City agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

10. The City agrees to continue in full force and effect during the Term its local ordinance for the protection of local water sources.

11. Any dispute arising between the MWRA and the City concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the City under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________
Frederick A. Laskey
Executive Director

CITY OF PEABODY

By:______________________
Edward A. Bettencourt, Jr.
Mayor

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

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MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

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MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

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Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

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- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;
- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and
- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

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Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF WESTON

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the Town of Weston, having an address of 11 Town House Road, Weston, MA 02493 ("Town"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the Town will continue to purchase its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the Town executed a contract dated November 14, 1963, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1990, 1998, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on June 13, 2024, the Town submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates;

R8. Whereas, the MWRA has reviewed the Town's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the Town;
(2) No existing or potential water supply source for the Town has been abandoned;
(3) Effective demand management measures have been developed by the Town;
(4) A local water supply source feasible for development has not been identified by either the Town or the DEP; and
(5) A water use survey has been completed, which identifies all users within the Town that consume in excess of twenty million gallons a year;

R9. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies; and

R10. Whereas, the MWRA and the Town wish to formalize their rights and obligations regarding the continuation of supply of water to the Town and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The MWRA shall, during the Term, provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

<u>Maximum Annual Volume</u>
718 million gallons

MWRA will supply the Town up to 5.2 millions of gallons per day ("mgd") on a maximum day basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volume stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

3. In the event revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be suppled from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

4. The Town agrees that the MWRA will not be liable for any disruption of water service to the Town attributable to the Town's water distribution system.

5. The MWRA shall bill the Town, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

6. The Town agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

7. The Town shall implement and maintain a full cost pricing system for water received from the MWRA water system.

8. The Town agrees to cooperate with the Cambridge Water Board to protect the Cambridge reservoir system, a portion of which is located within the Town. The Town understands that the Town's obligations hereunder are limited to the following:

   a) participating, through a Town representative, in any ad hoc working group composed of communities whose lands are partially within the Cambridge reservoir system watershed, which said group may attempt to develop coordinated land use policies to assure the continued quality of the water in the Cambridge reservoir system;

   b) informing relevant local entities, including but not limited to Town meeting and the Board of Selectmen, of any conclusions reached by the said ad hoc group, and of any recommended changes in local land use controls.

9. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users; (c) compliance with the MWRA's regulations for Town-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the Town's distribution system, including all municipal facilities; and (e) maintenance of

efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

10. The Town agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

11. The Town agrees to continue in full force and effect during the Term its local ordinance for the protection of local water sources.

12. Any dispute arising between the MWRA and the Town concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the Town under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________

Frederick A. Laskey
Executive Director

TOWN OF WESTON

By:______________________

Leon A. Gaumond, Jr.
Weston Town Manager

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;

- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and

- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

WATER SUPPLY CONTINUATION AGREEMENT
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF WINCHESTER

PARTIES

This Water Supply Continuation Agreement ("Agreement") is entered into by and between the Massachusetts Water Resources Authority, a body corporate and politic and an instrumentality of the Commonwealth of Massachusetts established pursuant to Chapter 372 of the Acts of 1984, as amended, having an address of Deer Island, 33 Tafts Avenue, Boston, MA 02128 ("MWRA") and the Town of Winchester, having an address of 15 Lake Street, Winchester, MA 01890 ("Town"), (hereinafter jointly referred to as "the Parties" and each individually as a "Party"). This Agreement documents the understanding of the Parties regarding the arrangement whereby the Town will continue to purchase a portion of its water supply from the MWRA water supply system.

RECITALS

R1. Whereas, the Massachusetts Legislature created MWRA in December 1984 to use, operate, maintain, and improve the waterworks and sewerage systems serving the greater metropolitan area. Operating pursuant to its enabling act under chapter 372 of the Acts of 1984, as amended ("Act"), MWRA provides water supply and distribution services and wastewater collection and treatment services, to certain cities, towns, and special services districts ("Communities") within MWRA's service area;

R2. Whereas, Section 8(d) of the Act authorizes the MWRA to enter into an arrangement to provide for the continued delivery of water to a community under reasonable terms as determined by MWRA provided that specific requirements are met;

R3. Whereas, a regulation entitled "Continuation of Contract Water Supply," promulgated by the MWRA at 360 C.M.R. § 11.00, and most recently revised on November 18, 1994, ("Regulation"), defines more specifically the requirements of Section 8(d) of the Act and govern the continued delivery of water by the MWRA to the Communities purchasing water from the MWRA;

R4. Whereas, the Town executed a contract dated July 2, 1957, for the purchase of water from the MDC which contract, because it had no stated termination date, remained in effect on January 1, 1985;

R5. Whereas, by operation of the Act, this contract was terminated as of January 1, 1990; and was thereafter replaced by contracts, which were subject to the terms of the Act;

R6. Whereas, the Parties subsequently executed *Water Supply Continuation Agreements* for the continued purchase of water from the MWRA in 1990, 1998, 2005, and 2015, the latter of which, by its terms, expires on December 31, 2024;

R7. Whereas, pursuant to the Regulation, on September 23, 2024, the Town submitted a continuation request and a supplementary report including: (1) a supply analysis; (2) a demand analysis; (3) a water management plan; (4) an ordinance for the protection of local sources; and (5) a description of the local user charges and accounting system which meet the Regulation's requirement for conservation based rates;

R8. Whereas, the Town's Middle Reservoir and South Reservoir and Zone A of their watersheds are owned and controlled by the Town for water supply purposes. North Reservoir is also owned and controlled by the Town, with portions of Zone A of the watershed not owned by the Town and the Commonwealth, and also extending into Stoneham and Medford. Local sources are primarily protected through land ownership by the Town for water supply purposes and in part by ownership through the Commonwealth, and by rules and regulations of the Commonwealth, which meet the intent of MWRA's requirements for enactment of local ordinances for the protection of local water supplies. The Source Water Assessment and Protection Report prepared for the Winchester Water and Sewer Division provided recommendations to further improve local source protection.

R9. Whereas, the MWRA reviewed the Town's continuation request and finds that the applicable requirements of Section 8(d) of the Act have been met, as follows:

(1) the safe yield of the watershed system as of the date of this Agreement and as projected for the term hereof is sufficient to meet the projected demand of the Town;
(2) No existing or potential water supply source for the Town has been abandoned;
(3) Effective demand management measures have been developed by the Town;
(4) A local water supply source feasible for development has not been identified by either the Town or the DEP; and
(5) A water use survey has been completed, which identifies all users within the Town that consume in excess of twenty million gallons a year;

R10. Whereas, MWRA and the Town executed the Spot Pond Elevation Management Agreement in 2002, which permits Winchester, under certain conditions and upon written request, to withdraw untreated water from Spot Pond for local treatment and distribution.

R11. Whereas, MWRA desires to continue to provide safe and sufficient water supplies to the Town and to provide system-wide assistance to help protect and conserve water supplies;

R12. Whereas, the MWRA and the Town wish to formalize their rights and obligations regarding the continuation of supply of water to the Town and therefore enter into this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and the Town agree to the following:

1. The term ("Term") of this Agreement shall end at midnight on December 31, 2034.

2. The Town agrees that during the Term it will operate its local water supply system in such a manner so as to provide approximately 256 million gallons per year towards meeting its local needs.

3. The MWRA shall, during the Term, provide the Town with water on a maximum annual water volume basis, stated in millions of gallons, as follows:

   <u>Maximum Annual Volume</u>
   610 million gallons

   MWRA will supply the Town up to 6.7 millions of gallons per day ("mgd") on a maximum day (non-emergency) basis, consistent with the hydraulic capabilities of MWRA's distribution system. In the event of unusual water demand or supply conditions and upon written notice to the MWRA disclosing and explaining such conditions, MWRA agrees that it will use its best efforts to supply the Town with those quantities of water to meet its legitimate needs in excess of the maximum annual water volumes stated above so as to make up for unexpected shortfalls in the available yield of available local sources.

4. In the event revised circumstances regarding local demand and/or supply should occur and the Town determines that the volume designated in this Agreement to be supplied from the MWRA system is insufficient to meet the Town's new demand, the Town may petition the MWRA to amend this agreement pursuant to 360 C.M.R. 11.11.

5. The Town may withdraw untreated water from Spot Pond pursuant to the terms of the Spot Pond Elevation Management Agreement between Town of Winchester and Massachusetts Water Resources Authority. Withdrawals are subject to the terms and conditions of that Agreement, and are not included in the withdrawals in (3) above.

6. The MWRA shall bill the Town, which shall in turn remit payment to the MWRA charges for all water supplied under this Agreement at the MWRA's applicable prevailing rate. All billing procedures, due dates, and interest charges for late payments shall be in accordance with the MWRA's Budget and Assessment Policies and Procedures (Exhibit A).

7. The Town agrees that the MWRA will not be liable for any disruption of water service to the Town attributable to the Town's water distribution system.

8. The Town agrees to continue a user charge system and an accounting system, which meets the Regulation's requirement to: (a) incorporate a uniform rate or an alternative structure, which provides incentives for water conservation and/or is designed to ensure the affordability of water services to low and/or fixed income persons; and (b) prohibit rate structures that incorporate descending or declining block rates.

9. The Town agrees to continue in effect a full cost pricing system for water received from the MWRA water supply system.

10. The Town agrees that during the Term it shall continue the implementation of its current and proposed local demand management programs, including the following: (a) participation in MWRA conservation programs; (b) distribution of MWRA-provided materials to all water users;(c) compliance with the MWRA's regulations for Town-wide leak detection and repair (360 CMR §12.00); (d) maintaining metering in 100 percent of the Town's distribution system, including all municipal facilities; and € maintenance of efficient water fixtures in all public buildings, together with promotion of their use in industrial, commercial, and residential areas.

11. The Town agrees that during the Term it shall not abandon any local source and substitute water from MWRA sources unless DEP has declared that the local source is to be or has been abandoned, is unfit for drinking, and cannot be economically restored for drinking purposes.

12. The Town agrees to continue in full force and effect during the Term its control and protection of the reservoirs and its portion of its watersheds owned by the Town, and to continue to work with DCR to protect portions of the watershed owned by the Commonwealth. The Town further agrees to work towards implementation of the recommendations of Table 3 of the Source Water Assessment and Protection (SWAP) Report prepared for the Winchester Water and Sewer Division.

13. Any dispute arising between the MWRA and the Town concerning the calculation of the annual assessment shall be resolved in accordance with the Review and Dispute Resolution Process as outlined in MWRA's Budget and Assessment Policies and Procedures (Exhibit A). Any other dispute between MWRA and the Town under terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 CMR § 11.14 and the administrative procedures set forth at 360 CMR § 1.00.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this________ day of December, 2024 by their duly authorized representatives.

MASSACHUSETTS WATER RESOURCES AUTHORITY

By:______________________
Frederick A. Laskey
Executive Director

TOWN OF WINCHESTER

By:______________________
Beth Rudolph, P.E.
Town Manager

Exhibit A: MWRA Budget and Assessment Policies and Procedures

Exhibit A

MASSACHUSETTS WATER RESOURCES AUTHORITY
BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its Enabling Act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;

2. To minimize the cost of debt;

3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and

4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.

- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One-quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which affect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;

- Federal and state community census statistics, and sewered population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and

- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year, MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment due date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,

2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,

3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and

4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

STAFF SUMMARY

TO: Board of Directors
FROM: Fredrick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Intermediate High Pipeline Improvements, CP1 Sections 75A and 47 – Belmont, Boston, Newton and Watertown
P. Gioioso & Sons, Inc.
Contract 7484

COMMITTEE: Water Policy & Oversight

_____ INFORMATION
__X__ VOTE

Michele S. Gillen
Director of Administration

Ester N. Lwebuga, P.E., Assistant Director of Engineering
Brian L. Kubaska, P.E., Chief Engineer
Preparer/Title

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

RECOMMENDATION:

To approve the award of Contract 7484, Intermediate High Pipeline Improvements, CP1 Sections 75A and 47, Belmont, Boston, Newton and Watertown, to the lowest responsible and eligible bidder, P. Gioioso & Sons, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of $22,580,000 with a contract term of 912 calendar days from the Notice to Proceed.

DISCUSSION:

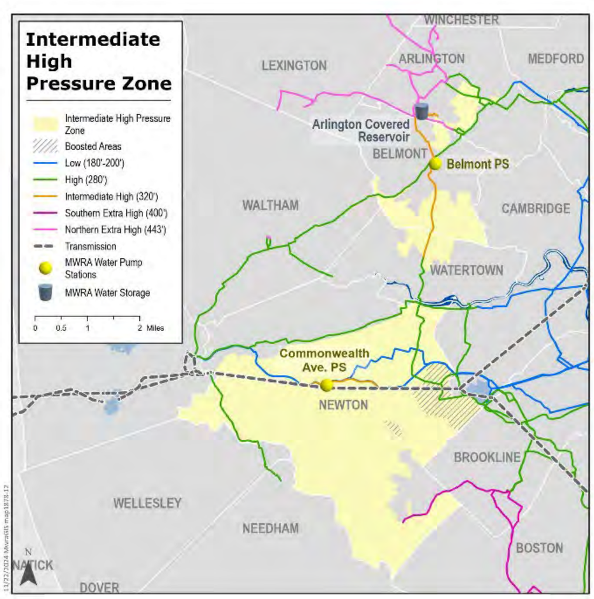


Figure 1 - Intermediate High Pressure Zone

Construction Contract 7484, designed by CDM Smith Inc. and Green International Affiliates under Contract 6955, is one of three contracts to interconnect the two geographically distinct and hydraulically unconnected Intermediate High Pressure zones supplied by the Commonwealth Avenue and Belmont Pumping Stations. See Figure 1.

This contract will improve system reliability by providing hydraulic looping and redundancy between the two Intermediate High Pressure zones and operational flexibility in the event of pipe failures. The contract will also improve water quality by reducing the length of unlined cast iron water mains in the system.

This is the second of three construction packages to go out to bid. The first construction package, Contract 6956, is currently in construction. As presented to the Board in October 2023, design of the third construction package will not be performed under Contract 6955, but will be considered under a future contract after additional existing pipe data can be collected, which will be possible after activation of the work to be constructed under this contract.

As part of this contract, Section 75, consisting of a 30-inch diameter pre-stressed concrete cylinder pipe, will be extended with 3,500 linear feet of 24-inch water main (Section 75A) to connect with the Intermediate High Pressure zone water mains at the intersection of Ward Street and Waverly Avenue in Newton, creating a connection between the Commonwealth Avenue and Belmont Pumping Stations (see Attachment A). Section 75 provides water supply to the City of Newton and currently ends at the intersection of Commonwealth Avenue and Centre Streets. This contract will also include the replacement of 2,700 linear feet of the City of Newton's 140-year-old 20-inch diameter cast iron water main, running parallel to MWRA's Section 75 extension alignment. In October 2023, the Board of Directors approved a Memorandum of Agreement with the City of Newton to reimburse MWRA for construction of the local Newton water main. Further contract work will be performed to rehabilitate Section 47, a 106-year-old 20-inch diameter cast iron water main that provides supply to the communities of Boston and Watertown. A portion of this water main was rehabilitated under a previous contract and the remaining section will be rehabilitated as part of this contract. Lastly, contract work will include replacement of the 80-year-old Belmont Meter 111, one of two meters that feed the Town of Belmont Intermediate High pressure zone.

Procurement Process

Contract 7484 was advertised in the Central Register, the Boston Herald, Banner Publication, El Mundo, and COMMBUYS, and bid utilizing MWRA's e-procurement system (Event 6049) in accordance with Massachusetts General Laws, Chapter 30. A remote, pre-bid conference was held on September 27, 2024 with three general contractors participating.

Four bids were received and opened on November 1, 2024, with the following results:

Contractor	Bid Amount
P. Gioioso & Sons, Inc.	$22,580,000
RJV Construction Corp.	$22,848,000
Albanese D&S, Inc.	$25,473,000
Engineer's Estimate	*$25,619,800*
Albanese Bros. Inc.	$27,894,124

P. Gioioso & Sons, Inc. ("Gioioso") submitted the lowest bid, which is 11.9% below the Engineer's Estimate, 1.2% below the second lowest bid, and 11.4% below the third bidder. The number and distribution of bids are reflective of a competitive environment and in line with the Engineer's Estimate.

MWRA staff, the Design Engineer (CDM Smith), and the City of Newton's engineer reviewed the scope of work in detail with Gioioso. The difference between Gioioso's bid and the Engineer's estimate is attributed to Gioioso's familiarity with the Section 75A work on Ward Street in Newton. During a pre-award meeting, Gioioso explained that it has an ongoing project in Newton, which potentially resulted in lower costs associated with the initial mobilization. Gioioso also indicated that it was comfortable with the scope of work and understood the complexity of the project. Based on the bid review, staff are satisfied that the contractor understands the full scope of work and can perform the work for the bid price, which includes the payment of prevailing wages.

References were checked and found to be favorable. Gioioso successfully completed several water projects for MWRA, including the Northern Intermediate High pipeline project in Stoneham, Winchester and Woburn, and Southern Extra High pipeline in Boston and Dedham, which included large diameter pipe construction. Gioioso performed well on these projects. Gioioso is currently working on Contract 7117, Northern Intermediate High Section 89 Replacement Pipeline, in the amount of $32,619,000 and has performed well on this large complex project. Staff also checked references for other non-MWRA projects, which were favorable. Staff reviewed five years of OSHA records; there were three inspections documented. All three inspections are related to trench safety; two complaints in December 2022 and April 2024 and one referral on August 13, 2024. The two complaints were closed shortly after the cases were opened with no violations issued. According to Gioioso, the inspection from August 2024 was due to a minor injury on the job that resulted in the employee being out of work for a week. This incident was investigated by OSHA and safety training was conducted. A final report has not been issued by OSHA, but Gioioso expects this incident to be considered a minor accident with no fine.

Staff are of the opinion that Gioioso possesses the skill, ability, and integrity necessary to perform the work under this contract and is qualified to do so. Therefore, staff recommend the award of this contract to Gioioso as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

The FY25 CIP includes a budget of $16,882,000 for Contract 7484. The contract award amount is $22,580,000; however, the contract includes $5,250,000 for the City of Newton's work for the replacement of Newton's 20-inch water main, which will be reimbursed to MWRA in accordance with the terms of the Memorandum of Agreement between MWRA and the City of Newton. Therefore, MWRA's portion of project cost is $17,330,000 or $448,000 over the CIP amount. This amount will be absorbed within the five-year CIP spending cap.

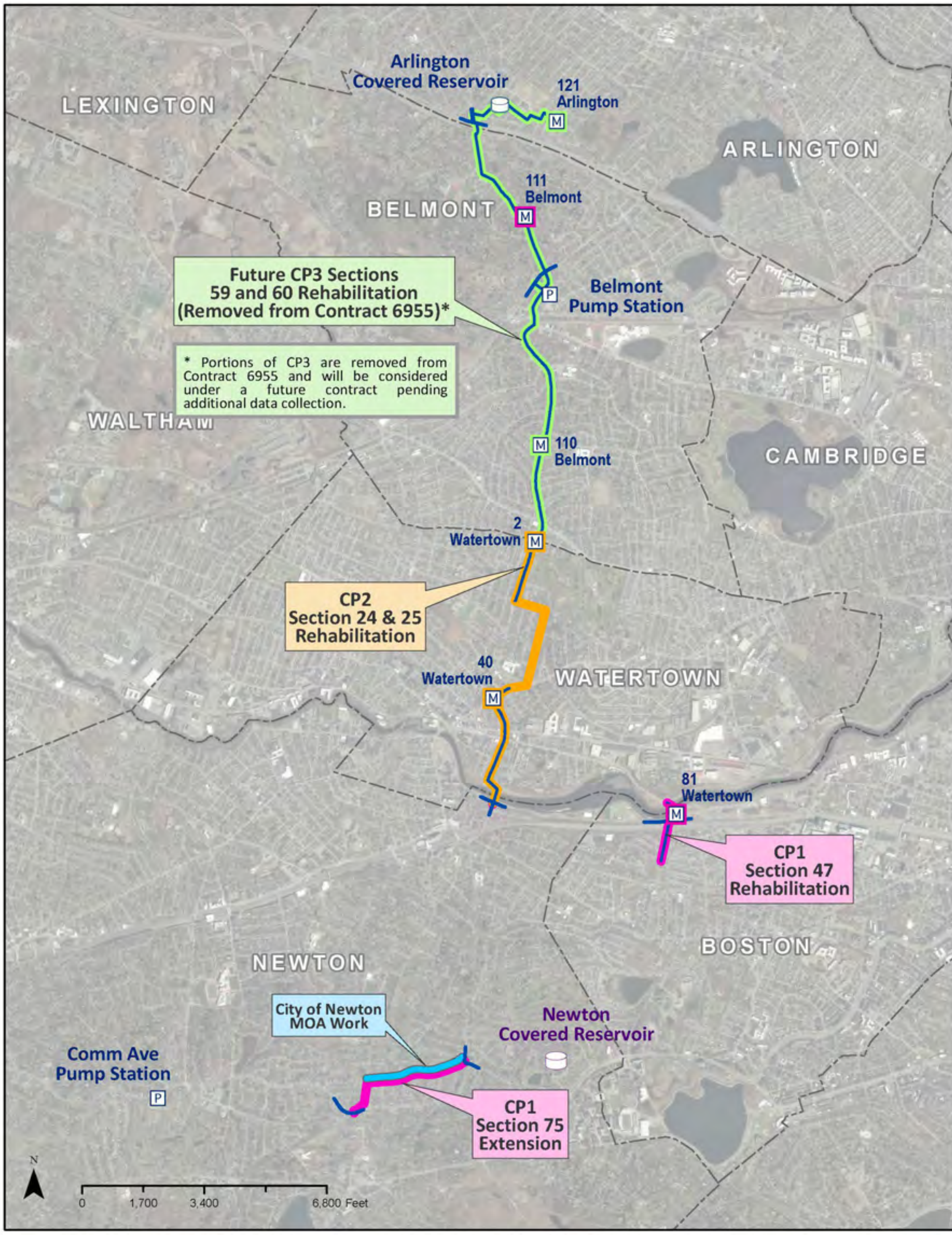
MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this contract were established at 7.24% and 3.6%, respectively. The Affirmative Action and Compliance Unit reviewed the bids and determined that Gioioso's bid is responsive to these requirements.

ATTACHMENT:

Attachment A – Intermediate High Pipeline Improvements Contract 6955 Location Map

Attachment A



ATTACHMENT 1: INTERMEDIATE HIGH PIPELINE IMPROVEMENTS – CONTRACT 6955

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Intermediate High Pipeline Improvements, CP1 Sections 75A and 47
Resident Engineering and Inspection Services
CDM Smith Inc.
Contract 8067

COMMITTEE: Water Policy & Oversight

_____ INFORMATION
__X__ VOTE

Michele S. Gillen
Director of Administration

Ester N. Lwebuga, P.E., Assistant Director of Engineering
Brian L. Kubaska, P.E., Chief Engineer
Preparer/Title

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

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award Contract 8067, Intermediate High Pipeline Improvements CP1 Sections 75A and 47 Resident Engineering and Inspection Services, to CDM Smith Inc. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not to exceed $1,821,258.30 for a contract term of 33 months from the Notice to Proceed.

