MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors October 29, 2025

A meeting of the Massachusetts Water Resources Authority (MWRA) Board of Directors was held on October 29, 2025 at MWRA's Administration Facility in Chelsea and via remote participation.

Chair Tepper presided from MWRA's Cheslea Administration Facility. Board Members Flanagan, Pappastergion, Taverna, Vitale and Patrick Walsh participated at the Administration Facility. Board Members Swett and Wolowicz participated remotely. Board Members Foti, Peña, and Jack Walsh were absent.

MWRA Executive Director Frederick Laskey attended at the Chelsea Administration Facility. General Counsel Carolyn Francisco Murphy; Deputy Chief Operating Officers Stephen Cullen and Rebecca Weidman; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Chief Engineer Brian Kubaska; Director of Environmental and Regulatory Affairs Colleen Rizzi; Senior Program Manager, Planning, Michael O'Keefe; Director of Environmental Quality David Wu; Program Manager, Environmental Monitoring Chris Goodwin; Deputy Finance Director/Treasurer Matthew Horan; Chief of Staff Katherine Ronan; Associate General Counsel Angela Atchue; Technical Support Manager Michael Curtis; and Assistant Secretary Kristin MacDougall were among the staff who also attended at the Chelsea Administration Facility.

Vandana Rao, EEA and Matt Romero, MWRA Advisory Board attended at the Chelsea Administration Facility.

Chair Tepper called the meeting to order at 10:01am.

ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board members in attendance and announced that Board Member Wolowicz was participating remotely. The Chair announced that the meeting was being held at MWRA's Chelsea Administration Facility and virtually, via a link posted on MWRA's website. She added that the meeting was being recorded, and that the agenda and meeting materials were available on MWRA's website.

INTRODUCTION

Chair Tepper thanked staff for preparing for this meeting, and Board members for their participation. MWRA Executive Director Fred Laskey briefly discussed the importance of the Draft Updated Combined Sewer Overflow (CSO) Control Plan and welcomed representatives of Watershed Groups to the meeting. (Mr. Swett joined the meeting).

WASTEWATER POLICY AND OVERSIGHT

Introduction

Kathleen Murtagh, MWRA Chief Operating Officer, outlined the topics to be covered during the meeting; and noted the agenda included time for questions, and that staff would follow up on any questions that could not be answered immediately. She also noted that this meeting was for informational purposes only, and that the Board would not be expected to vote with respect to a recommended Draft Updated CSO Control Plan at this time. She provided a summary of the Plan's submittal and review schedule.

Background

Brian Kubaska, Chief Engineer, provided background on MWRA's CSO Control achievements to date as detailed in the Staff Summary and presentation slides for this meeting. He discussed completed projects; MWRA CSO investments to date by receiving water; system-wide CSO reductions since the start of the CSO Control Program; the locations of variance water CSOs, and variance water requirements. (Mr. Taverna joined the meeting).

Mr. Pappastergion requested that staff provide Board members with copies of the presentation slides. (Staff distributed hard copies during the meeting.)

Water Quality

David Wu, MWRA Director of Environmental Quality, discussed water quality factors for consideration, including sources of pollution; how water quality is assessed with modeling; and preliminary modeling results for the Charles, Mystic and Alewife Brook, as presented in the Staff Summary and meeting slides.

In response to a question from Chair Tepper, Mr. Wu confirmed that the water quality models used reflect the expected impacts of increased rainfall from climate change on the existing MWRA sewer system.

In response to question from Mr. Taverna about the derivation of the "time in compliance" tables, Mr. Wu confirmed that the benchmark of 410 E. coli per 100mL was based in the state water quality standards.

Next, Chris Goodwin, MWRA Program Manager for Environmental Monitoring, presented a summary of preliminary water quality impacts of acute analyses from CSOs as detailed in the Staff Summary and presentation slides for this meeting.

There were questions and answers about the analyses' assumptions and findings, including for worst-case, maximum E. coli water quality impacts in a 2050 typical year.

Levels of Control

Mr. Kubaska reviewed the levels of control considered in the Draft Updated CSO Control Plan, and the available tools used to develop remediation alternatives for the remaining

CSO outfalls in the variance waters, as further outlined in the Staff Summary and slides for this meeting. Mr. Kubaska further discussed the climate change considerations; the four levels of control evaluated; the general components of an alternative; and tools for controlling CSOs (sewer separation, green stormwater infrastructure, storage, conveyance and a regional tunnel) and provided examples of such tools in the presentation slides. Mr. Kubaska also noted locations of tunnel launch sites for the Alewife and Charles alternatives.

