



**WATER SUPPLY CITIZENS
ADVISORY COMMITTEE**
to the Mass. Water Resources Authority

485 Ware Road
Belchertown MA 01007
(413) 213-0454
fax: (413) 213-0537
email: info@wscac.org

WSCAC, Tuesday, January 13, 2026, Virtual Meeting
Meeting Time: 10:00 AM – 11:30 AM

WSCAC Members in Attendance in Bold:

- **Christine Bennett**, MWRA Advisory Board
- William Copithorne, Town of Arlington
- Steven Daunais, Tata & Howard
- **Bill Fadden**, OARS
- **Bill Kiley**, BWSC
- **Paul Lauenstein**, Neponset (Chair)
- **Paul Rybicki**, Partially Supplied Community
- **Martin Pillsbury**, MAPC
- **Janet Rothrock**, League of Women Voters
- **Bill Merriam**, Framingham resident, Foss reservoir abutter
- **Erin Bonney Casey**, Ipswich River Watershed Association
- **Warren Kimball**, Nashua River Watershed Association
- **Lydia Olson**, Mass Rivers Alliance
- **Evan Pesut, Trout Unlimited**
- Nina Gordon-Kirsch, CT River Conservancy
- **Christopher Dreher**, Educational Institute

Non-Members in Attendance:

- Stephen Estes-Smargiassi, MWRA
- Paul Savard, MWRA
- Andreae Downs, WAC
- Vanessa Curran, DCR
- Purvi Patel, EEA
- Bailey Mullins, Public
- Moussa Siri, WSCAC

I. Introduction of the Agenda (Moussa Siri)

Moussa Siri called the meeting to start around 10:02 AM and wished the attendees a Happy New Year. He informed participants that the meeting was being recorded for meeting minute-taking purposes. He reviewed the agenda, noting that the meeting would proceed with approval of the November 18, 2025, meeting minutes, the introduction of new members, updates from working groups, briefings from partner organizations, and a presentation on the MWRA Metropolitan Water Tunnel Program. He emphasized the importance of maintaining the meeting schedule to ensure sufficient time for the presentation and discussion.

II. WSCAC Businesses

a. Roll Call and Attendance Check (Paul Lauenstein)

Paul Lauenstein conducted a roll call, confirmed quorum, and formally welcomed new members Evan Pesut, Lydia Olson, Nina Gordon-Kirsch, and Christopher Dreher. Members were reminded that participation in at least one working group is expected as part of the WSCAC service.

b. Vote to Approve November 18, 2025, Meeting Minutes

Paul Lauenstein called for a motion to adopt the November 18 meeting minutes.

- Erin Bonney Casey made a motion
- Seconded by Janet Rothrock.
- For discussion, members noted minor spelling corrections of names.
- The minutes were approved with one abstention (Bill Merriam). Moussa acknowledged the corrections and committed to incorporating all revisions before final distribution and posting.

c. Introduction of Executive Committee and New Members

Moussa and Paul welcomed the new members and provided a brief overview of WSCAC's structure and purpose. They explained that WSCAC operates through working groups that analyze issues and bring recommendations to the full committee. Current working groups include Water Conservation and Forestry/Watershed Protection. The Chair discussed the potential formation of a Water Quality working group, particularly in light of emerging topics including fluoride, invasive species management, and reservoir protection. Moussa indicated that, with a small number of members and limited qualifications, the exploration of topics such as fluoride may be limited. He also indicated that it could be overwhelming for members who are all volunteers.

d. Water Conservation Working Group (Paul Rybicki)

Paul Rybicki reported that the working group is preparing a comprehensive PowerPoint presentation to request an update to the 2018 Water Conservation Standards. He explained that the objective is to present revised recommendations to the Water Resources Commission to strengthen statewide conservation practices. A draft has been circulated among working group members, and feedback is

being incorporated into a revised version. While there is no urgent deadline, the group tentatively anticipates presenting later in 2026, following review and approval by the full WSCAC membership.