DISCUSSION:

Contract 8067 will provide Resident Engineering and Inspection Services for the Intermediate High Pipeline Improvements CP1 Sections 75A and 47, Contract 7484, which was designed by CDM Smith Inc. and is a separate agenda item for award at this Board meeting. Contract 7484 is the second construction package to go out to bid. The first construction package, Contract 6956, is currently in construction. (See attached Figure 1 - Intermediate High Pipeline Improvements CP1, Contract 7484 Location Map).

The selected firm will provide resident engineering and inspection services for a duration of 33 months to cover the construction contract period through substantial completion, punch list, final inspections and construction contract closeout. The Resident Engineer and Inspector's responsibilities include daily, onsite observation and documentation of the progress and quality of the construction work to ensure it conforms to the construction contract documents and approved schedules. The contract includes a full-time Resident Engineer and Resident Inspector and one part-time Resident Inspector to accommodate multiple contractor work shifts and work outside normal contract working hours.

Procurement Process

On October 9, 2024, MWRA issued a one-step Request for Qualifications Statements/Proposals (RFQ/P) that was publicly advertised in the Central Register, the Boston Herald, Banner Publications, El Mundo, The Dorchester Reporter, and on the MWRA Supplier Portal. A total of 12 firms requested the RFQ/P documents. The RFQ/P included the following evaluation criteria and points: Cost (35 points); Qualifications and Key Personnel (35 points); Technical Approach, Capacity/Organization, and Management Approach (15 points); Relevant Experience/Past Performance (10 points); and Minority and Women Business Enterprise Participation (5 points).

On November 6, 2024, MWRA received one proposal from CDM Smith Inc. The following table represents the cost and level of effort proposed:

Proposer	Proposed Cost	Proposed Hours
CDM Smith Inc.	$1,821,258.30	12,812
Engineer's Estimate	$1,946,475.00	13,010

The Selection Committee met on November 19, 2024 to review and evaluate the proposal.

CDM Smith's proposed cost was 6.4% lower than the Engineer's Estimate due to a lower level of effort for Project Administration and Project Management proposed by CDM Smith compared to that assumed in the Engineer's Estimate. The proposed Resident Engineer has over 25 years of experience in construction and was rated as excellent by MWRA staff on previous projects, including Chelsea Creek Headworks Upgrades and currently on the Low Service PRV Improvement projects. CDM demonstrated a clear understanding of the work required in its technical approach. In addition to positive references for performance for the proposed Resident Engineer and Resident Inspector, CDM is the designer of record for this project and has a full understanding of the project requirements as demonstrated in its proposed Technical Approach. The proposed team has the capacity, organization and management approach necessary to successfully complete the project. The Selection Committee recommends award of this contract to CDM Smith Inc. in an amount not to exceed $1,821,258.30.

BUDGET/FISCAL IMPACTS:

The FY25 CIP includes $1,954,450 for Contract 8067. The award amount is $1,821,258.30.

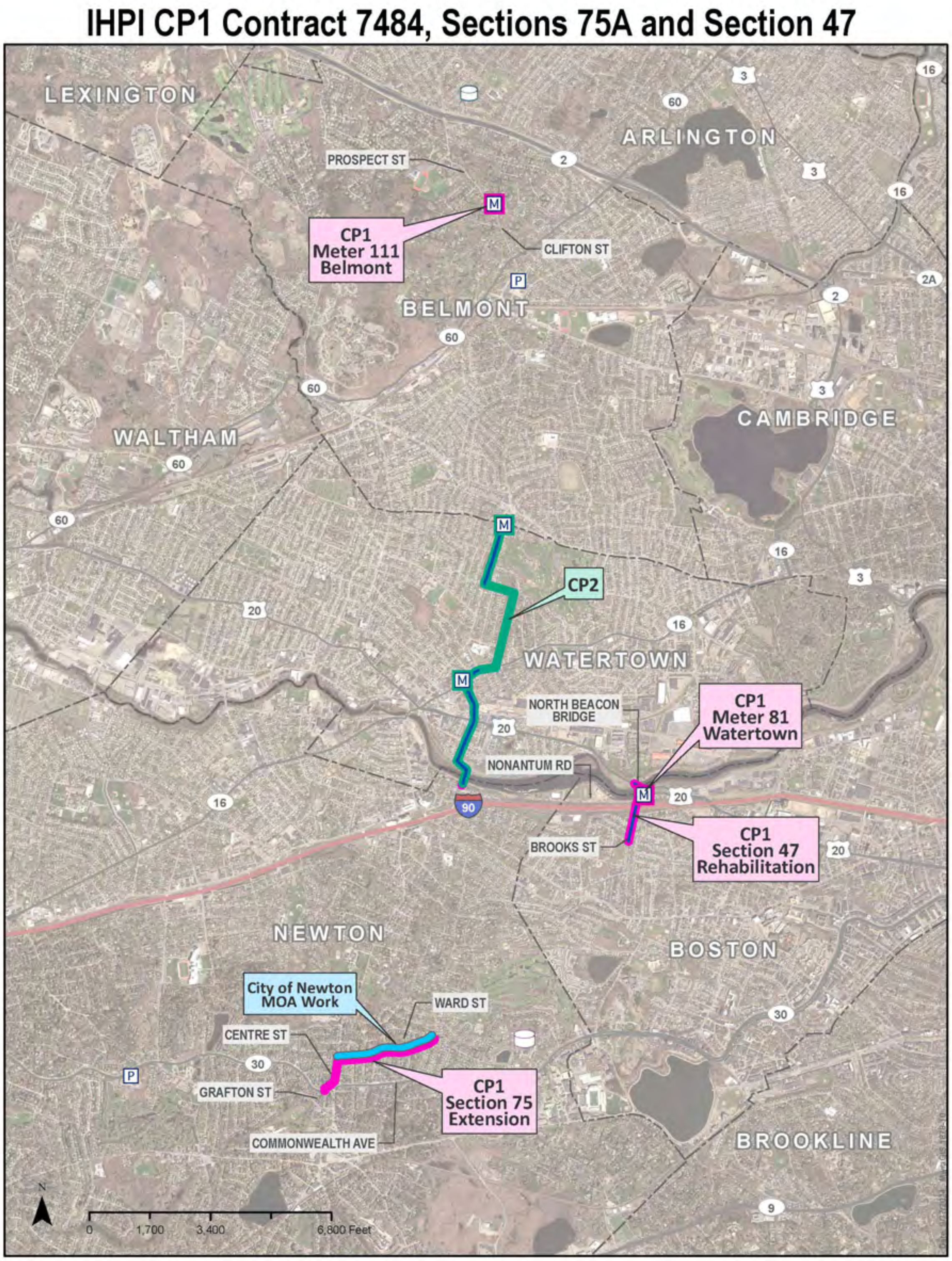
MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this contract were established at 7.18% and 5.77%. CDM proposed 15% for MBE participation and requested a partial waiver for WBE participation. The Affirmative Action Compliance Unit has approved CDM Smith's partial waiver request for WBE participation.

ATTACHMENT

Figure 1 - Intermediate High Pipeline Improvements CP1Contract 7484 Location Map

Figure-1


IHPI CP1 Contract 7484, Sections 75A and Section 47
LEXINGTON
ARLINGTON
PROSPECT ST
CP1
Meter 111
Belmont
CLIFTON ST
BELMONT
CAMBRIDGE
WALTHAM
CP2
WATERTOWN
NORTH BEACON
BRIDGE
CP1
Meter 81
Watertown
NONANTUM RD
BROOKS ST
CP1
Section 47
Rehabilitation
NEWTON
BOSTON
City of Newton
MOA Work
WARD ST
CENTRE ST
GRAFTON ST
CP1
Section 75
Extension
COMMONWEALTH AVE
BROOKLINE
0
1,700
3,400
6,800 Feet

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: Northern Intermediate High Section 89 Replacement Pipeline
P. Gioioso & Sons, Inc.
Contract 7117, Change Order 10

COMMITTEE: Water Policy & Oversight

___ INFORMATION
X VOTE

Martin E. McGowan, Director, Construction
Jeremiah P. Sheehan, Construction Coordinator
Preparer/Title

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 10 to Contract 7117, Northern Intermediate High Section 89 Replacement Pipeline, with P. Gioioso & Sons, Inc. for an amount not to exceed $255,655.68, increasing the contract amount from $36,242,127.69 to $36,497,783.37 with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7117 in an amount not to exceed the aggregate of $1,000,000, and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

MWRA's Northern Intermediate High (NIH) pressure zone has supplied water to the communities of Reading, Stoneham, Wakefield, Wilmington, Winchester, and Woburn through a single 48-inch diameter pipeline fed by the Gillis and Spot Pond Pumping Stations in Stoneham. MWRA recently completed the NIH Redundancy Project with the installation and activation of the new Section 110 pipeline through the communities of Stoneham, Reading and Woburn. Section 110 provides full pipeline redundancy for the water supply to the NIH communities. Activation of the new Section 110 pipeline has allowed MWRA to proceed with design and construction for the replacement of Section 89, which has previously been the single spine transmission line to the NIH communities.

The MWRA Section 89 pipeline was constructed in the 1970s with pre-stressed concrete cylinder pipe (PCCP) and is the primary transmission line from Gillis Pumping Station to Bear Hill Tank in Stoneham. Distribution of water from Bear Hill Tank to the communities of Reading, Stoneham, Wakefield, Wilmington, Winchester, and Woburn occurs based on demand. This contract includes replacement of 10,500 linear feet of existing Section 89 pipeline from the Spot Pond Pumping Station to Washington Street in Woburn with new ductile piping as well as installation of additional isolation valve structures. Replacement of this pipeline is necessary because the PCCP manufactured during this timeframe has been susceptible to catastrophic failure.

This Change Order

Change Order 10 consists of the following three items:

Asphalt Reconstruction of Eugene Drive in Winchester Not-to-Exceed $95,000

Typical reconstruction on a narrow residential road

The Contractor is required to furnish and install approximately 500 feet of new 48-inch ductile iron pipe on Eugene Drive in Winchester. The contract requires the installation of temporary pavement, permanent trench patch, and full width asphalt milling and overlay as pavement restoration after installation of the new pipe and valve vaults. To install MWRA's new pipeline, the Contractor was required under the contract to relocate multiple municipal utilities on Eugene Drive. These utility relocations created more trenches beyond the main trench created for the new pipeline that expanded the limits of disturbance on this narrow residential street. After the trench work commenced, the Contractor discovered that the existing subsurface pavement was in poor condition, requiring further evaluation of the specified paving requirements.

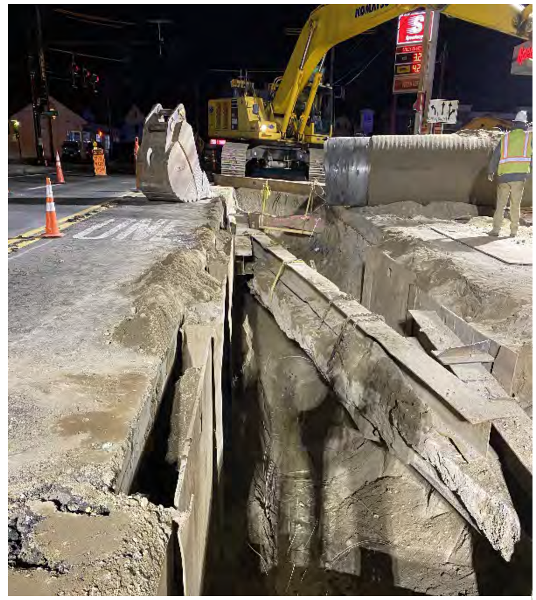
MWRA met with the Town of Winchester to discuss the size and quantity of trenches along with the poor condition of the existing pavement subbase. It was determined that the trenches under such poor conditions would create a structurally inferior roadway. To ensure the long-term integrity of the roadway, the Contractor must reconstruct the roadway subbase prior to installing the full width overlay pavement. This requires temporarily removing the existing frames and covers, pulverizing and regrading approximately 1,475 square yards of existing roadway, installing a three-inch asphalt base course, and restoring the frames and covers.

This item was identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to a not-to-exceed amount of $95,000 for this additional work. The work has not begun yet.

Utility Conflicts on Montvale Avenue in Woburn $87,523.32

The Contractor is required to furnish and install approximately 400 feet of 36-inch ductile iron pipe along Montvale Avenue in Woburn. Montvale Avenue is a congested, four-lane roadway with numerous underground utilities. During installation of the new water main, the Contractor encountered an unidentified eight-inch vitrified clay sewer line installed immediately adjacent to the MWRA pipeline. Due to its proximity to the existing sewer, construction of the new pipeline could not be performed without causing damage to the local sewer line. This sewer was not indicated on the Woburn utility maps nor included in the contract documents. MWRA directed the Contractor to conduct a TV inspection of the sewer line and perform test pits to determine the size and location of impacted sewerage services. This investigation determined that it was necessary to furnish and install 126 linear feet of eight-inch sewer main and 23 linear feet of six-inch sewer laterals to maintain the sewerage services for businesses along Montvale Avenue during installation of the MWRA water line.

In addition to the sewer, the Contractor also encountered a Verizon communications ductbank running adjacent to the MWRA's pipe that was not shown on the contract drawings. Eversource recently constructed a new high voltage transmission line running along Montvale Avenue that required Verizon to relocate its ductbank. The new location of the Verizon ductbank was not available nor included in the latest utility drawings used during design. MWRA met with Verizon to discuss options to address this conflict. Given the existing utility congestion in this area along with the tight construction schedule, MWRA concluded it was not feasible for Verizon to relocate the communications ductbank within the contract term. Therefore, the Contractor was instructed to provide temporary support for the new communications ductbank to prevent damage during the water pipe installation.



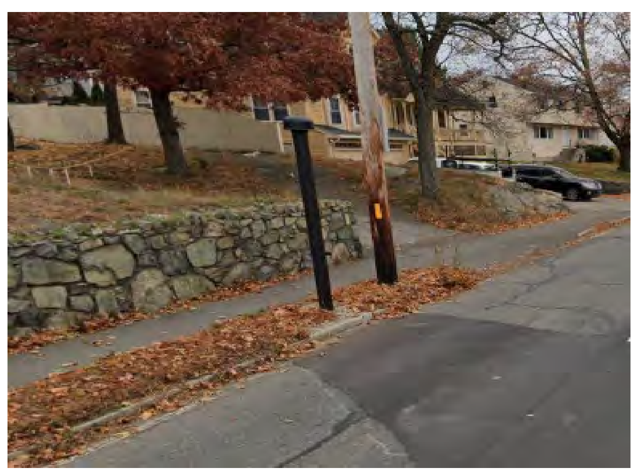
Support for Verizon ductbank

This item was identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of $87,523.32 for this additional work. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

<u>Vent Piping for Air Release Manhole Structures</u> $73,132.36

The Contractor is required to furnish and install six new air release valves and manhole structures located at the high points along the new pipeline. These air release valves provide a means for venting the pipe when filling and draining the line. In addition, these air release valves will automatically vent accumulated air in the pipe while in service. The new air release valves are installed in concrete manhole structures that provide MWRA staff access for maintenance and repairs.

MWRA provided standard details to the Design Engineer for all new air release valves and manholes to be included in the contract. These details indicate the general arrangement of air release components that are connected to a six-inch vent pipe that extends from the manhole structure to a suitable location on the side of the road or sidewalk that terminates at least eight feet above finished grade. This six-inch vent line eliminates the potential of a sanitary cross connection with the public water supply in the event the manhole structure becomes flooded. In addition, this vent piping safely dissipates any trapped air from inside the structure to the environment.



Typical MWRA Air Release Vent Piping

After commencement of the contract, it was noted that the contract documents also included non-standard air release valve and manhole details that did not include the critical six-inch vent piping. These non-compliant details were incorrectly referenced for the new air release valve, so the Contractor did not include this scope of work in its bid price. To correct this error, the Contractor must furnish and install the six-inch vent piping at the six new air release valve locations to eliminate the potential of a sanitary cross connection and prevent the manhole structures from over-pressurizing. To accomplish this, the Contractor must core holes in the new concrete air valve structures and install approximately 20 linear feet of six-inch ductile iron air vent piping from the structure to the sidewalk, or other area that does not impede traffic.

This item was identified by MWRA staff as a design error. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of $73,132.36 for this additional work. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

CONTRACT SUMMARY:

	Amount	Time	Dated
Original Contract:	$32,619,000.00	1,475 Days	08/05/21
Change Orders:			
Change Order 1*	$250,000.00	0 Days	02/09/23
Change Order 2*	$150,809.10	0 Days	07/25/23
Change Order 3*	$13,404.89	0 Days	07/25/23
Change Order 4*	$275,924.84	0 Days	09/05/23
Change Order 5	$1,966,523.28	0 Days	01/31/24
Change Order 6*	$840,501.48	0 Days	08/15/24
Change Order 7*	$15,749.12	0 Days	08/30/24
Change Order 8*	$94,812.34	0 Days	11/13/24
Change Order 9*	$15,402.64	0 Days	11/20/24
Change Order 10	$255,655.68	0 Days	Pending
Total Change Orders	$3,878,783.37	0 Days	
Adjusted Contract:	$36,497,783.37	1,475 Days	

*Approved under delegated authority

If Change Order 10 is approved, the cumulative value of all change orders will be $3,878,783.37 or 11.9% of the original contract. Work on this contract is 75% complete.

BUDGET/FISCAL IMPACTS:

The FY25 Capital Improvement Program includes $35,925,662 for Contract 7117. Including this change order for $255,655.68, the adjusted subphase total will be $36,497,783.37 or $572,121.37 greater than the amount in the CIP. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this project were established at 4.2% and 4.5%, respectively. The Contractor has been notified that they are still expected to meet these requirements.

MASSACHUSETTS WATER RESOURCES AUTHORITY
Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

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

BOARD OF DIRECTORS' MEETING

Date: Wednesday, December 11, 2024

Time: 1:00pm

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

Photo ID required for entry.

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

Webex meeting link (Registration required):

https://mwra.webex.com/weblink/register/ra15829a106bc709f7c7a5ab8d71af9c5

Meeting Number: 2339 708 3126 Password: 121124

REVISED AGENDA

I. **APPROVAL OF MINUTES**

II. **REPORT OF THE CHAIR**

III. **REPORT OF THE EXECUTIVE DIRECTOR**
- Quinapoxet Dam Removal Project Update (verbal)

IV. **EXECUTIVE SESSION**

i. Approval of October 23, 2024 Executive Session Minutes

A. **Litigation**
1. To Discuss Strategy with Respect to Litigation (ref. ES 2.a)

B. **Real Estate**
1. Metropolitan Tunnel Redundancy Program Land Acquisition - verbal (ref. ES 3.a)

V. **PRESENTATION**
1. FY21-FY25 Strategic Business Plan: Annual Update for FY24

VI. **PERSONNEL & COMPENSATION**

A. **APPROVALS**
1. Appointment of John Parkhurst, Director, Wastewater Operations and Maintenance (ref. P&C B.1)

VI. PERSONNEL & COMPENSATION (Continued)

A. APPROVALS (Continued)

2. Appointment of Rita C. Mercado, Special Assistant for Affirmative Action (ref. P&C B.2)

VII. ADMINISTRATION, FINANCE & AUDIT

A. APPROVALS

1. First Amendment to the Memorandum of Agreement (MOA) with the City of Quincy (ref. AF&A B.1)

2. First Amendment to the Memorandum of Agreement (MOA) with the Town of Winthrop (ref. AF&A B.2)

VIII. WASTEWATER POLICY & OVERSIGHT

A. CONTRACT AWARDS

1. Hayes Pump Station Rehabilitation Resident Engineering/Resident Inspection Services: Hazen and Sawyer, Contract 7668 (ref. WW A.1)

B. CONTRACT AMENDMENTS/CHANGE ORDERS

1. Ward Street and Columbus Park Headworks Upgrade: CDM Smith, Contract 7429, Amendment 1 (ref. WW B.1)

2. Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and Unstaffed Pump Stations: Woodard & Curran, Contract S606, Amendment 1 (ref. WW B.2)

3. Braintree-Weymouth Pump Station Improvements: Walsh Construction Co. II, LLC, Contract 7366, Change Order 10 (ref. WW B.3)

4. Braintree-Weymouth Pump Station Improvements Design and ESDC Services: Wright-Pierce, Contract 7435, Amendment 4 (ref. WW B.4)

5. Harbor and Outfall Monitoring, Benthic, Fish and Shellfish Monitoring: Normandeau Associates, Inc., Contract OP-401B, Amendment 3 (ref. WW B.5)

IX. WATER POLICY & OVERSIGHT

A. APPROVALS

1. Renewal of Water Supply Continuation Agreements (ref. W A.1)

B. CONTRACT AWARDS

1. Intermediate High Pipeline Improvements CP1, Section 75A and Section 47, Belmont, Boston, Newton and Watertown: P. Gioioso & Sons Inc., Contract 7484 (ref. W B.1)

2. Intermediate High Pipeline Improvements CP1, Section 75A and Section 47 Resident Engineering and Resident Inspection Services: CDM Smith Inc., Contract 8067 (ref. W B.2)

C. CONTRACT AMENDMENTS/CHANGE ORDERS

1. Northern Intermediate High Section 89 Replacement Pipeline: P. Gioioso & Sons, Inc., Contract 7117, Change Order 10 (ref. W C.1)

X. OTHER BUSINESS

XI. CORRESPONDENCE TO THE BOARD

XII. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

November 13, 2024

A meeting of the Massachusetts Water Resources Authority ("MWRA") Board of Directors was held on November 13, 2024 at the MWRA Administration Facility in Chelsea, and via remote participation.

Vice Chair Pappastergion presided at the MWRA Administration Facility. Board Members Flanagan, Foti, Peña, Taverna and Jack Walsh also participated at the MWRA Administration Facility. Chair Tepper and Board Members Swett, Vitale, Patrick Walsh and Wolowicz participated remotely.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Director of Tunnel Redundancy Kathleen Murtagh; MIS Director Paula Weadick; Program Manager for Planning Michael O'Keefe; Internal Audit Director Claude Cormier; Senior Financial Analyst Sean Cordy; Human Resources Director Wendy Chu; Budget Director Michael Cole; Deputy Deer Island Treatment Plant Director Chad Whiting; Planning and Sustainability Director Stephen Estes-Smargiassi; Senior Program Manager for Western Operations John Gregoire; Waterworks Director Valerie Moran; Deputy Waterworks Director Lisa Bina; Environmental and Regulatory Affairs Director Colleen Rizzi; Chief of Staff Katherine Ronan; Associate General Counsel Angela Atchue; and, Assistant Secretary Kristin MacDougall attended at the Chelsea Administration Facility.

Felicia Bakaj and Ken MacKenzie, DCR, also participated at the Chelsea Administration Facility.

MWRA Deputy Chief Operating Officer Rebecca Weidman and Acting Special Assistant for Affirmative Action Tomeka Cribb participated remotely.

Vandana Rao, EEA; Matt Romero, MWRA Advisory Board; and, John Scannell, DCR, also participated remotely.

