



# MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey  
Executive Director

*Chair:* B. Card

*Vice-Chair:* J. Carroll

*Secretary:* A. Pappastergion

*Board Members:*

C. Cook

P. Flanagan

J. Foti

B. Peña

H. Vitale

J. Walsh

P. Walsh

J. Wolowicz

## **BOARD OF DIRECTORS' MEETING**

**To be Held on Wednesday, July 20, 2022**

Time: 1:00pm

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

**WebEx Meeting Link (Registration Required)**

<https://mwra.webex.com/mwra/onstage/g.php?MTID=ebc38aaa2eaaf9c03123c32b4ee69c51d>

Event Number: 2338 518 0899

Password: 0720

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## **REVISED AGENDA (3)**

### **I. APPROVAL OF MINUTES**

### **II. REPORT OF THE CHAIR**

### **III. REPORT OF THE EXECUTIVE DIRECTOR**

### **IV. EXECUTIVE SESSION**

i. Approval of June 22, 2022 Executive Session Minutes

#### **A. Real Estate**

1. Watershed Land Acquisition

#### **B. Collective Bargaining**

1. Approval and Ratification of Collective Bargaining Agreement (verbal)

#### **C. Litigation**

1. Chelsea Creek Headworks Project: Arcadis U.S., Inc., Contract 7206, BHD/BEC JV 2015, A Joint Venture, Contract 7161

2. *Conservation Law Foundation, Inc. v. Massachusetts Water Resources Authority*, USDC, No. 1:22-CV-10626 Update (verbal)

**V. WASTEWATER POLICY & OVERSIGHT**

**A. Information**

1. Update on New Wastewater Metering System
2. City of Cambridge Partial Sewer Separation Connections

**B. Contract Awards**

1. Braintree-Weymouth Pump Station Improvements: Walsh Construction Co. II, LLC, Contract 7366

**VI. WATER POLICY & OVERSIGHT**

**A. Contract Awards**

1. Section 101 Pipeline Extension (Waltham) Engineering Services During Construction, Resident Engineering and Resident Inspection Services: CDM Smith Inc.

**VII. PERSONNEL & COMPENSATION**

**A. Approvals**

1. PCR Amendments – July 2022
2. Appointment of Deputy Director, Deer Island

**VIII. ADMINISTRATION, FINANCE & AUDIT**

**A. Information**

1. Delegated Authority Report – June 2022

**B. Approvals**

1. Memorandum of Agreement between MWRA and the Town of Ludlow regarding Construction and Ownership of an Antenna Tower at Nash Hill Reservoir for Installation of Communication Equipment (materials to follow)
2. Increasing the Cost of Living Adjustment Base for Retirees

**IX. CORRESPONDENCE TO THE BOARD**

**X. OTHER BUSINESS**

## MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of June 22, 2022

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A meeting of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on June, 22 2022. The meeting was conducted at MWRA’s headquarters at 100 First Avenue, Boston, Massachusetts, and also virtually pursuant to Chapter 20 of the Acts of 2021, An Act Relative to Extending Certain COVID-19 Measures Adopted During the State of Emergency. Chair Card presided from MWRA headquarters. In addition to the Chair, also present from the Board were Ms. Wolowicz (remote participation), and Messrs. Carroll (remote participation), Cook (remote participation), Foti (remote participation), Peña (remote participation), Vitale (remote participation), and Patrick Walsh (remote participation). Messrs. Flanagan, Pappastergion and Jack Walsh were absent. MWRA staff participants at MWRA’s headquarters included: Frederick Laskey, Executive Director and Carolyn Francisco Murphy, General Counsel. MWRA staff in attendance virtually included David Coppes, Chief Operating Officer; Carolyn Fiore, Deputy Chief Operating Officer; Thomas Durkin, Director, Finance; Michele Gillen, Director, Administration; Kathy Murtagh, Director, Tunnel Redundancy; Paula Weadick, Director, MIS; Denise Breiteneicher, Program Manager, Energy and Environment; Ria Convery, Special Assistant to the Executive Director and Assistant Secretary; Sean Navin, Director, Intergovernmental Affairs; David Duest, Director, Deer Island Treatment Plant; John Colbert, Chief Engineer; Andrea Murphy, Director, Human Resources; and Assistant Secretary Kristin MacDougall. Also in attendance virtually were Vandana Rao, Executive Office of Environmental Affairs (EEA), and Joseph Favaloro, MWRA Advisory Board (Advisory Board).

Chair Card called the meeting to order at 1:03pm. MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance. The Chair announced that except for Executive Session, the meeting was open to the public virtually, via a link posted on MWRA’s website ([www.mwra.com](http://www.mwra.com)). She added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA’s website. She also announced that the meeting would move into Executive Session after the Executive Director’s report, and that the Open Session would resume after the adjournment of Executive Session.

General Counsel Francisco Murphy explained that all motions would be individually presented and given an opportunity for discussion and deliberation; further, that after discussion and deliberation, any Board member could request an individual roll call vote on that motion, where Board Members could vote affirmatively or in the negative, or abstain from voting. She also noted that if no request for an individual vote were made or concerns raised, the motion would advance for an omnibus roll call vote at the conclusion of all the presentations.

### APPROVAL OF MAY 25, 2022 MINUTES

A motion was duly made and seconded to approve the minutes of the Board of Directors’ meeting of May 25, 2022. Chair Card called for any questions, discussion, or objections. Hearing none, she referred the motion to an omnibus roll call vote. (ref. I)

### REPORT OF THE CHAIR

Chair Card reported that she had declared a Level 2-Significant Drought in the Northeast and Southeast regions and a Level 1-Mild Drought in the Connecticut River Valley, Central, and

Islands regions, due to below-average rainfall. She explained that conditions in the Western and Cape Cod regions were normal, and that the Drought Management Task Force, in partnership with the Massachusetts Department of Public Health, continued to monitor conditions and coordinate in preparation for any potential impacts to residents. Next, Chair Card advised that the US EPA (EPA) had recently issued Interim Health Advisories for PFOA and PFAS; that the Department of Environmental Protection was reviewing these advisories and working on determining the next steps; and, that EEA staff was coordinating and communicating with the Department of Health and Human Services, with additional conversations to come. (ref. II)

#### REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey announced that MWRA had distributed its Annual Report on Drinking Water Quality for calendar year 2021, noting that staff had incorporated language translation capabilities to the online reports in accordance with Environmental Justice best practices. Mr. Laskey then reported that MWRA staff was closely monitoring the EPA's PFOA/PFAS Health Advisory. Finally, Mr. Laskey advised that MWRA was working with Town of Ludlow with respect to a new communications tower, and that staff would present any proposed MOA with the Town for Board approval at a future meeting. (ref. III)

(Mr. Cook temporarily left the meeting during the report.)

#### EXECUTIVE SESSION

Chair Card requested that the Board move into Executive Session to discuss litigation and collective bargaining, since Open Session could have a detrimental effect on the bargaining positions of the Authority. She announced that the planned topics of discussion in Executive Session were a Conservation Law Foundation litigation update and budget and a Collective Bargaining update. She announced that the Board would return to Open Session after the conclusion of Executive Session.

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

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

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

| <u>Yes</u> | <u>No</u> | <u>Abstain</u> |
|------------|-----------|----------------|
| Card       |           |                |
| Carroll    |           |                |
| Foti       |           |                |
| Peña       |           |                |

| <u>Yes</u> | <u>No</u> | <u>Abstain</u> |
|------------|-----------|----------------|
| Vitale     |           |                |
| P. Walsh   |           |                |
| Wolowicz   |           |                |

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

The Board moved to Executive Session to discuss Litigation and Collective Bargaining, since discussing such in Open Session could have a detrimental effect upon the bargaining positions of the Authority.

\*\*\* EXECUTIVE SESSION \*\*\*

The meeting entered Executive Session at 1:16pm and adjourned at 1:47pm.

(Mr. Cook returned to the meeting after the vote to enter Executive Session.)

\*\*\* CONTINUATION OF OPEN SESSION \*\*\*

Open Session resumed at 1:48pm. Chair Card presided.

#### ADMINISTRATION, FINANCE AND AUDIT

##### Information

##### Open Meeting Law – Remote Participation of Members of a Public Body

MWRA General Counsel Francisco Murphy summarized the provisions of An Act Relative to Extending Certain COVID-19 Measures Adopted During the State of Emergency. She advised that the temporary measures were scheduled to expire on July 15, 2022, and that a pending Senate budget amendment could extend them to December 15, 2023. Finally, Ms. Francisco Murphy explained that Board Members could, at their discretion, vote to adopt remote participation under the Open Meeting Law, in accordance with the requirements of 940 CMR 20.10, in the event that the temporary measures were not extended; she then described the requirements of such remote participation under the Open Meeting Law and its regulations.

Chair Card requested that MWRA staff advise Board Members of any remote participation requirements for the next Board meeting. There was general discussion about remote participation guidelines, requirements and restrictions.

A motion was duly made and seconded to allow remote participation by the Board under the Open Meeting Law in accordance with the requirements of 940 CMR 29.10.

There were additional questions and answers about remote participation, and discussion about the benefits of remote, hybrid and onsite meeting participation.

Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. V A.1)

#### Delegated Authority Report – May 2022

MWRA Director of Administration Michele Gillen invited Board Members' questions and comments on the Delegated Authority Report.

Hearing no questions or discussion, Committee Chair Foti proceeded to the next agenda item. (ref. V A.2)

#### MWRA's Energy Program, Presentation of Incentives and Grants Received

MWRA Deputy Chief Operating Officer Carolyn Fiore summarized projects and monetary incentives that MWRA received over the last three years from Eversource and National Grid under Memoranda of Understanding and other funding sources; MWRA's energy efficient design practices; and, income from the sale of energy certificates, power generation and enrolment in ISO New England's Forward Capacity Market.

There was discussion about MWRA's electric vehicle (EV) fleet; funding programs for EVs and charging stations; and the availability of EVs.

Hearing no further questions or discussion, Committee Chair Foti proceeded to the next agenda item. (ref. V A.3)

#### FY22 Financial Update and Summary Through May 2022

MWRA Director of Finance Thomas Durkin provided a financial update through May, 2022. He reported a +9.9% variance for wages and salaries due to ongoing staffing challenges, and a -16.3% variance for energy due to increasing energy costs. Next, Mr. Durkin advised Board members that inflation, rising prices and supply chain disruptions could potentially impact MWRA budgets. He then reported a +6.3% variance for maintenance and a +25.2% variance for other materials, and noted that MWRA had applied \$25 million in surplus to execute a Board-approved defeasance on June 16, 2022. Finally, Mr. Durkin reported projected final variances of +5.5% for the FY2022 Current Expense Budget and +38% for the Capital Improvement Program.

There was general discussion about projected interest rates through calendar year 2023, variable interest rates, strategies to balance financial risks, the federal funds rate, and inflation.

(Mr. Carroll temporarily left the meeting during the discussion.)

Hearing no further questions or discussion, Committee Chair Foti proceeded to the next agenda item. (ref. V A. 4)

#### Approvals

##### Approval of the FY2023 Final Capital Improvement Program

A motion was duly made and seconded to approve the FY2023 Final Capital Improvement

Program with a total budget of \$278.5 million for FY2023 including \$230.0 million in project spending and \$48.5 million in community assistance.

Mr. Durkin advised that the FY 2023 Capital Improvement Plan (CIP) was the fifth in a five year cap period. He explained that at a projected \$278.5 million, the final FY2023 CIP appeared higher than the average of prior actuals, consistent with MWRA's historical five year cap period budget patterns. Finally, Mr. Durkin noted that the FY2023 CIP puts forth a robust plan that accurately communicates MWRA's priorities to stakeholders.

Chair Card asked if there was any discussion or objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. V B.1)

#### Approval of the Final FY23 Current Expense Budget

A motion was duly made and seconded to adopt the Final FY23 Current Expense Budget set forth in Attachments A and B to the June 22, 2022 Staff Summary presented and filed with the records of this meeting, with current revenue and expense of \$840,190,871; and to adopt the Final FY23 Operating Budget (Trustee's Budget) set forth in Attachment C of the June 22, 2022 Staff Summary presented and filed with the records of this meeting.

Mr. Durkin advised that MWRA's Final FY2023 Current Expense Budget (CEB) was prepared in consideration of a volatile economic climate. Mr. Durkin then summarized the proposed final FY23 CEB, including direct expenses (33%) indirect expenses (8%) and capital finance (60%). Next, he acknowledged MWRA Advisory Board staff's contributions to the budget processes and provided a brief overview of MWRA's approaches to FY2023 water and sewer assessments; rate stabilization; and, the pension funding schedule.

Board Member Vitale thanked MWRA and Advisory Board staff for their efforts in preparing the budgets.

(Mr. Carroll returned to the meeting during the summary.)

Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. V B.2)

#### Final FY23 Water and Sewer Assessments

A motion was duly made and seconded to adopt, effective July 1, 2022, the water and sewer assessments, rates and charges as set forth in the June 22, 2022 Staff Summary as presented and filed with the records of this meeting, including Attachments 1, 2 and 3.

Mr. Durkin explained that MWRA staff recommended a 2.85% rate increase on a combined basis for the MWRA system in its entirety, and described annual water and sewer community assessment methodologies.

Committee Chair Foti invited MWRA Advisory Board Executive Director Joseph Favaloro to offer remarks.

Mr. Foti thanked MWRA staff for their participation in an effective and transparent rate-setting process, and noted that the Advisory Board advocated for sustainable and predictable assessments.

Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. V B.3)

#### Appointment of Proxy for Fore River Railroad Corporation

A motion was duly made and seconded that 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 set forth in the June 22, 2022 Staff Summary presented and filed with the records of this meeting. Further, that the MWRA Board of Directors directs the proxy to elect the following board members: David W. Coppes; Carolyn M. Fiore; Carolyn M. Francisco Murphy; Rose Marie Convery; Michele S. Gillen; Brian Pena; Thomas J. Durkin; Frederick A. Laskey; and John J. Walsh.

MWRA Deputy Director of Finance/Treasurer Matthew Horan described the purpose and responsibilities of the proxy for shareholders.

Chair Card asked if there was discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. V B.4)

#### Contract Awards

##### Office Consolidation Boston and Chelsea: WES Construction Corp., Contract 7980

A motion was duly made and seconded to approve the award of Contract 7980, Office Consolidation Boston and Chelsea, to the lowest responsible and eligible bidder, WES Construction Corp. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$19,587,883, for a contract term of 270 calendar days from the Notice to Proceed.

MWRA Special Assistant to the Executive Director Ria Convery presented an overview of the proposed contract to consolidate office space from the Charlestown Navy Yard to MWRA's Chelsea and Deer Island facilities, including the reasons and project scope. She then explained the benefits of the project, including cost savings of approximately \$2 million per year; improved security; and, a reduced carbon footprint, as both locations were MBTA accessible and supported hybrid work schedules. Finally, Ms. Convery described the project design process, the contract procurement process and the qualifications of the recommended project contractor.



There was discussion about the benefits of the office consolidation and MWRA's lease of its existing facilities in Chelsea.

Chair Card expressed support for the office consolidation project and noted that Commonwealth agencies were undertaking similar efforts.

Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. V C.1)

## WASTEWATER POLICY AND OVERSIGHT

### Contract Awards

#### Wastewater Advisory Committee Contract

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute a contract, substantially in the form set forth in the June 22, 2022 Staff Summary presented and filed with the records of this meeting, with the Wastewater Advisory Committee for a term of one year, from July 1, 2022 to June 30, 2023, for a total contract cost of \$80,144.

MWRA Director of Intergovernmental Affairs Sean Navin summarized the terms of the proposed annual, one-year contract renewal with the MWRA Wastewater Advisory Committee to the MWRA.

Chair Card asked if there was any discussion or objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. VI A.1)

### Contract Amendments/Change Orders

#### Agreement for Contract Extension, Operations and Maintenance of the Fore River Pelletizing Plant with New England Fertilizer Company Contract S345, Amendment 3 - Exercise Optional Third Year

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve the optional third year of Amendment 3 to Contract S345, Operations and Maintenance of the Fore River Pelletizing Plant, with New England Fertilizer Company for an amount of \$13,668,477 plus escalation and adjustments for excess quantities, and extending the contract term for one year, from January 1, 2023 through December 31, 2023.

MWRA Deer Island Treatment Plant Director David Duest presented an overview of MWRA's Fore River Pelletizing Plant operations, and the terms of the contract and proposed extension. He advised that MWRA's Sludge-to-Fertilizer program could be affected by expected state and federal regulations regarding PFAS, and described potential future contracting strategies.

There was general discussion about biosolids disposal and associated costs.

Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. VI B.1)

Agency-Wide Technical Assistance Consulting Services: Contract 7692, Amendment 2, CDM Smith Inc.

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 7692, Agency-Wide Technical Assistance Consulting Services, with CDM Smith Inc., increasing the contract amount by \$1,000,000, from \$3,000,000 to \$4,000,000, with no increase in contract term.

MWRA Chief Engineer John Colbert explained the purpose of agency-wide technical assistance contracts and advised that the proposed amendment would primarily support resident engineering services for the Office Consolidation Project as referenced in agenda item V C.1.

There was general discussion about MWRA's other agency-wide technical assistance contracts (how many such contracts did MWRA maintain) and similar contracts at the Boston Water and Sewer Division.

Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. VI B.2)

WATER POLICY AND OVERSIGHT

Contract Awards

Annual Renewal of Water Supply Citizens Advisory Committee Contract

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute a contract, substantially in the form set forth in the June 22, 2022 Staff Summary presented and filed with the records of this meeting, with the Water Supply Citizens Advisory Committee for a one-year period beginning July 1, 2022 to June 30, 2023, with a total contract cost of \$116,978.

Mr. Navin summarized the terms of the proposed annual, one-year contract renewal with the Water Supply Citizens Advisory Committee to the MWRA.

(Ms. Wolowicz left the meeting during the summary.)

Chair Card asked if there was discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. VII A.1)

PERSONNEL AND COMPENSATION

Approvals

Appointment of Manager, Maintenance (Deer Island) Operations Division

A motion was duly made and seconded to approve the appointment of Mr. Daniel Keough to the position of Manager, Maintenance (Deer Island) (Non-union, Grade 14) at an annual salary of \$146,500 commencing on a date to be determined by the Executive Director.

MWRA Human Resources Director Andrea Murphy summarized the proposed candidate's work history, experience, education, and qualifications.

There was general discussion about salary negotiations for internal promotions and new hires. Chair Card asked if there was further discussion or any objections. Hearing none, she advanced the motion to an omnibus roll call vote. (ref. VII A.1)

### OMNIBUS ROLL CALL VOTE

Chair Card called for an omnibus roll call vote on the motions made and seconded.