In response to a question from Mr. Taverna, Mr. Kubaska described characteristics of a microtunnel. Mr. Taverna asked if staff had considered relief or parallel sewers as a means of CSO control. Mr. Kubaska explained that relief sewers were not feasible for the Alewife Brook system primarily due to existing system capacity constraints within the downstream system, and the scale of an undertaking to increase the capacity all the way through to the DITP treatment plant.

Public Engagement

Michael O'Keefe, MWRA Senior Program Manager, Planning, discussed ongoing public outreach efforts for the Draft Updated CSO Control Plan, such as public meetings; meetings with watershed groups; outreach to environmental justice populations; and the solicitation and integration of stakeholder input, as further described in the Staff Summary and presentation slides for this meeting. He also briefly discussed the integration of stakeholder input in the draft plan (e.g., act with urgency for both short and long-term solutions; green infrastructure; impacts of climate change) and noted that this topic was previously presented at the October 22, 2025 Board of Directors' meeting.

<u>Alternatives Development</u>

Colleen Rizzi, MWRA Director of Environmental and Regulatory Affairs, outlined the alternatives development process as presented in the Staff Summary and slides for this meeting (considerations before concepts were developed, initial development and screening of technologies, assessment of opportunities to address multiple outfalls with a single control tool, optimization of combination of control tools and assessment of elimination of discharges). Referencing the power point slides Ms. Rizzi described the summary of alternatives under consideration for the Alewife Brook, Mystic River and Charles River.

Mr. Taverna asked if the use of Green Stormwater Infrastructure (GSI) is included in more alternatives than those highlighted during the presentation. Ms. Rizzi responded in the affirmative and provided some examples, namely in alternatives with sewer separation which lends itself to GSI. Mr. Kubaska added that when evaluating alternatives the team didn't see significant impacts to infrastructure sizing when adding GSI. Ms. Rizzi noted that future incorporation of GSI has not been precluded from alternatives and could be added in the future as opportunities and benefits present themselves.

Alternatives Evaluation and Scoring

Ms. Rizzi then presented the alternatives evaluation/selection considerations including discussion on the benefits criteria and scoring; and alternatives evaluation and selection considerations. Referencing the power point slides she outlined the components of the benefits criteria and provided an example of a scoring for an Alewife Brook alternative of 0 CSOs in the 2050 Typical Year.

In response to a question from Chair Tepper, Ms. Rizzi confirmed that the meeting slides on the scoring rubrics were synopses of the detailed rubrics included in the Staff Summary for this meeting. There was general discussion about the scoring process and how the alternatives were weighted based on different priorities that may exist among stakeholders to perform a sensitivity analysis of the criteria. There was also discussion on how some factors such as cost, as well as regulatory and land acquisition risks were considered in addition to the scoring criteria.

Chair Tepper asked why these factors were considered in parallel. Ms. Rizzi explained that the CSO Project Partners (MWRA, Cambridge and Somerville) did not want the factors of cost and regulatory/land acquisition risks to drive the alternatives assessment process; however, land acquisition risks did ultimately influence the selection of an alternative where work would have taken place in Davis Square, Somerville as an example (see the *Recommended Alternatives* section of these minutes for more information).

Chair Tepper asked if the water quality scoring for the Limited Control alternatives included different scoring for how well they reduce CSOs. Ms. Rizzi responded in the affirmative and further explained the criterion.

Mr. Taverna asked if sensitivity analysis was performed for each alternative. Ms. Rizzi explained that it was performed for the alternatives in the zero CSOs in a 2050 typical year level of control category in each water body.

Recommended Alternatives

Ms. Rizzi presented the alternatives under consideration for the Draft Updated CSO Control Plan including estimated costs; timelines; benefits; and recommended alternatives for each water body as presented in the Staff Summary and meeting slides. She noted that the CSO Project Partners recognize that the recommended alternatives may evolve as a result of the regulatory review and public comment process that will follow the submittal of the Draft Updated CSO Control Plan at the end of December 2025.