Vice Chair Pappastergion called the meeting to order at 1:01pm.

ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance and announced that Board Members Swett, Vitale, Patrick Walsh and Wolowicz were participating remotely. The Vice Chair announced that the meeting was being held at the Chelsea Administration Facility and virtually, via a link posted on MWRA's website. He added that the meeting would be recorded, and that the agenda and meeting materials were available on

MWRA's website.

APPROVAL OF OCTOBER 23, 2024 MINUTES

A motion was duly made and seconded to approve the minutes of the Board of Directors' meeting of October 23, 2024.

Vice Chair Pappastergion asked if there was any discussion or questions from the Board. Hearing none, he requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Flanagan		
		Foti
		Pappastergion
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. I)

REPORT OF THE EXECUTIVE DIRECTOR

Fred Laskey, MWRA Executive Director, noted that Chair Tepper was expected to join the meeting in progress. He then reported that Secretary Tepper had recently declared a Level 3 Critical Drought for the Northeast region of Massachusetts, and a Level 2 Significant Drought for the Western Connecticut River region. He explained that while its water supply remains sufficient, MWRA is urging the public to practice water conservation measures. He advised that the cities of Cambridge and Lynn could potentially request emergency water supply assistance in the near future due to the ongoing drought.

Next, Mr. Laskey distributed the MWRA *Dorchester Tunnel Drilling Incident After Action Review* to the Board, as requested by members during the October 23, 2024 meeting.

Mr. Laskey then discussed the status of the ongoing Quabbin Reservoir Watershed Communities System Expansion Evaluation, and noted that staff planned to meet with representatives of Quabbin-area communities during the week of November 18, 2024.

Finally, Mr. Laskey reminded the Board that Committee meetings would take place at Deer Island on December 11, 2024. (ref. III)

ADMINISTRATION, FINANCE AND AUDIT

Information

Delegated Authority Report – October 2024

Committee Chair Flanagan invited Board members' questions on the report.

Board Member Pappastergion requested clarification on the delegated authority limit with respect to report Item P-1: *One-Year Purchase Order Contract for the Supply and Delivery of Ferric Chloride*. Douglas Rice, MWRA Procurement Director, explained that this item was within Board-approved delegated authority limits for chemicals purchases.

In response to a question from Board Member Jack Walsh, Paula Weadick, MWRA MIS Director, described the functions the software referenced in report Item P-3: *Sole Source Purchase Order for One Year of Maintenance and Support for the Pretreatment Information Management System* ("PIMS"). Mr. Jack Walsh expressed concern about the use of a sole source contract for such a purchase. Ms. Weadick explained that Item P-3 was a sole source contract because PIMS is customized and enhanced to suit MWRA's distinct operational needs. Mr. Jack Walsh asked if Item P-3 includes maintenance services. Ms. Weadick responded in the affirmative, and described some maintenance deliverables, including troubleshooting, debugging and patches.

There was discussion about potentially conducting market research to identify additional PIMS vendors in the future, during which Ms. Weadick advised that the number of vendors would likely be limited due to the level of customization required. Mr. Jack Walsh expressed concern about the cost of software customization and maintenance through sole source vendors. Michele Gillen, MWRA Director of Administration, acknowledged this concern and explained that software customization and maintenance are common industry practices.

Hearing no further discussion or questions or questions from the Board, Mr. Flanagan moved to the next Information item. (ref. IV A.1)

FY25 First Quarter Orange Notebook

Michael O'Keefe, MWRA Program Manager for Planning, presented highlights of the FY25 First Quarter ("FY25Q1") Orange Notebook. He reported that precipitation levels were below average and noted related reductions in Deer Island Wastewater Treatment Plant ("DITP") flows and power use. He also discussed the impacts of low precipitation on the water system, such as increased transfers from the Quabbin to the Wachusett Reservoir; a reduction in UV-254 treatment for the Wachusett; and a drop in Quabbin Reservoir levels. He advised that MWRA's water system continues to operate within normal range.

Mr. Laskey briefly noted the drought's impacts on the Quinapoxet Dam Removal Project.

Next, Mr. O'Keefe reported that elevated levels of *Chryosphaerella* algae in the Quabbin

Reservoir had resulted in water taste complaints from residents in Chicopee Valley Aqueduct communities during FY25Q1. He noted that the algae did not impact the water's safety. He then described the MWRA/DCR response to the elevated *Chryosphaerella* levels, including more frequent sampling and assessments; taste tests; and, outreach to communities and regulators. He noted that the algae levels decreased sharply in September 2024, and that no further taste complaints have been received.

Mr. O'Keefe next reported that siphon inspections and cleanings were substantially above targets during the FY25Q1, attributable to staff's change in work approach, which included prioritized inspections during the summer months, as well as more frequent inspections and cleanings.

Mr. O'Keefe then discussed total coliform positive results for the water distribution system. He reported a significant decrease in coliform positives during the first quarter of FY25 versus the first quarter of 2024. He explained that the decrease is likely the result of lower than average precipitation that reduced levels of organic matter and increased water demand, which lowered the system's water age.

Next, Mr. O'Keefe presented metrics for renewable energy production at DITP, which fell below targets during FY25Q1, attributable to the reduced availability of certain renewable energy assets due to maintenance; mechanical issues; and, equipment failure. He noted that staff are working to address these issues and described ongoing and planned next steps. Finally, Mr. O'Keefe reported that renewable energy provided approximately 23% of DITP's electricity during FY25Q1, despite reduced power generation.

Board Member Flanagan requested more information about the DITP wind turbine that was taken out of service in June 2023 due to generator failure. Mr. O'Keefe advised that staff expect to replace that turbine, and that feasibility research is underway.

Hearing no further discussion or questions from the Board, Mr. Flanagan moved to the next Information item. (ref. IV A.2)

<u>Internal Audit Department Activities Report – FY2024</u>
Claude Cormier, MWRA Internal Audit Director, discussed MWRA Internal Department ("IAD") activities for FY24. He described the IAD's purview, requirements and goals. He reported that the IAD identified over $2.9 million in savings and recoveries in FY24.

Next, Mr. Cormier reviewed IAD Contract Audit Program FY24 highlights, including a potential $2.3 million in cost savings on future change orders as a result of construction labor burden rate reviews; approximately $293,000 in realized cost savings for Harbor Electric Energy Company (HEEC) Cross-Harbor Cable payments; and a recovery of over $5,000 as a result of incurred cost audits.

Mr. Cormier then discussed IAD's Internal Audit and Management Advisory Services FY24 activities, including Accounts Payable controls and procedures; Payroll process controls and procedures; travel expense (mileage) reimbursement; and, MIS asset management. He noted that IAD worked with staff to close seven recommendations, all within 12 months of audit report issuance.

Next, Mr. Cormier explained that IAD staff meets annually with its external auditor, CliftonLarsonAllen ("CLA"), and provides the firm with copies of all MWRA audit reports. He noted that the Accounts Payable and Payroll process reports were of particular interest to CLA; however, CLA offered no feedback or inquiry. Finally, Mr. Cormier briefly introduced and welcomed a new IAD staff member.

Mr. Jack Walsh requested more information about the status of the six Accounts Payable recommendations. Mr. Cormier explained that four of the six recommendations were closed, and two are in process. Mr. Jack Walsh asked if the two open recommendations were accepted. Mr. Cormier responded in the affirmative, noting that MWRA management accepts all audit report recommendations.

Mr. Jack Walsh then requested the status of the Payroll process recommendations, and a time frame for their closure. Mr. Cormier explained that two of the recommendations were closed, with one in process. He noted that the IAD annual Activities Report summarizes progress as of the end of each fiscal year (June 30); that substantial progress has been made on the open recommendations since FY24's close; and that all recommendations bear a commitment to be closed within 12 months of issuance. There was brief, general discussion about a graph in the Staff Summary that did not include completion dates.

Board Member Taverna asked if MWRA audits the overhead rates of consulting engineering companies. Mr. Cormier explained that those rates are audited by third party CPAs. Mr. Taverna asked if the overhead rates are consistent or variable. Mr. Cormier explained that they are variable and can fluctuate year to year. Finally, Mr. Cormier briefly described IAD's overhead rates review process.

Hearing no further discussion or questions from the Board, Mr. Flanagan moved to the next Information item. (rev. IV A.3)

<u>FY25 Financial Update and Summary through October 2024</u>

Thomas Durkin, MWRA Finance Director, provided a summary of financial highlights for October 2024. He reported that the budget is doing well overall, and that prices have stabilized, citing the example of ferric chloride costs, which grew by 1.5%, versus a budgeted 10%

increase. Next, Mr. Durkin advised that underspending for wages and salaries continued due to staffing challenges, and that variable rate trends were volatile, but within manageable boundaries. He reported that the Capital Improvement Program ("CIP") is progressing well, at 22.9% underspent. Finally, Mr. Durkin reminded Board Members that the CIP is an aspirational document, subject to change due to such factors as weather and adjustments to project scopes.

Hearing no further discussion or questions from the Board, Mr. Flanagan moved to Approvals. (ref. IV A.4)

APPROVALS

Approval of Matthew R. Horan, Fore River Railroad Corporation Proxy

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 as presented in the November 13, 2024 Staff Summary and filed with the records of this meeting.

In addition, a motion was duly made and seconded that the MWRA Board of Directors directs the proxy to elect the following board members: David W. Coppes; Thomas J. Durkin; Michele S. Gillen; Frederick A. Laskey; Carolyn M. Francisco Murphy; Brian Peña; Katherine Ronan; John J. Walsh; and, Rebecca Weidman.

Sean Cordy, MWRA Senior Financial Analyst and Assistant Operations Manager for the Fore River Railroad Corporation ("FRRR"), provided background on the FRRR, which MWRA has owned since 1987. He explained that staff sought approval of the above motion, which is presented annually to allow the proxy to appoint the FRRR Board of Directors at its annual meeting. Finally, he explained that the FRRR Board oversees the management of the corporation.

(Board Member Wolowicz temporarily left the meeting during the summary.)

Hearing no discussion or questions from the Board, Vice Chair Pappastergion requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Flanagan		
Foti		
Pappastergion		
Peña		
Swett		
Taverna		

Yes	No	Abstain
Vitale		
J. Walsh		
P. Walsh		

(ref. IV B.1)

CONTRACT AMENDMENTS/CHANGE ORDERS

Dental Insurance: Delta Dental of Massachusetts, Inc., d/b/a Delta Dental of Massachusetts, Contract A631, Amendment 3

A motion was duly made and seconded to approve Amendment 3 to Contract A631 with Delta Dental of Massachusetts, Inc., d/b/a Delta Dental of Massachusetts, exercising the third option to renew, increasing the contract amount by $230,000 for a total not-to-exceed amount of $994,000, and extending the contract term by 12 months from January 1, 2025 to December 31, 2025 for a total contract term of 48 months.

Wendy Chu, MWRA Human Resources Director, discussed a proposed amendment to extend contract A631 with Delta Dental of Massachusetts, Inc. She explained that MWRA offers dental insurance to all non-union employees and a handful of union employees under this contract, which was originally approved by the Board in December 2021. She noted that the contract's CY25 plan rates would remain the same as those for CY24 under the proposed amendment; however, the CY25 contract extension amount will be less than CY24's because staff expect fewer subscribers next year.

(Ms. Wolowicz returned to the meeting during the summary.)

Board Member Peña asked if there would be any benefit changes for CY25. Ms. Chu responded in the negative. Mr. Jack Walsh requested the number of plan subscribers. Ms. Chu reported that there were 141 subscribers in CY24, with 137 projected for CY25. Mr. Jack Walsh asked how many employees are eligible for coverage under the contract. Ms. Chu explained that approximately 70 non-union managers; 10 confidential employees; all members of bargaining units 1 and 6; and, a small number of unit 9 members are eligible.

Mr. Jack Walsh expressed support for the proposed amendment and suggested that staff consider options to provide more benefits and promote increased participation in the plan.

Board Member Foti asked if MWRA management has received any complaints about this dental plan's offerings. Ms. Chu responded in the negative. Mr. Foti then requested the respective plan contributions for employees and MWRA. Ms. Chu explained that contributions are 10% for employees, and 90% for MWRA. There was brief, general discussion about this amendment and the value of the plan.

Citing rising costs, Board Member Vitale requested the amount of dental coverage employees receive under the plan, and suggested that staff consider increasing coverage for employees. Michael Cole, MWRA Budget Director, relayed that the plan participants receive approximately $1,550 in coverage annually. Mr. Vitale asked if the coverage amount had increased since the original contract. Mr. Cole responded in the negative. Mr. Vitale reiterated his recommendation to look into increasing the coverage amount. There was brief, general discussion about the contract's terms and costs.

Mr. Flanagan asked if MWRA's dental plans are negotiated. Ms. Chu explained that these plans are contracted through a regular procurement process. She noted that a significant number of bargaining unit staff receive dental benefits through their unions, whose plans are not negotiated by MWRA. In response to a follow-up question from Mr. Flanagan, Ms. Chu explained that MWRA negotiates its contributions to the unions' Health and Welfare Funds.

There was brief discussion about employees' out-of-pocket costs for major dental restorations, and the growing cost of dental care. Mr. Jack Walsh restated his earlier suggestion to consider increasing employee dental benefits. Mr. Laskey acknowledged this recommendation.

Hearing no further discussion or questions from the Board, Vice Chair Pappastergion requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Flanagan		
Foti		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. IV C.1)

WASTEWATER POLICY AND OVERSIGHT

Contract Awards

Three-year Contract for the Supply, Delivery, and Disposal of Regenerated Activated Carbon, Carbon Activated Corporation, Bid WRA-5496, Event 5994

A motion was duly made and seconded to approve the award of purchase order contract WRA-5496, a three-year contract for the supply, delivery, and recycling or disposal of regenerated activated carbon to the lowest responsive bidder, Carbon Activated Corporation, and to authorize the Executive Director, on behalf of the Authority, to execute said purchase

order contract in an amount not to exceed $1,379,025 for a period of three years, from December 12, 2024 through December 11, 2027.

Chad Whiting, MWRA Deputy Deer Island Treatment Plant Director, noted that this proposed three-year contract directly relates to MWRA's odor control systems. He explained that the DITP Title V air permit requires MWRA to treat all air that is contaminated during the wastewater treatment process. He described the steps for DITP odor control and the Title V air permit limits for hydrogen sulfide and non-methane hydrocarbons.

Next, Mr. Whiting discussed DITP's carbon scrubber units, which collectively contain a total of 700,000 pounds activated carbon for odor control. He explained that 285,000 – 430,000 pounds of activated carbon are replaced within the scrubber units annually, on average.

Mr. Whiting then summarized the proposed purchase order contract with Carbon Activated Corporation and the procurement process, noting that the bid price represents a 13% increase over the current contract. Finally, Mr. Whiting advised that Procurement staff had solicited bids from four potential bidders; however, MWRA received only one bid from the incumbent contractor, largely attributable to the volumes of product required.

Mr. Jack Walsh requested further information about the grade of carbon to be purchased under the proposed contract. Mr. Whiting explained that this contract is for regenerated carbon purchased from China and regenerated in the U.S., and described the regeneration process. There was general discussion with questions and answers about various grades of carbon; how staff determine when carbon scrubber units need to be regenerated; and, the carbon replacement process. There was also brief discussion about DITP emissions testing.

Mr. Jack Walsh asked if some odors that he had noticed while boating on Boston Harbor could be related to the carbon levels in DITP's scrubbers. Mr. Whiting described some potential causes of those odors, such as DITP maintenance activities and wind direction. Mr. Laskey advised that such odors could have been caused by algae.

There was brief, general discussion about the benefits of using regenerated carbon, which is more environmentally-friendly, and just as effective as virgin carbon. Mr. Taverna asked how the regenerated carbon is transported to DITP. Mr. Whiting explained that it is transported by flatbed truck. Mr. Taverna asked if the bid price for the activated carbon is fixed over the life of this contract. Mr. Whiting responded in the affirmative, noting that MWRA has not yet exceeded the activated carbon contracts' estimated quantities.

Hearing no further discussion or questions from the Board, Vice Chair Pappastergion requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Flanagan		
Foti		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. V A.1)

WATER POLICY AND OVERSIGHT

Information

Update on Lead and Copper Rule Changes – Fall 2024 and Rules Changes

Stephen Estes-Smargiassi, MWRA Director of Planning and Sustainability, presented an update on the latest round of Lead and Copper sampling, and an overview of some recent regulatory changes with respect to the federal Lead and Copper Rule ("LCR"). He presented a graph depicting lead 90% lead levels in MWRA's fully-supplied communities from June 1992 through September 2024, and reported that results for September 2024 represented an improvement on results for September 2023. He noted that the improvement was likely due to drier weather, which allowed staff to transfer water from the Quabbin Reservoir to the Wachusett, which in turn resulted in lower-than-typical levels of UV254 adsorbance, organic material and reactivity.

Next, Mr. Estes-Smargiassi provided background on the MWRA lead program's sampling sites, processes and goals, and summarized results for the September 2024 sampling round. He reported that 16 of 595 samples were over the Lead Action Level ("LAL") and that 15 of these samples were taken at homes with lead service lines. He noted that homes with lead service lines are more likely to have elevated lead levels, and that the test results emphasize MWRA's efforts to replace all lead service lines within its service area.

Mr. Estes-Smargiassi then explained that the MWRA water system is regulated as a whole, and that its member communities are also regulated as individual entities. He reported that only one MWRA community was over the LAL in the most recent sampling round. He described that municipality's required response actions, including the issuance of a 24-hour public notice; a public education brochure mailing to all homes in its service area by the end of December 2024; and, continued lead service line replacement.

Mr. Estes-Smargiassi next discussed three regulatory changes that took effect in October and November 2024, including the required submission of a complete service line inventory by October 16, 2024. He reported that all MWRA water comminutes had met this deadline. He noted that the regulatory changes also require all communities to mail a letter by November 15, 2024 that informs residents and owners of the risks associated with lead to every home with a lead service line; galvanized service line requiring replacement; or, a service line of material that is unknown. He reported that MWRA water service communities had completed this task, and have received significant feedback from residents. He then discussed a third new regulatory change, which requires all community systems in the U.S. to issue 24-hour public notices if they sample over the LAL. He noted that MWRA has been piloting this requirement over the past several years.

Next, Mr. Estes-Smargiassi presented some key aspects of regulatory changes due to take effect after October 2027, under the EPA's Lead and Copper Rule Improvements (LCRI), including the required replacement of all lead service lines in the U.S. within 10 years, regardless of lead sample results; and a LAL reduction from 15 ppb to 10 ppb. He noted that staff expect the reduced LAL to present challenges to some community systems that have tested over 10 ppb in the past several sampling rounds. He advised that the MWRA system could also be at risk of exceedance.

Mr. Estes-Smargiassi then described upcoming new requirements for lead sampling and calculation procedures, and potential compliance challenges. He explained that the LCRI includes a provision that allows water systems that exceed the LAL to defer making changes to corrosion control treatment if they commit to replacing all lead service lines within five years of the exceedance. He noted that staff are strongly encouraging MWRA water service communities to replace all LSLs by the end of 2032 in order to avoid triggering a need to adjust MWRA's corrosion control treatment.

Next, Mr. Estes-Smargiassi presented an update on MWRA's Lead Service Line Replacement Program ("LRP"). He noted that MWRA is offering a 25% grant for communities to fund full replacement of LSLs (including the private sides) at no cost to the consumer. He reported that Revere and Chelsea have already applied for the grant, with disbursements expected in February 2025. He described other ongoing LRP initiatives aimed at accelerating local LSL replacements, including EPA grant assistance, and the identification of State Revolving Fund ("SRF") financial assistance options. Finally, Mr. Estes-Smargiassi shared a photograph tweeted by BWSC to encourage LSL replacement within the City of Boston.

Mr. Peña asked if MWRA could offer incentives to its water service communities in order to encourage the completion of LSL replacements by deadline. Mr. Estes-Smargiassi advised that staff would take this suggestion under consideration.

Mr. Taverna asked if all communities are required to post their LSL inventories online. Mr. Estes-Smargiassi explained that all U.S. water systems that serve over 50,000 residents are required to post their inventories online, while communities that serve fewer than 50,000 customers are required to make their inventories publicly available. He advised that MWRA encourages all of its water communities to post LSL inventory information online, and cited a number of municipalities that have done so. There was general discussion about posting LSL inventories.

Mr. Vitale requested more information about the water service communities represented in the MWRA sampling data. Mr. Estes-Smargiassi explained that the samples represent 29 fully-supplied cities and towns in the Metro Boston area that are served by the Carroll Water Treatment Plant, as well as Deer Island.

Hearing no further discussion or questions from the Board, Committee Chair Taverna moved to the next Information item. (ref. VI A.1)

Watershed Land Acquisition Program

John Gregoire, MWRA Senior Program Manager for Western Operations, and Felicia Bakaj, DCR Land Acquisition Coordinator, presented an overview of the MWRA/DCR Watershed Land Acquisition Program (“WLA Program”). Mr. Gregoire began the presentation with a history of the program and a summary of its goals and tools, including purchases in Fee (outright property ownership transfer) and Watershed Preservation Restriction (“WPR”), where landowners retain ownership of the land with use prohibitions. He summarized the WLA Program’s funding; FY25 Capital Improvement Program (“CIP”) budget; spending through October 2024; and MWRA’s Payments in Lieu of Taxes (“PILOT”) on all Fee acquisitions.

Next, Ms. Bakaj discussed the current status of the Watershed Land Protection program. She noted that DCR currently manages or protects approximately 63% of the land within three watersheds: Quabbin (63%); Ware River (41%); and, 29% Wachusett Reservoir (29%), totaling over 112,000 acres.

Next, Ms. Bakaj reviewed key steps in the land acquisition process, including project cultivation; information gathering; landowner meetings; land acquisition panel (“LAP) review; land acquisition modeling; price negotiation; MWRA Board approval; due diligence; final approvals; and, project tracking and monitoring.

Ms. Bakaj next presented an overview of the WPR Stewardship and Monitoring Program (“WPR Program”), noting that DCR holds 158 WPRs over 9,300 acres across the Quabbin, Ware River and Wachusett watersheds. She summarized the WPR Program’s main objectives, including documentation of baseline conditions; routine monitoring; violation resolution; and, maintenance of landowner relationships. She noted that frequent communication with WPR landowners is key to the WLA Program because it supports restriction compliance and environmental stewardship.

Ms. Bakaj then presented an example of a Story Map, which is a visual tool that is typically presented to the LAP for every proposed acquisition, and described what such includes (e.g., locus map; parcel overview with cost estimate; water resources assessment, Watershed Protection Act (“WsPA”) jurisdiction status, tributaries, and zoning; natural resources; and, parcel connectivity).

Next, Mr. Gregoire discussed WLA Program modelling, noting that modeling is a key driver in the land acquisition process. He presented an example of a WLA model that was developed in the mid-1990s. He summarized the model’s weighted criteria, including slope; zoning; sewer systems; aquifers and WsPA regulation status. He also described how sub basins are prioritized by proximity to water resources. Finally, Mr. Gregoire presented a more recent model of the Worcester Basin of the Wachusett Watershed, and discussed how the WLA models have been updated over time.