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

| <u>Yes</u> | <u>No</u> | <u>Abstain</u> |
|------------|-----------|----------------|
| Card       |           |                |
| Carroll    |           |                |
| Cook       |           |                |
| Foti       |           |                |
| Peña       |           |                |
| Vitale     |           |                |
| P. Walsh   |           |                |

Voted: to approve the minutes of the Board of Directors' meeting of May 25, 2022; (ref. I)

Further, voted: to allow remote participation by the Board under the Open Meeting Law in accordance with the requirements of 940 CMR 29.10; (ref. V A.1)

Further, voted: to approve the FY2023 Final Capital Improvement Program with a total budget of \$278.5 million for FY2023 including \$230.0 million in project spending and \$48.5 million in community assistance; (ref. V B.1)

Further, voted: to adopt the Final FY23 Current Expense Budget set forth in Attachments A and B to the June 22, 2022 Staff Summary presented and filed with the records of this meeting, with current revenue and expense of \$840,190,871; and to adopt the Final FY23 Operating Budget (Trustee's Budget) set forth in Attachment C of the June 22, 2022 Staff Summary presented and filed with the records of this meeting; (ref. V B.2)

Further, voted: to adopt, effective July 1, 2022, the water and sewer assessments, rates and charges as set forth in the June 22, 2022 Staff Summary as presented and filed with the records of this meeting, including Attachments 1, 2 and 3; (ref. V B.3)

Further, voted: 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 set forth in the June 22, 2022 Staff Summary presented and filed with the records of this meeting. Further, that the MWRA Board of Directors directs the proxy to elect the following board members: David W. Coppes; Carolyn M. Fiore; Carolyn M. Francisco Murphy; Rose Marie Convery; Michele S. Gillen; Brian Pena; Thomas J. Durkin; Frederick A. Laskey; and John J. Walsh; (ref. V B.4)

Further, voted: to approve the award of Contract 7980, Office Consolidation Boston

and Chelsea, to the lowest responsible and eligible bidder, WES Construction Corp. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$19,587,883, for a contract term of 270 calendar days from the Notice to Proceed; (ref. V C.1)

Further, voted: to authorize the Executive Director, on behalf of the Authority, to execute a contract, substantially in the form set forth in the June 22, 2022 Staff Summary presented and filed with the records of this meeting, with the Wastewater Advisory Committee for a term of one year, from July 1, 2022 to June 30, 2023, for a total contract cost of \$80,144; (ref. VI A.1)

Further, voted: to authorize the Executive Director, on behalf of the Authority, to approve the optional third year of Amendment 3 to Contract S345, Operations and Maintenance of the Fore River Pelletizing Plant, with New England Fertilizer Company for an amount of \$13,668,477 plus escalation and adjustments for excess quantities, and extending the contract term for one year, from January 1, 2023 through December 31, 2023; (ref. VI B.1)

Further, voted: to authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 7692, Agency-Wide Technical Assistance Consulting Services, with CDM Smith Inc., increasing the contract amount by \$1,000,000, from \$3,000,000 to \$4,000,000, with no increase in contract term; (ref. VI B.2)

Further, voted: to authorize the Executive Director, on behalf of the Authority, to execute a contract, substantially in the form set forth in the June 22, 2022 Staff Summary presented and filed with the records of this meeting, with the Water Supply Citizens Advisory Committee for a one-year period beginning July 1, 2022 to June 30, 2023, with a total contract cost of \$116,978; (ref. VII A.1) and,

Further, voted: to approve the appointment of Mr. Daniel Keough to the position of Manager, Maintenance (Deer Island) (Non-union, Grade 14) at an annual salary of \$146,500 commencing on a date to be determined by the Executive Director. (ref. VIII A.1)

#### CORRESPONDENCE TO THE BOARD

##### June 15, 2022 Metropolitan Area Planning Council (MAPC) Memorandum Regarding Proposal to Waive the Entrance Fee for New Water Service

Chair Card announced that the MWRA Board of Directors had received correspondence from the Metropolitan Area Planning Council (MAPC), and invited Mr. Laskey to introduce the topic.

Mr. Laskey advised that the MAPC's memo endorsed the waiving of an entrance fee for MWRA membership and invited MWRA Advisory Board Executive Director Joseph Favaloro to make remarks.

Mr. Favaloro explained that Advisory Board members endorsed the waiver of the MWRA entrance fee for a period of five years, under specific conditions. He advised that the Advisory Board would prepare a proposal for presentation at a future MWRA Board of Directors meeting, and described potential benefits of the fee waiver.

There was brief discussion about MAPC Smart Growth policy.

Chair Card noted that the MAPC memorandum referenced MWRA system expansion to the Ipswich River and the South Shore, which would require consideration of infrastructure requirements.

Chair Card asked if there was further discussion or any objections. Hearing none, she proceeded to Other Business. (ref. IX.a)

#### OTHER BUSINESS

Chair Card advised that Acting DCR Commissioner Stephanie Cooper will be returning to her responsibilities at the Department of Environmental Protection. Chair Card announced that MWRA Director of Procurement Douglas Rice, who previously served as DCR General Counsel, would temporarily serve as DCR Commissioner, under a detailed agreement, through the end of the administration. (ref. X) Chair Card expressed her thanks and gratitude.

#### ADJOURNMENT

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

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

| <u>Yes</u> | <u>No</u> | <u>Abstain</u> |
|------------|-----------|----------------|
| Card       |           | Carroll        |
| Cook       |           |                |
| Foti       |           |                |
| Peña       |           |                |
| Vitale     |           |                |
| P. Walsh   |           |                |


The meeting adjourned at 3:05pm.

Approved: July 20, 2022

Attest:

\_\_\_\_\_  
Andrew M. Pappastergion, Secretary

## STAFF SUMMARY

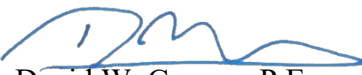
**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director   
**DATE:** July 20, 2022  
**SUBJECT:** Update on the New Wastewater Metering System

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**COMMITTEE:** Wastewater Policy & Oversight

INFORMATION  
 VOTE

Michael Greeley, P.E., Manager, Meter and Monitoring  
Ethan Wenger, P.E., Director, SCADA, Metering and Monitoring  
Rodrigo Pineros, E.I.T, Program Manager, Meter Engineering  
Preparer/Title

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

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*This update is being provided to the Board in advance of the release of the first Wastewater Community Assessment Report for 2022. While most community wastewater flows are close to historical averages, the flows from some communities vary measurably from the past and could impact future assessments. This update will review the Wastewater Flow Assessment process and the improvements made to the MWRA Metering System under the recent Meter Replacement Project.*

### RECOMMENDATION:

For information only.

### DISCUSSION:

Wastewater meters are a key element of MWRA's cost allocation methodology for the regional sewer system. In addition, they provide critical system operating data. Approximately 50% of the sewer system's operating expenses and debt service costs for capital projects are allocated to communities using data that is dependent upon metered flows.

MWRA designed and installed the first wastewater metering system between 1989 and 1993 and first began to use metered wastewater flow for billing in fiscal year 1996. Prior to that, wastewater charges to communities were based on population. The last full metering system upgrade took place in 2004 and the installed equipment had an expected lifespan of seven to ten years. As a result of aging equipment, corrective maintenance costs of the system began to increase and a higher proportion of staff time was required to ensure data reliability. In June 2017, MWRA entered into Contract 6739 with RJN Group, Inc. to perform a system-wide meter assessment and update the community metering methodologies used in the formulation of sewer charges. RJN was also tasked with the design of a new wastewater meter system that would be competitively bid as a construction contract.

At its October 2020 meeting, the Board of Directors voted to approve the award of Contract 7191, Permanent Metering System Replacement Equipment Purchase and Installation, to ADS Environmental. ADS Environmental performed the installation of 173 total area-velocity flow

meters in the wastewater collection system. (Area-velocity flow meters are the most common type of flow meter in the MWRA system and are installed directly in the sewer system itself.) All installations took place between April and December of 2021. The upgraded permanent wastewater metering system was put back in service on January 1, 2022.

The upgraded wastewater metering system now includes 263 meters. These meters are a combination of the 173 meters installed by ADS and 90 additional existing meters not included in the ADS contract. Forty-three existing meters were not included because the equipment was less than two years old. The remaining 47 existing flow meters did not have to be replaced because they were not area-velocity flow meters, and were deemed accurate and reliable. These other flow meters include a variety of types, usually present in pump stations and other MWRA or community structures.

A summary of meter types is presented in the following table:

|                     | ADS<br>Installation | Existing<br>Sites | TOTAL      |
|---------------------|---------------------|-------------------|------------|
| Revenue Flow        | 161                 | 66                | 227        |
| Nonrevenue Flow     | 12                  | 12                | 24         |
| <u>CSO Sites</u>    | <u>0</u>            | <u>12</u>         | <u>12</u>  |
| <b>Total Meters</b> | <b>173</b>          | <b>90</b>         | <b>263</b> |

Additionally, the new meter project included a reconfiguration of the meter database structure to allow for more advanced analysis of meter performance. An example of one of these techniques (depth-velocity scatterplot analysis) is presented in Figure 1. Scatterplot analysis provides a quick

visual reference of meter function. Each point of the graph depicts an individual measurement of metered depth (in) versus average velocity (ft/sec). This relationship is typically consistent based on the hydraulics of the site and thus can be used as a good benchmark to analyze different meter styles. In these examples, each graph represents an individual meter site. The orange data have been collected from the new metering system and the green from the previous meters (prior to 2021). In the first example, the new meter is shown to be recording a similar depth-velocity relationship to the old meter and, therefore, no more action is required. In the second graph, the meter is recording a velocity that is lower than the previous meter over a similar range of depths. This meter is then flagged for further attention. In this case, the meter represented by the second graph has been submitted for third party review of the calibration efforts to date to confirm setup and calibration of the velocity sensor.

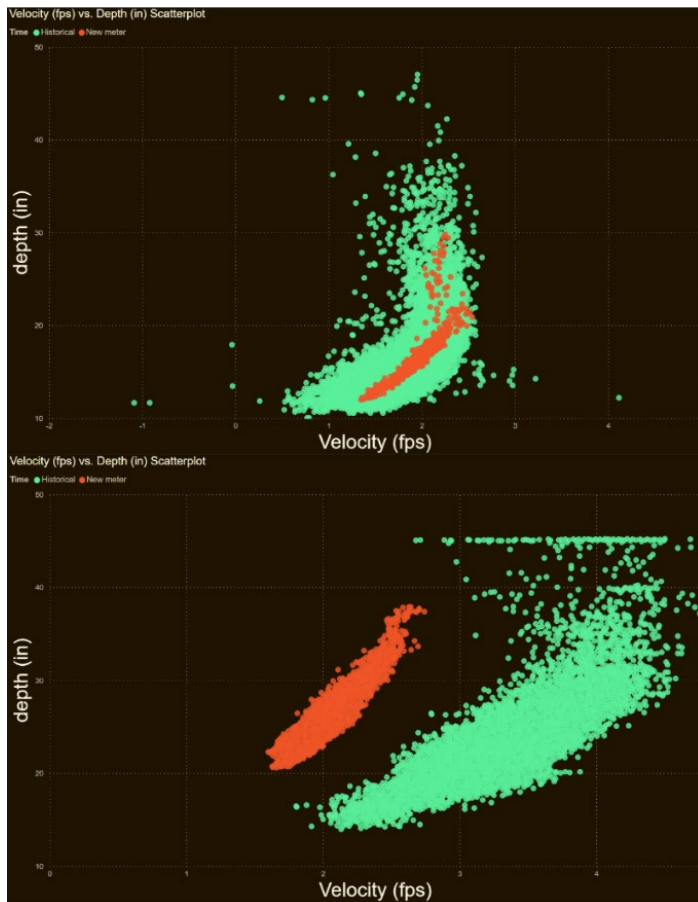


Figure 1 - Scatterplot analysis of 2 meters. Consistent data (above), and meter showing a velocity discrepancy (below)



In January 2022, the new meter system was first used to collect official flow data for the CY22 flow assessment for MWRA communities. The goal for flow data capture of the wastewater metering system is 95% system-wide meter uptime as measured by total volume billed. With the aging infrastructure of the previous system, staff were unable to consistently meet this goal in the years leading up to the installation project. As expected during the first four months of 2022, the new system has exceeded this goal each month with the lowest data capture rate being 97.7%.

|                           | 2018  | 2019  | 2020  | 2022     |
|---------------------------|-------|-------|-------|----------|
| Average Flow Data Capture | 96.3% | 91.7% | 91.7% | 98.0%    |
| Minimum Flow Data Capture | 93.7% | 86.7% | 85.0% | 97.7%    |
| Months Meeting 95% Goal   | 7     | 1     | 2     | 4 (of 4) |

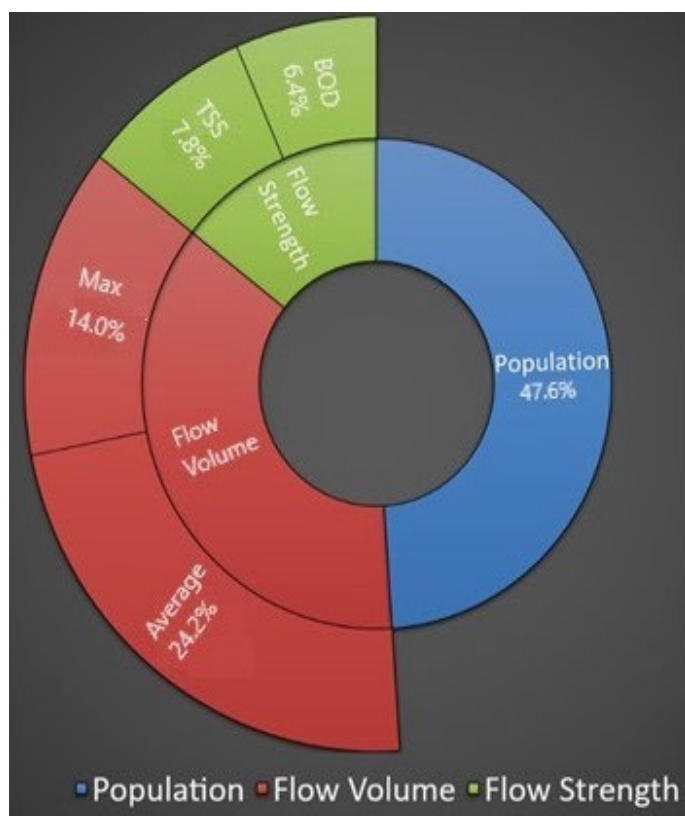


Figure 2. Total Wastewater Flow Assessment (FY23)

Historically, community wastewater flow shares have been far more variable than shares of community water usage. This is primarily because of the impact of precipitation on each community sewer system. Rainfall can infiltrate or flow into the sewers and increase flow, and in CSO communities, stormwater is intentionally combined with wastewater during periods of heavy rainfall. With this variability in mind, the flow volume portion of the assessment is calculated on a three-year average. For FY24, the flow portion of each community’s sewer assessment will be based on the average of CY20–CY22 flows. To ensure equity, wastewater assessments are based on a number of factors. These factors include maximum and average monthly volumes (“Flow Volume”), sewer and unsewered population, and Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD) present in each community’s wastewater contributions (“Flow Strength”). See Figure 2.

It is not unusual to note a one- or two-month change in community share of 20% or 30% from year to year; however, these changes have typically returned to historical averages after a few months. Therefore, the MWRA three-year flow average to calculate sewer assessments usually smooths the impact of year-to-year changes in community flow share. Over the first four months of 2022, community flow share percentages have varied from as much as 30% lower than historical average to as much as 30% higher than historical average. Of course, most communities’ flows varied much less than that, as can be seen on the attached four-month assessment report.

Some of the changes in flow measurements were anticipated due to the installation of new meters to capture previously unmetered areas. In other cases, improvement in the data structure and data analysis enabled staff to identify issues that led to changes from historical averages. MWRA staff

will be assessing the final volume calculations of each community, beginning with confirmation of the outlier communities and working inward to the mean. If necessary, adjustments to meters and flow data will be made based upon sound engineering and business practices. Any meter and flow data changes determined to be warranted by metering staff will be applied to the meters back to January 1, 2022.

**BUDGET/FISCAL IMPACT:**

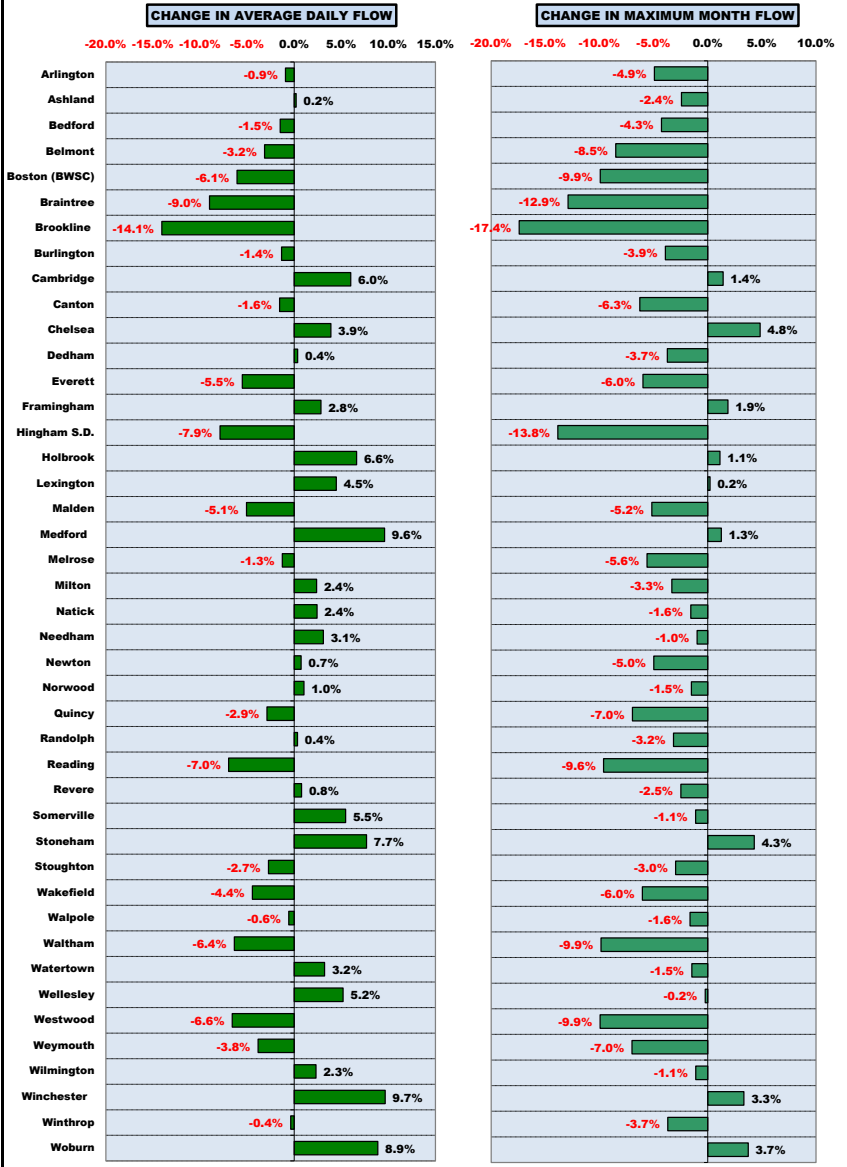
The FY23 CIP includes \$3,090,423 for the Permanent Metering System Replacement Equipment Purchase and Installation contract 7191.