III. Briefings

a. WSCAC Briefing (Moussa Siri)

Moussa provided an update on statewide drought conditions, DCR projects, and handling of information and files from the WSCAC office:

- He noted that December drought indicators were more severe than in November, although MWRA reservoirs remain within normal operating range. Quabbin Reservoir is approximately 81% full, and Wachusett Reservoir is approximately 85% full.
- He stressed that continued conservation awareness remains important even when reservoir levels are stable.
- Moussa also reported that DCR received approval to use drone technology to monitor deer populations in watershed areas to manage forest regeneration better.
- Additionally, he informed members that DCR is drafting a proposal on the use of glyphosate for invasive species management, which WSCAC will review once it is available.
- He reminded members to treat documents from the WSCAC office as documents for members only and to avoid sharing them with non-WSCAC members. He also reaffirmed that all official WSCAC documents are issued through the office and that no member should present personal opinions as official WSCAC positions.

b. Wastewater Advisory Committee (WAC) Briefing (Andreae Downs)

Andreae Downs reported ongoing discussions concerning the Combined Sewer Long-Term Control Plan.

- She explained that while a final plan has not yet been issued, public meetings are being held to discuss progress and gather input.
- Financial feasibility analysis remains under development, and regulators are requesting additional information from municipal partners.
- She noted that construction impacts will be discussed in greater detail at upcoming sessions.

c. MWRA Advisory Board Briefing (Christine Bennett)

Christine Bennett reported that the FY25 Water and Sewer Rate Survey has been finalized and presented to the Advisory Board's Executive Committee.

- She detailed the average water rate (\$839/year; 6.75% increase), sewer rate (\$1,259/year; 4.76% increase), and combined rate (\$2,098/year; 5.27% increase).

- She explained that supplemental survey questions addressed infrastructure challenges, funding structures, affordability concerns, and workforce capacity.
- Christine also announced that the Advisory Board is now fully staffed with the addition of Abigail Buhlmann and a new Northeastern University co-op focused on data science and budget analysis.

d. MWRA Briefing (Steve Estes-Smargiassi)

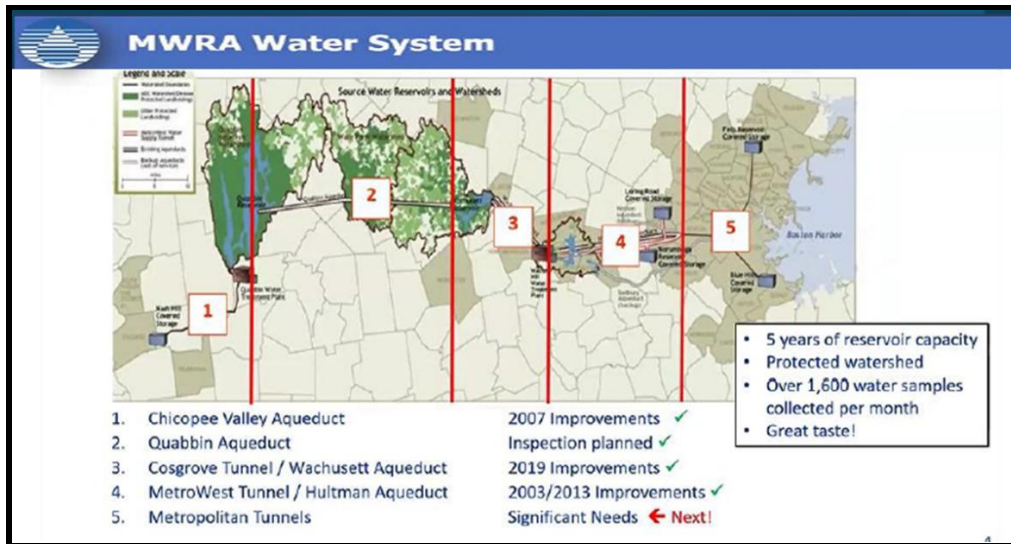
MWRA Briefing covered MWRA reservoir levels, Fluoride, MWRA staff recruitment, and drought management.