(Chair Tepper joined the meeting during the presentation.)

Mr. Taverna requested more information about how staff perform site investigations. Mr. Gregoire described some tools for environmental site assessments such as follow-up surveys; soil sampling; test pits; records evaluations; sampling; and, discussions with local fire departments to determine the use of firefighting foam. Ms. Bakaj added that all properties to be acquired in Fee undergo thorough site assessments, and briefly described the process, including walkthroughs and follow-up testing. She stressed that only properties with clean environmental assessments or approved remediation are eligible for acquisition.

There was brief, general discussion about third-party contractors that assist with the site assessments, and Mr. Gregoire highlighted the value of DCR staff’s familiarity with the watershed lands.

Mr. Taverna asked if an existing dam would impact the value of a potential land acquisition. Mr. Gregoire explained that the WLA policy excludes Fee purchases of properties with dams, dykes, and impoundments due to potential liability.

Mr. Flanagan requested more information about landowners’ allowed uses under WPRs. Ms. Bakaj explained that WPRs allow forest management, noting that conversion from a forest to a field is prohibited. She further explained that WPRs also allow recreation on the properties.

Mr. Laskey commended MWRA and DCR staff for working cooperatively and professionally on the WLA Program, and noted that the protected watershed land is a legacy that will be passed on to future generations.

Mr. Peña asked to what extent staff audit compliance with WPR provisions. Mr. Gregoire explained that DCR staff perform regular inspections. Ms. Bakaj confirmed that WPR properties are inspected every two years, or more frequently to address any compliance concerns, and ground inspections are supplemented by aerial monitoring.

Board members complimented staff on their presentation and work on the WLA Program.

Vice Chair Pappastergion welcomed Chair Tepper to the meeting, which she joined during staff's presentation. Secretary Tepper requested that Mr. Pappastergion continue to serve as Chair for the meeting in progress.

Hearing no further discussion or questions ns from the Board, Mr. Taverna moved to the next Information item. (ref. VI A.2)

Community Water Interconnections

Staff presented an update on MWRA community water interconnections. Valerie Moran, MWRA Waterworks Director, explained that water interconnections between neighboring communities provide mutual benefits and operational flexibility. She noted that interconnections are encouraged between neighboring public water supplies to help maintain water capacity to meet provisions of the federal Safe Drinking Water Act.

Ms. Moran described some common events and activities in which water interconnections are used, including droughts; water main breaks; water quality concerns; treatment plant isolations; construction; and, routine maintenance. She presented a map of the MWRA's Metro Boston and MetroWest water communities, and highlighted three community categories: full-served; partially-supplied; and emergency use.

Ms. Moran then reported that MWRA's member communities have over 300 interconnections with their neighbors, including 26 known connections with non-member communities. She noted that MWRA connects to member water communities for emergencies and maintenance activities through metered connections, and maintains approximately 100 non-metered interconnections, including five with non-MWRA communities. She also presented a map of MWRA's Chicopee Valley Aqueduct water member communities, and their interconnected neighbors.

Next, in response to questions raised at the August, 2024 Board of Directors' meeting, Ms. Moran reported that MWRA has supplied emergency water to five non-member communities over the past ten years, either by direct connection or via interconnections with member communities, and described the circumstances for each. She also presented examples of the uses of MWRA interconnections for water quality concerns, and during droughts and maintenance activities.

Lisa Bina, MWRA Deputy Waterworks Director, then discussed ways that MWRA benefits from community emergency interconnections. She explained that interconnections provide flexibility and allow MWRA to perform maintenance in areas where the water system lacks redundancy. She highlighted examples of emergency interconnections to supply pumps at MWRA's Fore River Pellet Plant and Braintree-Weymouth Pump Station during a water main break; and to maintain water supplies for portions of Winchester while MWRA performed valve replacement work in Arlington. She also discussed the importance of understanding and monitoring the hydraulics of all water systems involved before opening an interconnection. Finally, Ms. Bina discussed how MWRA plans to use interconnections between two MWRA communities during the repair of a WASM 3 water main leak in Waltham.

Mr. Jack Walsh asked if connections to water non-member communities are hard piped, and if they have check valves. Ms. Moran relayed that they are hard piped, and that most do not have check valves. She explained that staff are installing two valves at these connections, of which one will be controlled by MWRA, and the second by the community. There was general discussion about how the valves are controlled, and the high value of community interconnections.

There was also discussion about how communities with MWRA emergency water interconnections are billed for water use, with no standby fee, due to a unanimous vote of the MWRA Advisory Board membership that took place approximately ten years ago. During this discussion, Mr. Durkin explained that communities pay a 10% surcharge for emergency water use, and that an escalating, additional asset value charge is added at each additional instance. Mr. Jack Walsh suggested that staff consider increasing the surcharge amount.

Mr. Flanagan asked if MWRA could refuse a community's emergency request for water if such a request would negatively impact MWRA's customers. David Coppes, MWRA Chief Operating Officer, responded in the affirmative. He explained that community interconnections are a universal practice among U.S. water systems that is recommended by regulators, and mutually beneficial to all parties. He noted that MWRA strongly promotes community interconnections. There was general discussion about the benefits of water system interconnections, and the reasons for the 10% MWRA surcharge. Finally, Matt Romero, MWRA Advisory Board Executive Director, confirmed that the Advisory Board membership had voted down a proposed standby fee.

Hearing no further discussion or questions from the Board, Mr. Taverna moved to Approvals. (ref. VI A.3)

Approvals

Revised MWRA Operating Policy OP.05 Emergency Water Supply Withdrawals

A motion was duly made and seconded to approve the following revisions to MWRA Operating Policy OP.05 *Emergency Water Supply Withdrawals*, substantially in the form presented in the November 13, 2024 Staff Summary and filed with the records of this meeting: (i) an increase to the "short-term" withdrawal duration from 30 days to 60 days; (ii) an authorization of the Deputy Chief Operating Officer to approve the short-term emergency use of MWRA water; and (iii) other conforming nonsubstantive policy refinements recommended by staff.

Colleen Rizzi, MWRA Environmental and Regulatory Affairs Director, discussed proposed revisions to MWRA Operating Policy OP.05 *Emergency Water Supply Withdrawals,* which was last updated in 2007 and governs the process for non-member water system communities to withdraw water from the MWRA system on an emergency basis. She noted that staff proposed two key changes to the policy, and some non-substantive refinements, all of which were presented to and approved by the MWRA Advisory Board and its Executive Committee.

Ms. Rizzi described the two key changes: increasing the short-term withdrawal duration from 30 days to 60 days; and, authorizing MWRA's Deputy Chief Operating Officer to approve short-term withdrawals. She explained that emergency withdrawals over 30 calendar days require Board approval, and that staff typically request such approvals for durations of up to six months. She added that withdrawal periods that exceed six months require approval from the both the Board of Directors and the Advisory Board.

Ms. Rizzi then noted that staff's request to extend the short-term withdrawal duration to 60 days was prompted by a July 2024 emergency withdrawal request from the Town of Wayland. She explained that a special August Board meeting was required to approve a time extension because the Town was unable to complete work to restore its water system within the 30-day limit. She advised that in staff's view, extending the short-term withdrawal duration to 60 days would make the approval process more efficient, and help to avoid convening special meetings. Finally, Ms. Rizzi relayed that staff also sought Board approval to authorize the Deputy Chief Operating Officer to approve short-term withdrawals.

(Ms. Wolowicz left the meeting during the summary.)

With respect to Attachment A to the Staff Summary (*MWRA Charges for Emergency Water Withdrawals - OP.05*), there was general discussion with questions and answers about the definitions of "short-term" and "up to six-month" withdrawal periods. There was also discussion about the charges and administrative processes for Emergency Supply Agreement Periods One through Seven, and staff's request to increase the duration of short-term withdrawals from 30 days to 60 days.

Mr. Foti requested clarification on the proposed OP-05 requirement that Emergency Water Supply Withdrawal applicants provide MWRA with long-term plans for changes to their water treatment. Ms. Rizzi explained that requirement would apply in such cases as positive PFAS test results. She noted that this requirement is intended to encourage communities to implement lasting water quality measures versus requesting repeated emergency withdrawals.

Hearing no further discussion or questions from the Board, Vice Chair Pappastergion requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VI B.1)

PERSONNEL AND COMPENSATION

Approvals

November 2024 PCR Amendments

A motion was duly made and seconded to approve amendments to the Position Control Register (PCR) as presented and filed with the records of this meeting.

Ms. Chu invited Board Members' questions on the PCR Amendments for November.

Hearing no discussion or questions from the Board, Vice Chair Pappastergion requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Flanagan		

Yes	No	Abstain
Foti		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VII A.2)

FY25 and FY26 Non-Union Compensation and Amendment of Employment Contract of the Director of the Tunnel Redundancy Program

A motion was duly made and seconded that the Board of Directors take the following actions relative to the MWRA's FY25 and FY26 non-union compensation review: authorize the Executive Director to implement a 3% across-the-board compensation adjustment for eligible non-union managers effective the first full pay period in January 2025 and a 2% across-the-board compensation adjustment for eligible non-union managers effective the first full pay period in FY26; and, approve a revision to the non-union salary ranges for FY25 and FY26 as presented in Attachment A of the November 13, 2024 Staff Summary and filed with the records of the meeting.

Further, a motion was duly made and seconded that the Board of Directors authorize the Executive Director to implement a 3% adjustment effective the first full pay period in January 2025 and a 2% adjustment effective the first full pay period in FY26 of the salary of Kathleen M. Murtagh, Director of the Tunnel Redundancy Program, consistent with other non-union managers.

Committee Vice Chair Jack Walsh asked if there was any discussion or questions from the Board. Hearing none, he requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Swett		

Yes	No	Abstain
Taverna		
Vitale		
J. Walsh		
P. Walsh		

Mr. Laskey thanked Board Members for their support of the compensation adjustments, and praised MWRA's non-union managers and Ms. Murtagh for their professionalism, hard work and dedication.

Mr. Pappastergion echoed Mr. Laskey's remarks, thanked managers and noted an upcoming compensation study.

Mr. Foti requested more information about performance assessments for non-union managers. Mr. Laskey explained that performance assessments are scheduled to take place every two years. Mr. Foti asked if that same schedule applied to union employees. Michele Gillen, Director of Administration, advised that the same schedule currently applies to members of Bargaining Units 1, 6 and 9. (ref. VII A.2)

CORESPONDENCE TO THE BOARD

There was no correspondence to the Board. (ref. VIII)

ADJOURNMENT

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

Hearing no further discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Flanagan		
Foti		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

The meeting adjourned at 3:04pm.

Approved: December 11, 2024

Attest: ________________________________

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- Draft Minutes of the October 23, 2024 MWRA Board of Directors' Meeting (ref. I)
- Handout: Dorchester Tunnel Drilling Incident After Action Review (ref. III)
- November 13, 2024 Staff Summary – Delegated Authority Report (ref. IV A.1)
- November 13, 2024 Staff Summary and Presentation– FY25 First Quarter Orange Notebook (ref. IV A.2)
- November 13, 2024 Staff Summary – Internal Audit Department Activities Report – FY2024 (ref. IV A.3)
- November 13, 2024 Staff Summary – FY25 Financial Update and Summary through October 2024 (ref. IV A.3)
- November 13, 2024 Staff Summary – Appointment of Matthew R. Horan, Fore River Railroad Corporation Proxy (ref. IV B.1)
- November 13, 2024 Staff Summary – Dental Insurance: Delta Dental of Massachusetts, Inc., d/b/a Delta Dental of Massachusetts, Contract A631, Amendment 3 (ref. IV C.1)
- November 13, 2024 Staff Summary – Three-year Contract for the Supply, Delivery, and Disposal of Regenerated Activated Carbon, Carbon Activated Corporation, Bid WRA-5496, Event 5994 (ref. V A.1)
- November 13, 2024 Staff Summary and Presentation – Update on Lead and Copper Rule Compliance – Fall 2024 and Rules Changes (ref. VI A.1)
- November 13, 2024 Staff Summary and Presentation – Watershed Land Acquisition Program (ref. VI A.2)
- November 13, 2024 Staff Summary and Presentation – Community Water Interconnections (rev. VI A.3)
- November 13, 2024 Staff Summary - Revised MWRA Operating Policy OP.05 Emergency Water Supply Withdrawals (ref. VI B.1)
- November 13, 2024 Staff Summary – November 2024 PCR Amendments (ref. VII A.1)
- November 13, 2024 Staff Summary – FY25 and FY26 Non-Union Compensation and Amendment of Employment Contract of the Director of the Tunnel Redundancy Program (ref. VII A.2)

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 11, 2024
SUBJECT: FY21-FY25 Strategic Business Plan: Annual Update for FY24

COMMITTEE: Administration, Finance and Audit

_X_ INFORMATION
____VOTE

Rebecca Weidman, Deputy Chief Operating Officer
Denise Breiteneicher, Program Manager
Preparer/Title

David W. Coppes, P.E
Chief Operating Officer

The MWRA's five-year Business Plan, covering FY21 through FY25, was presented to the Board in December 2020. The plan described MWRA's mission, identified values, and outlined six key strategic priorities and 20 goals, as well as specific initiatives associated with these goals, which provide a framework for MWRA's business initiatives over the five-year period. This staff summary presents a review of the fourth year of the current five-year business plan, including accomplishments and progress made on initiatives.

RECOMMENDATION:

For information only.

DISCUSSION:

The FY21-FY25 MWRA Business Plan is a strategic blueprint that articulates the mission statement, values and goals of the Authority, as well as specific initiatives associated with these goals to be achieved or evaluated over the five-year period. The document was developed as a tool to guide staff in prioritizing projects and programs within the broader framework of MWRA's goals and mandates, and to evaluate system-wide performance.

The following six strategic themes integral to MWRA's mission form the basis of the Plan.

I. Drinking Water Quality and System Performance
II. Wastewater Management and System Performance
III. Infrastructure Management and Resilience
IV. Finance and Management
V. Diversity, Equity, Inclusion, and Workforce Development
VI. Environmental Sustainability

MWRA identified a series of goals to help it achieve its stated priorities, as well as core and special initiatives that described the specific projects and direction MWRA plans to undertake over this five-year period. Core Initiatives address the activities that MWRA must do to meet its performance goals, regulatory requirements and financial commitments. Special Initiatives address activities, projects and emerging issues that staff will be assessing or undertaking in order to improve MWRA's performance of its core responsibilities. Existing reporting mechanisms, such as the Orange and Yellow Notebooks, continue to be used to track monthly and quarterly performance.

The annual update allows MWRA to assess progress toward achievement of its goals, as well as to assess progress made on individual projects within Core Initiatives and on Special Initiatives. It also provides an opportunity for managers to review projects at a high level and decide whether the priority status of the project has changed since the development of the current Business Plan, and whether the level of resources devoted to the project should remain the same, be increased or reduced.

The attached document presents all the goals by priority areas with the associated initiatives. Symbols included show progress made in FY24, and an associated list of highlights for each initiative. Completed and newly added items are identified. Arrows identify many initiatives related to ongoing requirements.

Some of the highlights for FY24 listed by strategic theme are:

<u>Drinking Water Quality and System Performance</u>

- In September 2023, MWRA won the People's Choice award for best drinking water during the New England Water Works annual taste test.
- Staff continue to identify strategies to minimize contaminants of concern in MWRA's water including participating in a new research project with UMass Amherst focusing on strategies to minimize the adverse impacts of organic matter on MWRA's drinking water supply.
- Staff continue to assist member communities to improve local water distribution systems including:
    - Completed 4,055 lead and copper tests from 154 schools and childcare facilities in 35 communities.
    - Assisted three communities with response to single E. coli detections within their communities and worked with each community to plan for potential boil water orders and provided assistance to nine communities for leak detection.
    - Conducted MWRA community Emergency Response Plan training sessions, discussing various water quality subjects including coliform, E. coli, PFAS, cyber security, and changes to lead rules, as well as conducted significant outreach to communities on the Lead Service Line Replacement program.

<u>Wastewater Management and System Performance</u>

- MWRA received the Platinum award for the Deer Island Treatment Plant from the National Association of Clean Water Agencies for 17 consecutive years without a NPDES violation.
- MWRA continues to support wastewater based epidemiology research, providing in-kind samples to research groups from the Massachusetts Institute of Technology, Northeastern, Tufts and UMass Amherst as well as the national program administered by the Massachusetts Department of Health and Human Services. Results are reported publicly on the Wastewater SCAN Dashboard.

- Braintree-Weymouth Pump Station Improvements, Contract 7366, Notice to Proceed was issued in September 2022 with project completion expected in early 2025. This project will improve the operation of the pump station and includes many energy saving components.
- Nut Island Headworks Odor Control & HVAC Systems Improvements, Contract 7548, achieved Substantial Completion in September 2023. Final punch list and site restoration will be completed in fall 2024. MWRA's contractor, Walsh Construction, was awarded Engineering News-Record's 2024 Best Water/Environmental project for its work on this project.

Infrastructure Management, Resilience, and Redundancy

- PLC upgrades continue, with one of the largest upgrades occurring at the Carroll Water Treatment Plant, which began in FY2022 with completion anticipated in September 2025.
- Preliminary design work for the Metropolitan Tunnel was completed in January 2024 and procurement for a final design consultant began in 2024.

Financial and Management

- Staff again took advantage of the low interest rate environment and in June sold $445.6 million of bonds comprised of $279.3 million in refunding bonds and $166.3 million in tax-exempt new money bonds. The refunding resulted in $38.4 million in present value debt service savings applied between FY2026 and FY2043.
- MWRA piloted an energy and utility bill management software program in FY24, in an effort to begin to transition away from paper-based energy bill management processes and greatly improve operational efficiency, financial performance, and environmental sustainability.
- A new MWRA.com website was launched and all content was migrated from the old website to new website accompanied by a new search functionality.

Diversity, Equity, Inclusion and Workforce Development

- A Deer Island Treatment Plant Instrumentation Shadow Program was developed in FY24. Staff participating in the program are required to complete 24 modules of an Electronic Technician course and work with experienced Instrument staff for a period of one year; thereby allowing them to meet all requirements to apply for an Instrument Specialist position.
- Staff continue to engage with Vocational Technical Schools, through the Employer Partnership Committee, whose goal is to provide high school, college, and university students with information about career opportunities in the water and wastewater sectors.

- An external speaker series and internal lunch and learn series was established to highlight important initiatives and programs (e.g. environmental justice, mental health awareness), and to provide staff an opportunity to share their work with staff outside their group.
- In February 2024, MWRA unveiled its first Environmental Justice Strategy developed as directed under the Secretariat.

Environmental Sustainability

- MWRA continues to reduce its greenhouse gas emissions through continued implementation of energy efficiency projects, electrification, use of renewable energy generation, and low or no emission technologies, such as electric vehicles and battery powered landscaping equipment. MWRA has already met the State's 2025 greenhouse gas emission reduction goal. MWRA posts its greenhouse gas inventory report on its webpage.
- Conducted 15 new energy audits in FY24, focusing on replacement of fossil fuel heating systems with heat pumps, building envelope and remaining lighting opportunities.
- MWRA's Decarbonization Standard Procedures were updated in FY24 to ensure that all operations and facility rehabilitation projects incorporate both the MWRA's and the Commonwealth's decarbonization priorities and requirements. Training was provided to engineering and maintenance staff on the changes.

BUDGET/FISCAL IMPACT:

Any budgetary impacts of the initiatives in the Business Plan are accounted for in the Current Expense Budget and Capital Improvement Program.

ATTACHMENTS:

Attachment 1 MWRA Five Year Strategic Business Plan, FY21-FY25 (link below)
https://www.mwra.com/publications/businessplan/2021-2025finalmwrabp.pdf

Attachment 2: Review of MWRA Five Year Strategic Business Plan, FY21-FY25, with FY24 updates

KEY:

Not started

Initiated

In progress

Achieved

On-going Core Activities →

I. Drinking Water Quality and System Performance

Goal #1: Maintain drinking water quality to protect public health, and continue to ensure that MWRA water meets all applicable regulations.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Optimize operation of water treatment facilities to produce high quality, safe drinking water while maximizing water aesthetics (e.g., taste, clarity, and odor).	→	• MWRA met all regulatory requirements for safe drinking water. • In September 2023, MWRA won the People's Choice award for best drinking water during the New England Water Works annual taste test. • In May 2024, Massachusetts Department of Environmental Protection (MassDEP) awarded the MWRA with a 2023 Public Water System Award in the Medium & Large Community System category, Compliance Award Recipients. • In April 2024, MWRA conducted a transmission system drill simulating a main break and a high water system flow event at the Carroll Water Treatment Plant (CWTP). Response protocols were executed according to response plans. • In FY24, MWRA drafted a fluoride report to summarize the findings from fluoride tracer study that was concluded in June 2023. The report will be an inter-departmental effort to understand flow patterns and travel time for transport of water from the treatment plant to MWRA's transmission system.

B. Monitor drinking water quality in collaboration with member communities and the Massachusetts Department of Conservation and Recreation (DCR) in order to verify high quality water and provide guidance for operating decisions.	→	• MWRA continues to coordinate monitoring efforts with DCR for both routine algae and algal toxin monitoring as well as reservoir emergency response planning. • MWRA continued weekly inspections to monitor for cyanobacteria blooms in standby and active reservoirs during May-September using a GIS collector-application. • MWRA continued to coordinate field and laboratory resources to aid local water departments and in-house staff in the resolution of water quality complaints, low chlorine residuals or coliform detections, and water storage tank cleaning projects or activations. In FY24, staff assisted communities with sampling on 13 occasions and with water quality complaint sampling on eight occasions, and offline pipeline or tank clearance sampling on 25 occasions. • MWRA provided water quality and system updates to MassDEP and U.S. Environmental Protection Agency (EPA) staff during a coordination meeting between MWRA and the regulatory agencies in March 2024. • Data regarding key water quality parameters and reservoir conditions (while the buoys are deployed) are distributed electronically every morning to key decision makers at MWRA. Monthly reports continue to be sent to each community with their water systems' performance compared to historical data. MWRA's Data Management Group sends community reports via email to 101 recipients in 45 towns every month. • Staff continued to assist communities with sampling plan updates, level assessments, water quality complaint reporting, MWRA's Emergency Response Plan (ERP) training sessions, and data requests. Twelve Level Assessments were received from MWRA served communities and reviewed by staff.