**ATTACHMENT:**

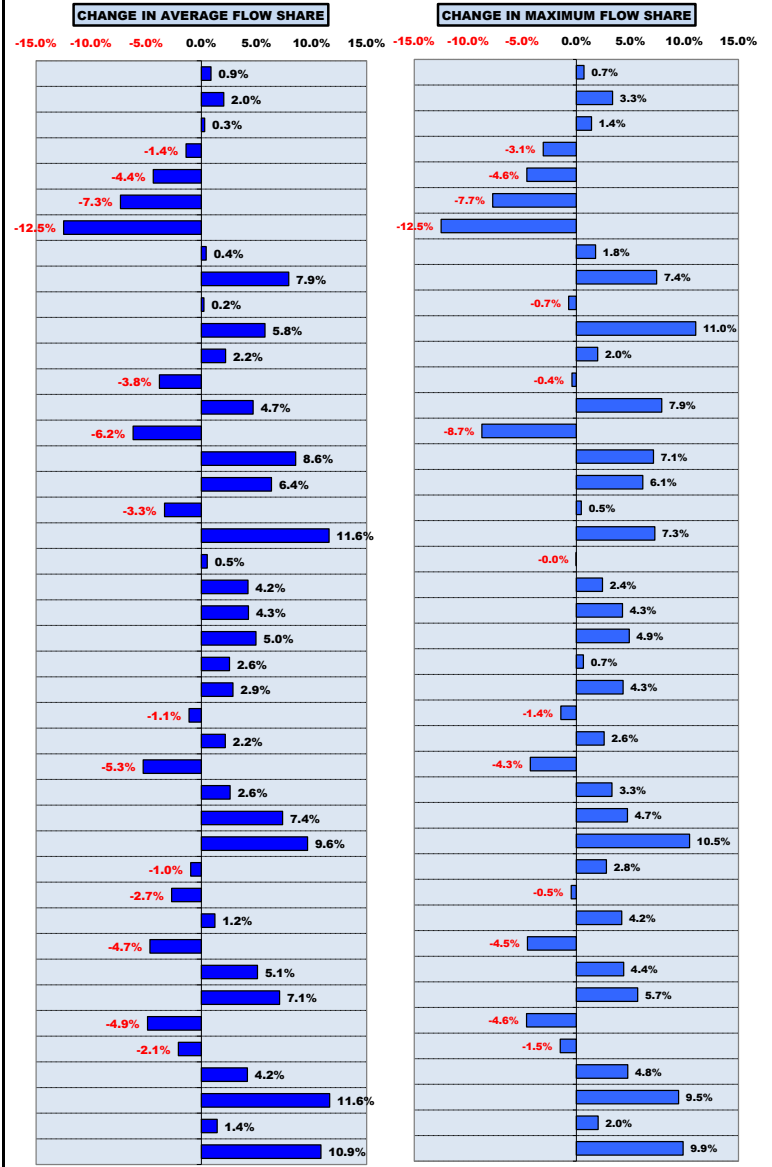
Wastewater Community Four-Month Assessment Report

# How CY2020-22 Community Wastewater Flows Could Effect FY2024 Sewer Assessments <sup>1,2,3</sup>

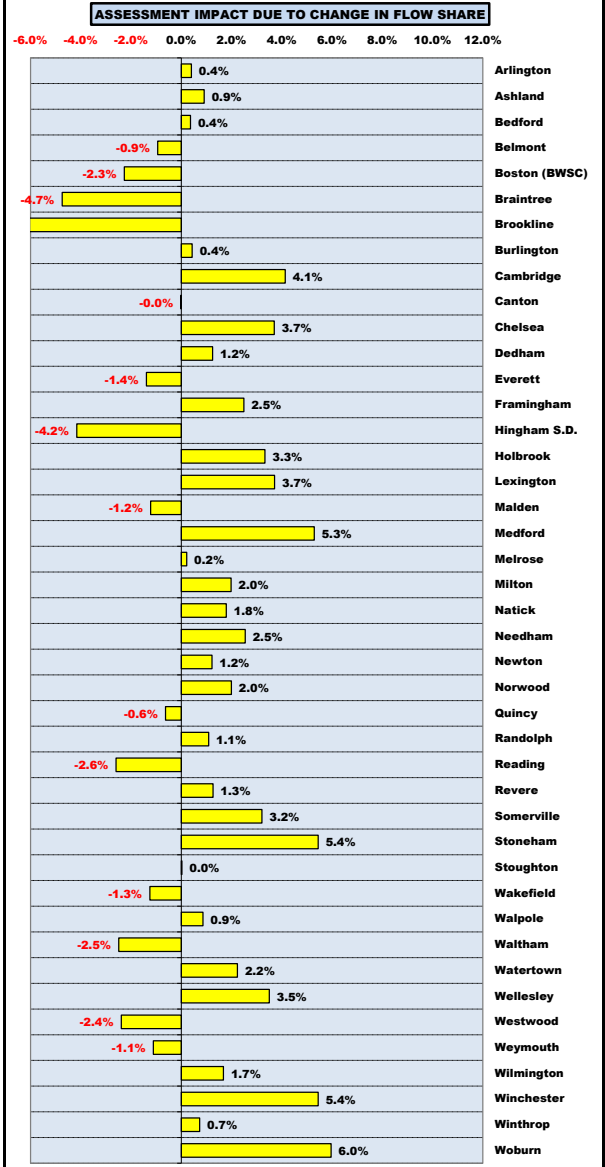
The flow components of FY2024 sewer assessments will be calculated using a 3-year average of CY2020 to CY2022 wastewater flows compared to FY2023 assessments that will use a 3-year average of CY2019 to CY2021 wastewater flows.



But as MWRA's sewer assessments are a ZERO-SUM calculation, a community's assessment is strongly influenced by the **RELATIVE** change in CY2020 to CY2022 flow share compared to CY2019 to CY2021 flow share, compared to all other communities in the system.




The chart below illustrates the change in the **TOTAL BASE** assessment due to **FLOW SHARE CHANGES**. <sup>4</sup>



<sup>1</sup> MWRA uses a 3-year flow average to calculate sewer assessments. Three-year averaging smoothes the impact of year-to-year changes in community flow share, but does not eliminate the long-term impact of changes in each community's relative contribution to the total flow.  
<sup>2</sup> Based on actual flows for 2019 and 2022 (through April), and January to March, and June to December 2020. April & May 2020 based on the average of three prior years, adjusted for 2020 water use. January to December 2021 estimated based on the average of the three prior years.  
<sup>3</sup> Flow data is preliminary and subject to change pending additional MWRA and community review.  
<sup>4</sup> Represents **ONLY** the impact on the total BASE assessment resulting from the changes in average and maximum wastewater **FLOW SHARES**.

## STAFF SUMMARY


**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director   
**DATE:** July 20, 2022  
**SUBJECT:** City of Cambridge of Partial Sewer Separation Connections

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**COMMITTEE:** Wastewater Policy & Oversight

X  INFORMATION  
  VOTE

Brian L. Kubaska, P.E., Assistant Director of Engineering, OPS  
Rebecca Weidman, Director, Env. & Reg Affairs, Ops. Admin.  
John Colbert, P.E., Chief Engineer, Operations  
Preparer/Title

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

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*On October 19, 2019, the Board of Directors approved a trial partial sewer separation program, implemented and monitored by the City of Cambridge, which allows a portion of its separate stormwater system to continue to discharge to MWRA's sewer system through restricted connections. Through metering and further hydraulic modeling, the trial restricted stormwater system connections have proven to reduce peak flows in comparison to the pre-separation combined sewer connections and contribute to reductions of combined sewer overflow (CSO) discharges at MWRA's downstream Cottage Farm facility. The trial has further shown that the restricted stormwater connections allow all but the larger storm events, which cause downstream CSO discharges at Cottage Farm, to continue to drain to the sewer system, thereby reducing the impact of phosphorous and other pollutants on the Charles River.*

### RECOMMENDATION:

For information only.

### DISCUSSION:

The City of Cambridge completed a sewer separation project, converting the combined sewers within the 218-acre Cambridgeport neighborhood to carry stormwater separately, constructed a new stormwater outfall to the Charles River (Talbot St. Outfall), and installed new sanitary sewers to convey now separate wastewater into MWRA's North Charles Relief Sewer (Figure 1).

The sewer separation and stormwater outfall construction performed in the 218-acre Cambridgeport area was funded by the City of Cambridge with support from MIT and MWRA's Infiltration/Inflow (I/I) Local financial assistance. This work is part of the efforts to achieve the level of CSO control required in the MWRA court ordered Long-Term Control Plan.

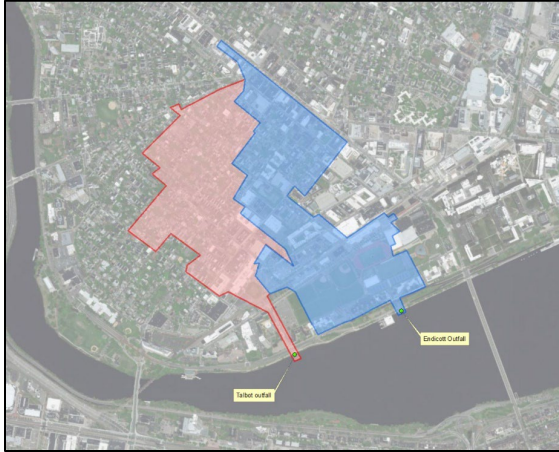


Figure 1: 218 acres separated in Cambridgeport

The neighborhoods adjacent to both banks of the Charles River downstream of Cambridge’s Talbot Street Outfall and MWRA’s Cottage Farm CSO outfall are predominantly characterized as Environmental Justice populations, as defined by M.G.L. C. 30 § 62. As MWRA and the City of Cambridge move forward with efforts to reduce CSO discharges into the Charles River, we are committed to engaging these communities in a proactive and meaningful way.

On October 16, 2019, the Board approved, as a trial, Cambridge’s request to allow a portion of their recently separated stormwater to continue to enter the MWRA’s sewer system through two existing but significantly restricted connections (an 18-inch and a 10-inch connection reduced to 6-inch connections) (Figure 2). The trial was intended to verify flows, assess impacts towards the goal of achieving the MWRA’s CSO Long-Term Control Plan, and evaluate any adverse financial impact to the MWRA. Cambridge completed the physical changes to its system and received DEP approval by August 14, 2020, and began the trial partial sewer separation evaluation.

To evaluate the performance of this partial sewer separation, Cambridge metered the restricted stormwater connections to MWRA’s system as well as Cambridge’s two stormwater outfalls to the Charles River at Endicott and Talbot Streets. The City also performed hydraulic modeling and completed a detailed analysis to document the effectiveness of the partial sewer separation in reducing downstream CSO discharges and improving water quality to the Charles River. Cambridge’s hydraulic model predicts that the partial sewer separation has reduced the discharge volume at the Cottage Farm CSO facility by over 4.7 million gallons (26 percent) in a typical rainfall year. These results are consistent with the MWRA’s earlier finding of a 3.7 million gallon reduction. The hydraulic model was also configured to determine what further Cottage Farm CSO discharge reductions would be expected if the restricted stormwater connections were fully plugged, sending all the stormwater to the Charles River. Plugging the restricted stormwater connections is predicted to result in further CSO reductions of 0.2 million gallons at Cottage Farm in a typical year. The estimated CSO reductions achieved through the partial sewer separation program result in capturing and treating over 85 percent of the urban stormwater runoff from these areas, reducing the discharge of phosphorus to the Charles River by 180 kilograms in a typical year.



Figure 2: One of Two Six-Inch Restricted Stormwater Connections

MWRA continues to measure and collect payment for the sanitary flows and stormwater flows coming from this portion of the Cambridge system into the MWRA system. Cambridge's overall contribution of flow to the wastewater collection system in a year has only been reduced slightly. Therefore, no negative financial impact of measurable amount will be placed on other MWRA communities as a result of Cambridge's partial sewer separation. It is anticipated that lower CSO discharges from Cottage Farm will result in small reductions in MWRA's operational cost. Reduced CSO discharge from Cottage Farm may result in a smaller future capital cost to further reduce CSO discharges, which may be required under MWRA's variance requirements for continued CSO discharges to the Charles River.

Staff will continue to permit these two restricted stormwater connections from the Cambridgeport area based on the monitoring data and the updated hydraulic model results obtained during the trial period. MWRA will no longer require Cambridge to submit quarterly reports documenting impacts from this partial sewer separation. Continued operation of these connections will be subject to the conditions of MWRA's Annual Municipal Permit with the City of Cambridge.

## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** July 20, 2022  
**SUBJECT:** Braintree-Weymouth Pump Station Improvements  
Walsh Construction Co. II, LLC  
Contract 7366




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**COMMITTEE:** Water Policy & Oversight

       INFORMATION  
  X   VOTE

Patrick Smith, P.E., Program Manager  
John Colbert, P.E., Chief Engineer  
Preparer/Title

Michele S. Gillen  
Director of Administration



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

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### RECOMMENDATION:

That the Executive Director, on behalf of the Authority, approve the award of Contract 7366, Braintree-Weymouth Pump Station Improvements, to the lowest responsible and eligible bidder, Walsh Construction Co. II, LLC, and execute said contract in the bid amount of \$13,473,075 for a contract term of 639 calendar days from the Notice to Proceed.

### 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

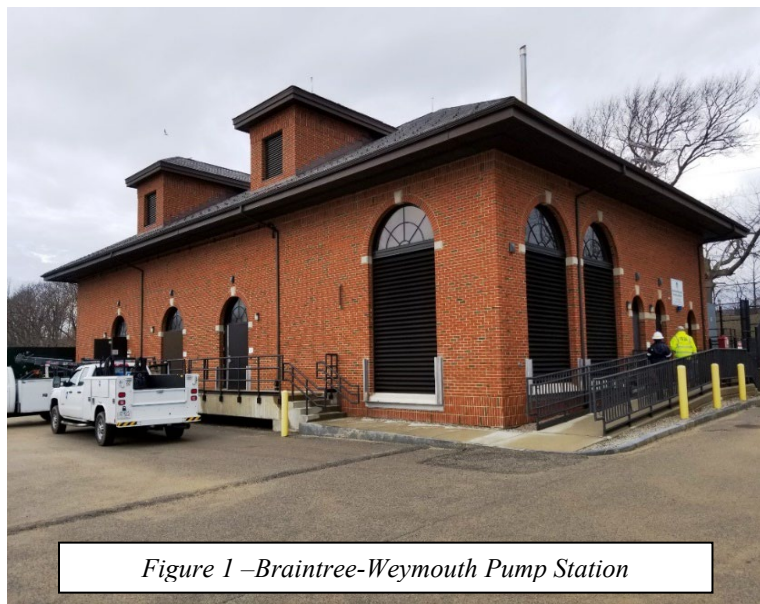
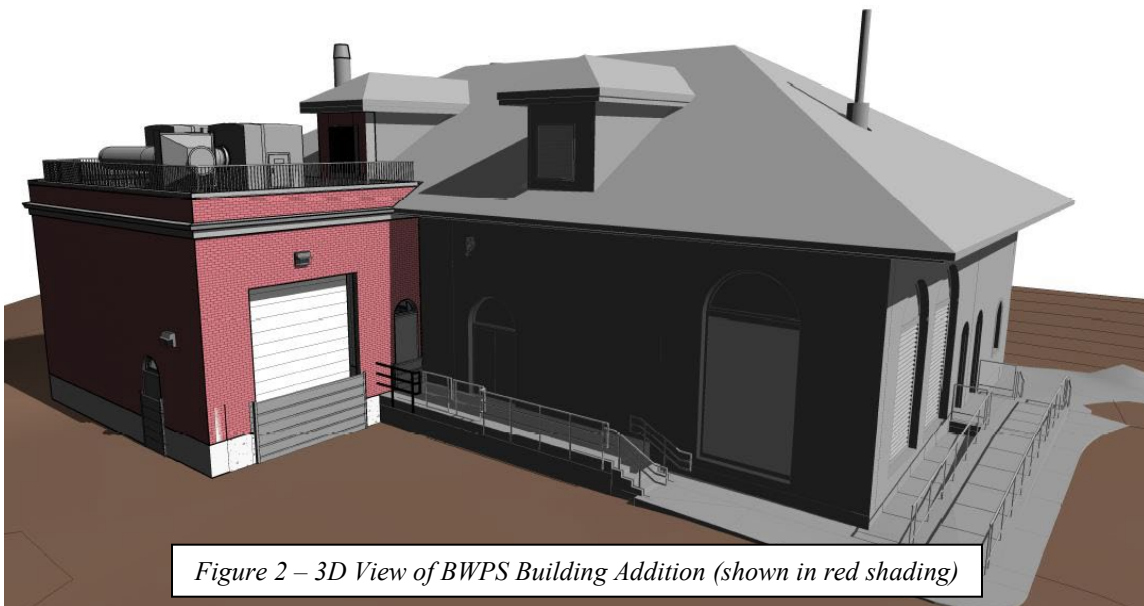


Figure 1 – Braintree-Weymouth Pump Station

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 (shown in Figure 1) 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 will provide 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 will be replaced with two new multi-story, multi-rake type mechanical screens, two wash presses, and two screw conveyors to alleviate chronic clogging of the existing grinders due to the large amount of rags present at this facility. Two new 60 Hp centrifugal jockey pumps for conveying dry weather flow and associated suction/discharge piping will be installed to supplement the existing facility pumps. Use of these smaller jockey pumps during dry weather will reduce electrical usage by over 200,000 kW-hrs/year. Additional upgrades to HVAC, SCADA, instrumentation, gas detection and electrical systems will be completed. The facility will remain operational during construction with one channel/wetwell always on line, temporary bypass pumping on-site, and temporary odor control systems when permanent systems are off line.



*Figure 2 – 3D View of BWPS Building Addition (shown in red shading)*

The Braintree-Weymouth Pump Station is located within an Environmental Justice Population (EJ) designated as “Minority and Income.”<sup>1</sup> The pump station is also located within one mile of other EJ populations designated as “Minority” and “Minority, Income and English Isolation.” Within the census tracts containing the above EJ populations, Chinese has been identified as a language spoken by 5% or more of residents who also identify as having limited English proficiency. The new odor control system to be installed as part of this project will directly benefit the surrounding EJ populations by reducing and eliminating unwanted wastewater odors from the facility. The project will also improve wastewater service, ensure capacity, and reduce the possibility of surcharging in the immediate area and in tributary areas to the station. Additionally, following the completion of this project, the automated multi-rake screens will remove debris from the wastewater, followed by advanced wash presses to remove organics and water content to reduce odors, volume and weight, pushing cleaned/dewatered material to containers for removal

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<sup>1</sup> On March 26, 2021, Governor Baker signed into law the Climate Roadmap Act. The Act contains a new definition of “Environmental Justice Population” which includes four categories of neighborhoods (defined as census block groups) with certain demographic characteristics based on median income level, percentage of residents who are people of color (i.e., minority) and percentage of residents who have limited English proficiency.



from the facility. Hauled screenings will be less odorous and drier than current debris removed. Construction activities associated with this project have the potential to impact surrounding EJ populations. In an effort to mitigate these impacts, construction will be limited to the existing pump station parcel and construction best practices will be implemented, including construction traffic planning, noise, dust, rodent control, and temporary onsite odor control. Adverse community impacts, including the temporary construction activity and additional vehicle traffic associated with the construction, are outweighed by the long-term operational reliability and benefits sited above.