- Steve confirmed that MWRA remains in normal operating range, with approximately 334 billion gallons of water in storage. He explained that reservoir benchmarks are designed to account for seasonal variability and long-term climate trends.
- He discussed EPA's proposed perchlorate drinking water standard and Massachusetts' stricter existing regulation.
- Regarding fluoride, Steve reaffirmed MWRA's long-standing compliance with established public health standards, noting that fluoridation has been in place since the 1970s and remains supported by prevailing scientific consensus. He added that levels are adjusted in accordance with federal guidance (currently 0.7 mg/L).
 - Members discussed the scientific consensus supporting fluoridation, while also acknowledging public concerns.
 - Steve cautioned against misinterpretation of scientific literature and offered to provide references if needed.
- He also noted ongoing staff recruitment across MWRA departments and encouraged awareness of open positions.
- Members asked clarifying questions regarding reservoir operating thresholds, drought triggers, and the interpretation of scientific standards.
 - Steve Estes-Smargiassi provided a technical explanation that MWRA drought triggers are based specifically on Quabbin storage levels and follow a structured plan, distinct from the State Drought Task Force, which considers groundwater, streamflow, wildfire risk, and agricultural conditions.
 - He emphasized that reservoir storage at approximately 81% represents roughly 334 billion gallons of water and remains within the normal seasonal operating range.

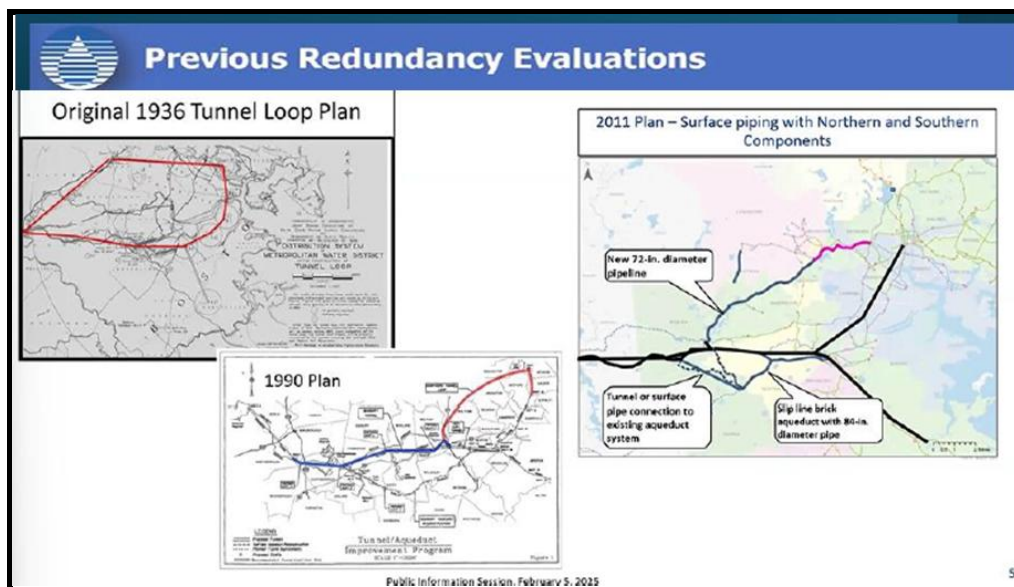
IV. Presentation: MWRA Metropolitan Water Tunnel Program (Paul Savard, P.E.)