		Forty-seven data requests were fulfilled including two external requests in FY24. • As part of the new Lead and Copper Rule, a follow-up sample at a nearby Total Chlorine Residual (TCR) site must be collected within three days for any community residence with lead levels above the Action Level. MWRA's Water Quality Department performed this task in the fall of 2023 and spring of 2024 in 14 communities within the required MassDEP timeline.
C. Ensure reliability of data presented in required regulatory compliance reports.	→	• In order to ensure reliability of water quality data we have implemented a proactive statistics based outlier detection algorithm report to identify putative outliers every week. • To ensure reliability and identify issues, weekly and monthly reports continue to be automated. • In FY24, the first draft of the Consumer Confidence Report (CCR) automation script/business rules was used for 2023 reporting. Staff added more water quality data to the MWRA's CCR web page including individual disinfection byproduct components and water quality parameters with secondary standards.
D. Work cooperatively with DCR on various water quality initiatives including chloride, nutrients, algae and disinfection byproduct precursor monitoring programs. Jointly develop operational response plans for nuisance and harmful algal blooms, algal toxin detections, and taste and odor events.	→	• DCR collaborative research with UMass Amherst investigating the cause of elevated seasonal total coliform in Quabbin reservoir was concluded in August 2023. A summary manuscript was developed and circulated with findings from this research. • Continuing in FY24, staff participated in an MWRA/DCR work group to help both agencies work together on monitoring programs. • Continue to monitor reservoirs for aquatic invasive species and deploy control efforts to prevent their proliferation
E. Continue to encourage DCR to meet its obligations under its		• Conducted regular senior manager coordination, reservoir operations,

Watershed Protection Plan overseen by the Water Supply Protection Trust, and monitor progress toward achieving those obligations.		watershed protection operations, and water quality monitoring/laboratory meetings. • Reviewed and commented on DCR Land Management Plans and updates to Public Access Plans. • Review Annual Watershed Operations Plan and Budget, as well as quarterly status reports. • Facilitated annual DEP inspection visits at Quabbin/Ware watersheds and Wachusett watershed under the Filtration Avoidance Determination. • Continued active involvement on DCR Land Acquisition Panel, and presented proposed land acquisitions to MWRA's Board of Directors. From MWRA's creation in 1985 through 2024, a total of 28,000 acres have been protected at a total cost of $143.7 million. This amount includes MWRA's commitment of $34.0 million to date for watershed land acquisitions, of which $29.1 million has been spent through August 2024. Furthermore, MWRA has proposed another $5 million (or $1 million per year) in the next 5-year Capital Improvement Plan (CIP).
F. Operate the reservoir system to optimize both quality and quantity of water available for water supply purposes and to meet statutory and regulatory requirements for downstream releases.		• Met all statutory requirements for downstream releases. • MWRA manages the timing and amount of water transferred from Quabbin to Wachusett Reservoir to maximize raw water quality while minimizing potential downstream flood impacts and safeguarding supply reliability, using data from multiple water quality monitoring stations and reservoir management models. • MWRA completed annual standby reservoir monitoring and performed annual water quality sonde profiling and grab sample analysis. Data Management staff finalized standby reservoir annual reporting and

		created a software program to generate nutrient reports. • Staff continued operation of water quality profiling buoys with additional monitoring for nitrate and fluorescent dissolved organic matter (FDOM) on Buoy 2 and 4 of the Wachusett reservoir, respectively. In May 2024, FDOM sensor was installed on the Quabbin buoy for monitoring organic matter in the Quabbin reservoir. • In April 2024, staff drafted a bid specification for the procurement of a fixed depth buoy to perform water quality monitoring of the Wachusett Reservoir during the Quinapoxet Dam removal project. • Sudbury Reservoir, Foss Reservoir, Chestnut Hill Reservoir, Fells Reservoir, and Spot Pond were all kept within their normal operating ranges. Level control has been maintained through the removal of excess water when the elevation was above the normal operating range. • Continued to deploy annual monitoring and control efforts for aquatic invasive species at source and emergency reservoirs.
G. Implement database management systems for handling data and incorporating web-based technologies for reporting near real time water quality metrics and provide easy access to data to the MWRA community.		• In FY2024, developed reports, applications, SOPs, regulations and administrative content. Reports of multi-year review of water quality data for all reservoirs and standby reservoirs can be accessed from the Data Management Group's internal website. • Staff continues to develop databases to house a fully curated database independent of the Deer Island Lab Services databases for regulatory report generation.
H. Enhance the safety and security of the water supply and watershed system against accidental or intentional threats and hazards.		• Continued implementation of consequence management practices to guide alarm response at contaminant monitoring locations. In FY24, 28 actionable alarm events were responded to across MWRA contaminant monitoring locations.

	→	• Staff successfully completed the installation of second generation online contaminant monitoring systems (CMS) at CMS locations and mobile trailer by June 2024. • Continued seasonal deployment of water quality profiling buoys and sondes for monitoring source water quality and collecting profiling data in the Wachusett and Quabbin Reservoirs. Three buoys were deployed in the Wachusett Reservoir at Basin South, Basin North and the intake locations and one buoy was deployed in the Quabbin Reservoir near the intake. Buoy data is processed in real-time, and can be viewed through the Buoy App found on the Data Management Group Homepage as well as from the daily emails. • Continue to provide professional training to MWRA and DCR watershed operations staff on spill response in the watersheds and reservoirs. Continue to maintain prepositioned spill response trailers and equipment in the watersheds.
I. Maintain water quality sampling from treatment throughout the distribution system, including monitoring for emerging contaminants.	→	• Purchased instrumentation to add the capability to monitor per- and polyfluoroalkyl substances (PFAS) in-house in FY21 and were certified by MassDEP to do drinking water testing in FY22; we are expect to start performing wastewater testing for PFAS in early FY25. • Continued sampling for Unregulated Contaminant Monitoring Rule (UCMR) in consecutive communities and providing training to partial and CVA communities, MWRA also approved laboratory testing data uploaded by the testing lab to EPA's Central Data Exchange. • Staff deployed the contaminant monitoring mobile trailer for the cell cleaning of the Norumbega covered storage tank in fall of 2024.

J. Identify and evaluate the impact of different treatment strategies and scenarios on the mitigation of transportation related contaminants into the source water. COMPLETED		• Completed UMass Amherst research project to evaluate strategies for minimizing impacts of an oil spill and cyanotoxins in the Wachusett Reservoir using treatment scenarios at the CWTP December 2020. Findings from the final report were presented to MWRA and DCR staff at the Reservoir Operations meeting.
K. Identify treatment strategies to minimize contaminants of concern in MWRA's source water. NEW		• MWRA research with UMass Amherst on strategies for minimizing disinfection by-products, and other contaminants of concern was completed in February 2024. • A new research project under an Interdepartmental service agreement with UMass Amherst began on April 1, 2024. Research will be focused on strategies to minimize the adverse impacts of organic matter on MWRA drinking water supply.
L. Evaluate new water quality monitoring equipment and testing techniques to monitor and maintain high quality water all the way to the ends of the community systems.		• Six communities borrowed field water quality monitoring equipment in FY24 to help monitor and troubleshoot causes for low chlorine residuals in their distribution systems.
M. Participate with other water utilities nationwide in Water Research Foundation studies, specifically researching opportunities pertaining to algae monitoring and mitigation strategies in source water.		• In FY24, continued to participate in Water Research Foundation studies on energy efficiency, PFAS, lead pipe rig design, and other distribution system water quality issues. • Continued collaboration with New York City on watershed programs, following publication of the National Academy of Sciences (NAS) review. Participated in New York City (NYC) Expert Panel meeting on potential filtration planning for NYC. • In FY24, collaborated on two research studies on microbial and chemical characteristics of drinking water. One project, with Georgia Tech, UNC Chapel Hill, Northeastern University and the Water Tower institute requires sampling over a three-year period. The second study, with a similar focus, is with the University of Texas and UMassAmherst which is a three-year

		project with annual sampling throughout MWRA's system. • In June 2024, MWRA staff performed a trial sampling run for legionella and Disinfection By-Products collection in collaboration with the University of Texas and UMass Amherst, with the actual sampling event to be completed in August 2024.
N. Collaborate with CVA communities to modify chlorine dosing strategy to minimize the formation of disinfection byproducts. COMPLETED		• New chlorine dosing strategy and residual targets continues to be implemented in Brutsch Water Treatment Facility-CVA system in collaboration with CVA community Superintendents to minimize disinfection by-products. Continued weekly review of CVA disinfection to balance water quality objective.
O. Evaluate data from UCMR4 2018-2020 monitoring and compare against nationwide occurrence data. COMPLETED		• Completed UCMR4 monitoring on behalf of the communities and posted all data on MWRA's website, responded to public questions on the data, and used the data to demonstrate MWRA's excellent source water quality.
P. Evaluate data from UCMR5 2023-2025 monitoring and compare against nationwide occurrence data. NEW		• Began UCMR5 monitoring on behalf of communities and regularly posted data to MWRA's website.
Q. Advocate for responsible and reasonable new and revised state and federal drinking water regulations, and provide training and technical support to communities for new regulations.		• MWRA staff continue to be active in state and federal review of the Lead and Copper Rule, and microbial and disinfection byproducts rules, as well as other proposed rule and guidance changes. Continued to participate in MassDEP/ EPA work group on lead public notice and public education templates, and MassDEP/Massachusetts Department of Public Health (DPH) work group on Disinfection Byproducts public notice template. • MWRA staff continue to closely track EPA's efforts to regulate PFAS. EPA finalized its new PFAS rules in April 2024 to become effective in 2029. MassDEP will have to modify the state regulation to meet federal regulation requirements.

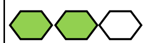
		• EPA finalized revisions to the CCR in May 2024, including a requirement for twice annual reports. Staff will coordinate with Advisory Board and communities on implementation of the changes before 2027 • MassDEP issued changes to the state Water Management Act that added conditions to registration renewals. MWRA provided comments. Staff are working on required changes to MWRA's drought management plan. • Conducted training session on Lead and Copper Rule revisions for all MWRA communities.

Goal #2: Continue to effectively report and communicate water quality information to our customers and public officials.

Objective	**FY2024**	**Highlights/ Progress Updates**
A. Distribute the federally required annual water quality report, the CCR, to all households.	→	• Completed Annual Water Quality report in June and distributed to homes, as well as posted on MWRA website. Additional focus in FY24 was on the people who deliver the water for all customers as well as lead-related issues.
B. Maintain and improve water quality and public health information on MWRA's web page, www.MWRA.com, and through widely distributed weekly and monthly reports.	→	• During FY24, MWRA continued to update and add water quality information to its website. • In FY24, the Annual Water Quality Report was prominently featured at the top of the home page and was publicized through Twitter and other news outlets. The monthly water quality reports were posted regularly and sent directly to subscribers through the Everbridge application. • MWRA again participated in the Association of Metropolitan Water Agency's (AMWA) "Imagine A Day Without Water" in October 2023 and American Water Works Association's (AWWA's) "Drinking Water Week" in May 2024 with relevant postings on MWRA.com and Twitter.

C. Regularly communicate routine Total Coliform Rule (TCR) monitoring data to Water Departments and assist with water quality sampling or training, as needed	→	• Continued ongoing distribution of monthly reports to member communities with data from their TCR sampling events. In coordination with MIS, staff developed a community Operations Management Monitoring System (OMMS). Web-portal to enable community access to latest water quality data is in progress due to operational issues.
D. Continue to strengthen planning and emergency response documents for Boil Water Order (BWO) events. Create, disseminate, and train staff on materials that can be used during a BWO event or at a public information call center.	→	• SOP and training materials have been developed for use in training volunteers staffing a public information call center. Staff included examples during community ERP trainings. • Water quality staff assisted three communities in FY24 with response to single *E. coli* detections at routine sample sites within their communities. MWRA, using emergency response plans, helped each community plan for a potential BWO. Repeat sampling resulted in no detection of total coliform or *E. coli,* therefore no BWOs were issued by MassDEP.
Goal #3: Assist member communities to improve local water distribution systems through ongoing financial, technical and operational support programs to maximize long-term water quality benefits.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Provide technical and operational support through training, on-call contracts, and targeted assistance, as needed.	→	• During FY24, MWRA's lab completed 4,055 lead and copper tests from 154 schools and childcare facilities in 35 communities. Since 2016, MWRA's Laboratory has conducted over 44,000 tests from 647 schools and daycares in 45 communities. We have also completed 1,007 home lead tests under the DPH sampling program since 2017. Overall, MWRA's lab completed 7,876 drinking water lead and copper tests in FY24. • Provided assistance to 9 communities for leak detection. • Conducted hybrid MWRA community Emergency Response Plan training sessions and discussed various water quality subjects

		including coliform, *E.coli*, potential BWOs, PFAS, pandemic response, cyber security, and changes to the lead rules. • Staff performed community sampler training in various capacities including nine training sessions for drinking water sampling.
B. Promote and manage MWRA's Local Water System Assistance Program to help facilitate improvements in local community infrastructure.	→	• In FY24, $48.9 million in MWRA interest-free loans were distributed to member water communities. In total, more than $576 million in loans have been distributed to fund 536 local projects, with 43 of the 45 eligible water communities participating. Since 1998, 625 miles of local water main have been replaced or cleaned and lined (about 9 percent of the regional system) via projects funded by MWRA financial assistance.
C. Enhance outreach and technical assistance within the existing Lead Service Line Replacement program to support communities as they respond to EPA's revisions to the Lead and Copper Rule and the expected Lead and Copper Rule Improvement.		• In FY17, the $100 million lead service line replacement loan program began. In FY24, $8.5 million was distributed to member water communities through this Program. Through FY24, $43.8 million in loans, targeting full removal of lead water services, have been distributed. In FY24, the Advisory Board recommended and the Board of Directors approved an additional $100 million in funding and added a 25 percent grant component for communities who fully fund lead service line replacements. • Conducted significant outreach associated with the Lead Service Line Replacement program, as well as additional outreach on other local lead issues. • Continued to conduct outreach and training on lead service line replacement and the requirements of the Revised Lead and Copper Rule, the upcoming Lead and Copper Rule Improvements, including segments in community ERP training in the fall and spring of FY24. Provided outreach at the Lead and Copper Forum held in May 2024. Assisted communities in preparation for EPA audits of community lead programs.

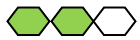
D. Develop the capability to evaluate potential changes to corrosion control treatment using a pipe loop system constructed using "harvested" lead service lines.		• Continued to work with a stakeholder panel of national lead corrosion experts, community and regulatory staff to provide guidance on the set up and operation of a lead pipe rig to evaluate corrosion control options. • Continuing in FY24, staff conducted biweekly sampling from a lead pipe rig system at CWTP as the system continued to acclimate. This project involves multiple departments across the Authority. • Procured a consultant to assist in designing and analyzing the corrosion control evaluation. The testing phase will be completed in October, 2024. An expert panel will be held in early 2025 to evaluate the study results. A final report will be prepared in mid-2025.

II. Wastewater Quality and System Performance

Goal #4: Meet or surpass environmental compliance standards at both MWRA treatment facilities and throughout the wastewater collection system.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to carry out the Pretreatment Program to protect receiving water quality, maximize the beneficial reuse of wastewater residuals, and protect workers, MWRA's wastewater treatment plants, and receiving waters.	→	• Conducted a total of 1,148 industrial waste inspections (Significant Industrial Users (SIUs) and Non-SIUs), 403 gas/oil separator inspections, and 118 septage and septage hauler inspections. • Responded to all discharge violations for both SIUs and Non-SIUs by taking the appropriate action in accordance with MWRA's EPA approved Enforcement Response Plan (ERP) and federal regulations. The Toxic Reduction and Control department issued a total of 230 Notices of Violations and 68 higher-level enforcement actions (62 Notices of Noncompliance, two Administrative Orders and three Penalty Assessment Notice) to industrial and commercial facilities. Link to the Pretreatment Program's annual report: https://www.mwra.com/media/file/2024-industrial-waste-report • Conducted a total of 2,996 sampling events for the following activities: o 1,453 industrial compliance; o 332 National Pollutant Discharge Elimination System (NPDES) permit compliance; o 4 for emergency response; o 230 for local limits; o 855 for special projects; and o 122 other sampling events. • Sampled 156 permitted SIUs with a discharge at least once in FY24. • Issued or renewed 452 permits.
B. Continue to monitor Deer Island Treatment Plant (DITP) processes to ensure high quality treated effluent optimizing plant performance to ensure all applicable NPDES permit limits continue to be attained.	→	• Deer Island was awarded a Platinum award from the National Association of Clean Water Agencies (NACWA) for 17 consecutive years without a NPDES permit violation.

C. Operate the enhanced phosphorus control system at the Clinton Wastewater Treatment Plant to ensure compliance with its NPDES permit.	→	• The seasonal effluent phosphorus limit of 150 micrograms per liter (ug/L) and 3.8 pounds per day loading limit became effective starting April 1, 2019. The effluent through the end of fiscal year 2024 has met these limits.
Goal #5: Continue to initiate plans and studies to prepare for regulatory changes; identify opportunities to refine monitoring requirements; and improve effluent quality.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Prepare updated Local Limits Studies for Clinton and Deer Island in accordance with EPA guidelines to confirm appropriate discharge limits from industries.		• Awaiting EPA's issuance of new NPDES permit for DITP. A draft permit was issued on May 31, 2023 and comments were submitted by the end of November 2023 as required by EPA. The existing permit continues to be administratively continued until the new permit becomes final. • MWRA received NPDES permit coverage under the Medium Wastewater Treatment Facilities General Permit for the Clinton Plant from EPA effective on April 1, 2023. MWRA submitted an analysis of Local Limits as required in June 2023.
B. Continue to review all Ambient Monitoring Plan questions and conduct evaluations to ensure they address MWRA needs and public concerns.	→	• MWRA continued to update the Outfall Monitoring Science Advisory Panel and the public on MWRA's monitoring program, including Contingency Plan exceedances of *Alexandrium,* dissolved oxygen and chlorophyll.
C. Continue to closely follow developing permit issues such as the impact of changes in bacterial and nutrient water quality standards, effluent loading limits, emerging contaminants and PFAS regulations, stormwater permitting, endangered species designations, co-permittees, and phosphorus and PFAS in biosolids.	→	• Key issues in FY24 were emerging contaminants including PFAS compounds and pharmaceuticals, rapid notification of combined sewer overflow (CSO) discharges, industrial stormwater permitting, microplastics, and nitrogen limits. MWRA staff across multiple department are closely tracking regulatory developments regarding PFAS. • Like all recent permits including that for Clinton, the new DITP permit, when issued, will require sampling of PFAS in influent, effluent, biosolids, and industrial wastewater. • An Approval of Suitability (AOS) permit for the beneficial use of the biosolids pellets for the Biosolids Processing Facility went into effect November 2020 and expires in 2025. This AOS requires the pellets to be tested on a quarterly basis for 16 PFAS compounds. No permit limits have been developed for PFAS in any Massachusetts NPDES permit or AOS to date.

D. Develop a plan to address emerging contaminants (e.g., PFAS and microplastics) as they are identified and frame an approach to respond to the public's concerns about these constituents.		• In FY24, MWRA continued to provide support to a Water Research Foundation project to study PFAS compounds in wastewater and biosolids and its possible treatment options. • MWRA has provided effluent samples for a study with the University of Rhode Island, the Woods Hole Oceanographic Institution (WHOI), and the National Oceanic and Atmospheric Administration to measure the presence of PFAS and other contaminants of emerging concern in wastewater and the ambient Massachusetts Bay receiving waters. The report has been drafted but not released. • MWRA has supported academic researchers from WHOI on a research project investigating microplastics in wastewater influent, effluent, and Massachusetts Bay receiving waters, including sampling on a routine MWRA oceanographic survey. A final report on findings has not been issued. • Conducted a total of 58 sampling events at industrial users; 48 sampling events for Local Limits and seven sampling events for NPDES permit compliance to better understand where PFAS could be entering the sewer system. • PFAS monitoring requirements were added to Industrial Sewer Use Discharge Permit applications. This will allow a review of PFAS for all new permittees and permits that are being renewed.
E. Assess thresholds for annual nitrogen loading, including evaluating the existing thresholds and the environmental impact of nitrogen, as well as, whether these thresholds developed over 20 years ago are valid or should be modified.		• In FY24, runs of the Bay Eutrophication Model continued to show minimal impacts of effluent nitrogen on Massachusetts Bay. DITP met the total nitrogen Contingency Plan threshold in CY2023.
F. Review new waste treatment technologies, as they arise, to continuously improve treatment performance and efficiency.		• In FY24, ENQUAL and DITP Process Control collaborated to update evaluations of an expanded list of technologies for nitrogen removal and the design criteria used for evaluating nitrogen removal technologies at Deer Island, should it be required. The report continues to be updated with new data each year.