**Procurement Process**

Contract 7366 was advertised in the Central Register, the Boston Herald, Banner Publications, El Mundo, and COMMBUYS in accordance with Chapter 149 of the Massachusetts General Laws. In addition, bid documents were made available for public viewing and downloading on the MWRA Supplier Portal as Event 5111. The contract was bid and advertised with sub-bids for several categories of work. General bids were received and opened on June 21, 2022, with the following results.

| <b><u>Bidder</u></b>                  | <b><u>Bid Amount</u></b> |
|---------------------------------------|--------------------------|
| <i>Engineer’s Estimate</i>            | \$9,950,000              |
| <b>Walsh Construction Co. II, LLC</b> | <b>\$13,473,075</b>      |
| Daniel O’Connell’s Sons               | \$13,650,000             |

Walsh Construction Co. II, LLC (Walsh) submitted a bid price that is \$3,523,075 (35%) higher than the Engineer’s Estimate and 1.3% lower than next lowest bid from Daniel O’Connell’s Sons. The \$3.5 million higher bid includes \$1.8 million in total higher filed sub-bids and \$1.7 million in the general contractor’s bid. The major cost difference between the Engineer’s Estimate and the bids is attributable to recent price volatility in material prices due to supply chain problems, current raw material costs, fuel price increases and related surcharges, and labor shortages in manufacturing.

MWRA staff reviewed the scope of work with Walsh and are satisfied that the bid includes all elements of the work for the bid price. References for Walsh were checked and found to be favorable. Walsh recently and successfully completed three Deer Island Treatment Plant/Residuals projects (Emergency repairs to Gravity Thickeners, Chemical Tank Relining and Pipe Replacement, and Pelletizing Plant Pipe Relocations). Walsh is currently 80% complete with construction on the Nut Island Headworks Odor Control and HVAC Improvements contract. Additionally, Walsh recently completed a Wastewater Treatment Plant in Ann Arbor, Michigan and Black River Tunnel – Phase 1 in Lorain, Ohio, with work quality and onsite supervision described as very good.

Staff conducted a review of the OSHA database and noted that Walsh had an OSHA violation in 2018 involving a project conducted with Archer Western (described as a Walsh affiliate) that resulted in two fatalities. The accident occurred in Florida and was caused by an unbraced barrier wall that fell into an occupied excavation. Following the incident, Walsh indicated it increased safety training for its workers, including OSHA 30 training.

Staff have determined that Walsh possesses the skill, ability, and integrity necessary to perform the work under this contract, and is qualified to do so. Staff have further determined that the bid price is reasonable, complete, and incorporates all necessary labor and materials, including payment of prevailing wages, as required. Though the bid price is higher than estimated, these deviations are comparable with other wastewater construction bid prices being observed in the current bidding climate. Therefore, staff recommend the award of this contract to Walsh Construction Co. II, LLC as the lowest responsible and eligible bidder.


**BUDGET/FISCAL IMPACTS:**

The FY23 CIP includes \$9,950,000 for contract 7366. The award amount is \$13,473,075 or \$3,523,075 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 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 Minority Business Enterprise (MBE) participation requirements. MWRA's Affirmative Action and Compliance Unit has reviewed Walsh's bid and has granted a partial waiver for Minority Business Enterprise (MBE) participation requirements.

## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director   
**DATE:** July 20, 2022  
**SUBJECT:** Section 101 Pipeline Extension (Waltham) Engineering Services During Construction, Resident Engineering and Resident Inspection Services  
CDM Smith Inc.  
Contract 7672


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**COMMITTEE:** Water Policy & Oversight

INFORMATION  
 VOTE

Peter Grasso, Program Manager  
John Colbert, P.E., Chief Engineer  
Preparer/Title

Michele S. Gillen  
Director of Administration

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

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### RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award Contract 7672, Section 101 Pipeline Extension (Waltham) Engineering Services During Construction, Resident Engineering and Resident 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 \$2,882,956.42 for a contract term of 33 months from the Notice to Proceed.

### DISCUSSION:

On May 25, 2022, the Board of Directors approved the award of Contract 7457, Section 101 Pipeline Extension (Waltham), to the lowest responsible and eligible bidder, Baltazar Contractors, Inc., in the bid amount of \$31,900,000 for a contract term of 635 calendar days from the Notice to Proceed. This procurement will provide Engineering Services During Construction, Resident Engineering and Resident Inspection Services for the duration of construction Contract 7457.

The Section 101 Pipeline Extension project consists of a new 36-inch diameter water main and appurtenances extending from MWRA's Meter 182 at the Waltham/Lexington town line down Lexington Street to Totten Pond Road, where it will connect to Waltham's water system. (See Figure 1.) This connection will provide a new redundant water supply to Waltham's Prospect Hill Service area from the Northern Extra High pressure zone and to MWRA's Lexington Street Pumping Station. In an emergency, the pipeline will provide a partial water supply to MWRA's NEH pressure zone from the Lexington Street Pumping Station. This new water main will provide sufficient capacity to maintain water service to Waltham during the anticipated shutdown of MWRA's WASM 3 pipeline and the Lexington Street Pumping Station for future rehabilitation.

Construction Contract 7457 includes work for both MWRA and the City of Waltham. The City will be paying for its portion of work and will contract separately for the associated ESDC and Resident Engineering Services.

The new Section 101 Pipeline Extension is situated entirely within Environmental Justice (EJ) Populations designated as “Minority.”<sup>1</sup> The new pipeline is also located within one mile of other EJ populations designated as “Minority” and “Minority and English Isolation.” Within the census tracts containing the above EJ populations, Spanish Creole or Spanish have been identified as languages spoken by 5% or more of residents who also identify as having limited English proficiency. The Section 101 Pipeline Extension will help to ensure the communities, including the EJ populations in this service area, always have access to water, even in the event of an emergency. Construction activities associated with this project have the potential to impact surrounding EJ populations. Adverse community impacts, including the temporary construction activity and additional vehicle traffic associated with the construction, are outweighed by the long-term, reliable access to clean and safe drinking water in this service area provided by this project.

The selected consultant will provide Engineering Services During Construction for MWRA’s portion of the work, including attending construction meetings, review of submittals, requests for information and change orders, provide startup services, and record documentation for the 21-month construction period and 12-month warranty. A Resident Engineer and Resident Inspector will be provided during the 21-month construction contract. The Resident Engineer’s responsibilities include daily, on-site observation and documentation of the progress and quality of the construction work. In addition, an allowance in the amount of \$200,000 is included in the contract for other unanticipated services that may be required for additional resident engineering services or additional design services.

**Procurement Process**

On May 16, 2022, MWRA issued a Request for Qualifications Statements/Proposals (RFQ/P) that was publicly advertised in the Central Register, the Boston Herald, Banner Publications and El Mundo. The RFQ/P documents were also available on the MWRA Supplier Portal. In addition, notice of the RFQ/P was sent directly to 191 firms via the MWRA Supplier Portal. While 12 firms requested the RFQ/P documents, many of those firms were subconsultants. The RFQ/P included the following evaluation criteria and points: Cost (30 points); Qualifications and Key Personnel (25 points); Relevant Experience/Past Performance (25 points); and Technical Approach, Capacity/Organization and Management Approach (15 points) and MBE/WBE (5 points).

On June 9, 2022, MWRA received one proposal from CDM Smith, Inc. Staff believe this is likely due to the timing of the request for proposals and the limited amount of available staffing with the level of experience that MWRA requires. The following table represents the cost and level of effort proposed:

| Proposer                   | Proposed Cost  | Proposed Hours |
|----------------------------|----------------|----------------|
| <i>Engineer’s Estimate</i> | \$2,400,000.00 | 18,500         |
| CDM Smith Inc.             | \$2,882,956.42 | 19,172         |

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<sup>1</sup> On March 26, 2021, Governor Baker signed into law the Climate Roadmap Act. The Act contains a new definition of “Environmental Justice Population” which includes four categories of neighborhoods (defined as census block groups) with certain demographic characteristics based on median income level, percentage of residents who are people of color (i.e., minority) and percentage of residents who have limited English proficiency.

The proposal cost was approximately 20% over the Engineer's Estimate due to lower estimated project management hours and a lower engineering hourly rate in the Engineer's Estimate. Additional project management hours in the proposal are attributed to managing two subconsultants (Green International Affiliates Inc. and Peer Consultants, PC) and providing additional engineering hours to support construction activities. The higher hourly rates are attributed to the experienced CDM project management staff salaries and recent project engineering salary retention increases due to the current employment environment.

The Selection Committee met on June 23, 2022 to evaluate CDM's proposal. CDM's proposed project manager is a Licensed Professional Engineer in Massachusetts, has more than 30 years of experience in public works construction projects, and is currently performing well as project manager on two other MWRA projects. The proposed Resident Engineer also has over 30 years of construction experience and has worked successfully on multiple MWRA construction projects. In addition to positive references for performance for the proposed Resident Engineer and Resident Inspector, CDM and Green International are the designers of record for this project and have a full understanding of the project requirements as demonstrated in their proposed Technical Approach. The proposal clearly presented that the team has the capacity, organization and management approach necessary to successfully complete the project.

For the reasons set forth above, the Selection Committee recommends award of this contract to CDM Smith Inc. in an amount not to exceed \$2,882,956.42.

**BUDGET/FISCAL IMPACTS:**

The FY23 CIP includes \$2,000,000 for Contract 7672. The award amount is \$2,882,956.42, or \$882,956.42 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 project were established at 7.18% and 5.77%, respectively. The Affirmative Action and Compliance Unit has reviewed the proposal and has determined that CDM Smith's proposal exceeds these requirements with an MBE percentage of 27% and WBE percentage of 9.4%.

**ATTACHMENT:**

Project Map

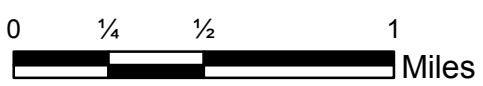
# Section 101 Ext. Waltham Project Map



**Legend**

- P Pump Stations (MWRA)
- P Pump Stations (Community)
- M Meters
- Water Storage (MWRA)
- Water Storage (Community)
- 24" Waltham Community Pipes

Figure 1



## STAFF SUMMARY

**TO:** Board of Director  
**FROM:** Frederick A Laskey, Executive Director  
**DATE:** July 20, 2022  
**SUBJECT:** PCR Amendments - July 2022



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**COMMITTEE:** Personnel and Compensation

     INFORMATION  
  X   VOTE

Andrea Murphy, Director of Human Resources  
Preparer/Title



Michele S. Gillen  
Director, Administration

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### RECOMMENDATION:

To approve amendments to the Position Control Register (PCR) included in the attached chart.

### DISCUSSION:

The Position Control Register lists all positions of the Authority, filled and vacant. It is updated as changes occur and it is published at the end of each month. Any changes to positions during the year are proposed as amendments to the PCR. All amendments to the PCR must be approved by the Personnel Committee of the Board of Directors. All amendments resulting in an upgrade of a position by more than one grade level, and/or an amendment which creates a position increasing annual cost by \$10,000 or more, must be approved by the Board of Directors after review by the Personnel and Compensation Committee.

### July PCR Amendments

There are three PCR Amendments this month.

#### Organizational Changes:

1. Title and grade change to one vacant position in the Internal Audit Division, from Senior Auditor Unit 6 Grade 10 to Internal Audit Specialist Unit 6 Grade 8 to better meet the staffing needs of the department.
2. Title and grade change to one vacant position in the Internal Audit Division, from Supervisory Auditor Unit 6 Grade 11 to Internal Audit Manager, Unit 6 Grade 12 to better meet the staffing needs of the department.
3. Title and grade change to one vacant position in the Operations Division, Deer Island Trades Maintenance department from Machinist Unit 3 Grade 15 to Metal Fabricator/Welder Unit 3 Grade 16 to better meet the staffing needs of the department.

**BUDGET/FISCAL IMPACT:**

The annualized budget impact of these PCR amendments will be \$0.

**ATTACHMENTS:**

New Job Descriptions  
Old Job Descriptions



MASSACHUSETTS WATER RESOURCES AUTHORITY  
 POSITION CONTROL REGISTER AMENDMENTS  
 FISCAL YEAR 2023

| PCR AMENDMENTS REQUIRING BOARD APPROVAL - July 20, 2022 |  |     |      |                     |    |    |                           |    |    |                       |                      |   |                            |           |               |           |                                |
|---|--|-----|------|---------------------|----|----|---------------------------|----|----|-----------------------|----------------------|---|----------------------------|-----------|---------------|-----------|--------------------------------|
| Number  | Current PCR #                            | V/F | Type | Current Title       | UN | GR | Amended Title             | UN | GR | Current/Budget Salary | Estimated New Salary |   | Estimated Annual \$ Impact |           | Reason        |           |                                |
|   |  |     |      |                     |    |    |                           |    |    |                       |                      |   |                            |           | For Amendment |           |                                |
| B1  | Internal Audit 8210008                   | V   | T.G  | Senior Auditor      | 6  | 10 | Internal Audit Specialist | 6  | 8  | \$103,333             | \$55,797             | - | \$85,378                   | -\$47,536 | -             | -\$17,955 | To better meet staffing needs. |
| B2  | Internal Audit 8210003                   | V   | T.G  | Supervisory Auditor | 6  | 11 | Internal Audit Manager    | 6  | 12 | \$113,729             | \$81,736             | - | \$125,069                  | -\$31,993 | -             | \$11,340  | To better meet staffing needs. |
| B3  | Operations DI Trades Maintenance 2988094 | V   | T.G  | Machinist           | 3  | 15 | Metal Fabricator/Welder   | 3  | 16 | \$76,605              | \$56,784             | - | \$80,929                   | -\$19,821 | -             | \$4,324   | To better meet staffing needs. |
| <b>BOARD TOTAL=</b>                                     |  |     |      |                     | 3  |    |                           |    |    |                       | <b>TOTAL:</b>        |   | -\$99,350 -                |           | -\$2,291      |           |                                |

**MWRA  
POSITION DESCRIPTION**



**POSITION:** Senior Auditor

**DIVISION:** Executive

**DEPARTMENT:** Internal Audit

**BASIC PURPOSE:**

Conducts financial and performance audits of the MWRA operations and capital programs to safeguard MWRA assets and ensure the integrity, reliability, efficiency and effectiveness of established systems, policies and contracts. Acts as team leader and/or provides direct support on complex internal or external audits, if necessary. Also may work independently on complex audits.

**SUPERVISION RECEIVED:**

General or direct supervision received by the Assistant Director or the Director based on assignment.

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Reviews management control systems and related policies and activities to identify weaknesses and to evaluate the effectiveness of internal system controls.
- Develops audit programs, procedures and techniques to meet the needs of specific assignments.
- Presents oral and written audit results and recommends a course of action to management and department personnel, and prepares formal written reports of audit results, recommendations and responses.
- Conducts financial audits of MWRA contracts and agreements to assure the allowability, allocability and reasonableness of proposed or incurred costs.
- Selects and tests databases to establish the reliability of data necessary to conduct internal and external audits, which rely on both manual and computer generated data or other

information.

**SECONDARY DUTIES:**

- Performs other related duties as assigned.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) Knowledge of business principles as normally attained through a Bachelor's degree in business with a concentration in accounting/management systems or a related field; and
- (B) Understanding of financial and business systems as acquired by four (4) to seven (7) years auditing experience; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills, and Abilities:

- (A) Knowledge of construction, engineering and procurement practices and cost principles is preferred.
- (B) Ability to work with operating departments and outside consultants and contractors in a harmonious manner.
- (C) Excellent interpersonal, verbal and written communication skills are required.
- (D) Overnight travel may be required. Local daytime travel is required.
- (E) Knowledge of current industry auditing practices, rules, and regulations.

**SPECIAL REQUIREMENTS:**

Certified Public Accountant (CPA), Certified Internal Auditor (CIA), Certified Information Systems Auditor (CISA) or other related certification is preferred.

A valid Massachusetts Class D driver's license is required.

**TOOLS AND EQUIPMENT USED:**

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

### **PHYSICAL DEMANDS:**

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

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

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

### **WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee regularly works in an office environment. The employee occasionally makes visits to operating facilities and construction sites. In these situations the employee is occasionally exposed to outdoor weather conditions, extreme heat or cold and wet, humid conditions (non-weather) and vibration. The employee occasionally works near moving mechanical parts, and in high precarious places. The employee is occasionally exposed to fumes, toxic or caustic chemicals and airborne particles. The employee is occasionally exposed to risk of electrical shock and radiation.

The noise level in the normal work environment is a moderately quiet office setting. Visits made to operating facilities and construction sites include noise levels at the site that could range from loud to very loud.

December 2019

**MWRA  
POSITION DESCRIPTION**



**POSITION:** Internal Audit Specialist

**DIVISION:** Executive

**DEPARTMENT:** Internal Audit

**BASIC PURPOSE:**

Supports project and contract audits to determine whether reasonable, allowable and allocable costs are paid to consultants, contractors and vendors. Supports financial, operational and compliance audits. Supports reviews of MWRA's policies, procedures and operational management methods to insure employee safety, reduce operational waste in terms of time, resources and money, and supports the evaluation of the ways in which assets are safeguarded from theft, fraud and employee abuse. Supports the assessment of controls to ensure the integrity, reliability, efficiency and effectiveness of established systems, policies and contracts. Supports research on regulatory changes and internal audit issues.

**SUPERVISION RECEIVED:**

Works under the general or direct supervision of the Director, Internal Audit, Assistant Director, Internal Audit, and Internal Audit Manager.

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Supports consultant preliminary reviews to determine if the proposed direct labor, indirect costs, other direct costs or multipliers/comprehensive hourly rates are supportable.
- Supports consultant incurred costs audits to validate costs billed by consultants performing on cost plus fixed fee contracts. Performs tests and creates work papers to validate that the direct labor, indirect costs and other direct costs billed are in accordance with the compensation terms of the contract.
- Supports vendor audits to validate that the pricing (discounts and/or mark -ups) billed by vendors are in accordance with the terms of their Authority agreement.

- Supports special projects, investigations and other initiatives related to the Contract Audit Program.
- Supports planning, strategy, and scope of Internal Audit assignment.
- Supports data and documentation requests relevant to Internal Audit assignment.
- Conducts testing, prepares work papers to support assignment objectives, and performs analysis.
- Supports testing on follow up/recommendation closing validation; supports conclusion to close open recommendations.

**SECONDARY DUTIES:**

- Performs other related duties as assigned.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) Knowledge of business principles as normally attained through a Bachelor's degree in business with a concentration in accounting, management information systems or a related field; and
- (B) Understanding of financial and business systems and auditing practices as acquired by one (1) to three (3) years auditing or accounting experience; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills, and Abilities:

- (A) Basic knowledge of construction, engineering and procurement practices and cost principles is preferred.
- (B) Ability to work with professional consulting firms, engineering and construction firms, operating departments and outside vendors in a harmonious manner.
- (C) Intermediate skills and experience with Microsoft Office.
- (D) Excellent interpersonal, verbal and written communication skills are required.
- (E) Ability to use technology to successfully work remotely (WebEx, share screen, etc.)

- (F) Ability to use Adobe Acrobat Pro to successfully prepare electronic workpapers.
- (G) Overnight travel may be required. Local daytime travel is required.
- (H) Knowledge of current industry auditing practices, rules, and regulations.

**SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D Motor Vehicle Operators License.

**TOOLS AND EQUIPMENT USED:**

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

**PHYSICAL DEMANDS:**

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

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

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

**WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee regularly works in an office environment. The employee occasionally makes visits to operating facilities and construction sites. In these situations the employee is occasionally exposed to outdoor weather conditions, extreme heat or cold and wet, humid conditions (non-weather) and vibration. The employee occasionally works near moving mechanical parts, and in high precarious places. The employee is occasionally exposed to fumes, toxic or caustic chemicals and airborne particles. The employee is

occasionally exposed to risk of electrical shock and radiation.

The noise level in the normal work environment is a moderately quiet office setting. Visits made to operating facilities and construction sites include noise levels at the site that could range from loud to very loud.

July 2022



**MWRA  
POSITION DESCRIPTION**



**POSITION:** Supervisory Auditor

**DIVISION:** Administration & Finance

**DEPARTMENT:** Internal Audit

**BASIC PURPOSE:**

Supervises and conducts financial and performance audits of the MWRA's operations and capital programs to safeguard MWRA assets and ensure the integrity, reliability, efficiency and effectiveness of MWRA's established systems, policies, and contracts.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Assistant Director, Internal and Management Systems, or Assistant Director, Project Audits.

**SUPERVISION EXERCISED:**

Supervises senior staff auditors on specific assignments.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Conducts and supervises the review of management control systems and the related policies, and activities to identify weaknesses and to evaluate the effectiveness of internal system controls.
- Develops audit programs, procedures and techniques to meet the specific needs of an assignment and modifies appropriately as the audit progresses.
- Provides technical guidance and instruction to staff and reviews their work for sufficiency of scope, accuracy and the proper development of findings.
- Presents oral and written audit results and recommends a course of action to management and department personnel, and prepares formal written reports of audit results, recommendations and responses.
- Conducts and supervises financial audits of MWRA contracts to assure the allowability, allocability and reasonableness of proposed or incurred costs.

- Selects and tests databases to establish the reliability of data necessary to conduct internal and external audits, which rely on both manual and computer, generated data or other information.

**SECONDARY DUTIES:**

- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) Knowledge of business principles as normally attained through a four (4) year college program in business with a concentration in accounting, management information systems, or a related field; and
- (B) Understanding of financial and business systems and auditing practices as acquired by six (6) to eight (8) years of auditing experience, including two (2) years of supervisory experience, or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Proficient knowledge of construction, engineering and procurement practices, Federal Acquisition Regulations, and Government Auditing Standards
- (B) Ability to work with operating departments and outside contractors in a harmonious manner.
- (C) Excellent verbal and written communication skills.
- (D) Overnight travel may be required (10 to 20 percent).

**SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D Motor Vehicle Operators License.

Certification in one of the following categories is desirable: Certified Public Accountant (CPA), Certified Internal Auditor (CIA), or Certified Information Systems Auditor (CISA).

**TOOLS AND EQUIPMENT USED:**

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

### **PHYSICAL DEMANDS:**

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

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

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

### **WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee regularly works in an office environment. The employee occasionally makes visits to operating facilities and construction sites. In these situations the employee is occasionally exposed to outdoor weather conditions, extreme heat or cold and wet, humid conditions (non-weather) and vibration. The employee occasionally works near moving mechanical parts, and in high precarious places. The employee is occasionally exposed to fumes, toxic or caustic chemicals and airborne particles. The employee occasionally exposed to risk of electrical shock and radiation.

The noise level in the normal work environment is a moderately quiet office setting. Visits made to operating facilities and construction sites include noise levels at the site that could range from loud to very loud.

**November, 1999**

**MWRA  
POSITION DESCRIPTION**



**POSITION:** Internal Audit Manager

**DIVISION:** Internal Audit

**DEPARTMENT:** Internal Audit

**BASIC PURPOSE:**

Manages and conducts project and contract audits to determine whether reasonable, allowable and allocable costs are paid to consultants, contractors and vendors. Makes recommendation for improvement and seeks reimbursement of unsupported contract costs. Manages and conducts financial, operational and compliance audits. Manages reviews of MWRA's policies, procedures and operational management methods to insure employee safety, reduce operational waste in terms of time, resources and money, and conducts the evaluation of the ways in which assets are safeguarded from theft, fraud and employee abuse. Manages assessment of controls to ensure the integrity, reliability, efficiency and effectiveness of established systems, policies and contracts. Manages and performs research on regulatory changes and internal audit issues.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Director, Internal Audit and Assistant Director, Internal Audit.

**SUPERVISION EXERCISED:**

May supervise Internal Audit Specialist and an Internal Audit Intern and provide direction to Senior Auditor(s).

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Manages and conducts consultant preliminary reviews to determine if the proposed direct labor, indirect costs, other direct costs or multipliers/comprehensive hourly rates are supportable. Provide advice to the Procurement Department and the Project Managers on acceptable billing rates and identified reprogrammable funds.
- Manages and conducts consultant incurred costs audits to validate costs billed by consultants performing on cost plus fixed fee contracts. Performs tests and creates work papers to validate that the direct labor, indirect costs and other direct costs billed are in accordance with the compensation terms of the contract.

- Manages and conducts construction preliminary reviews to provide advice on labor burden rates that are acceptable for change order pricing, which includes -
  - (1) Determine established provisional labor burden rates to be used in the pricing of future change orders
  - (2) Review typical adjustments to contractor proposed rates which include applying effective versus statutory FICA, FUTA and SUTA rates
  - (3) Apply appropriate experience modifications and other adjustments to workers compensation rates
- Manages and conducts change order and claim reviews provide Project Managers and Law Division advice on a contractor's proposed or claimed costs.
- Manages and conducts vendor audits to validate that the pricing (discounts and/or mark-ups) billed by vendors are in accordance with the terms of their Authority agreement.
- Manages and conducts special projects, investigations and other initiatives related to the Contract Audit Program.
- Supports Director, Internal Audit with planning, organizing and management of project and contract management audits to assure that proper evaluations are performed in all significant contract areas. Reviews Board of Director minutes/materials for approved contracts, change orders and delegation of authority report to insure completeness of planned and scheduled reviews/audits. Works with Budget Manager to identify status of Notice to Proceed and timing of work to be done. Coordinates with the Procurement department to insure executed professional contracts are forwarded to Project and Contract Audit team to insure consultant preliminary assignments are initiated in a timely manner.
- Supports Director, Internal Audit with negotiating directly with consultants to establish appropriate indirect cost rates and interprets Federal Acquisition Regulations (FARs) and other MWRA contract compensation language, regarding the allowability, allocability, and reasonableness of costs billed to MWRA contracts by consultants.
- Conducts and manages financial audits of MWRA contracts to assure the allowability, allocability and reasonableness of proposed or incurred costs.
- Manages and leads planning, strategy, and scope of assignment.
- Manages data and documentation requests relevant to assignment; challenges completeness of information received.
- Manages and conducts testing, prepares work papers to support assignment objectives, performs analysis, over most complex topics and technically challenging areas and draws conclusions.

- Conducts meetings with management to discuss scope, assignment status, and significant audit issues.
- Prepares audit report - consisting of background, scope and objectives, testing methodology, summary of audit findings and drafting recommendations. Presents written and oral communication (i.e. meetings) with auditee.
- Manages or conducts testing on follow up/recommendation closing validation; determines conclusion to close open recommendations.
- Manages and conducts vendor audits to validate that the pricing (discounts and/or mark - ups) billed by vendors are in accordance with the terms of their Authority agreement.
- Manages and conducts other contract reviews including, but are not limited to, advising on a contractor's prevailing wage and/or e-verify compliance, or a contractor's financial performance on a contract.
- Conducts and supervises the review of management control systems and the related policies, and activities to identify weaknesses and to evaluate the effectiveness of internal system controls.
- Develops audit programs, procedures and techniques to meet the specific needs of an assignment and modifies appropriately as the audit progresses.
- Provides technical guidance and instruction to staff and reviews their work for sufficiency of scope, accuracy and the proper development of findings.
- Selects and tests databases to establish the reliability of data necessary to conduct internal and external audits, which rely on both manual and computer, generated data or other information.

**SECONDARY DUTIES:**

- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) Knowledge of business principles as normally attained through a Bachelor's degree in business with a concentration in accounting, management information systems, or a related field; Master's degree preferred; and

- (B) Understanding of financial and business systems and auditing practices as acquired by six (6) to eight (8) years of auditing experience, including 1 year of supervisory experience or completion of the MWRA supervisory development program within six months of being in the position or;
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Proficient knowledge of construction, engineering and procurement practices, Federal Acquisition Regulations, and Government Auditing Standards
- (B) Ability to work with operating departments and outside contractors in a harmonious manner.
- (C) Advanced skills and experience with Microsoft Office.
- (D) Excellent verbal and written communication skills.
- (E) Ability to use technology to successfully work remotely (WebEx, share screen, etc.)
- (F) Ability to use Adobe Acrobat Pro to successfully prepare electronic work papers.
- (G) Overnight travel may be required. Local daytime travel is required.

**SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D Motor Vehicle Operators License.

Certification in one of the following categories is preferred: Certified Public Accountant (CPA), Certified Internal Auditor (CIA), or Certified Information Systems Auditor (CISA).

**TOOLS AND EQUIPMENT USED:**

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

**PHYSICAL DEMANDS:**

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

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

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

### **WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee regularly works in an office environment. The employee occasionally makes visits to operating facilities and construction sites. In these situations the employee is occasionally exposed to outdoor weather conditions, extreme heat or cold and wet, humid conditions (non-weather) and vibration. The employee occasionally works near moving mechanical parts, and in high precarious places. The employee is occasionally exposed to fumes, toxic or caustic chemicals and airborne particles. The employee occasionally exposed to risk of electrical shock and radiation.

The noise level in the normal work environment is a moderately quiet office setting. Visits made to operating facilities and construction sites include noise levels at the site that could range from loud to very loud.

**July 2022**



**MWRA  
POSITION DESCRIPTION**



**POSITION:** Machinist  
**DIVISION:** Operations  
**DEPARTMENT:** EQ-General, Equipment Maintenance, Trade Labor Maintenance

**BASIC PURPOSE:**

Performs skilled precision machine shop duties to plan and set up work and operate a variety of machine tools to produce complex parts, and fabricate or repair equipment, tools or devices.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Unit Supervisor.

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Operates various machines and tools in the machine shop, for the fabrication, shape and repair of finish machinery parts from raw materials such as steel, iron, brass, plastics and other alloys.
- Plans and lays out work from blueprints, sketches, work orders, model of part or other specifications.
- Determines the most efficient work procedures, machine tools and attachments to be used, and proper sequence of machine operations.
- Performs preventive, predictive and corrective maintenance on machine shop tools and equipment.
- Performs routine lubrication of equipment and replaces oil reserves.
- Assists other maintenance department mechanics to dismantle, replace defective parts and reassemble equipment and devices.
- Obtains necessary parts through established procedures.

- Operates motor vehicles, such as vans and pick up trucks, to transport materials to work sites, and pick up and deliver supplies and equipment.
- Performs light maintenance independently or as part of a team. Light maintenance shall include but not limited to:
- Inspects and troubleshoots various systems and equipment
- Installs and retrofits/new equipment related to plant systems.
- Modifies and/or aligns existing equipment to specifications.
- With proper training sets up ladders, staging and rigging and utilizes hoists, jacks, dollies, lifts, etc. for proper access to job and to remove and install equipment.
- Operates portable pumping and/or ventilation equipment to prepare a work area for access.
- Opens hatches.
- Installs safety rails.
- Performs routine testing, lockout/tagout, operation (startup/shutdown) and adjustment of process equipment.
- Removes snow from immediate work area.

**SECONDARY DUTIES:**

- Promotes and participates in the cross-functional work practices.
- Trains peers and subordinates as requested.
- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A high school education or the equivalent; and
- (B) Requires the satisfactory completion of a certified journey level machinist apprenticeship training program, or a similar formal training program and four (4) to (6) six years of experience; or

(C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) A working knowledge of the tools, methods, materials, equipment, instruments common to the trade, such as (but not limited to), lathes, boring machines, drill presses, welding equipment, milling machines, grinders, vernier calipers, micrometers and other precision measuring instruments, principles of metallurgy, heat treating and tempering, etc.
- (B) The ability to plan and lay out work from blue prints sketches, work orders, models, or other specifications, and to set up and operate a wide variety of machine shop equipment to fabricate complex parts to specified precise dimensions.
- (C) Basic reading, writing, mathematical, scientific and oral communication skills.
- (D) A working knowledge of the occupational hazards and safety practices common to the trade, to include the satisfactory completion of MWRA safety training in safe techniques for the use of staging, rigging, and material handling equipment.

**SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D Motor Vehicle Operators License.

Complete competency based training program related to **ESSENTIAL DUTIES AND RESPONSIBILITIES** as outlined above and successfully demonstrates required competencies.

**TOOLS AND EQUIPMENT USED:**

Motor vehicle, power and hand tools, mobile radio, and telephone.

**PHYSICAL DEMANDS:**

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

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

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance and peripheral vision, depth perception, and the ability to adjust focus.

## **WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee regularly works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is very loud in field settings, and moderately loud at other work locations.

**December 2020**

**MWRA  
POSITION DESCRIPTION**



**POSITION:** Metal Fabricator / Welder

**DIVISION:** Operations

**DEPARTMENT:** Pipe Maintenance-Water, Trade Labor Maintenance, EQ-General, Equipment Maintenance

**BASIC PURPOSE:**

Fabricates and repairs metal parts; welds, cuts and installs metal parts of equipment; lays out sketches and reads blueprints; rigs equipment and performs preventive maintenance on plant equipment.

**SUPERVISION RECEIVED:**

Works under the direct supervision of the Unit Supervisor.

**SUPERVISION EXERCISED:**

Exercises close supervision of one (1) skilled laborer in the absence of the Unit Supervisor.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Fabricates, cuts, forms, welds, assembles and installs metal parts of equipment in conformance with drawings, plans or instructions through the use of machine, tool, bench or hand work as required.
- Assembles and disassembles scaffolding, staging, flooring and grating.
- Sets-up and operates hand, electric and air-operated tools, hydraulic jacks and hoists using oxyacetylene and electric arc welding equipment for fabrication, repair or alteration to machinery.
- Sketches work to be completed and interprets existing blueprints to estimate size of parts needed.
- Performs preventive maintenance on pumps, generators, valves, turbines, gates and gate assemblies and related equipment.
- Rigs equipment to be moved using cranes and hoists with lift straps and/or chains.

- Evaluates equipment, reports damage and unsafe conditions and recommends maintenance program requirements.
- Performs light maintenance independently or as part of a team. Light maintenance shall include but not limited to:
  - Inspects and troubleshoots various systems and equipment
  - Installs and retrofits/new equipment related to plant systems.
  - Modifies and/or aligns existing equipment to specifications.
  - With proper training sets up ladders, staging and rigging and utilizes hoists, jacks, dollies, lifts, etc. for proper access to job and to remove and install equipment.
  - Operates portable pumping and/or ventilation equipment to prepare a work area for access.
  - Opens hatches.
  - Installs safety rails.
  - Routine testing, lockout/tagout, operation (startup/shutdown) and adjustment of process equipment.
  - Removes snow from immediate work area.

**SECONDARY DUTIES:**

- Promotes and participates in the cross-functional work practices.
- Trains peers and subordinates as requested.
- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A high school education or the equivalent; and
- (B) One (1) year certificate from college or technical school; and

- (C) Three (3) to six (6) years metal trades apprenticeship or related experience; or
- (D) An equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of the standard practices, materials, tools, occupational hazards and safety practices common to the trade, including safe techniques for assembling and welding staging, rigging and material handling equipment.
- (B) Ability to work from manufacturer's manuals and specifications, blueprints, schematics and verbal instructions to weld and fabricate all kinds of metals.
- (C) Ability to maintain and repair mechanical, electro-mechanical, pneumatic and hydraulic equipment.
- (D) Skill in the operation of welding tools and equipment.
- (E) Ability to apply concepts of basic algebra and geometry.
- (F) Excellent interpersonal, oral and written communication skills.
- (G) Basic reading, writing, mathematical, scientific and oral communication skills.

**SPECIAL REQUIREMENTS:**

- A valid Massachusetts Class D Motor Vehicle Operators license.
- Complete productivity improvement competency-based training program related to **ESSENTIAL DUTIES AND RESPONSIBILITIES** as outlined above and successfully demonstrates required competencies.

**TOOLS AND EQUIPMENT USED:**

Power, hand and welding tools, construction equipment, mobile radio, telephone, personal computers including word processing and other software, copy and fax machine.

**PHYSICAL DEMANDS:**

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

The employee is regularly required to use hands to finger, handle, feel or operate objects, tools,

or controls and reach with hands and arms. The employee frequently is required to stoop, kneel, crouch or crawl. The employee occasionally is required to stand, walk, talk or hear, sit, climb, or balance.

The employee must frequently lift and/or move up to 50 pounds and occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance and peripheral vision, depth perception, and the ability to adjust focus.

### **WORK ENVIRONMENT:**

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


While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock. The employee occasionally works in extreme bright light or extreme inadequate light conditions, cramped work space that requires getting into awkward positions.

The noise level in the work environment is usually loud in field settings, and moderately quiet in an office setting.

**April, 2001**



## STAFF SUMMARY


**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director   
**DATE:** July 20, 2022  
**SUBJECT:** Appointment of Deputy Director, Deer Island Wastewater Treatment Plant

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**COMMITTEE:** Personnel & Compensation

INFORMATION  
 VOTE

Andrea Murphy, Director, Human Resources  
Stephen D. Cullen, Director, Wastewater  
David F. Duest, Director, Deer Island Treatment Plant  
Preparer/Title

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

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### RECOMMENDATION:

To approve the appointment of Mr. Chad A. Whiting to the position of Deputy Director, Deer Island Wastewater Treatment Plant (Non-Union, Grade 15) at an annual salary of \$151,000, commencing on a date to be determined by the Executive Director.

### DISCUSSION:

The position of Deputy Director, Deer Island Treatment Plant became vacant upon the appointment of the incumbent to another position. This position reports directly to the Director of the Deer Island Treatment Plant and will act on behalf of the Director in his absence. The Deputy Director will oversee the operating units of the Deer Island Treatment Plant (Wastewater Treatment, Thermal/Power Plant and Process Control Departments). The Operations Department works 24 hours a day, seven days a week operating the second largest wastewater treatment plant and one of the largest wastewater plant-based combined heat and power systems in the United States.

### Selection Process:

The position was posted internally and externally. A total of 16 candidates applied; two candidates were determined to be qualified and were referred for an interview. The Director of the Deer Island Treatment Plant, the Director of Wastewater and the Special Assistant for Affirmative Action interviewed the candidates. Upon completion of these interviews, Mr. Chad A. Whiting was recommended for this position based on his knowledge, experience, abilities, skills and education.