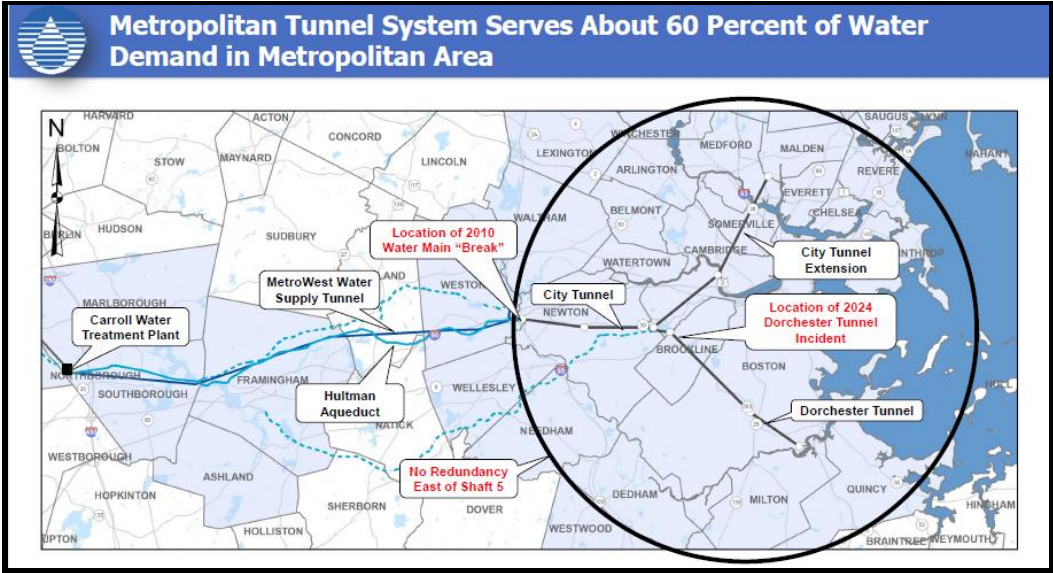
MWRA Metropolitan Water Tunnel Program (Paul Savard, P.E., Deputy Director of Design and Construction, MWRA)

Program Overview



- Major long-term capital initiative to provide full redundancy to the metropolitan tunnel system.
- Existing City Tunnel, City Tunnel Extension, and Dorchester Tunnel serve approximately 60% of metropolitan demand.
- Infrastructure constructed between the 1950s and 1970s and has operated continuously for decades.
- Final design began in November 2024.
- Primary objective is to ensure uninterrupted service while enabling inspection and rehabilitation of aging assets.