		• Deer Island staff have been following the development of PFAS treatment technologies for pellets for potential future implementation at the MWRA pellet plant.
G. Continue to work with researchers investigating the use of wastewater as an indicator of the presence of the COVID-19 virus.		• MWRA continues to support wastewater based epidemiology (WBE) research for tracking the spread of COVID-19. MWRA has provided in-kind samples to research groups from the Massachusetts Institute of Technology, Northeastern, Tufts and UMass Amherst as well as the national program run by the Massachusetts Department of Health and Human Services (HHS). MWRA continued the wastewater monitoring throughout FY24 by submitting samples from DITP to Biobot Analytics, Inc. for the analysis of the genetic signal for the SARS-CoV-2 virus that causes COVID-19. The results of these analyses are shared with MA DPH as they are received and shared with the public on www.MWRA.com. At DPH's request we continue to submit samples to the WastewaterSCAN project from December 2022 onwards. These samples are tested for SARS-CoV-2 virus ribonucleic acid (RNA) and variant composition and 10 other pathogens. Results are reported publicly on the WastewaterSCAN Dashboard, https://data.wastewaterscan.org.
Goal #6: Move forward with design and construction of major wastewater infrastructure rehabilitation and renewal projects.		
Objective	**FY2024**	**Highlights/Progress Updates**
A. Continue to design and implement facility rehabilitation projects for various pump stations, headworks, CSO facilities and the DITP.		• Specific rehabilitation projects include: o Design of Prison Point CSO Facility Improvements, Contract 7462 to upgrade, replace and add major facility components (gates, screens, conveyors, pump engines, mixers, etc.) was completed, competitively bid and awarded in 2021. However, construction was terminated early 2022 due to contract disagreements. Staff are carving out a few project components which require more immediate attention prior to re-bidding the full facility upgrade. The 96-inch discharge header was rehabilitated this past year under a separate contract and future standalone contracts will include installing a manual transfer switch and repairing or replacing the existing sodium hypochlorite tanks. o Nut Island Headworks Odor Control & HVAC Systems Improvements construction contract, #7548, achieved Substantial Completion in

	→	September 2023. Final punch list and site restoration will be completed in fall 2024. o Braintree-Weymouth Pump Station (PS) improvements construction contract #7366 notice to proceed (NTP) was issued in September 2022 with completion anticipated in March 2025. o Ward Street & Columbus Park Headworks Design (Design/ESDC contract 7429) began in January 2021. Incorporating lessons learned from the Chelsea Headworks (CCHW) Construction project, these projects will include a new above-grade structure on both sites instead of rehabilitating the existing facility superstructures. Final design is now underway and expected to be complete October 2026. o Hayes PS Rehab design (contract #7162) was completed in summer 2024. The construction (contract #7357) is expected to be awarded in fall 2024. o Prison Point Discharge Piping Rehab (contract # 8013) was completed in April 2024. o Somerville Marginal CSO Pipe Connection design (contract #7691) was completed in summer 2024. The construction contract (contract #7985) was awarded in September 2024 with anticipated NTP in fall 2024. o Columbus Park Headworks Emergency Makeup Air Unit construction contract (contract #8100) had a NTP in February 2024 with an anticipated completion in February 2025. o Braintree-Weymouth Intermediate PS Transformer Replacement construction contract #7995 had noticed to proceed in March 2023 with an anticipated completion in July 2025. o Various wastewater facility improvements are underway through in-house and consultant Technical Assistance task order design efforts to support facility and system reliability, including but not limited to: Nut Island Fire Pump Replacement, Phase 3 Fuel Tank Replacements, Cottage Farm CSO Engine Silencers Replacement, Belle Isle Sandcatcher Rehab, Phase 3 Duct Cleaning. Alford Street (Charlestown) Pump Station Seawall, Emergency Lighting at Quincy PS, Squantum PS, New Neponset PS, Somerville Marginal SCO, Framingham PS and Commonwealth Ave. PS.

		o Deer Island Clarifier rehabilitation Phase II construction contract was issued in February 2023. Construction began in later 2024 after receipt of materials needed for construction. The construction contract focuses on tank concrete and coating systems, gate replacements and other critical work within the primary and secondary treatment sections of the DITP (construction contract #7395). Anticipated completion in fall 2027. o Deer Island initiated a number of design projects for future plant refurbishments including south system pump station, residuals, odor control, and combined heat and power.
B. Continue to implement an ongoing program to review, prioritize and accelerate interceptor renewal projects.	→	• Evaluated wastewater interceptors and prioritized them for rehabilitation. • The design of Interceptor Renewal No. 7 (Malden/Melrose) sections 41/42/49/54/65), to line 26,400 linear feet of sewer was awarded in June 2020. Construction NTP anticipated May 2025. • The West Roxbury Tunnel (Sections 637 & 637A) requires an inspection to evaluate its condition and identify any repairs. Design contract (contract #7991) was completed in spring 2024 and the construction contract (contract #6898) to inspect the tunnel had a NTP in July 2024 with an anticipated completion in July 2025. • Siphon and Junction Structure Rehab design (contract #6224) is evaluating 40 structures in 17 communities as part of Phase 1 rehab. Construction (contract # 6225) is scheduled to be awarded in late 2024.
Goal #7: Complete all CSO milestones by 2024 and demonstrate that the CSO Plan meets its performance objectives.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Implement CSO performance assessment through ongoing contract with AECOM that will culminate in a report to MassDEP/EPA in December 2021 and a supplemental report in December 2024		• In December 2021 MWRA submitted the Final CSO Post Construction Monitoring Program and Performance Assessment Report. MWRA has completed the last of seven semi-annual reports documenting the progress of the performance assessment in 2021 and has continued to produce annual reports every April for the previous calendar year. Additionally, MWRA is required to produce and submit a Supplemental Report to the Post Construction

verifying whether the approved long-term CSO control plan goals are attained.		Monitoring Program. The supplement is due on December 6, 2024. • The performance assessment results indicated that although substantial improvements were made, 16 of the 86 CSOs fell short of meeting the Long Term Control Plan (LTCP) volume and/or activation goals. The report further defined the limited impact remaining CSOs have on water quality. The MWRA and the court parties have agreed and the court has approved a 3-year extension to the court order, for MWRA to implement additional identified projects and perform additional investigations to determine what can be done to further reduce CSO at the 16 sites. A supplemental report will be submitted in December 2024, documenting final performance and conclusion for the 16 outfalls. • MWRA has advanced projects that will allow 10 outfalls to materially attain the LTCP activation and volume goals by December 2024. This includes: Sewer Separation Work in East Boston partially funded through a financial assistance agreement (FAA) with Boston Water and Sewer Commission (BWSC). Project under construction with substantial completion expected in fall 2024, this project will allow BOS003 and BOS009 to meet the LTCP goals. Also planned for East Boston are five new sewer separation projects starting in the summer 2024 to be completed in 2030 further reducing the CSO volumes and activations in East Boston. Installation of connection relief for CHE008 (Construction completed summer 2023); and installation of a new pipe connection upstream of Somerville Marginal with NTP expected fall 2024). Substantial completion expected December 2025. • MWRA has a Memorandum of Understanding with BWSC to design and construct modifications to BOS013, BOS017, BOS062, BOS065 and BOS070. • MWRA continues to investigate alternatives and develop costs for possible projects to address CSO compliance issues for the remaining 10 of 16 difficult sites and will document its findings and recommendation in the supplemental performance assessment report to be submitted in December 2024.
B. Comply with the CSO Variances for the Alewife Brook/Upper Mystic River		• MWRA continues to use the CSO public notification system implemented in July 2020 to make required notifications to

Basin and the Lower Charles River/Charles Basin issued to MWRA and CSO communities for the term of 9/1/19 through 8/31/24.		regulatory agencies, boards of health, and subscribers. (Also see Objective D below). • Staff have commenced and completed project evaluations required by the CSO variances, including completion of the CSO System Optimization for Alewife Brook and Lower Charles River Basins Project in December 2022. Further studies to minimize discharges from CSO regulators that contribute CSO to the variance waters continue. • A significant variance requirement includes the development of an Updated CSO Control Plan for MWRA's discharges to the Variance Waters. Work towards complying with this requirement has included the development and MassDEP/EPA approval of a scope of services, work towards development of a new "typical year," and close coordination with Cambridge and Somerville in obtaining public and watershed input, and developing a unified hydraulic model for each entity's use in analyzing alternatives. Further efforts will include alternative development and evaluation, preparation of an affordability analysis, and development of draft and final Updated CSO Control Plans. The updated typical year in the Updated CSO Control Plans now take into account climate change effects. • Due to the complexity of the coordination and public input required for the Updated CSO Control Plan, MWRA, Cambridge, and Somerville requested an extension of the Variance. MassDEP held a public hearing in the spring of 2024, and issued new Variances in August 2024, extending the completion timeline by 36 months. • Staff continue to comply with all other variance conditions to minimize CSO impacts. • Variance-required monitoring of receiving waters continued throughout FY24. The monitoring results were used to prepare the annual water quality report as required by the variances. The report on 2023 conditions was completed in July 2024.
C. Conduct an evaluation of the CSO treatment processes to determine potential opportunities to better meet permit limits. Confirm or reassess		• As part of the scope of the CSO performance assessment noted above, staff and the consultant are investigating site-specific measures that can further reduce CSO discharges where needed to help meet the CSO LTCP. MWRA's consultant generated a technical memo for Cottage Farm CSO Treatment Facility which evaluated facility

treatment processes as part of the CSO facility rehabilitation projects.		optimization and reviewed adding chemical enhanced primary treatment as a means to improve effluent water quality.
D. Implement a subscriber based CSO Public Notification Program. Provide notification of a CSO overflow within four hours of the start of a discharge. COMPLETED		• As of July 2024, notifications are being sent to over 300 external subscribers within two hours of the start of a CSO discharge, including the required notifications to regulatory agencies and boards of health. • The new Sewage Notification Law and the implementing regulation 314 CMR 16.00 required continuing improvements to the notification program during FY24. Extensive coordination efforts with metropolitan Boston CSO communities and regional Boards of Health were initiated in FY22 and continues into FY25. MWRA issued the required expanded public notifications starting in July 2022. Signs at public access areas potentially affected by CSOs were produced by MWRA and installed by MWRA and CSO communities around metropolitan Boston. The final Notification Plan was submitted on January 6, 2023 as required, with an opportunity for public comment; MassDEP requested some revisions which were completed on June 23, 2023.
E. Implement a near real-time Sanitary Sewer Overflow (SSO) reporting system to provide public information and ensure reporting timeframes meet regulatory requirements. COMPLETED		• In 2015, MWRA began posting SSOs to its web site soon after they occurred. The new Sewage Notification regulation 314 CMR 16.00 requires notification of some SSOs. Expansion of the existing system was completed in FY22 and MWRA began issuing public notifications as required starting in July 2022. • MWRA continues to improve its ability to rapidly gather data on SSOs, which happen very infrequently in MWRA's collection system. FY22 and FY24 saw a number of unusually large storms that caused SSOs. Standard operating procedures have been developed and updated to allow effective communication and training for future staff in case of the next very large storms.
Goal #8: Assist member communities to improve their wastewater collection systems through ongoing technical, financial, and operational support programs.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Provide technical and operational support including TV inspections, fieldwork assistance, or other targeted assistance, as needed.		• Staff provide technical assistance when requested. In FY24, no requests were submitted by the communities for TV inspections.

B. Promote and manage MWRA's Inflow/Infiltration (I/I) Local Financial Assistance Program to facilitate reduced I/I in local community infrastructure.	→	• In FY24, $29.2 million in MWRA grants and interest-free loans were distributed to member sewer communities. In total, more than $560 million in grants and loans have been distributed to fund 664 local projects. All 43 sewer member communities are participating in this Program. In FY24, the Advisory Board recommended and the Board of Directors approved two new phases of the I/I Local Financial Assistance Program. Phase 15 ($100 million) will be available as an interest-free loan in FY25, and Phase 16 ($125 million) will be available as a 75 percent grant/25 percent interest-free loan in FY26. Since 1989, average annual wastewater flow to DITP has been reduced by about 67 million gallons per day (mgd), a 17 percent reduction. (See more information in the Annual NPDES I/I Reduction Report). MWRA's Regulatory Reporting Page

III. Infrastructure Management and Resilience

Goal #9: Maintain and enhance water and wastewater system assets over the long term at the lowest possible life cycle cost and acceptable risk, consistent with customer, community, and regulatory support service levels.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to ensure proper operations and maintenance of the water and wastewater systems and minimize system downtime by performing Preventative, Predictive, and Corrective maintenance on equipment and linear assets, water system leak surveys, valve inspections and exercise, and performing inspections and cleaning of wastewater pipelines, structures, water storage tanks, and inverted siphons inspections, and cleaning.	→	• Replaced 28 water blow-off retrofits and six main line valves, entailing excavating and isolating the main from the valve, cutting out the old valve and installing a new one. • Inspected 142.8 miles of MWRA water mains and repaired seven leaks. • Performed independent water meter testing to confirm the accuracy of the meters supplying the municipalities in MWRA Service Area. • Continued maintenance, inspection, and capital improvements on the existing on-line and backup reservoirs. • Inspected 28.38 miles of MWRA wastewater interceptors and 687 sewer manholes and other sewer structures such as diversion chambers, tidegates, etc. • Cleaned approximately 28.38 miles of wastewater interceptors and 47 siphon barrels. • Replaced 28 wastewater manhole frames and covers and repaired 24 sewer manhole structures.
B. Inspect, maintain, and improve the dams, dikes, spillways, intakes and outlet works constituting the infrastructure of the reservoir system through ongoing maintenance and an adequate multi-year capital improvement program in order to ensure dams' regulatory compliance, long-term operational viability and spillway	→	• Since 2005, over $27 million has been invested in capital and major maintenance, inspections and studies of source and distribution water supply dams across the system, with over $7 million committed in current Capital Improvement Plan (CIP) projects. • Contracts underway for needed dam repairs design, bid document production and engineering services during construction

operation and maintenance to limit potential flood hazards.		(ESDC) for Sudbury Dam spillway masonry and vent repairs, Wachusett North Dike earthen berm restoration for overtopping protection, Foss Dam overtopping protection. FY25 award of most recent dam safety inspection contract and instrumentation design underway. The calendar 2024 biennial Phase 1 Dam Safety Inspections were recently completed on schedule. Additional dam instrumentation design and repair efforts are underway for Norumbega Reservoir and Schnecks Pond Dams. Chapter 30 construction on the Chestnut Hill Reservoir Dam and Weston Reservoir Dam instrumentation was completed in FY24. Wachusett North Dike earthen berm restoration for overtopping protection was completed in FY24 • Continue to meet MA Office of Dam Safety regulatory requirements on 28 dams and dikes that impound the MWRA source and emergency reservoirs.
C. Expand Condition Monitoring techniques to provide earlier indication of asset degradation.		• Condition Monitoring techniques continue to be utilized in normal business practices at DITP. Deer Island is now expanding its lube oil program. Staff are able to perform basic oil testing in lieu of sending samples out. This provides immediate results about MWRA's assets and reduces downtime. • Deer Island Condition Monitoring group is putting together a lubrication manual for maintenance staff. It will contain all lubricants and greases for all process equipment around the plant. It will included oil best practice procedure for oil sampling, grease and filter carts. This will be required for staff to have in their tool box to ensure no cross contaminates between oils and greases. This will be completed in 2025. • Install Remote Access Sensors (RAS) connectors on our motors and odor control fans to enhance ultrasound acoustics

		readings and greasing at various locations throughout the process areas. We will install 35 units over the next two years. This will allow us to connect our Ultrasound Acoustic tool to provide earlier indication of asset degradation. • Condition Monitoring techniques continue to be utilized in normal business practices in the Field Operations Department (FOD), including all the headworks, PSs, and CSO facilities. Actions include oil sampling to determine the remaining life expectancy of the oil, ultrasonic testing of the grit pipes in the headworks, and vibration analysis. Staff continue to implement infrared thermography and utilize laser alignment of pumps and fans. Initial staff training has been completed, and training will continue with new staff when brought on board, specifically on vibration analysis and laser alignment.
D. Conduct an updated benchmarking analysis in order to identify gaps and sustain the goal of maximizing asset protection while potentially identifying new best practices in the industry.		• No work on this initiative to date. MWRA has continued to focus on upgrading Maximo to allow more efficient tracking of benchmarks in their current format rather than updating benchmarks.
E. Update the wastewater metering system and evaluate new technologies to ensure continued accurate flow accounting and to enhance its usefulness for operational and evaluation purposes. COMPLETED		• The new wastewater meter system was installed and tested on schedule by the end of CY2021. The new meters are now being used for billing of communities as of January 2022.
F. Continue to research and develop Key Performance Indicators (KPI) to compare our performance internally and against the industry.	→	• The MAXIMO upgrade was completed in FY19 with new reports being issued continuously. The updated MAXIMO continues assisting MWRA in making KPI's easy to track, display and compare with other public utilities.
G. Enhance and monitor water pipeline protection to maximize pipeline lifetime.		• In FY16, MWRA began the process of replacing old cathodic protection on MWRA water mains. In FY24, this work continued in force, with the following activities:

		o Designed 11 replacement cathodic protection systems for Section 57, an 80 year old 48-inch diameter steel water main in the northern low service area. In-house construction staff are working to replace these systems. Nine of these systems were completed in FY17-FY18, and work continues on the remaining two. o A scope is being developed for the Beacon Street Line Rehabilitation Project which includes the evaluation/replacement of 54 test stations in Boston and Brookline. o The Shafts E, L, N & W Cathodic Protection Improvements Project (Contract #6439) is currently at the 100 percent R1 design phase. o Testing was completed for Contract OP-393 – Cathodic Protection System Testing, which included inspection/testing of 182 existing test stations. A final report was submitted in July 2023.
H. Expand integration between MWRA's Authority-wide Enterprise Asset Management System (MAXIMO) with Lawson, Process Information (PI) and Automated Vehicle Location systems to expand the use of predicative Management tasks increasing functionality, asset tracking and improved workflow to reduce equipment and downtime ad control budget spikes. Utilize updated MAXIMO to increase opportunities for more paperless work.		• MAXIMO now tracks life-cycle costs for Clinton, DITP, FOD, IT and Lab assets. End of Life asset values are now captured in the Property Pass site. • MAXIMO Spatial (GIS) interface updates the mapping features giving staff easier access to buried assets history for the Water Distribution and Wastewater Collection systems. • MAXIMO Anywhere (mobile solution) allows staff to receive work and update work orders and asset history in the field.

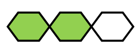
COMPLETED		
I. Continue to upgrade and improve upon the Supervisory Control and Data Acquisition (SCADA) hardware and software to meet the current industry standard and to address cyber security concerns.		• PLC upgrade was completed at Comm. Ave West Pump Station; Comm. Ave East has been upgraded under the recent redundancy project. A new PLC Panel was designed, purchased and installed at Brutsch Water Treatment Facility, with the system programmed in-house. A design contract for the CWTP SCADA Improvement was finalized in January 2019 and construction began in September 2021 with substantial completion anticipated in September 2025. PLC upgrades for BOS019 and Framingham PS are have been initiated but will be postponed until the work at CWTP is completed due to staffing constraints. Additional PLC replacements are being performed as part of facility rehabilitation projects (Wachusett Dam Lower Gate House, Braintree-Weymouth, and Water Tank Improvements, etc.), and will be developed in future PLC upgrade projects for water and wastewater facilities. • Standards templates and guidelines were developed for MWRA Human Machine Interface (HMI) Graphics. New graphics have been and will continue to be implemented to improve operator situational awareness through ongoing design and construction projects and MWRA staff implementation. Installed at Alewife PS, Nut Island Odor Control, Comm. Ave PS-east and west and Chelsea Creek Headworks • Continued to improve the SCADA network architecture to enhance security. • Established internal committees to review MWRA's physical resilience, and identify deficiencies and subsequently safety systems to provide multiple levels of protection from cyber-attacks on MWRA's assets.

Goal #10: Prepare for catastrophic events that could affect the water and wastewater delivery systems.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to improve and incorporate redundancy and operational flexibility within the water system to ensure uninterrupted service.	→	• Northern Intermediate High, Sections 89/29 Replacement was awarded in June 2021 with an NTP issued in August 2021 and an anticipated construction completion date of August 2025. • Sections 23, 24, and 47 Rehabilitation construction contract #6392 NTP was issued in November 2021 and achieved Substantial Completion in May 2024. This will provide redundancy to Boston and Watertown. • Intermediate High Improvements design contract #6955 was awarded January 2019 and will, when complete (expected in CY 2026), interconnect two Intermediate High Service Areas to provide redundancy and operational flexibility in the event of pipe failures. The first construction contract #6956 had a NTP in July 2023 with an anticipated completion in January 2026. The design of the second construction contract #7484 is complete with an anticipated award in late 2024.
B. Design and implement projects including those that eliminate or mitigate single points of failure within MWRA's water transmission and distribution.	→	• CP1 construction contract #6544 NTP was issued in October 2020 and includes rehabilitation of approximately 13,800 feet of 56-inch and 60-inch diameter water main in Arlington, Somerville and Medford. Construction achieved substantial completion in May 2023, more than one year ahead of schedule. CP2 construction contract #6543 is currently in design with anticipated construction in fall 2025. • Low Service Pressure Reducing Valve Improvements construction contract #7563 was awarded May 2021 and will provide additional operational flexibility to provide water service during emergencies. A construction NTP was issued in July 2021 with substantial completion scheduled for August 2024.

		• Improvements to the top of shafts are being implemented to provide strengthening of pipes directly connected to the tunnel system, waterproofing of underground vaults and replacement of nuts on valve connections. Performing interim improvements at the top of shafts consists of three Construction Packages (CP). CP1 (contract #7561) included top of Shafts 6, 8 and 9A and achieved substantial completion in April 2022; CP2 (contract #7671) include top of Shaft 5 with a notice to proceed in April 2024 and anticipated completion in October 2026; and CP3 (contract #7670) includes top of Shafts 7, 7B, 7C and 7D (in design) and will be awarded after CP2 is complete. • Waltham Water Pipeline Design was constructed and includes a new water main extension to provide redundancy for the Lexington Street Pump Station. Construction contract #7457 had an NTP in July 2022 with an anticipated substantial completion date in September 2025.
C. Continue to train staff on various potential emergency scenarios and participate in broader training exercises.	→	• Staff conduct the following trainings and exercises on a regular basis including: Deer Island Emergency Response Team drills, boom deployment, communications, and community Emergency Response Plan training. • Staff also periodically conduct the following trainings and exercises: site characterization, reservoir spill response, terrestrial spills, severe weather response, mobile disinfection. In FY24, MWRA conducted two tabletop/field exercises; a water transmission drill and a cyber/SCADA attack drill. • MWRA has also provided coliform sampler training to support our service communities. A number of community coordination/training sessions were held relating to work on Section 89.

		• All MWRA staff continued training in cybersecurity awareness; and IT and OT staff continued training in advanced technical cyber security topics.
D. Work with Departments throughout MWRA to continue to implement a comprehensive security and emergency preparedness program including an analysis of lessons learned (ongoing) during the COVID-19-State of Emergency.	→	• Lessons learned during the COVID-19 State of Emergency was compiled into a preliminary “after-action” report on MWRA’s response and recovery efforts to COVID-19. This report will be used to update MWRA’s pandemic plan. • Emergency Action Plans were updated to include implementation of flood protection measures where applicable and staff is in the process of finalizing power outage responses for each facility. • Dams Emergency Action Plans are reviewed and updated regularly. • Staff continue to upgrade and expand the MWRA security system. Components including alarm sensors, fences, and cameras were added and /or replaced. • The MWRA has invested in an enterprise-class Video Management System that is integrated with the access-control and intrusion detection system to drastically improve responsiveness to critical alarms in the water distribution infrastructure in both staffed and remote locations. • Our efforts to improve our technology and security program have greatly improved our relationships between Security and Emergency response agencies across the Commonwealth of Massachusetts. • The State Auditor’s Office released an audit on MWRA’s compliance with the requirements of America’s Water Infrastructure Act, focusing on those related to physical security, use of treatment chemicals, and security training.

		• The MWRA utilizes extensive liaison contacts within the Intelligence Community, Law Enforcement Organizations and the Private Sector in an effort to identify present and future potential threats to its employees and assets.
E. Develop and implement an Information Security Plan (ISP) to increase the resiliency and sustainability of the MWRA's data security practices.		• MWRA's ISP includes both approved and drafted cybersecurity policies, standards, and procedures. Three new policies were approved: three existing policies were substantively updated, reviewed and approved, while drafts of future policies continue to be revised to correspond with the latest version of the NIST Cyber Security Framework and to be integrated into both MWRA Information Technology ("IT" – *i.e.* MIS) and Operational Technology ("OT" -- *i.e.* SCADA, PICS, I&C, and Physical Security) areas. Approved policies are reviewed on an annual basis. • Staff continue to apply current cyber security standards, controls, and best practices when appropriate to MWRA computer systems and network.
F. Continuous assessment of Cyber Security defense in-depth strategy to mitigate the new and evolving threats leveraging advances in technologies.		• MWRA initiated a cybersecurity planning effort that will encompass the next 5 years and will inform the scope of the next Managed Security Services contract. • MWRA staff continue remediation of identified vulnerabilities from the risk and resiliency assessment of key IT network components required by the America's Water Infrastructure Improvement Act (AWIA). • Staff continue to update the internal cyber security incident response plan. • Staff continue to implement additional logging and technology solutions to further segment network traffic and improve visibility network traffic.

G. Develop and implement an updated Physical Security Plan including Crime Prevention Through Environmental Design (CPTED) to decrease vulnerabilities and increase capacities so that threats are reduced, thereby reducing risk. COMPLETED		• The approved MWRA Physical Security Policy, which incorporated CPTED components, was reviewed and updated. Additionally, other Physical Security Policies, such as Visitor Management and Security Policy for Contractor Access were approved in an effort to enhance MWRA's physical security. All approved Physical and Cybersecurity policies are reviewed annually.
H. Assess current communication technology and implement communication redundancies where needed within the security network.		• Staff continue to upgrade and expand the MWRA security system. The security team identifies perceived areas of exposure to the MWRA's critical water distribution infrastructure and plan ways of executing improvements and advancements to our existing system. The MWRA is currently using some of the highest rated cameras in the industry that are able to withstand the environmental and communication challenges facing MWRA facilities. Our network is limited by strict security protocols and is not internet facing. The security program includes standard operating procedures that are updated annually and specifically include daily tests of both our alarm and video system for response time, clarity and quality of video and alarm response. • The MWRA is working with its telecommunications provider to upgrade traditional telephone lines to fiber optic cables capable of transmitting alarm and CCTV camera images at faster speeds with better reliability and resolution. • As cameras age in our system we assess new products and look for cameras that provide the best technology currently available. Fifteen cameras were replaced and/or added in FY24.