In response to a question from Mr. Pappastergion regarding why some Alewife Brook alternatives presented were not recommended, Ms. Rizzi explained that alternatives 1.AB Integrated and 2.AB Hybrid 1 require 1-3 acres of land in Davis Square, Somerville for constructed wetland, and acquiring that large of an area of land in a dense residential and commercial area would be unlikely. Mr. Pappastergion asked if the alternatives 1.AB

Integrated and 2.AB Hybrid 2 were not selected because of the improbability of building them. Ms. Rizzi responded in the affirmative. She then described the recommended alternative for Alewife Brook (3 AB Hybrid 2), with zero CSOs in a 2050 typical year.

Mr. Pappastergion asked if the estimated costs for each alternative represented MWRA's costs or total costs. Ms. Rizzi relayed that they represented total costs. Mr. Patrick Walsh asked if the costs included both design and construction. Ms. Rizzi explained the costs were for capital design and construction.

Mr. Pappastergion also requested the estimated number of CSO activations predicted for the recommended Mystic River alternative (6a.MR Hybrid 1) in a 2050 typical year, versus the non-selected alternatives. Ms. Rizzi relayed that 6a.MR Hybrid 1 is expected to result in approximately two activations with 6.8 million gallons of discharge annually, versus 8 activations and 29 million gallons annually if no new CSO control measures were implemented. Mr. Pappastergion inquired about estimated CSO volumes and activations to the Mystic for a 2050 5-year storm and a 2050 25-year storm. Mr. Kubaska explained that staff expect activations under those scenarios; however, model runs of these conditions had not yet completed, and this information would be provided at a later date.

In response to Mr. Pappastergion's question about the estimated number of 2050 typical year activations for the recommended Charles River alternative (8.CR Hybrid 1), Ms. Rizzi relayed that staff expect approximately four activations annually, with a total discharge volume of 26.81 million gallons (treated) and 2.59 million gallons (untreated).

In response to a question from Mr. Patrick Walsh, Ms. Rizzi explained that alternative 8.CR Hybrid 1 would take approximately 23-28 years from design to complete due in part to the use of sewer separation; however, some noticeable benefits could be achieved within 5-7 years.

There was discussion with questions and answers about how factors such as larger storms from climate change, groundwater elevations and system capacity were considered with to assessing sewer separation alternatives.

Mr. Swett advised on the importance of stress testing the design storm models for each alternative to avoid potentially underestimating the volume and frequency of future storms. Mr. Kubaska relayed that stress testing models have not been run yet; modeling is the best tool available for estimating large storm events; and models of this scale are technically challenging.

Mr. Kubaska indicated that expandability to allow for future modifications if needed to address factors such as climate change is a key factor for selecting the recommended alternatives.

Projected CSO Reduction

Mr. Kubaska summarized how the recommended alternatives are projected to perform over time and presented the expected CSO reductions for the Alewife Brook and Mystic River if the recommended alternatives had been in place from 2015-2024, as presented in the materials for this meeting. He noted that the model for corresponding analysis for the Charles River was not yet complete.

At Chair Tepper's request, Mr. Kubaska and MWRA Deputy Chief Operating Officer Stephen Cullen sought to clarify the information presented on two slides concerning projected performance (i.e. Plan performance -2050 Typical Year) and anticipated 2015-2014 CSO reductions (i.e., Plan performance Historical record Alewife Brook), and Mr. Kubaska advised that staff would work to better respond to the questions presented and provide more clarity in the future.

Cost Sharing Methodologies

Mr. Kubaska reviewed the negotiations, methodologies and distributions for cost sharing among the Project Partners as detailed in the Staff Summary and presentation slides for this meeting. During his presentation, Mr. Kubaska relayed that staff recommend an approximate distribution of an estimated \$870 million for the recommended alternatives allocated at 31% for Cambridge, 22% for Somerville and 47% for MWRA. He advised that these figures had been updated since the Staff Summary for this meeting was originally published and, therefore, differ slightly; additionally, the costs and distributions are preliminary and could change pending the outcome of the review and approval processes for the alternatives and Draft Updated CSO Control Plan.

Financial Considerations

Next, Matthew Horan, MWRA Deputy Finance Director/Treasurer, outlined the projected financial impacts of the recommended alternatives as outlined in the Staff Summary and slides for this meeting. His presentation included discussion of anticipated impacts to debt service, MWRA community wastewater assessments (wholesale sewer rates), and ratepayers. He noted that MWRA's ratepayer impact analysis does not include potential added charges by customer communities to fund local work.