Mr. Whiting has 19 years of wastewater treatment experience. He spent his first eight years working in progressively more responsible operator positions in four private Wastewater Operations companies (Earth Tech, Earth Source, Veolia Water and Coler & Colantonio) supporting Gloucester, Raynham, Brockton and Taunton, Massachusetts. He was promoted to Lead Operator/Chief Operator in two of these positions and worked for two years as a Project Manager. He then worked for MWRA as an Operator at the Deer Island Wastewater Treatment Plant for two years. In 2013, Mr. Whiting left MWRA to work as the Assistant Wastewater

Manager for the Town of Plymouth. He was promoted to the Wastewater Superintendent, responsible for the operation and maintenance of a wastewater treatment facility, eight sewer pump stations, and 65 miles of sewer collection systems. Prior to rejoining MWRA in June 2021 as the Manager of Wastewater Operations, Mr. Whiting was the Director of Water and Sewer for the City of Somerville. He has had responsibility for current expense and capital budgets, managed collective bargaining agreements, developed and enforced standard operating procedures and safety protocols and has been responsible for hiring and staff training during his career managing multiple publically owned treatment works.

In his current role at MWRA, his knowledge of wastewater operations, process control and emergency response, as well as his management abilities were quickly put to the test during the historic rainfall of July, August and September of last year. Mr. Whiting demonstrated his capability and has proven to be an effective leader.

Mr. Whiting holds a Bachelor of Science degree in Engineering Technology from Wentworth Institute of Technology, a Grade 7 Wastewater Treatment Operator License, a Grade 4 Collections System License, and Grade 4D and 1T Drinking Water Operator in Training licenses all from the Commonwealth of Massachusetts.

**BUDGET/FISCAL IMPACT:**

There are sufficient funds for this position in the FY23 Current Expense Budget.

**ATTACHMENTS:**

Resume of Chad A. Whiting  
Position Description  
Organization Chart

# Chad A Whiting

## **Objective**

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A Challenging career in the water quality industry which allows for utilization of critical thinking and creative problem-solving skills.

## **Experience**

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August 2021 to Present    Massachusetts Water Resource Authority                      Chelsea, MA

Manager, Wastewater Operations

- 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.

## Chad A Whiting

- 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.

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December 2020 to  
August 2021

City of Somerville

Somerville, MA

### Director of Water & Sewer

- Responsible for all aspects water and sewer operations for the City of Somerville.
- Ensure public safety through the responsible provision of potable water and adequate fire protection and through the proper discharge of sewage.
- Supervise the construction, operation, metering, and billing of approximately 15,000 water and sewer accounts.
- Oversee the lead sampling program as mandated by the Department of Environmental Protection (DEP) and the Massachusetts Water Resource Authority (MWRA).
- Oversee the lead service replacement program as mandated by DEP.
- Formulate written policies and procedures to ensure regulatory compliance.
- Determine annual Budgetary needs and departmental goals.
- Responsible to develop annual rate structure and deliver annual budget to City Council totaling \$41 million annually.
- Develop and implement safety procedures and practices.
- Work with the Mayor's office to forecast proficient operation and maintenance strategies for department operations.
- Manages collective bargaining agreements for the successful operations of the department and serve as the Department grievance hearing officer.
- Responsible for recruiting and hiring of staff to meet departmental needs. Including the development of job descriptions for existing and new positions.
- Work closely with engineering and asset management on capital projects including design, budgeting, construction, and implementation.

---

October 2013 to  
December 2020

Town of Plymouth

Plymouth, MA

### Wastewater Superintendent

- Hired as Assistant Wastewater Manager, promoted March 2020 to Wastewater Superintendent.
- Management over the operation and maintenance of a 3 MGD SBR wastewater treatment facility, 8 sewer pumping stations, and 65 miles of sewer collection system, Management & operation of satellite SBR wastewater treatment facility for the Plymouth Airport.
- Optimization of process control through the implementation of SCADA and instrumentation.
- Work collaboratively with Public Health to manage FOG Program.
- Monthly and annual reporting to MADEP and EPA.
- Development of Standard operating procedures for process and equipment optimization.
- Emergency response to sewer backups and overflows as needed.
- Customer relations for unpleasant situations dealing with sewer issues including building backflows.
- Complete insurance claim documents for Town Managers office related to sewer issues.
- Collaboration with Engineering for project plan reviews.

## Chad A Whiting

- Oversight of Town's O&M contractor responsible for the wastewater facility operations, staff of 12, and three Town staff.
- Oversight of contractors and in-house staff working on or around Town infrastructure.
- Collaboration with consulting engineers for the design and construction of large capital projects including sewer expansion (\$4.5M), pump station headworks rehabilitation (\$7.5M), Emergency Sewer force main repairs (\$48M).
- Application for grant opportunities where available, successful recipient of two grants from MASS CEC in 2019 totaling \$285,000.
- Permitting of new sewer connections.
- Development of annual operation & maintenance budgets.
- Development of Annual, 5-year, and 25-year capital planning needs.
- Development of sewer rules & regulations, mandatory connection policies.
- Processing & tracking of Invoices for capital projects & annual budgets.
- Trouble shoot process problems and equipment issues.
- Completion of Supervisory Development Training 2019.
- Presentation of budgets and capital project to various boards, committees, and annual Town meeting.
- Provide public education through PACTV local television programing.

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June 2011 to  
October 2013

Massachusetts Water Resource Authority

Winthrop, Ma

### Wastewater Operations

- Monitoring the operation of critical wastewater equipment
- Process control sampling and testing for wastewater solids handling facilities
- Interpret testing results and make adjustment to solids handling equipment
- Tank Dewatering and cleaning
- Plant operations monitoring with SCADA
- Emergency on call operations during inclement weather events
- Shutdown of complex pumping system for maintenance procedures
- Successful completion of Supervisor Development Training Program
- Successful completion of NEIWPCC Management Training Program
- Training of new employees in the operation of the MWRA wastewater treatment process

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June 2009 to June  
2011

Coler & Colantonio

[City, ST]

### Project Manager

- Hired as Lead Operator/ Mechanic, Promoted to Project Manager 2 weeks after starting on the project
  - Operate and maintain the facility to receive the maximum amount of septage possible each day
  - Manage 9 person staff to operate and maintain the facility
  - Process control to meet discharge permit requirements
  - Monthly reporting to client and the city of Taunton, Ma
  - Liaison between client and the City of Taunton for reporting and annual inspections
  - Successful management of client's high expectations of our company
  - Laboratory Sampling to meet permit testing requirements of discharge permit
  - Repair, maintenance, and replacement of process equipment and instrumentation
-

# Chad A Whiting

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February 2008 to  
June 2009

Veolia Water

Brockton, MA

## **Wastewater Operations**

- Plant operations and process equipment monitoring
  - Process sampling for process control
  - Centrifuge operation for solids thickening
  - Incinerator operation for the biosolids incineration
  - Completion of assigned work orders for equipment maintenance inspections
  - Process standard operating procedure development to optimize operations
- 

August 2006 to  
February 2008

EarthSource

Raynham, MA

## **Assistant Chief Operator**

- Hired as Wastewater Operator, promoted to Assistant Chief Operator in the first month of employment
  - Operate and maintain the facility to receive the maximum amount of septage possible each day
  - Manage 10 person staff to operate and maintain the facility
  - Process control to meet discharge permit requirements
  - Laboratory Sampling to meet permit testing requirements of discharge permit
  - Act as Chief Operator/ Plant Manager in his absence
  - Repair, replacement, and maintenance of equipment to keep facility operations running efficiently
  - Process optimization to produce desired product while controlling costs
  - Emergency on-call responsibility
- 

August 2003 to August  
2006

Earth Tech

Gloucester, M

## **Lead Operator/ Site Safety Coordinator**

- Hired as Wastewater Operator, promoted to Lead Operator/ Site Safety Coordinator after 120 days of employment
  - Responsible for wastewater operations and process control to maintain plant compliance
  - Development of standard operating procedures for plant processes
  - Conduct site safety meetings and perform job hazard analysis on operations tasks
  - Laboratory Sampling to meet permit testing requirements of discharge permit
  - Act as Chief Operator/ Plant Manager in his absence
  - Repair, replacement, and maintenance of equipment to keep facility operations running efficiently
  - Emergency on-call response for plant issues
- 

## **Education & Training Certifications**

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Graduated 2012

Wentworth Institute of Technology

Boston, MA

## **Bachelor of Science Engineering Technology**

### **New England Interstate Water Pollution Control Commission**

- MA Wastewater Management Training Program

# **Chad A Whiting**

**Massachusetts Wastewater Collection System Operator Certification, Grade IV**

**Massachusetts Wastewater Operator Certification, Grade 7C Full**

**Massachusetts Drinking Water Operator Certification, T-1 OIT**

**Massachusetts Drinking Water Operator Certification, D-4 OIT**

**8-Hour Osha Confined Space Training**

**Lockout Tagout Electrical Safety Training**

## **Other Experience**

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Wentworth Environmental Club

North American Society Trenchless Technologies, NE Chapter, Board of Directors

Member of Water Environment Federation

New England Water & Environment Association Mentorship Training Program, Mentor

**MWRA  
POSITION DESCRIPTION**

**Position:** Deputy Director, Deer Island Wastewater Treatment

**PCR#:** 2915016

**Division:** Operations

**Department:** Wastewater Treatment

**BASIC PURPOSE:**

Directs the efficient and effective operation of the Deer Island Treatment Plant's processes and equipment to meet regulatory requirements and provide operations personnel with necessary resources and support. Directs the shift operations activities of assigned personnel to ensure efficient operation of all plant areas to enable the plant to meet optimized performance and permit requirements.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Director, Deer Island Wastewater Treatment Plant

**SUPERVISION EXERCISED:**

Exercises general supervision of the Senior Shift Manager, Manager of Power Generation, Program Manager of Energy Management, Program Manager of Energy and the Manager of Process Control.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Directs the 24 - hour operations of the Deer Island Wastewater Treatment Plant and Onsite Thermal/Power Plant. Advises the Director on all operational aspects of the facility. Responds to emergency situations 24 hours per day, seven days per week.
- Provides advice/assistance, on all issues, to the Director, DIWWTP and acts in place of Director in his/her absence.
- Oversees plant process evaluations to ensure optimization of plant processes. Has overall responsibility for enhancement of all plant process systems to reduce chemical and utility costs without sacrifice to permit compliance. Establishes and updates operational procedures in accordance with process control strategies.



- Reviews, analyzes and prepares managerial reports for operational, process control, fiscal and personnel matters. Develops recommendations for ongoing improvements in facility operations.
- Manages the preparation of annual operations budgets and participates in the Authority budgetary process.
- Coordinates with the Maintenance Department, the Thermal/Power Plant, and Laboratory Services to establish priorities to ensure successful facility operation.
- Represents plant operations and is an active participant in plant and/or Authority-wide initiatives.
- Directs the Process Control Department including Process Engineering, Process Monitoring/Data Management, and the PICS support functions.
- Directs Process Control Department in the implementation of new control strategy and/or process control modifications to improve plant performance or provide energy savings.
- Provides management input and technical review of plant wide or individual area energy initiatives including consultant studies and engineering projects.
- Works with the Process Control Manager to maintain and update the current inventory of all PICs hardware spare parts.
- Works with the Program Manager, Energy to coordinate CTG outages and plant notifications, monitor the electrical grid pricing and operate CTGs for peak days, demand response, or high electrical pricing to reduce energy costs.
- Manages the development and updating of Operation Manuals and Systems/Station Operating procedures and works with the Program Manager – Technical Information to ensure timely production of updates.
- Works with all Deer Island Department Managers to ensure the success of plant organization, including the development of staffing requirements and oversight of staff selection.
- Partners with the Manager, Training and Development to oversee and provide technical, supervisory and managerial training and education opportunities for all

operations employees. Works with Human Resources on the continued implementation of the Wastewater Operator Shadowing Program.

- 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.
- Collaborate with Manager of Occupational Health and Safety to oversee and ensure Deer Island Operations Department's compliance with safety programs, maximize employee involvement, and support Deer Island and Authority-wide safety programs. Acts as liaison to the Manager, Occupational Health Safety and Health.
- Works closely with Occupational Health and Safety and Training departments to establish, emergency response procedures, and oversees training via scheduled drills, audits and inspections.
- Establishes and administers operational records and procedures required for a 24 - hour facility.
- Ensures consistency and uniformity of work rules in accordance with established policies and procedures.
- Reviews assigned employees' performance per MWRA procedures. Provides feedback and coaching to managers to maximize successful performance.
- Reviews, analyzes and prepares managerial reports for operational, maintenance, budget, and personnel matters.
- Oversees successful administration of collective bargaining agreement provisions. Participates in grievance resolution, 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 related duties as required.

### **MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A Bachelor of Science degree in Chemical or Environmental Engineering or a related field. Masters degree preferred; and
- (B) Ten (10) to twelve (12) years of progressive experience in wastewater treatment and/or in a large utility, regional agency or equivalent, of which at least six (6) years should be in a managerial capacity; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of engineering principles and practices with a special emphasis on wastewater treatment theory, process instrumentation, control and automation.
- (B) Proven expertise in the commissioning and operation of large-scale process plant equipment/systems to include a solid understanding of mechanical operating characteristics and their relationship to process performance variables.
- (C) Demonstrated managerial capability in a multi-disciplinary technical environment. Knowledge of operational procedures and techniques.
- (D) Knowledge of standard business management practices to include labor relations, budgeting and job cost accounting techniques.
- (E) Demonstrated computer skills to include proficiency in MS Office software package as well as MS Project. Familiarity with Operations reporting systems, distributed control systems, and Maximo maintenance management systems a plus.
- (F) Excellent oral, analytical and written communication skills.
- (G) Demonstrated successful experience managing in a union environment with a diverse workforce preferred.
- (H) Demonstrated knowledge and understanding of water and sewer infrastructure issues.

**SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D driver's license.

A valid Massachusetts Wastewater Treatment Plant Operator Grade VII certification (or ability to obtain one within 12 months from date of hire).

Ability to respond to emergency situations 24 hours per day, seven days per week.

**TOOLS AND EQUIPMENT USED:**

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

**PHYSICAL DEMANDS:**

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

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

There are no requirements that weight 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:**

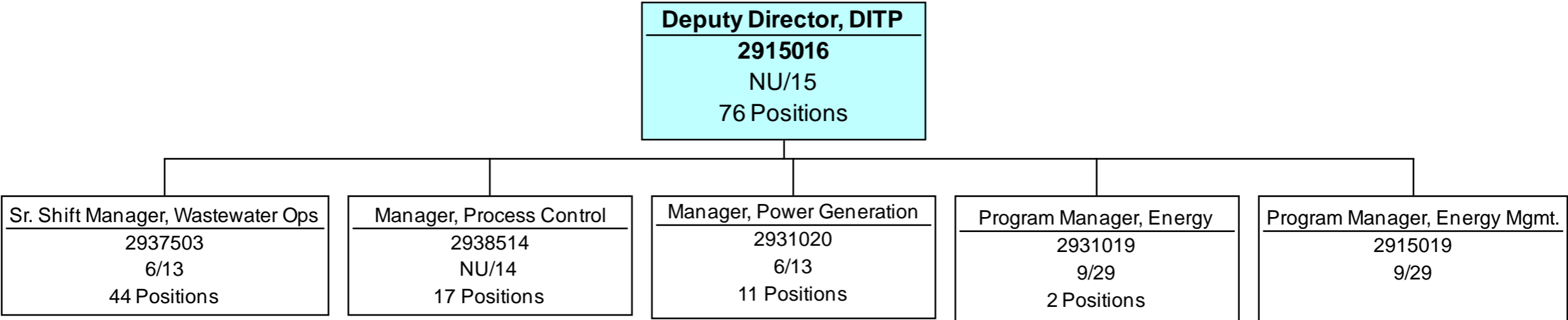
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee occasionally works near moving mechanical parts, is exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and occasionally is exposed to fumes or airborne particles, toxic and/or caustic chemicals.

The noise level in the work environment is usually loud in field settings, and moderately quiet in an office setting.

**October 2021**

**Deer Island - Operations, Process Control and Power Generation**  
July, 2022



## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** July 20, 2022  
**SUBJECT:** Delegated Authority Report – June 2022



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**COMMITTEE:** Administration, Finance & Audit

INFORMATION  
 VOTE



Michele S. Gillen  
Director, Administration

Sarah Parsons, Administrative Coordinator  
Barbara Aylward, Administrator A & F  
Preparer/Title

Rita C. Mercado   
Acting Director of Procurement

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### RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period June 1 – 30, 2022.

This report is broken down into three sections:

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

### DISCUSSION:

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

Construction Contract Awards:

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

Change Orders:

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

Professional Service Contract Awards:

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

Non-Professional Service Contract Awards:

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

Purchase or Lease of Equipment, Materials or Supplies:

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

Amendments:

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

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

**BUDGET/FISCAL IMPACT:**

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

CONSTRUCTION/PROFESSIONAL SERVICES DELEGATED AUTHORITY ITEMS JUNE 1 - 30, 2022

| NO.  | DATE OF AWARD | TITLE AND EXPLANATION  | CONTRACT | AMEND/CO | COMPANY                             | FINANCIAL IMPACT |
|------|---------------|--|----------|----------|-------------------------------------|------------------|
| C-1. | 06/06/22      | <b>DEER ISLAND TREATMENT PLANT - PERSONNEL DOCK REHABILITATION</b><br>AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR THE PERSONNEL DOCK REHABILITATION AT THE DEER ISLAND TREATMENT PLANT FOR A TERM OF 185 CALENDAR DAYS.  | S608     | AWARD    | R. ZOPPO CORP.                      | \$267,950.00     |
| C-2. | 06/13/22      | <b>AIR COMPRESSOR SYSTEM SERVICE</b><br>FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS: PREVENTATIVE MAINTENANCE, ROUTINE AND EMERGENCY ON-CALL SERVICES, REPLACEMENT PARTS.   | OP-404   | 3        | COOLING & HEATING SPECIALISTS, INC. | (\$48,575.47)    |
| C-3. | 06/13/22      | <b>HVAC SYSTEMS MAINTENANCE</b><br>FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS: BOILER AND HOT WATER SYSTEM REPAIRS, FAN DRIVE BELT AND HEAT PUMP SYSTEM REPAIRS, WAPS, ICCF AND WQL SYSTEMS REPAIRS, CLINTON WWTP SYSTEM REPAIRS, UNSPECIFIED MAINTENANCE REPAIRS, REPLACEMENT PARTS WITH MARKUP AND FACTORY AUTHORIZED SERVICE REPRESENTATIVE.  | OP-403   | 5        | ENE SYSTEMS, INC.                   | (\$55,723.98)    |
| C-4. | 06/23/22      | <b>DEER ISLAND TREATMENT PLANT MAINTENANCE COATING</b><br>FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS: REQUIREMENT TO FURNISH AND INSTALL PATCH PLATES, AND REMOVAL AND REINSTALLATION OF CARBON IN CARBON ABSORBERS.   | S583     | 5        | SOEP PAINTING CORP.                 | (\$93,014.87)    |
| C-5. | 06/23/22      | <b>TECHNICAL ASSISTANCE CONSULTING SERVICES JOHN J. CARROLL WATER TREATMENT PLANT</b><br>INCREASE THE LEVEL OF EFFORT TO PERFORM WORK ON THE FOLLOWING TASKS: RESIDENT ENGINEERING SERVICES FOR THE SOUTHBOROUGH HEADQUARTERS ELECTRICAL SYSTEM; ENGINEERING SERVICES DURING CONSTRUCTION FOR THE WACHUSETT DAM LOWER GATEHOUSE PIPE AND BOILER REPLACEMENT; DESIGN OF REDUNDANCY FOR THE LIQUID OXYGEN YARD PIPING AND STORAGE AND OTHER AS-NEEDED SERVICES; EXTEND THE CONTRACT TERM BY 12 MONTHS FROM DECEMBER 1, 2022 TO DECEMBER 1, 2023. | 7713     | 2        | HAZEN & SAWYER                      | \$250,000.00     |
| C-6. | 06/23/22      | <b>REMOTE HEADWORKS SHAFT ACCESS IMPROVEMENTS</b><br>AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR THE REMOTE HEADWORKS SHAFT ACCESS IMPROVEMENTS FOR A TERM OF 270 CALENDAR DAYS.   | 7550     | AWARD    | WES CONSTRUCTION CORP.              | \$2,408,888.00   |