I. Complete the Preliminary Design and Environmental Impact Report for the Metropolitan Water Tunnel Program and initiate final design.		• In May 2020, a contract was awarded for Preliminary Design, Geotechnical Investigation and Environmental Impact Report. • In March 2021, an Environmental Notification Form (ENF) for the Metropolitan Water Tunnel Program was submitted to the Massachusetts Environmental Policy Act (MEPA) office to initiate the public environmental review process. • A certificate from the Secretary of Energy and Environmental Affairs on the ENF was received in May 2021. The Environmental Impact Report (EIR) was developed in FY22 and submitted in October 2022. • In June 2021, a geotechnical field investigation program was initiated to support the preliminary design of the proposed tunnels. A second phase geotechnical field investigation program was completed in the summer/fall of 2022. An additional phase was initiated in May 2023 and is nearing completion. • Property for construction of a connection shaft was purchased in Waltham in September 2021. • A certificate from the Secretary of Energy and Environmental Affairs on the draft EIR (DEIR) was received in December 2022 requiring a Supplemental DEIR (SDEIR) be filed with MEPA. The SDEIR was filed in July 2023 and MWRA received the Secretary's Certificate in September 2023. A Final EIR (FEIR) was filed in early 2024 and MWRA received the Secretary's Certificate in April 2024 in which it was determined that the FEIR adequately and properly complies with MEPA and its implementing regulations. • Preliminary design work was completed in January 2024.

		• Procurement for a final design consultant has begun and is expected to be awarded in late 2024. • Outreach to key communities, property owners, relevant state agencies, and key stakeholders has been initiated and is ongoing. • Coordination with Eversource to build new power supply transmission to the planned tunnel launching shaft sites is ongoing and is expected to be complete by 2028. • Property acquisition and agreements in support of the Tunnel Program with several communities and key stakeholders will advance in anticipation of construction starting in 2028.
J. Update MWRA's earthquake preparedness through dam stability evaluations, as well as other studies to bring our facilities up to current standards, as they are rehabilitated. COMPLETED		• As part of the review under the AWIA, staff developed an assessment of each water facility's earthquake design standard and created an SOP to ensure earthquake stability is included in all rehabilitation projects. • MWRA dams have had seismic conditions and factors of safety assessed as part of Seepage and Stability Analyses.
K. Move forward Wastewater Facility Emergency Response Planning to identify potential measures to minimize disruptions from failures of facilities, including development of a comprehensive Emergency Response Plan for each facility.		• A team of staff have developed an approach to conduct these reviews. Staff are evaluating how this objective interacts with the newly proposed similar requirements in the NPDES permit for Deer Island. Elements of this effort related to climate change related future flooding and its impact on wastewater facilities have been include in the draft Deer Island NPDES permit. Developed a flood emergency response plan for both DITP and Clinton in FY24.
L. Create and implement a predetermined schedule of review for facility risk assessments.		• The AWIA process will require a regular five-year cycle for review of all water facilities. Staff are working on a similar process for wastewater facilities. Staff is also working toward updating our Risk and Resiliency Assessment by the certification due date of March 2025.

M. Participate in Lower Mystic Resiliency Planning as an abutter to the Lower Mystic.	→	• MWRA staff continue to participate in Resilient Mystic Collaborative meetings, specifically to provide facility insight, maps, and guidance regarding Lower Mystic climate resiliency planning
N. Issue MWRA 8(m) permits to all companies performing work within a water or sewer easement or other property interest held by the Authority.		• MWRA staff issued 207 8(m) water permits and 153 8(m) sewer permits to companies performing work within an easement or other property interest held by the Authority. The permitting process includes a detail review of each project and how it will affect MWRA infrastructure. The permitting process will also include staff inspections and mark-outs when required.

IV. Finance and Management

Goal #11: Ensure Financial Sustainability, Integrity, and Transparency.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue the long-term strategic budgeting practice to ensure sustainable and predictable sewer and water assessments to our member communities.	→	• Community Assessments increased by 2.4% for FY24, a reduction from the proposed 3.4% due to revised budgetary estimates and assumptions. Assessments are projected to increase no more than 3.4% annually through FY2028. Assessments for the Water and Sewer utilities continue to be "smoothed" reducing the volatility of year-to-year assessment changes thereby improving the sustainability and predictability for member communities.
B. Continue to implement MWRA's approach to rate increases while accounting for the pandemic's effects on its communities' revenue. COMPLETED		• MWRA offered to allow communities to restructure their Community Loan repayments, due in FY20-FY22, to mitigate the impact of COVID-19. Five communities took advantage of the offer and restructured their loans.
C. Manage debt and investment portfolios to maximize savings/returns in compliance with all applicable rules and regulations.	→	• Staff again took advantage of the low interest rate environment and in June sold $445.5 million of bonds comprised of $279.3 million in refunding bonds and $166.3 million in tax-exempt new money bonds. The refunding resulted in $38.4 million in present value debt service savings applied between FY2026 and FY2043. MWRA accepted $359.0 million of tendered bonds. The tender process is not often used but was advantageous again this year due to market conditions. The All-In True Interest Cost for the transaction was 3.68 percent, with an average life of 11.7 years. • Staff continue to explore opportunities for refunding for interest rate savings.
D. Continue diversification strategy to insulate against overexposure and promote resiliency to changing market conditions.	→	• Staff continue to seek prudent diversification.
E. Maintain a system of internal controls to best protect the organization's resources.	→	• Staff continue to review and monitor key controls and limit physical and electronic access to assets.

F. Continue to employ budget and expense control practices to manage expenses.		• Continued to drive cost improvement and containment measures throughout FY24 that allowed MWRA to set a 2.4 percent rate of increase to the combined Rate Revenue Requirement and a 2.54 percent for FY25.
G. Identify and pursue optimization in all aspects of MWRA financial operations.		• Continued the effort of reducing the use of paper by publishing documents on-line. Staff are actively evaluating the electronic financial system's existing and possible additional software modules to optimize operations. • MWRA again received the Distinguished Budget Presentation Award from the Government Finance Officers Association for FY24 and plan to apply again for FY25. MWRA has submitted the paperwork for the Government Finance Officers Association Certificate for Achievement in Financial Reporting for FY23. Additionally, MWRA is preparing the paperwork for FY24. • The Budget Department continues to explore a software solution to replace existing obsolete software. • The Accounts Payable and Payroll units of the Controllers department continue to record transactional work with electronic documents, having removed all paper from the processing. By employing an additional monitor to assist in data entry, paper was replaced by electronic files archived securely on the network. • MWRA piloted an energy and utility bill management software program in FY24, in an effort to begin to transition away from paper-based energy bill management processes and greatly improve operational efficiency, financial performance, and environmental sustainability. The centralized energy data platform will improve bill auditing, help us identify trends and anomalies in energy consumption that may lead to cost-reduction opportunities, offer data-driven decision making, and improve

		financial accounting and budgeting processes with access to more accurate and timely data.
H. Continue to conduct strategic energy procurements.		• Continued to evaluate energy procurement options including competitive bid process purchasing collaboratives and state programs.
I. Continue to fund the pension fund at the annual required contribution level and to develop strategies to address the growing Other Post- Employment Benefits (OPEB).		• As Plan sponsor of the Retirement System, MWRA recognized the increasing annual required contributions until achieving full funding in FY2030 and contributed an additional $1.9 million in FY24 and $5.2 million in FY25 to mitigate the increasing contribution and the impact on assessments. • The June 30, 2024 OPEB Trust balance (Net position) increased again to $82.1 million up from $72.4 million for the prior year reflecting a Plan Fiduciary Net Position of 46.5 percent slipping from 61.5 percent from the prior year. The annual funding practice has been and is projected to be half the annual determined contribution. Retiree health Insurance premiums are paid from the MWRA Current Expense Budget. This practice will be evaluated annually and may be changed according to overall budgetary conditions.
Goal #12: Promote Effective Business Operations and Resource Management.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Maintain and expand MWRA-wide recycling efforts. COMPLETED		• As of July 1, 2021, the MWRA implemented a single stream recycling program at the Chelsea Facility in conjunction with existing paper, cardboard, and metal recycling efforts.
B. Pursue, and administer any Federal and or State infrastructure, stimulus or COVID-19 related grants. COMPLETED		• Staff are actively monitoring the various COVID-19 related stimulus and/or grants that might be available. Staff have applied for reimbursement from the Federal Emergency Management Agency for costs incurred during the disaster. MWRA will be receiving American Rescue Plan Act (ARPA) funding from the Massachusetts Clean Water Trust as part of its next borrowing.

		• MWRA received $247,100 from the Commonwealth for the FY22 costs associated with the Biobot Sampling. The FY21 and FY22 payments from the Commonwealth totaling $689,765 fully reimbursed MWRA for all of the Biobot costs.
C. Evaluate office footprint and needs in light of pandemic lessons learned. Make changes where practical. COMPLETED		• At the June 22, 2022 Board of Directors' meeting, the Board approved a contract with a general contractor to upgrade the office space at both Deer Island and Chelsea to accommodate hybrid work spaces, including updates to office spaces, the electrical system and MIS services to accommodate staff previously working in the Charlestown Navy Yard (CNY). The office upgrade work is substantially complete. CNY staff have been relocated to Deer Island or Chelsea and CNY was vacated and left "broom clean" prior to the May 2023 lease expiration.
Goal #13: Leverage Information Technology to Improve Organizational Effectiveness.		
Objective	**FY2024**	**Highlights/Progress Updates**
A. Deliver secure Information Technology (IT) services and solutions efficiently and effectively.		• Enhanced cyber security with the completed migration to Crowdstrike for endpoint protection and response with managed services for all workstations and mobile devices. • The procurement of a new Managed Security Services Provider Contract was completed which included the replacement of all existing firewalls and the implementation new firewalls within the infrastructure enhancing the cyber security posture of the IT network. • Implemented Single Sign-on solution and integrated 32 applications to it. • Designed and implemented Software Defined Wide Area Network (SD-WAN) to provide redundancy, resiliency and network traffic optimizations. SD-WAN technology allows MWRA to leverage any combination of information transport services to securely connect users to applications.

		• Implemented additional network segmentation improving cyber security. • Additional highlights under specific initiatives below.
B. Provide Information Technology solutions to streamline work processes while ensuring the security and integrity of MWRA data by leveraging the use of existing or emerging technologies.	→	• Expanded use of secure remote access technologies in support of teleworkers in response to the COVID-19 pandemic. These technologies remain in place for teleworking staff post-pandemic and are continuously evaluated. • Expanded use of WebEx application for collaboration and virtual meetings in support of teleworking. • Designed and built new Board Room on DITP and Chelsea and implemented similar technology in all conference rooms. • Expanded wireless network within Deer Island Treatment Plant, Southborough Carroll Water Treatment Plant, Belchertown, Clinton, Nut Island and Needham. • MWRA.com website re-design: New website launched and migrated all content from old website to new website. Worked to update all stale content and built out new search functionality. • Records Management: Continued scanning initiative to digitize active records and potentially records to be archived in support of the workplace consolidation. • Implemented new asset management tool to manage both iOS and Windows devices. Started migration of all IT Assets to new platform. • Implemented addition IT Kiosk on DITP to improve self-service of IT accessories.

		• Design for new video streaming cameras at select MWRA sites being procured.
C. Obtain feedback from users on satisfaction levels and desired new services and implement changes accordingly.	→	• Continued monthly meeting with ENQUAL and Lab Services.
D. Maintain current technology hardware, software, and network infrastructure.	→	• Continue to deploy updates to existing hardware and software throughout the year to ensure currency and mitigate vulnerabilities. • Upgraded Vmware infrastructure supporting 450 virtual servers. • Upgraded circuit bandwidth at five locations in support of the new phone system rollout. • Upgrades continue to maintain databases and servier operating systems at supported versions. • Implemented hardware refresh of edge and core switches. • Upgraded backup (Commvault Backup) environment and expanded storage capacity. • Completed Storage Area Network hardware refresh. • Completed hardware refresh and printer consolidation for 63 multi-function printers.
E. Enhance Information Technology workforce capabilities through new certification and license requirements.	→	• Training for the IT Department staff was online/virtual during FY24. Twelve online IT classes were taken by eight staff. • MIS delivered four courses attended by 127 staff.
F. Implement an Application Improvement Program that will continue MWRA's efforts to update and enhance the multitude of applications used in the MWRA to improve efficiencies of business processes,		The following is a list of applications that were either updated or had functionality changes throughout FY24: o SAP Business Objects: The system supports reporting functions for MAXIMO, ENQUAL and Lawson. Legacy

mobile devices, and effectiveness of staff.		Discoverer reports were migrated to SAP Business Objects Webi. o Community OMMS**:** MWRA completed the upgrade of the existing community OMMS application. GIS was integrated with the application and data configurations for the member communities is being validated prior to launch o Harbor and Outfall Monitoring Loading (HOML): Used by contracted labs to submit sample data. o Pretreatment Information Management System (PIMS): Used in the management of the pretreatment program. Implementation of several service releases including updates for the Copy of Record and NPDES reports was completed. Phase 2 of PIMS infrastructure upgrades completed. o Maximo Upgrade: Completed Maximo Asset Management application and infrastructure upgrade. o Telog/Unity Remote Monitoring and Management: Integrated Telog with Badger’s Unity data reporting module, a GIS interface and OKTA single sign on. o Plant Information (PI) System: Completed the upgrade of the hardware and software for the PICS PI DITP System. Preparations for the Carroll Water Treatment Plant SCADA system upgrades are also continuing. o GIS Portal: Completed the application and underlying infrastructure upgrade. Integrated the application with OKTA single sign on and the Unity and COMMS applications.

		o Library Portal application upgrade and migration: Completed the upgrade and migration of the Library Portal to a SaaS environment. o Fore River Rail Road Accounting: Upgraded and migrated the accounting application used by Finance to manage the Fore River Railroad accounting to a SaaS environment. o Debt Management: Finance selected the DebtBook SaaS application to replace its obsolete Munease application. o Lab Information Management System (LIMS): Engaged with the application vendor (Labware) to perform an application assessment in preparation for a follow up application upgrade. o TV Inspection: Completed the upgrade of the TV Inspection application and infrastructure for our pipe system. o InspectNTrack Mobile Inspection: Upgraded the Inspection application and infrastructure used by Operations to inspect facilities and assets.
G. Implement an archive and purge system that will provide an automated and integrated solution for archiving electronic content that will allow the Authority to intelligently store, manage and discover e-mail and all critical business information sources, while providing easy and intuitive access for end users.		• Implementation of an archiving solution as an add-on to existing backup technology was completed. Personal folders into archiving solutions continues.
H. Execute a Technology Infrastructure Improvement Program that will assess and implement consolidated and optimized versions of MWRA's core IT infrastructure elements		• Implemented new Phone System. Unified Communications in the form of calling, instant messaging, virtual meetings and presence was consolidated into one application. •

and improve data management practices. COMPLETED		
I. Upgrade and enhance MWRA's Enterprise Resource Planning system leveraging out-of-the-box functionality while striving to eliminate customizations and adoption of technology standards.		• Learning Management System (LMS): Completed implementation of a new Infor/Lawson product for managing all training including on-line training developed in house and from third parties including LinkedIn Learning. Installation and configuration is underway. • Legacy Contract Management System Contracts: All Open contracts were migrated to Infor Lawson. Reporting capabilities have been developed for closed contracts that were not be migrated to Infor Lawson. • Maximo-Lawson Interfaces: Completed streamlining the interfaces between Maximo and Lawson. Enhanced process flows, functionality, data validation and transaction integrity. • Infor Lawson CloudSuite Upgrade: ERP application upgrade and migration to SaaS. Completed the Project and Technical Planning, Current State Analysis, System Provisioning, Super User and Technical Training, Technical and Design Workshops, first pass Data Conversion, Initial System Design, System Build and Unit Test. • LobbyTrack Visitor Management: Implemented a Local Watch List solution to be used when Pre-Registering and Checking-In visitors. MIS also configured the Brutsch Facility to use the Visitor Management application. • New Hire onboarding application: Updated the NewHire Application to enhance its functionality and integrate it with Maximo.
J. Implement Enterprise Content Management for e-Construction,		• The Enterprise Content Management System was initially meant to support selected Construction and Engineering processes,

e-Engineering and Records Management.		replace the legacy document/records management system and provide the infrastructure for expansion and integrations with other systems. All initial phases of this project were completed during FY24. Development of the system continues with a new initiative to build out the staff summary and policy and procedure review and approval work flows.
K. Implement a unified communication (UC) collaboration platform to improve business processes, team communication and collaboration and distributed work force.		• Implementation and configuration of new UC VOIP phone system began. The UC system will integrate with WebEx virtual meetings and provide call capabilities to teleworking staff. UC deployed to Chelsea, Southboro, CWTP, Nut Island, Clinton and DITP impacted by the construction. • Cabling and circuit upgrades started in support of new UC system. • Implemented digital message boards at four facilities to provide unified messaging and improved communications to all staff.
L. Move towards the use of AI and Machine Learning technology to address computational and process problems.		• No progress on this objective in FY24.
M. COVID-19 Employee Reporting Systems COMPLETED		• COVID-19 Self Certification Applications: Two applications were implemented to allow staff to self-certify they do not have COVID-19 symptoms prior to coming to work. One is an in-house developed web application with COVID-19 screening questions and the other is a telephone call in number. Both systems write to the same database for Human Resources and management reporting. • Employee Availability Tracking Application: Tested, updated and activated an existing in-house developed employee availability application designed for managing staff availability in emergencies such as pandemic outbreaks. • Completed custom application developed for employee vaccination attestation.

V. Diversity, Equity, Inclusion & Workforce Development

Goal #14: Foster and Sustain an Excellent Workforce		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Prioritize Succession Planning in anticipation of critical retirements over the next five years.	→	• Staff continue to identify and implement succession planning initiatives including training programs, leadership and mentoring programs, career path development, and expedited replacement hiring processes in advance of critical retirements. • The comprehensive exit procedure developed in FY19 for use when employees leave the MWRA, (documenting knowledge and information on projects, contacts, file locations etc.) continues to be implemented and updated. • Staff negotiated a number of recruitment and retention programs with affected unions, including class recruitment rates and sign-on bonuses for certain critical positions, development of entry-level positions and career ladder tracks, and employee referral fees. • In FY25, the Authority established a working group of non-union managers to prioritize succession planning across the Authority.
B. Provide effective training necessary for employees to obtain and maintain required licenses and certifications to ensure a highly skilled workforce.	→	• Wastewater and Water license prep courses as well as collection system certification classes provided at least twice per year on a virtual platform, or at approved vendor locations. Additional classes were brought to Deer Island for Water Distribution exam prep and Wastewater exam prep. • Employees may be sent to approved vendor locations throughout the year for prep training to obtain Water Distribution or Treatment licenses. Virtual, in-person, and hybrid classes are regularly offered to employees to meet continuing education requirements for license renewals and required hours.

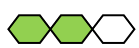
		• Training staff worked to redesign all in-house training to a virtual format in response to COVID-19. Post pandemic training remains a combination of on-line and in-person training.
C. Continue MWRA's in-house job shadowing, career development training programs and explore a pilot program for job rotation of certain titles.	→	• Continued the on-the-job training programs on an as-needed basis. DITP continued with its M&O shadowing program. This has been an on-going program for several years. • Continue to offer supervisory development programs several times per year. • Implemented a formal MWRA Mentoring program with Core Consulting through NACWA. • Developed a DITP Instrumentation shadow program in FY24. Staff participating in the program are required to complete 24 modules of an Electronic Technician course and work with experienced Instrument staff for a period of one year. This allows them to meet all the requirements to apply for an Instrument Specialist position. • Negotiated a pilot program that provides for on-the-job training to become OMC Laborers. Engaged in negotiations to establish similar entry-level Operator-in-Training program.
D. Continue to improve MWRA's teleworking capabilities and productivity incorporating lessons learned during the COVID-19 pandemic.		• MWRA implemented a formal Telework Policy following the COVID-19 pandemic that includes a new performance evaluation process to ensure productivity while teleworking. Staff continue to review and modify the Policy as needed.
E. Institute programs with a focus on professional and leadership development.		• Since 2020, MWRA annually enrolls up to five employees to participate in the CORE Emerging Leaders training offered through NACWA.
F. Expand intern initiative.		• Continued the summer intern program in 2024. In summer 2024, the MWRA employed 25 interns.

Objective	FY2024	Highlights/ Progress Updates
G. Continue to ensure compliance with new state and federal regulations and labor.	→	• Staff continue to review pay disparity as required by the Massachusetts Equal Pay Act, with a goal of conducting such reviews every three (3) years. A review of bargaining unit positions was completed in FY23. In FY24, staff began the process to review non-union manager compensation. • The Massachusetts paid family and medical leave benefits began in 2021. Staff process claims, as needed, and, where applicable, run such leave concurrent with FMLA leave benefits. MWRA continues to meet ongoing notice requirements relative to maximum benefit allowances and employee contribution rates. • Staff review all reasonable accommodation requests consistent with post-COVID changes in federal and state law.
Goal #15: Foster a diverse and inclusive workplace.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Cultivate a safe work environment for all employees that is free from harassment and encourages respect.	→	• Training on Respect in the Workplace was delivered by an outside trainer in early FY24 with all staff participating in the training. Staff will begin work on a procurement for Harassment Prevention Training in FY25.
B. Provide training to all employees on diversity, inclusion, equity, respect, and harassment prevention in the workplace.	→	• Continued to implement the DE&I strategy that includes the addition of off-year training on unconscious bias and respect in the workplace.

C. Continue MWRA's efforts to develop new recruitment and retention strategies to foster diversity, including traditionally underrepresented categories, people with disabilities, and veterans.	→	• A variety of job fairs, such as Diversity Career Fair, Recruit Military and College Job Fairs, were attended by staff, including Mass Maritime, Merrimack College, Salem State, Boston University STEM Fair, Worcester Polytechnic Institute and the Environmental, Energy and Engineering Career Fair sponsored by Environmental Business Council of New England. • In addition to increasing access to diverse pools of candidates, staff continue to promote MWRA as an organization with excellent benefits and employee relations through social media. Beginning in FY23, MWRA has utilized LinkedIn and other professional associations and websites to expand networking • Staff continue to conduct outreach and foster networking partnerships with Mass Hire Central Mass, Mass Hire City of Cambridge and Mass Hire Boston Workforce Development Program. Staff attended events hosted by Veteran Voice Network. In FY24, MWRA partnered with the City of Boston in connection with a city climate workforce grant program aimed to place city residents in green jobs. • Continued the use of The Local Job Network, a web-based recruiting site where entry, mid-level and senior level positions are posted to expand outreach to diverse protected classes. Continued utilizing Handshake to post job openings on college and professional association job boards. • Continued to add to the existing 258 recruitment sources for minorities, women, individuals with disabilities, and veterans in addition to its existing 53 recruitment sources identified in the Affirmative Action Plan. • Hired 93 new employees in FY24, including 23 (25%) females and 24 (26%) minorities.

