



Advocacy & Accountability

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Thursday November 21, 2024
Remote Connection Via Zoom
10:00 AM

ADVISORY BOARD MEETING SUMMARY

A. Roll call attendance

A commencing roll call was voted as follows:

Name	Community	Vote
Michael Rademacher	Arlington	Here (remote)
Dan Maurer	Ashland	Here (remote)
David Manugian	Bedford	Here (remote)
John Sullivan	Boston (BWSC)	Here (remote)
Jay Hersey	Brookline	Here (remote)
Brian White	Burlington	Here (remote)
Cate Fox-Lent	Chelsea	Here (remote)
Stephen Leone	Framingham	Here (remote)
James Finegan	Lynnfield WD	Here (remote)
Yem Lip	Malden	Here (remote)
Timothy McGivern	Medford	Here (remote)

Name	Community	Vote
John Terry	Needham	Here (remote)
Tom Fitzgerald	Newton	Here (remote)
Richard Raiche	Somerville	Here (remote)
Sam Stivers	Southborough	Here (remote)
John DeAmicis	Stoneham	Here (remote)
Pat Fasanello	Walpole	Here (remote)
Michael Chiasson	Waltham	Here (remote)
David Cohen	Wellesley	Here (remote)
Joseph Lobao	Wilmington	Here (remote)
Maurice Handel	MAPC	Here (remote)
J.R. Greene	Quabbin/Ware	Here (remote)

Other attendees included:

Rebecca Weidman	Valerie Moran	Carolyn Francisco	Michael O'Keefe	Jim Coyne
David Coppes	Lisa Bina	Murphy	Colleen Rizzi	Sean Navin
Lou Taverna	Christopher Cole	Katherine Ronan	Matthew Dam	Andreae Downs
Paul Rybicki	Andrew Taylor	Mike Retzky	Gerry Mroz	Malcolm Ragan
Susan Herman	Kareen Sud	Rebecca Weidman	Valerie Moran	Carolyn Francisco
Andrew Pappastergion	Kristen Patneaude	David Coppes	Lisa Bina	Murphy
Stephen Leone	Thomas Durkin	Lou Taverna	Christopher Cole	Katherine Ronan
Moussa Siri	Mike Cole	Paul Rybicki	Andrew Taylor	Mike Retzky
Fred Laskey	Jim Coyne	Susan Herman	Kareen Sud	Matthew Romero
Michael O'Keefe	Sean Navin	Andrew Pappastergion	Kristen Patneaude	Christine Bennett
Colleen Rizzi	Andreae Downs	Stephen Leone	Thomas Durkin	Nathan Coté
Matthew Dam	Malcolm Ragan	Moussa Siri	Mike Cole	
Gerry Mroz		Fred Laskey		

B. Executive Director's Report

Matthew Romero, Executive Director, began his report by addressing three main topics: the Advisory Board lease, drought conditions, and system expansion updates. Regarding the Advisory



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Board lease, Mr. Romero explained that MWRA General Counsel **Ms. Francisco Murphy** had responded to an inquiry from **Mr. Terry** about the Advisory Board's use of office and meeting space at the Chelsea facility. Ms. Murphy confirmed in writing that this arrangement is covered under the MWRA Enabling Act, which mandates the Authority to fund Advisory Board expenses. Since the Chelsea facility is not a third-party lease, no payment is required. Mr. Romero assured the group that he would include the relevant language in a follow-up email and invited additional questions.

On drought conditions, Mr. Romero announced that a Level 3 Critical Drought was declared across Massachusetts earlier this week, with the Quabbin Reservoir at 86% capacity as of November 1, operating within the normal range for this time of year. While MWRA communities have an adequate water supply, conservation is still encouraged. **Dave Coppes**, MWRA's Chief Operating Officer, added that the Quabbin transfer is temporarily shut down due to a dam removal project at the Quinnapoxet River. However, with water levels dropping in the Wachusett Reservoir, MWRA is considering reactivating the transfer soon. **Fred Laskey** further noted MWRA's active involvement in state drought committees, led by **Ms. Vandana Rao**, and highlighted upcoming meetings as part of their collaborative efforts to address the drought.