## PURCHASING DELEGATED AUTHORITY ITEMS JUNE 1 - 30, 2022

| NO.  | DATE OF AWARD | TITLE AND EXPLANATION  | CONTRACT  | AMENDMENT | COMPANY  |                |
|------|---------------|--|-----------|-----------|--|----------------|
| P-1  | 06/02/22      | <b>PURCHASE OF ARC FLASH APPAREL</b><br>Award of a purchase order to the lowest responsive bidder for Arc Flash Apparel for the Deer Island Treatment Plant. Arc Flash Apparel is worn by the electricians at Deer Island to protect against burns the dangers from burns when working on electrical equipment. This recommendation replaces existing arc flash apparel that has passed its service life with new apparel to protect electrical maintenance staff.   | WRA 5107Q |           | Wesco Distribution, Inc.                                 | \$25,016.35    |
| P-2  | 06/02/22      | <b>PURCHASE ORDER CONTRACT FOR A SENIOR BUSINESS ANALYST CONSULTANT</b><br>Award of a purchase order under State Contract ITS77 Category 1A and 1B to the lowest responsive bidder for a Senior Business Analyst Consultant for 975 billable hours (26 weeks).   | WRA-5147Q |           | Acro Service Corporation                                 | \$78,000.00    |
| P-3  | 06/02/22      | <b>PURCHASE ORDER CONTRACT FOR DATA REPORTING ANALYST (REPORT WRITER) CONSULTANT</b><br>Award of a purchase order under State Contract ITS77 Category 1A and 1B to the lowest responsive bidder to provide a Data Reporting Analyst Consultant for 975 billable hours (26 weeks).  | WRA-5146Q |           | Clovity Inc.   | \$83,850.00    |
| P-4  | 06/10/22      | <b>UPGRADE FIBER CABLING</b><br>Award of a purchase order under State Contract ITC68 to the lowest responsive bidder to upgrade the fiber cabling at six locations at the Southborough Facility. The new fiber cabling will improve network performance, application response time and support the new phone system.   | WRA-5141Q |           | Future Technologies Group, LLC                           | \$27,953.96    |
| P-5  | 06/10/22      | <b>PURCHASE OF ONE NEW ELECTRIC FORKLIFT</b><br>Award of a purchase order to the lowest responsive bidder of one electric forklift for the Deer Island Treatment Plant.  | WRA-5120  |           | Equipment Depot Northeast, Inc.                          | \$35,936.00    |
| P-6  | 06/10/22      | <b>PURCHASE OF UPGRADED ETHERNET CABLING</b><br>Award of a purchase order under State Contract ITC68 to the lowest responsive bidder to upgrade the ethernet cabling at the Southborough Administration Bldg. The new ethernet cabling will improve network performance, application response time and support the new phone system.   | WRA-5148Q |           | Future Technologies Group, LLC                           | \$39,443.61    |
| P-7  | 06/10/22      | <b>PURCHASE OF WEIL SUMP PUMPS AND CONTROL SYSTEMS</b><br>Award of a sole source purchase order for Weil Sump Pumps and Control Systems for the Deer Island Treatment Plant.   |           |           | Gustavo Preston Company, Inc.                            | \$59,943.36    |
| P-8  | 06/16/22      | <b>PURCHASE OF 775 HEWLETT PACKARD MONITORS</b><br>Award of a purchase order under State Contract ITC73 to the lowest responsive bidder for 775 Hewlett Packard monitors. This procurement will provide 775 monitors, to be used in shared offices and cubicles in Chelsea and Deer Island, and to be issued as part of the IT telework kit for use at home.   | WRA-5139Q |           | Hub Technical Services LLC                               | \$152,543.25   |
| P-9  | 06/16/22      | <b>SCADA SOFTWARE MAINTENANCE</b><br>Award of a sole source purchase order for one-year of SCADA, software maintenance for the time period July 15, 2022 to July 12, 2023. The annual maintenance agreement provides software upgrades and technical support to ensure that MWRA's SCADA system remains current and operable.  |           |           | GE Digital, LLC  | \$195,754.29   |
| P-10 | 06/16/22      | <b>REFURBISHMENT OF SECONDARY REACTOR AERATOR AND MIXER GEARBOXES</b><br>Award of a three-year purchase order contract to the lowest responsive bidder for the refurbishment of secondary reactor aerator and mixer gearboxes at the Cryogenic Facility at Deer Island Treatment Plant. The reactor aerators are similar to large mixers that dissolve pure oxygen into the reactor liquid.  | WRA-5103  |           | SPX Corporation  | \$796,731.92   |
| P-11 | 06/16/22      | <b>PURCHASE OF ONE 40-TON AIR CONDITIONING UNIT</b><br>Award of a purchase order to the lowest responsive bidder for one 40-ton Air Conditioning Unit for the Deer Island Treatment Plant. Previous award from May 15, 2022 was rescinded due to inability to provide unit at bid price.   | WRA-5130Q |           | HTS Engineering, Inc.                                    | \$38,000.00    |
| P-12 | 06/16/22      | <b>ASSIGNMENT AND ASSUMPTION OF THE THREE-YEAR PURCHASE ORDER CONTRACT TO PROVIDE PREVENTATIVE AND CORRECTIVE SERVICES FOR THE DEPARTMENT OF LABORATORY SERVICES</b><br>A notification from O.I Corporation informing of a transition of its manufacturing to YSI, Inc. requires the original preventative and corrective services contract for the Department of Laboratory services' Cyanide analyzer to be assigned and assumed by YSI, Inc.  |           |           | YSI, Inc.  | \$38,842.16    |
| P-13 | 6/23/22       | <b>MAINTENANCE AND SUPPORT OF THE PROCESS INSTRUMENTATION AND CONTROL SYSTEM HUMAN MACHINE INTERFACE SOFTWARE</b><br>Award of a sole source purchase order for maintenance and support of the Process Instrumentation and Control System Human Machine Interface Software for the time period August 1, 2022 - July 31, 2025. This agreement will minimize HMI downtime, and will ensure the availability of an extensive and qualified field engineering staff able to respond rapidly to problems, which is necessary for optimum system-wide performance. |           |           | Emerson Process Management Power & Water Solutions, Inc. | \$211,418.00   |
| P-14 | 06/23/22      | <b>SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE</b><br>Award of a one-year purchase order contract to the lowest responsive bidder for the supply and delivery of sodium hypochlorite. MWRA uses sodium hypochlorite for primary disinfection at the William A. Brutsch Water Treatment Facility and secondary disinfection at the John J. Carroll Water Treatment Plant.  | WRA-5136  |           | Univar USA, Inc.   | \$3,657,446.60 |
| P-15 | 06/28/22      | <b>CYBERSECURITY TRAINING</b><br>Award of a sole source purchase order contract with SANS Institute to provide Cybersecurity Training. The specialized cybersecurity training from this highly recognized organization will provide critical skills to staff to defend an against cybercrimes.   |           |           | SANS Institute   | \$25,704.00    |

|      |          |   |                    |                                    |              |
|------|----------|---|--------------------|------------------------------------|--------------|
| P-16 | 06/28/22 | <b>PURCHASE OF TWO FUEL OIL PUMPS</b><br>Award a purchase order to the lowest responsive bidder for two fuel oil pumps for the Deer Island Treatment Plant.   | WRA 5150Q          | Lighthouse Process Corporation     | \$41,450.00  |
| P-17 | 06/28/22 | <b>PURCHASE ORDER CONTRACT FOR GARTNER IT EXECUTIVE + DELEGATE SUBSCRIPTION RENEWAL</b><br>Award of a purchase order under State Contract ITS59 for the renewal of the Gartner IT Executive + Delegate Subscription for the service period of July 1, 2022 through June 30, 2023. Through this subscription, the MWRA will receive timely strategic advice to enhance the effectiveness and efficiency of the MIS Department, including independent expert advice on a variety of key IT initiatives. | ITS59              | Gartner, Inc.                      | \$117,071.00 |
| P-18 | 06/28/22 | <b>PURCHASE OF HEWLETT PACKARD ENTERPRISE EQUIPMENT MAINTENANCE AND SUPPORT</b><br>Award of a one-year purchase order under State Contract ITC73 to the lowest responsive bidder for Hewlett Packard Enterprise equipment for the period of July 1, 2022 through June 30, 2023. The MWRA uses Hewlett Packard Enterprise server hardware to host enterprise and departmental applications, Internet/Intranet computing, and manage print queues.  | WRA-5151Q<br>ITC73 | Hewlett Packard Enterprise Company | \$161,465.37 |
| P-19 | 06/30/22 | <b>PURCHASE OF ONE 33-FOOT ROUGH TERRAIN SCISSOR LIFT</b><br>Award of a purchase order to the lowest responsive bidder for one 33-ft Rough Terrain Scissor Lift for Western Operations staff. This lift replaces a 26-year old lift that, due to age and condition, cannot provide the necessary height and weight capability.  | WRA-5158Q          | All Around Access LLC              | \$49,532.00  |

**STAFF SUMMARY**

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director   
**DATE:** July 20, 2022  
**SUBJECT:** Memorandum of Agreement between MWRA and the Town of Ludlow regarding Construction and Ownership of an Antenna Tower at Nash Hill Reservoir for Installation of Communication Equipment

**COMMITTEE:** Administration, Finance & Audit

           INFORMATION

  X   VOTE

  
Carolyn Francisco Murphy

General Counsel

  
David W. Coppes, P.E.

Chief Operating Officer

Valerie L. Moran, P.E., Director of Waterworks  
Angela Atchue, Associate General Counsel  
 Preparer/Title

**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to execute a Memorandum of Agreement with the Town of Ludlow, substantially in the form attached hereto, related to the design and construction by Ludlow, and the ownership, operation and maintenance by MWRA, of a new antenna tower at the Nash Hill Reservoir site, with ownership and maintenance of the communication equipment by respective permit holders.

**DISCUSSION:**

In 2017, Ludlow received a permit pursuant to section 8(m) of MWRA’s Enabling Act to install radio communication equipment for its life safety operations (maintained by its police, fire and emergency management services) on MWRA’s existing 35-foot antenna tower at MWRA’s Nash Hill Reservoir site. MWRA’s SCADA equipment, as well as South Hadley Water Department communication equipment, is also located on the tower. MWRA uses the tower as part of a redundant data communication system to allow remote monitoring and control of the Nash Hill Reservoir site.

Due to changes in technology, Ludlow must upgrade its communications equipment to provide for its life safety operations. The upgraded equipment requires a reliable and consistent signal. Because MWRA’s existing antenna tower is too low to provide a reliable and consistent signal, Ludlow sought permission from MWRA to perform test borings at the Nash Hill Reservoir site to determine the feasibility of the placement of a new, higher antenna tower. In 2021, MWRA issued an 8(m) permit to Ludlow to perform the test borings at the site. A test boring report was subsequently provided to MWRA and feasibility of the site for placement of a 71-foot antenna tower was confirmed by Ludlow. To build a tower of this height requires a FAA permit, which the town obtained.



Figure 1. Existing Nash Hill Tower



Figure 2. MWRA Microwave Antenna

Ludlow submitted a detailed 8(m) permit application to replace the existing tower, including plans for removal of the existing antenna tower and construction of a new, 71-foot tall antenna at the site. Ludlow appropriated funding for the work, which is expected to commence in August. MWRA staff determined a higher tower will also benefit MWRA because the increased height of the new tower will make it less likely that future tree growth or other obstructions will block the microwave signal.

As previously reported to the Board, staff negotiated the terms of a proposed Memorandum of Agreement (MOA) with Ludlow which, subject to the Board's approval, outlines the terms and conditions of construction as well as MWRA's subsequent ownership of the new antenna tower. Ludlow has secured a consultant/contractor for the work. Ludlow shall be responsible for all costs to remove the existing antenna tower and construct the new tower. The new tower will include antennas for MWRA, Ludlow and South Hadley, as supplied by the contractor, and appropriate for the SCADA communication equipment approved by MWRA. The contractor shall coordinate connection to the local SCADA system with MWRA staff. After review and acceptance of the work, MWRA will take ownership and maintenance responsibility and control of the new tower. Only when the new tower is demonstrated to be working correctly will the contractor be given permission to demolish the existing radio tower. The MOA also includes provisions for warranty of the work, insurance and indemnification for MWRA's benefit. Under new 8(m) permits, Ludlow and South Hadley will thereafter operate and maintain their respective communication equipment on the new tower. The proposed MOA is also subject to approval by Ludlow's Board of Selectmen and will be presented to that Board at its meeting.

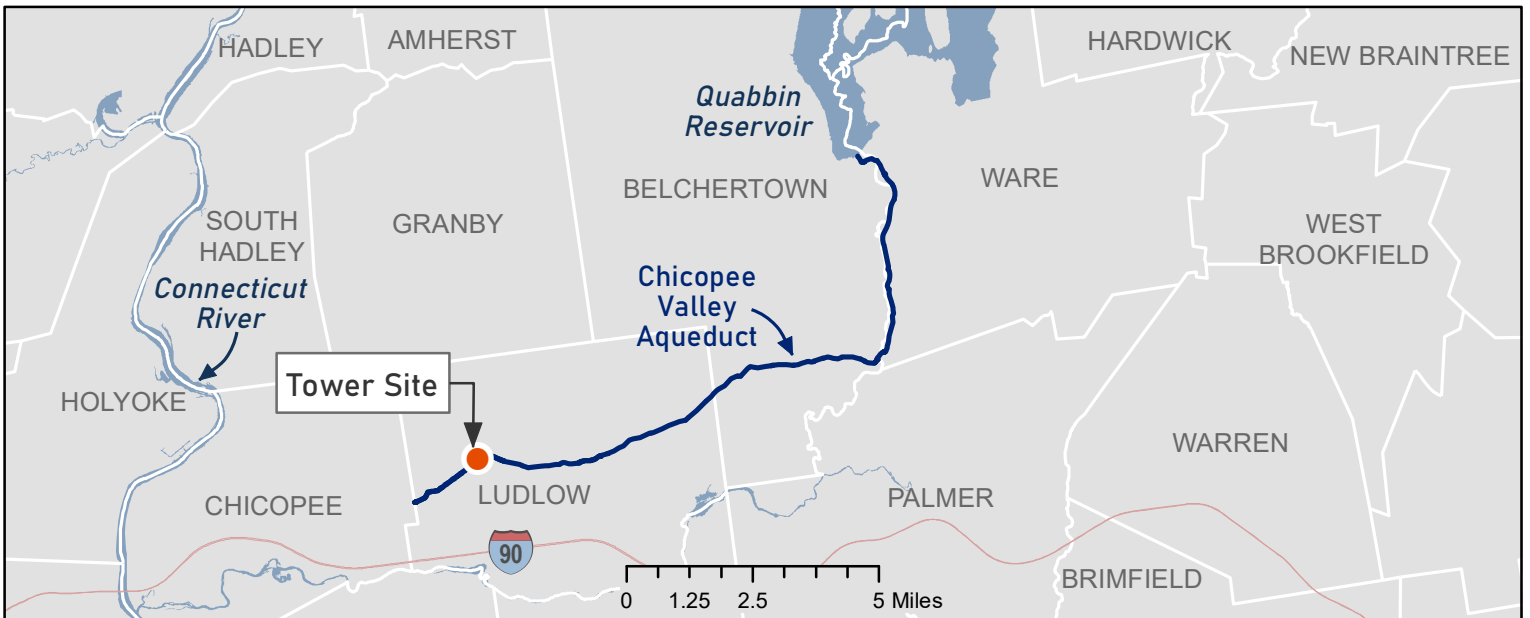
#### **BUDGET/FISCAL IMPACTS:**

Ludlow shall be responsible for the costs of the design and construction to remove the existing tower and construct the new, higher tower with new antennas. No funds are requested of MWRA for either design or construction of the removal of the existing tower and construction of the new, 71-foot antenna tower with new antennas.

#### **ATTACHMENTS:**

Figure 1- Nash Hill Tower Project – Locus Map  
Draft Memorandum of Agreement

# Figure 1 Nash Hill Tower Project Ludlow, Massachusetts



MEMORANDUM OF AGREEMENT  
BETWEEN  
MASSACHUSETTS WATER RESOURCES AUTHORITY  
AND  
TOWN OF LUDLOW, MASSACHUSETTS

This MEMORANDUM OF AGREEMENT (“MOA”) is made by and between the MASSACHUSETTS WATER RESOURCES AUTHORITY (“MWRA”), a body corporate and politic and an independent authority pursuant to St. 1984, c. 372 of the laws of the Commonwealth of Massachusetts, as amended, and the TOWN OF LUDLOW (“Ludlow”) a municipality duly organized and existing under the laws of the Commonwealth of Massachusetts having an address of 488 Chapin Street, Ludlow, Massachusetts 01056 (each individually a “Party” and collectively the “Parties”).