		• Promoted 97 employees in FY24, including 25 (26%) females and 19 (20%) minorities. • Staff continue to engage with Vocational Technical Schools, through the EPC Employer Partnership Committee, whose goal is to provide high school, college, and university students with information about career opportunities in the Water and Wastewater sector. As part of the Deer Island Tour Program, MWRA employees participate in a Q/A panel discussion to assist students in making informed career decisions. • Staff held the first annual STEM fair at Deer Island during Massachusetts STEM Week.
D. Develop leadership skills at every level to increase opportunities for staff advancement and ownership.	→	• Implemented a formal MWRA Mentoring program with Core Consulting through NACWA for the second year in a row.
E. Pursue an inclusive leadership approach that considers innovation and diverse points of view to respond to the evolving needs of the Authority.	→	• DEI workgroup was expanded to include more staff. • Established an external speaker series and lunch and learn series to highlight important initiatives and programs (e.g., environmental justice and mental health awareness). • Established an internal speaker series to provide staff an opportunity to showcase their work. • Conducted an employee survey on engagement and inclusion. Working on implementing new programs based on results of the survey.
F. Create and maintain a work group whose mission is to improve diversity, inclusion, equity and respect in the workplace. Implement workgroup recommendations with measurable goals.		• The Diversity, Equity, and Inclusion (DEI) workgroup was established in FY21. The purpose of the DEI workgroup is to ensure that the MWRA creates an inclusive environment that promotes equity in the workplace. This leads to a culture that leverages diversity to its fullest potential so that every employee can have a sense of belonging regardless of his or her background.

		• The DEI workgroup has established several sub-working groups to implement DEI initiatives and to further enhance employee engagement. • The DEI workgroup progress in FY24 towards achieving our goals include the following: o As evidenced by our efforts to engage veterans, individuals with disabilities, as well as persons of all protected classes, our workforce representation continued to exceed our overall staffing goals for 2024. o Staff continue to celebrate and embrace the diversity of our staff and regularly update the internal (intranet) webpages with messages that illustrate our commitment to DEI in our workforce. Additionally, staff continue to engage in activities during awareness month(s)/day(s) for a specific group, culture, or cause including hosting Heritage and Cultural Month potluck. o Developed and implemented a comprehensive reasonable accommodation information tracking system to improve the efficiency and effectiveness of processing ADA requests and compiling data. o In collaboration with the Environmental Justice task force, the DEI working group has created subcommittees to focus on efforts across the Authority. We have formed subcommittees to support heritage month recognitions, as well as a

		subcommittee to support external employer engagement. o Staff celebrated LGBTQ+ pride month by hosting annual Pride walk and luncheon that included a celebration of Caribbean Heritage Month and Juneteenth. • The DEI workgroup launched a follow-up survey to the original staff survey distributed in 2021 to collect feedback regarding Professional Development including mentoring, educational training, team-building, etc. More than half of the respondents (65 percent) indicated that the information provided has been interesting and there have been no other areas they feel have not been addressed.
G. Implement an Environmental Justice Strategy (EJ) which outlines MWRA's actions and visions for promoting EJ considerations across MWRA's programs, policies and activities.		• Deliver services equitably across a diverse service area. • The Executive Office of Energy & Environmental Affairs (EEA) 2017 Environmental Justice Policy (EJ) has directed all EEA agencies to develop their own EJ Strategies. The MWRA is committed to this mission articulated in Article 97 of the Massachusetts Constitution for all residents of the Commonwealth and has joined the EEA's Environmental Justice (EJ) Task Force. Tomeka Cribb, Associate Special Assistant, Affirmative Action and Compliance serves as the EJ point of contact representing MWRA. • An Environmental Justice Community Liaison position was created and filled in FY24 to assist in implementing MWRA's EJ strategies including monitoring changes to the demographics or language needs of residents in MWRA's service area, providing support to staff requesting assistance for translation or interpretation needs, providing staff training, and monitoring the effectiveness of the EJ Plan.

		• In February 2024, Massachusetts unveiled its first EJ Strategy developed as directed under the Secretariat-wide EJ initiative. • Progress on the following objectives were made in FY23: o In September 2024, MWRA launched their Language Access Plan (LAP) in accordance with **Executive Order 615**. The purpose of this LAP is to ensure meaningful communication and access to information on MWRA's services, programs, activities and materials for all residents in MWRA's service area with limited English proficiency. o Continued the MWRA lunchtime speaker series, with guest speakers discussing a variety of topics. Film Documentarian Larry Hott; Former State Senator Linda Dorcena Forry; the Massachusetts Women's History Center; the Mystic River Watershed Association and the NPS Boston African American National History Site were among the speakers. o Continued to Promote Public Awareness of Sewage Pollution of any combined sewer overflows (CSOs) or certain sanitary sewer overflows (SSOs). MWRA is using Google Translate to translate all notifications into 14 identified EJ languages, and issues notices through email and text via Everbridge. o To Promote Public Awareness of Sewage Pollution of any combined sewer overflows (CSOs) MWRA created signs for public access area

		that include warnings about health risks in 11 identified EJ languages. o Live language interpretation services were offered at all CSO Control Plan public meetings. o The MWRA continues to update the public-facing EJ web page. There are a number of resources available on this new page, including links to other MWRA web pages, such as summaries of construction projects, job postings, CSO and SSO notifications.
Goal #16: Ensure a safe and healthful work place for all employees, contractors and visitors free of recognized hazards		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to identify hazards and assess associated risks. Provide training on programs and procedures to prevent or control incidents and ensure employee safety.	→	• Continued to develop the Occupational Health and Safety Department including program and policy review and development, facility audits and by participating in training classes. Expanding use of safety software to aid in reducing workplace injuries and preparing Occupational Safety and Health Administration (OSHA) regulatory reports. • Continued to develop and identify safety training for employees. Utilize leading and lagging safety metrics to identify areas of concern to address through training or hazard mitigation strategies. • Continued to improve safety culture through communication and leading by example. • Continued to assess the risks associated with tasks and provide the appropriate training, procedures and equipment to eliminate the risks. Worked with training department to secure safety training that will address identified safety concerns.

B. Continue to review and implement best safety practices during the COVID-19 pandemic to protect the safety of all employees and ensure continuity of critical services. COMPLETED		• Discontinued many COVID protocols consistent with the end of the COVID emergency declaration. Continue to follow guidance on isolation and quarantine. Continue to stock COVID tests and masks for use if necessary.
C. Maintain compliance with Massachusetts Occupational Safety and Health for State Workers regulation (454 CMR 25.00) by meeting the requirements set forth under the Occupational Safety and Health Act of 1970.	→	• Safety and training staff continue certificate training in safety disciplines, which improves the overall safety knowledge of the Authority as it relates to OSHA regulations. • Expanded the use of the Safety Reports application to include safety observations and job safety analysis. This expansion now allows in addition to performing formal OSHA inspections of facilities, to conduct walk-through observations on a frequent basis to identify hazards and track them efficiently. Staff can create reports of findings and provide them to stakeholders.
D. Maintain records concerning occupational injuries, illnesses, deaths, and exposure to toxic materials in compliance with regulations.	→	• All injuries are reported to the Safety Department and reviewed per OSHA recordkeeping regulations to determine if the injury is recorded. Injuries that meet the recordkeeping requirements are recorded on the OSHA 300 and 300A log. Injured employees complete the OSHA 301 form at the time of injury.

VI. Environmental Sustainability

Goal #17: Continue to maximize energy efficiency of MWRA operations, renewable energy production, and revenue generation opportunities using MWRA's energy assets.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Assist the Commonwealth in meeting its Greenhouse Reductions Goals set forth in the Global Warming Solutions Act and various related climate policies and executive orders.	→	• MWRA continues to reduce its greenhouse gas (GHG) emissions through continued implementation of energy efficiency projects, electrification, use of renewable energy generation, and low or no emission technologies, such as electric vehicles and battery powered landscaping equipment. From 2006 through 2022, MWRA has reduced its GHG emissions by about 41 percent, already meeting the State's 2025 goal. • Staff continue to follow Executive Order 594, "Decarbonizing and Minimizing Environmental Impacts of State Government" signed Earth Day 2021 – which provides goals and guidelines to reduce fossil fuel use. MWRA has already met the 2025 goals of 33 percent reductions in GHG emissions. • Staff are developing a strategic and targeted greenhouse gas forecast and reduction plan.
B. Continue to conduct energy audits at all facilities as needed.	→	• Conducted 15 new energy audits in FY24, focusing on replacement of fossil fuel heating systems with heat pumps, building envelope and remaining lighting opportunities. • Conducted an energy audit at Clinton in FY20 that resulted in a series of recommendations for the operations building. Work was completed for influent pumping upgrades adding variable frequency drives (VFDs) to the screw pumps at Clinton. This work was completed in FY24. • Deer Island Electrical staff continue work on scope development for the replacement of exterior and interior building light fixtures and a facility-wide lighting control system.

C. Optimize processes to save energy.	→	• Work continues on identifying processes that can be optimized to save energy.
D. Continue to incorporate cost efficient energy efficiency, non-fossil fuel heating, electric vehicle (EV) charging capabilities, and renewable energy projects into new construction, rehabilitation projects, and equipment replacement.	→	• MWRA's Decarbonization Standard Procedures were updated in FY24 to ensure that all operations and facility rehabilitation projects incorporate both the MWRA's and the Commonwealth's decarbonization priorities and requirements. Training was provided to engineering and maintenance staff on the changes to the standards. • The rehabilitation of the odor control and HVAC at Nut Island which contains several energy efficient components, began construction in February 2020 and was completed in FY24. • Hayes Pumping Station rehabilitation project contains several energy efficiency elements including HVAC, odor control and pump upgrades, installation of a new air handling unit and exhaust fans with variable frequency drives that will reduce motor speed when the building is unoccupied, installation of new LED lighting fixtures, and the installation of a heat pump to reduce the facility's use of diesel fuel for heating. Rehab design contract #7162 is complete and the construction contract #7375 was awarded at the October 23, 2024 Board of Directors meeting. Construction is expected to begin in spring 2025. • Braintree-Weymouth Pump Station improvements construction NTP was issued in September 2022. This project includes several energy efficiency components including jockey pumps for increased pumping efficiency, ventilation setbacks, and LED lighting. Construction expected to be completed in the spring of CY2025.
E. Continue to invest in new stand-alone renewable energy projects at MWRA facilities.	→	• Staff continued work on planning for a 1-2 MW solar canopy and various roofs at Deer Island. This will include review of energy storage potential. The project is expected to be bid out for construction in FY25.

		• Staff continued work on planning for solar arrays over underground water storage tanks. Preliminary approvals have been given by MassDEP. Legislation was filed for approval to utilize Norumbega Covered Storage for solar. • Staff are reviewing options for replacement of the failed wind turbine on Deer Island.
F. Continue to maximize revenue from generation assets including additional Demand Response opportunities.	→	• FOD hydro assets were in operation between 90 and 100 percent of the time. • Charlestown wind maintained its normal operations. • Deer Island and the Carroll Water Treatment Plant used backup generators in FY24 in order to: Participate in Independent Systems Operator – New England (ISO-NE) and Eversource Demand Response programs, cutting load when dispatched, with Deer Island earning under $500,000 and Carroll earning approximately $53,000 in incentives; and, to reduce load during ISO-NE system – side one-hour peak to avoid installed capacity charges of over $1 million per year. As of the summer of 2023, neither Carroll nor DITP can use diesel generators to participate in the Eversource Connected Solutions Program, as fossil-fueled generation is no longer eligible. However, DITP has deferred Cryo operation to curtail 2 MW of power demand during these events. • Staff applied for and received grant funding from the Mass. Clean Energy Center for an assessment of the hydro turbines at Deer Island project. The feasibility study, which will look at replacing or refurbishing the existing two 1.1 MW hydro turbine to optimize their generation, will begin in early FY25.
G. Take full advantage of utility energy efficiency rebate opportunities and pursue available federal and state grant money.		• Staff are working with National Grid and Eversource to update the existing Memorandum of Understandings (MOUs). The MOUs are non-binding, but commit MWRA to continue to implement energy

	→	efficiency projects, while obtaining a higher than typical incentive amount from the utilities. • Participating in an Eversource Demand Reduction project that utilizes battery storage technology to reduce electricity demand costs at Brattle Ct. Pumping Station and the Chelsea Admin. Building in which Eversource provided the batteries at no cost to the MWRA. Batteries began operating in February/March of CY21. Savings, generated both by demand reductions as well as enrollment in the Eversource Targeted Demand Dispatch program (in which batteries are discharged at peak load times) totaled approximately $15,300 in FY24. • MWRA applied for funding of $10,061 from MassDEP through its MassEVIP program, for EV charging equipment for the Southborough facility. • MWRA received approval for funding of $37,500 from MassDEP through its MassEVIP program for the five Chevy Bolts. • MWRA received approval for funding of $233,135 under Eversource's EV Make Ready program to install EV infrastructure at the Chelsea Facility to accommodate 15 dual port level II chargers and five level III smart chargers.
H. Incorporate employee education on energy efficiency in MWRA training outlets, e.g. tool box talks and HR training classes.		• Staff developed and provided a tool box talk for all staff as part of the speaker series.
I. Design new combined heat and power equipment to take advantage of the higher power and thermal efficiencies of new equipment, maximizing the production of additional electric power for on-site use at Deer Island as well as cost savings while reducing maintenance spending on aging equipment.		• A project to evaluate DITP's comprehensive energy programs relative to Heat and Power was completed in FY21. Staff bid out a combined heat and power design project in FY24 and awarded the design contract in July 2024.

J. Evaluate and implement, where feasible, combined heat and power technology in plant operations to improve energy efficiency (e.g. pellet plant, Clinton). COMPLETE		• Staff completed Combined Heat and Power (CHP) evaluations for the Pellet Plant and Clinton Treatment Plants. Currently these technologies are not recommended for these facilities given unfavorable life cycle cost analyses.
K. Continue to develop the battery storage projects and work with the utility and its contractor to optimize demand savings. Evaluate opportunities for future battery storage projects.		• Staff applied for grant funding from the Leading by Example Program under Massachusetts Dept. of Energy Resources for a large-scale battery energy storage assessment (BESS) at Deer Island and have received preliminary verbal approval pending an award of a contract. The procurement of professional services to evaluate the potential for a large-scale BESS installation at Deer Island occurred in FY24 and work on this contract is expected to continue through FY25.
L. Explore community solar opportunities that will stimulate large-scale remote solar installations and save money on MWRA's electric bills. COMPLETE		• Staff investigated the possibility of MWRA's participation in community solar and after much discussion determined that at this time, MWRA is best positioned to prioritize on developing its own solar arrays though may be interested in community solar or other opportunities to support large-scale renewable energy.
M. Expand our fleet of electric vehicles and charging stations.		• In FY24, staff purchased an additional five all-electric Chevy Bolts, two (2) Chevy Silverado pickup trucks and five level II chargers. There are currently 28 alternative fuel vehicles in MWRA's fleet. • Eversource approved MWRA's Chelsea, Southborough and Deer Island applications to its EV Make Ready program that would provide MWRA with electric vehicle charging infrastructure. Work in Chelsea is scheduled to begin in the fall of CY2024.
N. Explore a new MWRA-wide building/plant information management system that includes a comprehensive energy management system.		• In FY21, staff began to examine artificial intelligence/machine learning platforms to optimize plant operations and save energy at Deer Island. A system to optimize parts of plant operations at Deer Island was explored and determined to not be cost effective for Deer Island.

		• For the new CHP installation at DI, which is currently starting detailed design, both a digital twin to monitor and optimize the CHP system operations as well as a microgrid to coordinate the operation of the multiple plant electrical generation sources are to be implemented.
O. Explore and implement building electrification to reduce MWRA's reliance on fuel oil for heating. NEW		• Staff have incorporated the requirement to review the feasibility of using heat pumps into the designs of new construction or facility rehabs. • MWRA was awarded a grant from MassDEP's Clean Energy Program to do a pilot installation of heat pumps at two pump stations, one water and one wastewater. This comes after an evaluation was done of these facilities to determine the feasibility of using heat pumps to replace fossil fuel boilers. These projects are expected to be bid in the second quarter of FY25. • Audits of facilities using fuel oil or with old gas-fired boilers are also being conducted to determine the feasibility of installing heat pumps at these facilities. Upon completion of an audit of the Norumbega Headquarters building, staff are moving forward with electrification to replace the existing fuel oil-fired boiler. This project is expected to be implement in the third quarter of FY25.
Goal #18: Continue to monitor climate change research and move forward with plans to reduce impacts of projected sea level rise and storm surge events on MWRA infrastructure.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to incorporate design modifications into facility renovations and maintenance activities to address sea level rise and storm surge.	→	• Continued to update flood elevations as the Federal Emergency Management Agency (FEMA) revised its projections. Now including these design parameters in all renovation and new construction projects.
B. Plan and install flood protection barriers at water and wastewater sites which fall below expected elevations of flood waters under		• Flood protection measures have been installed at nearly all facilities vulnerable to sea level rise. Staff have developed SOPs and regularly perform deployment drills.

condition of a FEMA 100 year storm plus 2.5 feet to minimize damage and still provide service.		• Flood protection for the MWRA/BWSC jointly owned Union Park CSO/Pump Station is in final planning stage. • Flood protection measures for the Residuals Pellet Plant have been identified and are in the process of being installed. • MWRA utilized new data from the Massachusetts Coastal Flood Risk Model, to update expected flood levels for a 100-year storm in 2030, 2040, and 2050. We will incorporate the new levels, which closely align with the 100 year 2.5 ft of sea level rise standard, in future resiliency efforts. • Continued coordination with Boston on development of Moakley Park adaptation planning so that MWRA's CSO Tunnel vent structure and Columbus Park headworks are protected from sea level rise flooding. MWRA facilities will be protected under the latest plan. • Flood protection was incorporated into the rehabilitation of the Chelsea Headworks that was completed in August 2021. Flood protection is being incorporated in the rehabilitation of the Columbus Park Headworks. As facility rehabilitation projects arise, flood protection will be included if the facility is located in an identified flood zone.
C. Work with State and regional organizations and academic institutions to identify how MWRA's existing long-term environmental data sets can be used to help assess and project impacts of climate change.		• Distinguishing climate change impacts from potential effects of MWRA's outfall in Massachusetts Bay, and how to best leverage the long-term environmental monitoring data set, is the subject of discussions internally and with the Outfall Monitoring Science Advisory Panel.
Goal #19: Advance reasonable water system expansion.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to provide assistance to communities seeking admission to the MWRA's water system or seeking emergency withdrawals.		• Provided guidance on the Water System Admission process to prospective communities and developments including: Hopkinton, the Former South Weymouth

		Naval Air Station, Lynnfield Center Water District, Natick, Walpole, Wayland, Wellesley, and Weymouth. • Completed three system expansion studies, one for the South Shore, one for the Ipswich River Basin Communities, and one for 21 Metro West communities in FY23. • In FY24 initiated a fourth system expansion study for the Quabbin Reservoir Watershed communities. This study will be complete mid-FY25.
B. Work with prospective communities to inform them of the benefits of admission.	→	• Work continues on this initiative through outreach to communities, watershed groups, and associations and through requests from consultants representing the communities.
C. Work with MWRA's Advisory Board on legislative initiatives to pursue funding for connection assistance for new communities connecting to the water system.		• In September 2022, the MWRA Board of Directors voted to approve a recommendation by the MWRA Advisory Board to waive the Entrance Fee. To be eligible for the Entrance Fee waiver, new communities seeking admission to MWRA must show that they have water quality issues, water quantity issues, or are unable to meet existing or future demands due to potential economic development opportunities. This waiver only applies to the first 20 mgd of water sold to new communities, and any community wishing to claim the waiver must be approved for admission to MWRA's water system by the MWRA Advisory Board and Board of Directors by the end of December 2027. • MWRA staff will continue to work with the MWRA Advisory Board to seek additional sources of funding to cover the infrastructure costs associated with connecting to MWRA's water system.

Goal #20: Continue to recognize the environmental, cultural, historical, and recreational importance of the watershed lands, the aqueduct system, and the unique location on Boston Harbor of the Deer Island Treatment Plant and Nut Island Headworks, to the citizens of the Commonwealth.		
Objective	**FY2024**	**Highlights/ Progress Updates**
A. Continue to work cooperatively with DCR and cities and towns to ensure that these lands are available for appropriate public access.	→	• Staff have participated in the DCR Land Acquisition Panel (LAP) offering guidance since 1995. The MWRA Board has had approval oversight of watershed land purchases under the CIP since FY07. Staff continue to be active in the LAP attending quarterly meetings and offering MWRA viewpoints on land purchases, preservation restrictions and disposition. *This update also supports Goal #1, assisting MWRA to maintain drinking water quality.* The Executive Director is chairing the Boston Harbor Islands Partnership, a federally sanctioned group that maintains stewardship responsibilities of the Harbor Island National Park.
B. Continue to work with cities and towns to implement the Public Access Initiative on the Wachusett, Weston, Sudbury, and Cochituate Aqueducts. This program creates a partnership between MWRA and communities that host each piece of infrastructure, granting access to applicant communities to use MWRA controlled aqueduct right-of-ways of the Cochituate, Sudbury, Wachusett, and Weston Aqueducts, along with the lands surrounding the Weston and Norumbega distribution reservoirs.	→	• The MWRA Aqueduct Trails Program is an innovative initiative that has opened up new recreational opportunities in communities across Metro West on appropriate MWRA aqueduct infrastructure. • Since 2011, MWRA staff have been working with aqueduct communities to provide technical assistance through the 8(m) permit process and have had great success opening access to these resources for the first time. • To date, MWRA staff have issued many Section 8 (m) Permits as part of the Aqueducts Trails Program authorizing approximately 30 miles of Aqueduct Trails. MWRA estimates that approximately 23 miles are currently open to the public. • MWRA staff have worked with a local historian to develop a web page on the history of the Metropolitan Water System, utilizing historic State archive reports and

		Digital Commonwealth photos. Website "beforetherwasadam.com" creator has won the 2023 New England Water Works Association "Distinguished Public Involvement Award" for this work.
C. Implement construction plans to remove the obsolete Quinapoxet River Dam at Wachusett Reservoir to restore fish migration, natural riverine hydrology, and climate resilience. NEW		• Dam removal began in CY2024 and is expected to be completed by the end of CY2025. The in-river work is scheduled to be completed by April 2025. Site restoration work will begin after that.
D. Continue to provide public access to Boston Harbor at Deer and Nut Islands, while ensuring appropriate security for MWRA's operations.		• MWRA, state and local officials, and fishing advocates cut the ribbon on the new Deer Island Recreational Fishing Pier on June 24, 2021 for its official grand opening. The fishing pier was constructed by the Division of Marine Fisheries (DMF) and the MWRA. MWRA participates in an annual "Reel Fun Fishing Day" at the Piers at Deer Island and Nut Island.