In his system expansion updates, Mr. Romero shared that MetroWest communities continue local discussions on MWRA water options. On the South Shore, South Weymouth Naval Air Station is progressing with plans to join MWRA, with a final SEIR (Supplemental Environmental Impact Report) currently out for comment. Additionally, Mr. Romero acknowledged **Mr. Fasanello's** request for MWRA information to evaluate a potential partial connection for Walpole. On the Ipswich Basin, there has been no significant interest, which aligns with expectations.

Mr. Romero also addressed recent developments in the Quabbin Study. MWRA and Advisory Board staff met with area legislators and officials earlier this week to review study results, which prompted strong opinions and plans to refile controversial legislation. The proposed legislation would include a per-gallon tax on water withdrawn from the Quabbin, increased PILOT (Payment in Lieu of Taxes) payments—despite MWRA having already paid over \$200 million—and changes to the MWRA Board of Directors' composition. It would also require an expanded feasibility study for 70 additional communities, at a cost of approximately \$2.5 million. Mr. Romero emphasized that these issues had been prominently addressed in last year's *Comments and Recommendations* and committed to keeping the board informed about developments and potential needs for support.

C. **Presentation-Dorchester Tunnel Break- Response and Lessons Learned- Dave Coppes, MWRA Chief Operating Officer; Lisa Bina, MWRA, Deputy Director of Waterworks**

Dave Coppes, MWRA Chief Operating Officer, and **Lisa Bina**, Deputy Director of Waterworks, presented on the October 9, 2024, Dorchester Tunnel break, outlining the response, operational challenges, and lessons learned. They were joined by **Matthew Dam**, Director of Toxic Reduction and Control (TRAC), who provided insights on efforts to prevent similar incidents. The break occurred near the Chestnut Hill Reservoir when a contractor drilling geothermal wells punctured



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the tunnel, a critical deep-rock structure located 250 feet underground, supplying water to over 600,000 people in the MWRA's Southern High and Extra High Service Areas. The timing, just after field crews had gone home, added complexity to the emergency response.

MWRA staff quickly mobilized, recalling field crews and support personnel to the Emergency Operations Center. Notifications were made to agencies such as EEA, DEP, and MEMA, as well as to the affected communities. The Chestnut Hill Emergency Pump Station was activated to maintain water supply while minimizing pressure issues. Fortunately, the situation allowed MWRA to plan the response without an immediate system shutdown, which could have caused widespread water outages.

Ms. Bina, serving as Incident Commander, detailed the efforts to isolate the Dorchester Tunnel and reconfigure the water system. Crews manually operated 27 valves across the southern system, some requiring confined space entries. Staff successfully operated rarely used hydraulic valves at Shaft 7, a key junction in the MWRA's tunnel system, ensuring uninterrupted water flow to northern areas. The isolation efforts, combined with the pump station's operation, minimized disruptions to the overall system.

The repair process, led by **Kathy Murtaugh**, Director of Tunnel Redundancy, and **Brad Miller**, Senior Program Geologist, involved collaboration with specialized contractors, including Hager Richter Geoscience and Keller. The team designed and executed a rapid repair plan that utilized a packer and grout to seal the puncture. The repair was completed by early Saturday morning, and the grout was tested and cured over the weekend. By Tuesday, the tunnel was reactivated, and the emergency pump station was decommissioned after 120 hours of continuous operation.

Mr. Dam highlighted gaps in the permitting process and outreach efforts, noting that geothermal drilling depths exceeded MWRA's review criteria. To address this, MWRA plans to distribute GIS maps to municipalities, update its website to clarify permitting requirements under Section 8M of the Enabling Act, and engage directly with well-drilling contractors and permitting authorities. **Ms. Carolyn Francisco Murphy**, MWRA General Counsel, emphasized the importance of the 8M process in safeguarding MWRA infrastructure, while **Mr. John Sullivan** raised concerns about the limitations of the DIGSAFE notification system, which does not always account for MWRA's deep infrastructure.