Chair Tepper asked if the financial impacts information presented would be submitted with the Draft Updated CSO Control Plan to EPA as part of the Financial Capability Analysis (FCA). Mr. Horan and Mr. Kubaska explained that the EPA requires the FCA to be submitted in a specific format; however, staff plan to include additional information on financial and rates impacts with the Draft Plan submittal. Mr. Laskey stressed the importance of the Draft Plan's affordability.

Next Steps

Ms. Murtagh reviewed the CSO Partners' efforts to develop a balanced approach for

updated CSO control, including the solicitation, consideration and incorporation of stakeholder feedback.

She noted that staff believe that the recommended alternatives strike the right balance between many competing factors, including a forward-looking approach to climate change; the protection of the environment and public health; ability to implement the projects; achievement of water quality improvements sooner than later; limitation of stormwater in the MWRA system; the management construction complexity and control of project risk; limited impacts on neighborhoods; protection of existing open and recreational space; and, affordability for ratepayers.

Ms. Murtagh added that the recommended alternatives also offer stakeholders green infrastructure to improve resiliency, reduce flooding and provide community co-benefits as appropriate. She advised that the Updated CSO Control Plan would have a strong influence on MWRA's rates for generations, costing real money for real families.

Finally, Ms. Murtagh then outlined the next steps for the Draft Updated CSO Control Plan as discussed in the Staff Summary and presentation materials for this meeting. She described upcoming milestones, including submittal of the recommended Draft Plan by December 31, 2025 and subsequent public comment period. She noted that staff envision the recommended alternatives would evolve based on feedback from the wider public, and the Final Plan is scheduled to be submitted to EPA and DEP in January 2027.

Chair Tepper thanked staff for their presentation and encouraged Board Members to reach out to MWRA staff with any additional questions.

(Mr. Taverna left and returned to the meeting during the presentation, Mr. Swett left the meeting during the Financial Considerations section, and Ms. Wolowicz left the meeting during the Next Steps section.) (ref. I.A)

CORRESPONDENCE TO THE BOARD

The Chair announced that the MWRA Board of Directors had received correspondence from the Mystic River Watershed Association (MyRWA) and a letter and petition from the Charles River Watershed Association (CRWA). She invited representatives of those organizations to briefly speak. Mr. Patrick Herron from MyRWA and Ms. Emily Norton from CRWA offered remarks and referenced their respective correspondence, as well as the petition.

Mr. Herron expressed appreciation for the work of MWRA; he briefly described the MyRWA communities and referred to MyRWA as active participants in the process as well as stewards of the River for more than 50 years. Next, Mr. Herron expressed significant disappointment in the outcome of the process that led to the preferred alternative; he asked that his statements not be misunderstood; he raised issues of concern, including

CSO discharge, LTCP for the facility; not keeping up with the climate change; discharge of CSOs into Alewife Brook; changing the River's classification; and urged the Board to challenge MWRA to do more than what is offered currently for the inland waterways and compared efforts to those that led to a thriving Boston Harbor.

Next, Ms. Norton spoke on behalf of the CRWA Board of Directors, members, supporters and the millions more who reside in Boston and use the Charles River; she relayed dismay and criticized the recommendations presented to the MWRA Board; she detailed the partnership, efforts of the CRWA and shared goal of a clean and healthy Charles River. Ms. Norton expressed concerns about current CSO discharges as well as proposed CSOs in the future; she compared the differences between stormwater and sewage; and further described public health issues following CSO discharges. Ms. Norton noted CRWA will be reviewing the modeling numbers/data shown today. She described discussions with the public and how they use the Charles River and the importance of a swimmable River. She commented on the communities who are financially invested in reducing stormwater and efforts to clean the Charles River; respect for rate responsibility, but not at the expense of the Charles River not being swimmable and safe for various public uses. She asked the Board to direct the MWRA staff to engage in efforts that would be a model for the Country and work together with CRWA and other organizations to improve and protect the Charles River. (ref. II.A and B)

OTHER BUSINESS

There was no Other Business. (ref. IX)

ADJOURNMENT

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

Hearing no discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

Yes No Abstain
Tepper
Flanagan
Pappastergion
Taverna
Vitale
P. Walsh
(ref. III)

The meeting adjourned at 12:36pm.

Approved: November 19, 2025

Attest:

Krish'n MacDongall

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- October 29, 2025 Staff Summary and Presentations: Draft Updated CSO Control Plan Alternatives Recommendation
- October 23, 2025 Letter from Mystic River Watershed Association
- October 23, 2025 Letter and Petition from Charles River Watershed Association