**RECITALS**

WHEREAS, Ludlow received a MWRA 8(m) permit (#2080) in August 2017 to install radio communication equipment for its life safety operations (maintained by its police, fire and emergency management services) on MWRA’s existing antenna tower at MWRA’s Nash Hill Reservoir site, located at 63 Nash Hill Road, Ludlow, MA 02150 (the “Premises”);

WHEREAS, Ludlow’s communication equipment requires an upgrade and MWRA’s existing antenna tower at a height of 35-feet is too low to provide a reliable and consistent signal;

WHEREAS, Ludlow’s life safety operations are in need of a more reliable and consistent signal for its operations;

WHEREAS, pursuant to Section 8(m) of MWRA’s Enabling Act, Ludlow sought permission from MWRA to perform test-borings at the Premises to verify the feasibility of the placement of a new, higher antenna tower at the Premises;

WHEREAS, MWRA issued an 8(m) Permit (#2723) to Ludlow in August 2021 allowing Ludlow to perform test-borings at the Premises for construction of a higher antenna tower;

WHEREAS, Ludlow requested permission from MWRA to construct a new, taller antenna tower, transfer functionality and remove the existing antenna tower on the Premises, all at its own costs and expense;

WHEREAS, MWRA allowed Ludlow to proceed with its investigation into replacing the existing antenna tower with a new, taller antenna tower pursuant to Ludlow submitting an 8(m) Permit application for MWRA’s review and approval;

WHEREAS, Ludlow obtained a Federal Aviation Administration (FAA) permit to construct an approximately, but no higher than, 71-foot antenna tower at the Premises;

WHEREAS, MWRA staff determined a higher tower will also benefit MWRA making it less likely that future tree growth or other obstructions will block the microwave signal;

WHEREAS, Ludlow appropriated funding through town meeting for the construction of a new, taller antenna tower at the Premises and the removal of the existing antenna tower;

WHEREAS, Ludlow submitted an 8(m) Permit application to MWRA, which included plans for construction of a new, approximately, but no higher than, 71-foot tall antenna, transfer of functionality and removal of the existing antenna tower at the Premises (collectively “the Work” and more fully described below), shown on the plans entitled, Emergency Communications Facility Town of Ludlow Nash Hill ECF Nash Hill Road Ludlow, MA, and prepared by Marcus Communications, LLC (“Marcus”), revision date 4/26/22 – Tower Plans Prepared by: Valmont Structures – Site: Ludlow MA Marcus Communications U4 X 70’ – Rev. Design Date: 12/29/21 (collectively “the Plans”); WHEREAS, on May 25, 2022, MWRA approved the Work subject to the Plans and MWRA Water Operations special terms and conditions detailed in the 8(m) Permit #2850, and as further revised on June 13, 2022, (the “Permit 2850”) as attached hereto;

WHEREAS, Ludlow has agreed to transfer ownership, responsibility and control of the new antenna tower and associated equipment that includes, but is not limited to, signage, a new propane tank, generator, transfer switch and air conditioning units, to MWRA once it has completed the Work, MWRA has issued an 8(m) permit for the location and operation of Ludlow communications equipment at the Premises and MWRA has accepted the new antenna tower, in accordance with the terms and conditions of this MOA; and

WHEREAS, MWRA and Ludlow wish to enter into this MOA regarding the Work, and their respective roles and responsibilities including with respect to costs for the Work, and ownership, control, operation, and maintenance of the new approximately, but no higher than, 71-foot antenna tower and associated equipment.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

**1. RESPONSIBILITIES AND COSTS**

1.1 The Work shall include furnishing and installing all labor, materials, equipment, safety measures, superintendence and everything else necessary for the construction of a new, approximately, but no higher than, 71-foot tall antenna, transfer of functionality and removal of the existing 35-foot antenna tower at the Premises, and all related work, in accordance with the Plans prepared by Marcus and Permit 2850. Ludlow shall pay for the Work and be fully responsible for the completion of the Work and all costs and expenses, including, but not limited to design, engineering, construction and permitting, arising out of or relating to the completion of the Work. MWRA shall bear no financial responsibility for the Work.

1.2 The Plans were provided to MWRA for final review and comment, and were accepted and referenced in Permit 2850.

1.3 The Work and location of the same shall be based on the Plans as reviewed and approved by MWRA and as referenced in Permit 2850, and shall not deviate therefrom without the prior review and express written approval of the MWRA 8(m) Permit Project Manager. The Work shall be performed in accordance with the Plans, Permit 2850 and all applicable federal, state and local laws, ordinances, rules, regulations and requirements.

1.4 A MWRA on site inspector shall review all requested field changes and coordinate with Ludlow regarding submission of any change of work plan to MWRA for review and written comment as identified in Permit 2850. Failure to comply may result in Ludlow being issued a cease and desist order and require Ludlow to correct/reconstruct the Work pursuant to the terms of Permit 2850.

1.5 Ludlow shall also provide MWRA with written notice before commencement of the Work to allow for information sharing and coordination. Further, Ludlow agrees the transfer of functionality will include placement of antennas on the new antenna tower for MWRA, Ludlow and the South Hadley Water District, as furnished and installed by Ludlow's contractor, and appropriate for the SCADA communication equipment approved by MWRA, approval not to be unreasonably withheld. Ludlow's contractor shall coordinate connection to the local SCADA system with MWRA staff. Ludlow shall cooperate with MWRA and routinely provide MWRA with written notice and updates on the progress of the Work. Ludlow shall also furnish information and requested documents and records relating to the Work requested by MWRA.

1.6 To perform the Work, MWRA agrees to allow Ludlow, Marcus, and their respective consultants and representatives, access to the Premises. MWRA shall provide reasonable assistance to Ludlow in accessing the Premises to perform the Work.

1.7 Ludlow shall be responsible for securing all necessary permits and approvals for the Work including, without limitation, from federal, state and local authorities with applicable jurisdiction. MWRA bears no such responsibility.

1.8 Upon reasonable written notice to Ludlow, MWRA and its consultants may inspect the Work at any time prior to transfer of ownership. Ludlow, Marcus and their respective contractors and subcontractors shall promptly remedy any defects or deficiencies in the Work to MWRA's satisfaction.

1.9 To the fullest extent permitted by applicable law, Ludlow shall indemnify, defend with counsel acceptable to the Authority, acceptance not to be unreasonably withheld, keep and save harmless the Authority and its board members, officers, representatives, contractors, agents, employees, successors and assigns, in both their individual and official capacities, against all suits, claims, liabilities, damages, losses (including but not limited to loss of use resulting therefrom) and expenses (including but not limited to attorney's fees) caused by, arising out of or resulting from the Work, any activity under this MOA and/or any act, omission, breach or default of Ludlow under this MOA, Marcus and/or any of their respective contractors, subcontractors, vendors or consultants, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligations shall not be construed to negate or abridge any other obligations of indemnification, and defense running to MWRA, which would otherwise exist.



1.10 Ludlow shall cause Marcus and all other contractors and subcontractors to name MWRA as an additional insured on all insurance policies required to be provided for the Work, except for Workers Compensation insurance. Ludlow further agrees to provide MWRA with insurance certificates from the Town and its contractors and subcontractors pursuant to the terms of Permit 2850 and prior to commencement of the Work and such certificates shall be periodically updated and maintained for the duration of the Work.

1.11 MWRA is to be named as an obligee on the Performance and Labor and Materials Payment Bonds to be provided by Marcus and its contractors and subcontractors.

1.12 Marcus shall warrant and guarantee the Work for the benefit of MWRA to at least the same extent as the Work is warranted for the benefit of Ludlow. MWRA is subject to all relevant terms and conditions of such warranties and guarantees. Provided, however, that such warranty and guarantee shall at a minimum warrant and guaranty that the Work will be free from defects in materials and workmanship for a period of one (1) year from completion and such defects shall be timely and completely repaired or replaced. Ludlow has secured Marcus' agreement to these terms. Ludlow shall furnish MWRA a written warranty/guaranty from Marcus to reflect these terms.

1.13 Marcus shall indemnify and hold harmless MWRA to the same extent that Ludlow requires Marcus and all other contractors and subcontractors to indemnify and hold harmless Ludlow relating to the Work. Ludlow has secured Marcus' agreement to these terms. Ludlow shall furnish MWRA with a written indemnification/hold harmless agreement from Marcus to reflect these terms.

## **2. OWNERSHIP, CONTROL, OPERATION AND MAINTENANCE**

2.1 Upon Ludlow's written notice to MWRA of completion of the Work MWRA, after full and final inspection and acceptance of the Work, shall take full ownership and control of and be responsible for the operation, control and maintenance of the new approximately 71-foot antenna tower and associated equipment that includes, but is not limited to, signage, a new propane tank, generator, transfer switch and air conditioning units, including all costs and expenses arising out of such ownership, but shall bear no responsibility for the operation and maintenance of the communication equipment installed by Ludlow for its own use. Provided, however, MWRA shall not be responsible or liable in any way for any incomplete or defective Work, which shall be Ludlow's sole responsibility to address, correct and timely complete.

2.2 Following the completion of the Work and acceptance of the approximately 71-foot antenna tower and related equipment by MWRA, simultaneously with transfer of ownership to MWRA, Ludlow will receive an 8(m) Permit from MWRA for the location, operation and maintenance of Ludlow's new communication equipment on the approximately 71-foot antenna tower and at the Premises. Ludlow shall be solely responsible for operating and maintaining such communication equipment pursuant to the terms of the 8(m) Permit anticipated to be issued upon Ludlow's completion and MWRA's acceptance of the Work. The placement of Ludlow's equipment on the new tower shall be governed by the terms of such 8(m) permit. Except in the event of exigent circumstances, to avoid interference with the performance of either MWRA equipment or Ludlow's emergency management communications equipment, MWRA and Ludlow agree to confer prior to the location or relocation of any equipment on the antenna tower

or any alteration to the tower. MWRA shall contact the Ludlow Fire Chief or the Ludlow Chief of Police, either of whom shall be authorized to confer on Ludlow's behalf. Ludlow shall promptly respond to MWRA's request to confer and be promptly available for a discussion(s).

**3. AMENDMENTS**

The Parties to this MOA may amend this MOA only by a writing duly executed by both Parties.

**4. SEVERABILITY**

If any part of this MOA is determined to be invalid, illegal, or unenforceable, such determination shall not affect the validity, legality, or enforceability of any other part of the Agreement and the remaining parts of this MOA shall be enforced as if such invalid, illegal or unenforceable part were not contained herein, unless continued performance of the remaining provisions of this MOA, which have not been determined to be invalid, illegal or unenforceable, would result in the substantial loss of the benefit of the bargain to either MWRA or Ludlow.

**5. NOTICE**

Whenever, by the terms of this MOA notice is required, it shall be in writing. Notice shall be deemed to have been given upon delivery to all recipients designated below, except that any delivery by e-mail must be confirmed in writing as received by such recipient. Delivery of notice shall be valid if addressed to the following regardless of the existence of the position or a change in the individual holding the position:

To Ludlow: Board of Selectmen  
c/o Town Administrator  
488 Chapin Street  
Ludlow, MA 01056

with copy to: Chief of the Fire Department  
PO Box 382  
612 Chapin Street  
Ludlow, MA 01056

Chief of the Police Department  
612 Chapin Street  
Ludlow, MA 01056

To MWRA: Eben Nash, Director Western Operations  
Massachusetts Water Resources Authority  
266 Boston Post Road, Southborough, MA 01772  
[Eben.Nash@mwra.com](mailto:Eben.Nash@mwra.com)

with copies to: Ralph Francesconi, 8M Permit Project Manager  
Massachusetts Water Resources Authority  
2 Griffin Way, Chelsea, MA 02150  
Ralph.Francesconi@mwra.com

Carolyn Francisco Murphy, General Counsel  
Massachusetts Water Resources Authority  
100 First Avenue  
Boston, MA 02129  
Carolyn.Francisco-Murphy@mwra.com

**6. ENTIRE AGREEMENT**

The terms of this MOA are in addition to the terms of Permit 2850. This MOA and Permit 2850 constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior agreements, understandings, expectations, negotiations, and discussions of the Parties, whether oral or written. There are no representations by either Party, which are not specifically set forth in this MOA and Permit 2850.

**7. GOVERNING LAW**

This MOA shall be executed and delivered in the Commonwealth of Massachusetts and shall be construed and enforced in accordance with, and shall be governed by, the laws of the Commonwealth of Massachusetts.

**8. DISPUTES/COOPERATION**

The Parties shall each use their best efforts to cooperate in the interest of advancing the Work and bringing such to a timely and successful completion by appointing appropriate representatives who, respectively, shall be responsible for expediting and responding to all inquiries, problems, and matters requiring coordination among the Parties concerning the scheduling, performance, progress and/or completion of the Work. Any and all disputes which arise and which cannot be amicably resolved by the Parties during the course of the performance of the Work, if at all possible, shall be resolved by a Court of competent jurisdiction.

**9. COUNTERPARTS**

This MOA may be executed in duplicate counterparts, each of which shall be deemed an original and both of which shall constitute one and the same instrument.

**10. AUTHORITY**

Each person signing in an official or representative capacity warrants that he or she is duly authorized to act for his or her principal, having received all necessary approvals, and that he or she is so acting when signing this MOA, and that, when executed this MOA shall be a valid and binding obligation, enforceable in accordance with its terms.

**11. NO PRESUMPTION**

The Parties agree that this MOA shall be construed without regard to any presumption or other rule requiring construction or interpretation against the Party causing this Agreement to be drafted.

IN WITNESS WHEREOF, the Parties hereto have caused the MOA to be executed as a sealed instrument and signed in duplicate by their duly authorized representatives.

**EXECUTED AS A SEALED INSTRUMENT** this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

MASSACHUSETTS WATER RESOURCES  
AUTHORITY

BOARD OF SELECTMEN  
TOWN OF LUDLOW

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

By: \_\_\_\_\_  
Chairman

\_\_\_\_\_  
Member


\_\_\_\_\_  
Member

\_\_\_\_\_  
Member

\_\_\_\_\_  
Member

Being a majority of the  
five member Board


## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director   
**DATE:** July 20, 2022  
**SUBJECT:** Increasing the Cost of Living Adjustment Base for Retirees

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**COMMITTEE:** Administration, Finance & Audit

VOTE  
 INFORMATION

  
Thomas J. Durkin  
Director, Finance

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*The MWRA Retirement Board will typically vote to approve an annual COLA for MWRA retirees. The COLA is currently calculated on the first \$15,000 of the annual retirement benefit. The base had been \$12,000 for many years but was increased to \$13,000 in 2015 by a vote of both the Retirement System Board of Trustees and the MWRA Board of Directors. It was further increased in 2019 to \$14,000 effective July 1, 2019 and to \$15,000 effective July 1, 2020. The Retirement Board recently voted to increase the COLA base from \$15,000 to \$17,000 effective July 1, 2022 and has requested approval from the MWRA Board of Directors.*

### RECOMMENDATION:

Pursuant to Section 19 of Chapter 188 of the Acts of 2010, to approve the MWRA Employees' Retirement Board's vote of June 1, 2022 to accept an increase in the maximum base amount on which the retiree cost-of-living adjustment is calculated from \$15,000 to \$17,000 effective July 1, 2022.

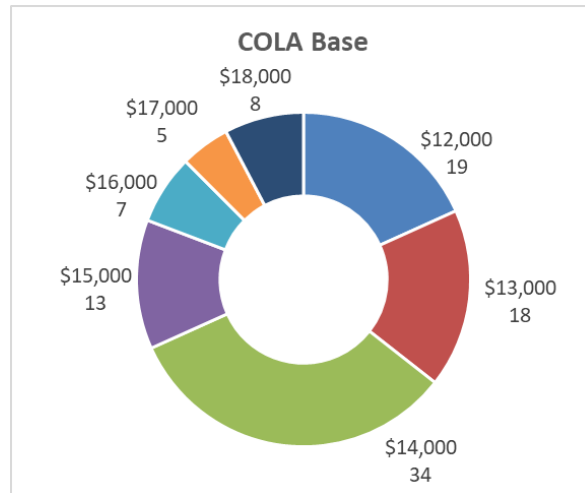
### DISCUSSION:

On October 14, 2015, the Board of Directors approved an increase to the base upon which the Cost of Living Adjustment (COLA) is calculated concurring with the MWRA Employees' Retirement System Board (Retirement Board) vote of September 24, 2015. The COLA base upon which a cost of living increase might be approved was increased from \$12,000 to \$13,000. On June 19, 2019, the Board of Directors approved an increase to the COLA base again from \$13,000 to \$14,000 effective July 1, 2019 and to \$15,000 effective July 1, 2020. The MWRA Employees' Retirement System Board (Retirement Board) voted unanimously on June 1, 2022 to increase the COLA base to \$17,000 effective July 1, 2022.

The approval of both the Retirement Board and the Board of Directors is required to adopt an increase to the COLA base. The Retirement Board has given MWRA notice of its actions and requested the Board's approval.

## Background

On July 27, 2010, the legislature approved the Municipal Relief Act – Chapter 188 of the Acts of 2010. This Act includes a provision (Sections 18 and 19) to increase the base upon which the COLA is calculated. Currently, Section 103 of Chapter 32 allows local retirement boards to grant cost of living increases each year to retirees up to the percentage reported each April 1 by the Public Employees Retirement Administration Commission (PERAC). The MWRA Retirement Board has typically granted 3% increases. Since July 1, 2020, the base for MWRA Employees' Retirement System retirees has been \$15,000. This currently results in a \$450 annual increase to a retiree's annual retirement benefit.



## Survey of Other Retirement Systems

PERAC reports the COLA base for the 104 retirement systems of Massachusetts. The chart to the right illustrates the COLA base, and the number of retirement systems using that base amount.

### **BUDGET/FISCAL IMPACT:**

Because the Retirement System experienced actuarial gains in 2021, the increase to the COLA base will not result in an increase in the budgeted Annual Required Contribution. While there is an increase to the Actuarial Accrued Liability and resulting amounts required each year to amortize the liability and an increase to the Normal Cost, these are offset by the actuarial gains of 2021.

Segal Consulting, the actuary firm for the MWRA Retirement Board has recently completed its valuation report as of January 1, 2022. Segal Consulting has determined that increasing the base from \$15,000 to \$17,000 would increase the Unfunded Actuarial Accrued Liability by \$5.6 million from \$76.4 million to \$82.0 million. Increasing the COLA base would increase the Normal Cost component of the Annual Required Contribution by \$100 thousand each year.

All years from Fiscal Year 2023 through Fiscal Year 2029 would remain the same. Due to the actuarial gains of 2021, Fiscal 2030 decreases by \$4.8 million from \$25.9 million to \$21.1 million.

There is no change to the Actuarial Assumed Rate of Return of 6.90%. The time to full amortization of the Unfunded Actuarial Accrued Liability remains at 2030. Since there is no change to the current funding schedule through Fiscal Year 2029, the Annual Required Contributions remain the same in MWRA's rates model projections and in the FY23 Draft Final Budget.

### **ATTACHMENT:**

Letter from MWRA Retirement Board



MWRA  
EMPLOYEES' RETIREMENT SYSTEM

*Since July 1, 1985*

June 1, 2022

Mr. Frederick Laskey  
Executive Director  
Massachusetts Water Resources Authority  
100 First Avenue, CNY  
Boston, MA 02129

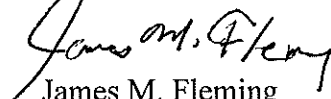
Dear Mr. Laskey:

Pursuant to the provisions of G.L. c. 32, s. 103(j) a Retirement Board may, subject to the approval of the legislative body, grant increases, in increments of \$1,000, to the base upon which the maximum 3% retiree Cost of Living Adjustments (COLA) are calculated. On June 1, 2022, the MWRA Employees' Retirement Board voted to adopt a Retirement System funding schedule which grants an increase to the COLA base from \$15,000 to \$17,000 to become effective for FY2023, and respectfully requests the approval of this increase by the MWRA Board of Directors.

The increase for the retirees was among several changes approved by the Retirement Board as part of a long-range, systematic funding approach which incorporates recommendations from actuarial consulting firm Segal, as well as PERAC Actuary John Boorack, to address the somewhat uncharted issues facing nearly fully-funded Systems. With the approval of the new funding schedule, the Retirement Board modified expense and mortality assumptions to approximate more realistically expected long-term plan experience. In addition, the new funding schedule fully amortizes the Retirement System's Unfunded Actuarial Accrued Liability (UAAL) by FY2030, and decreases the year over year increases to the UAAL amortization payments, to reduce volatility in Retirement System appropriation requirements, for the Authority, and in turn for its member communities.

The MWRA Employees' Retirement Board therefore voted unanimously to adopt the new schedule as a responsible approach, beneficial to the System's membership, to the Plan Sponsor, and to the member communities. We respectfully request that the Board of Directors approve the COLA base increase for FY2023 as part of this long-term plan. Thank you for your consideration.

On behalf of the Members of the Retirement Board,

  
James M. Fleming  
Chairman