Mr. Coppes acknowledged these challenges, stressing the need for proactive outreach and collaboration with local communities and contractors to protect critical infrastructure. **Mr. Jay Hersey** commended MWRA's leadership and professionalism during the incident, praising the agency's communication with the town of Brookline. The presentation concluded with **Mr. Richard Raiche**, the Chair, thanking the presenters and acknowledging the complexity of balancing infrastructure protection with alternative energy projects like geothermal systems.



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D. Presentation- Energy and Climate Resiliency Update- Kristen Patneaude, MWRA, Manager, Energy

Kristen Patneaude, Manager of Energy at MWRA, and **Michael O'Keefe**, Senior Program Manager in the Planning Department, presented updates on MWRA's energy initiatives and climate resiliency efforts. Ms. Patneaude opened with an overview of MWRA's energy use, noting that the agency operates over 100 facilities consuming energy equivalent to approximately 16,000 homes annually, with approximately \$30 million in energy expenses. Over 80% of MWRA's energy use comes from wastewater transport and treatment, with electricity as the primary energy source, primarily used by the Deer Island Treatment Plant and Carroll Water Treatment Plant. Renewable energy sources, including hydro, wind, solar, and steam turbines powered by digester gas, provide significant cost and carbon savings, avoiding approximately \$8 million in energy costs annually.

A major highlight of the presentation was MWRA's receipt of a \$20 million Climate Mitigation Trust grant from MassDEP, which will reimburse renewable energy and electrification project costs over the next five to six years. Projects funded by the grant include solar canopies at Deer Island, ground-mounted solar at Norumbega, and several heat pump installations. A key initiative is the replacement of a failed wind turbine at Deer Island and the Combined Heat and Power project, which will double electricity production while reducing fuel oil use by approximately 300,000 gallons annually. Ms. Patneaude also highlighted MWRA's partnership with Eversource, which is expected to provide approximately \$1 million in incentives for the Combined Heat and Power project.

In addition to capital investments, MWRA is accelerating traditional energy efficiency efforts, such as LED lighting upgrades and expanding electric vehicle (EV) charging infrastructure. Ongoing EV charging projects at facilities like Chelsea, Southboro, and Deer Island are funded through utility programs and MassDEP incentives, supporting MWRA's transition to a more sustainable fleet.

Ms. Patneaude also discussed innovative pilot projects, including battery energy storage systems funded by Eversource, which aim to reduce demand charges and enhance grid peak response capabilities. A feasibility study for large-scale battery storage at Deer Island, supported by a grant from DOER, will assess the potential for reducing diesel generator reliance during storm events, which currently consumes approximately 190,000 gallons of fuel oil annually.

The presentation also explored wastewater heat recovery as an emerging opportunity for heating and cooling. Ms. Patneaude detailed the technical and logistical challenges of integrating this technology into existing MWRA facilities but noted its growing interest among developers and potential for future implementation.





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Michael O'Keefe provided an overview of MWRA's progress in reducing greenhouse gas emissions, noting a 41% reduction from 2006 levels, surpassing the Commonwealth's 2025 target. MWRA's reductions, driven by energy efficiency, renewable energy, and grid decarbonization, are equivalent to removing over 13,000 vehicles from the road annually. He emphasized the importance of continuing these efforts to meet the state's 2050 net-zero emissions goal.

Mr. O'Keefe also discussed MWRA's integration of emissions mitigation into capital planning, including the adoption of a social cost of carbon (\$125/metric ton CO₂) to evaluate project impacts. This approach ensures climate change considerations are factored into decision-making.

The presentation concluded with **Matthew Romero**, Advisory Board Executive Director, commending the team for their proactive efforts to reduce energy use, secure external funding, and drive sustainability initiatives. Mr. Romero highlighted the \$20 million Climate Mitigation Trust grant as a significant achievement and thanked Ms. Patneade and Mr. O'Keefe for their work. **Richard Raiche**, the Chair, echoed this sentiment, praising the presentation and MWRA's focus on energy efficiency and climate resilience.

E. Committee Reports

Rich Raiche, provided an update on discussions regarding the format of Advisory Board meetings. While there is interest in resuming in-person meetings due to the benefits of face-to-face interactions, challenges such as reliance on remote meetings, last-minute schedule changes, and the lack of hybrid meeting technology at off-site meetings remain obstacles. As a compromise, the Committee proposed holding informal gatherings, similar to field trips, with a potential holiday open house scheduled for Thursday, December 19, at 11:00 AM at the Scottish Rite Masonic Museum in Lexington. This gathering would allow for informal networking without the pressure of achieving a quorum for formal business.

Matthew Romero, MWRA Executive Director, added that a poll was distributed to gauge interest in attendance, emphasizing the importance of informal interactions between members and MWRA staff. He highlighted the value of such gatherings for fostering connections and sharing knowledge among peers and staff.

Christine Bennett, Finance Committee Chair, introduced the FY25 CEB Dashboard, a new tool designed to present real-time analysis of MWRA's budget performance using data visualization. The dashboard provides a concise overview of spending trends and key performance indicators, aiming to make budget updates more engaging and digestible. Ms. Bennett walked members through the dashboard, highlighting specific analyses such as staffing challenges and maintenance expenses. She noted that staffing levels have consistently fallen below target due to long-term vacancies, with actual staffing levels below both the ideal and adjusted budget targets. Maintenance expenses showed notable variances, which may reflect seasonal fluctuations or timing of purchases.





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Ms. Bennett emphasized that the dashboard is an evolving tool meant to provide timely updates and deeper dives into budget performance over time. It will include narratives, statistical analyses, and links to underlying data for those who wish to explore further. She welcomed feedback from members to refine and improve the tool.

Michael Rademacher, Operations Committee Chair, reported on the success of a Copper Rule Forum held last month in collaboration with MWRA staff, which provided essential guidance to communities on complying with new regulatory requirements. The forum attracted over 100 registrants and received positive feedback for the expertise shared. Mr. Rademacher announced plans for an Operations Committee meeting in January or February to discuss updates on the CSO (Combined Sewer Overflow) program and the 8M permitting process. Additionally, a training workshop on I/I (Inflow and Infiltration) removal is scheduled for May.

F. Approval of Advisory Board meeting minutes from September 19, 2024

A motion was put forward to approve the Advisory Board meeting minutes from September 19, 2024. They were moved by David Manugian, seconded by John DeAmicis, and added to the omnibus roll call vote at the end of the meeting.

G. New business

None.

H. Adjournment

A motion to adjourn was put forward. It was moved by David Manugian, seconded by John DeAmicis, and added to the omnibus roll call vote at the end of the meeting.

I. Omnibus Roll Call Vote

A motion to approve the omnibus vote was put forward. It was moved by David Manugian and seconded by John DeAmicis.

An omnibus vote on the following items took place:

- Approval of the Advisory Board meeting minutes from September 19, 2024
- Adjournment of the meeting.

The omnibus vote was as follows:

Name	Community	Vote
Michael Rademacher	Arlington	Yes (remote)
Dan Maurer	Ashland	Yes (remote)
David Manugian	Bedford	Yes (remote)
John Sullivan	Boston (BWSC)	Yes (remote)
Jay Hersey	Brookline	Yes (remote)
Brian White	Burlington	Yes (remote)
Cate Fox-Lent	Chelsea	Not present
Stephen Leone	Framingham	Not present
James Finegan	Lynnfield WD	Yes (remote)

Yem Lip	Malden	Yes (remote)
Timothy McGivern	Medford	Yes (remote)
Name	Community	Vote
John Terry	Needham	Yes (remote)
Tom Fitzgerald	Newton	Yes (remote)
Richard Raiche	Somerville	Yes (remote)
Sam Stivers	Southborough	Yes (remote)
John DeAmicis	Stoneham	Yes (remote)
Pat Fasanello	Walpole	Yes (remote)
Michael Chiasson	Waltham	Not present





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David Cohen	Wellesley	Yes (remote)
Joseph Lobao	Wilmington	Yes (remote)

Maurice Handel	MAPC	<i>Not present</i>
J.R. Greene	Quabbin/Ware	Yes (remote)

Respectfully submitted,

A handwritten signature in blue ink that reads "David Manugian".

David Manugian, Secretary

These minutes reflect the discussion of the meeting. The Advisory Board maintains audio recordings of Advisory Board meetings that are available upon request.



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