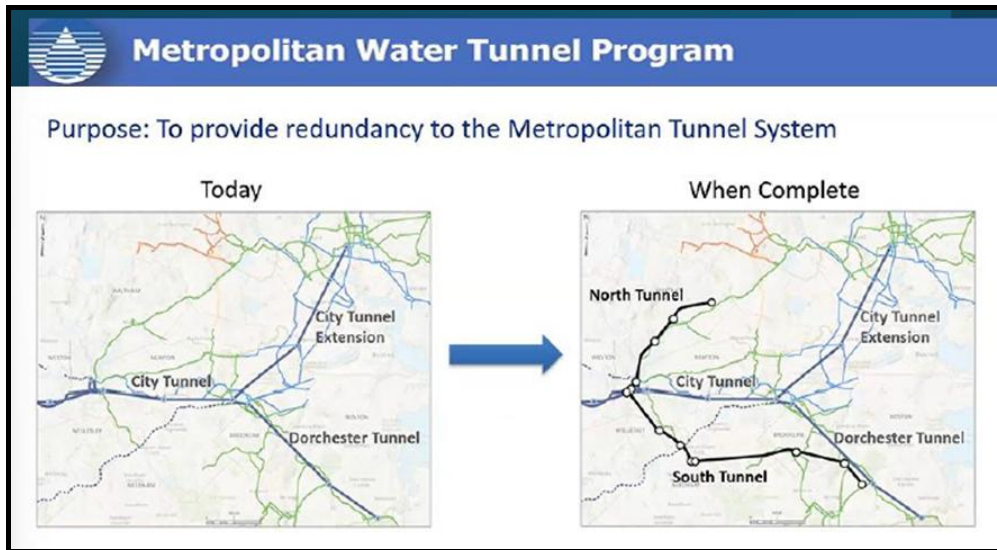




Need for Redundancy and System Resilience

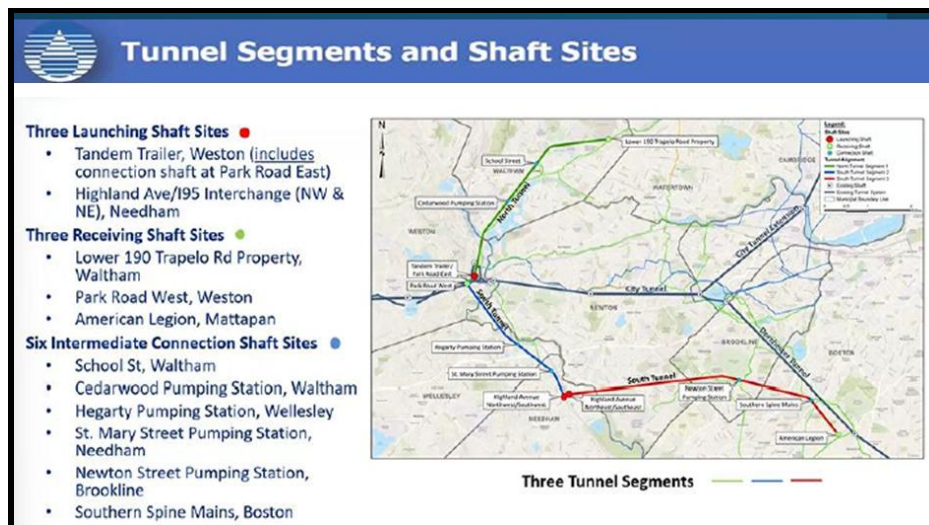
- Existing tunnels range from 50 to 80 years old.
- Valves and connection structures show signs of deterioration.
- System cannot currently be taken offline for inspection or repair without major service disruption.
- 2010 water main break resulted in a regional boil water order.
- 2024 Dorchester Tunnel drilling incident demonstrated infrastructure vulnerability.
- Redundancy protects public health, economic stability, and system reliability.
- The Metropolitan Water Tunnel Program will allow taking the old tunnel offline for inspection, maintenance, and repair by creating a redundant water tunnel system.

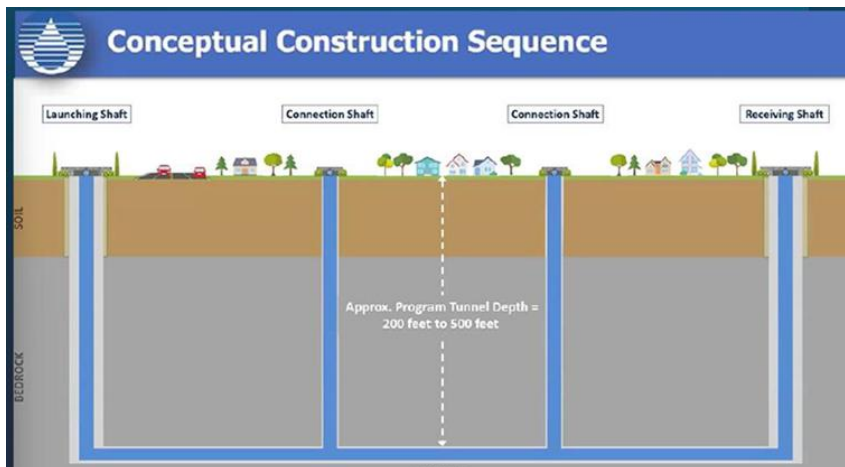
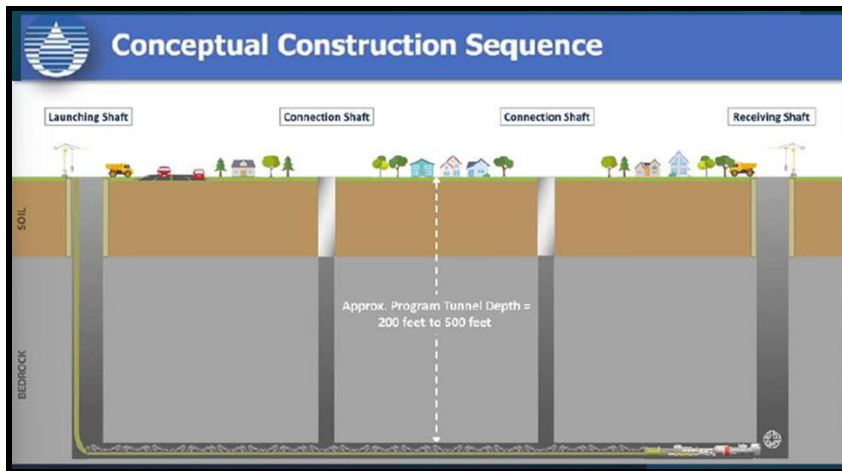
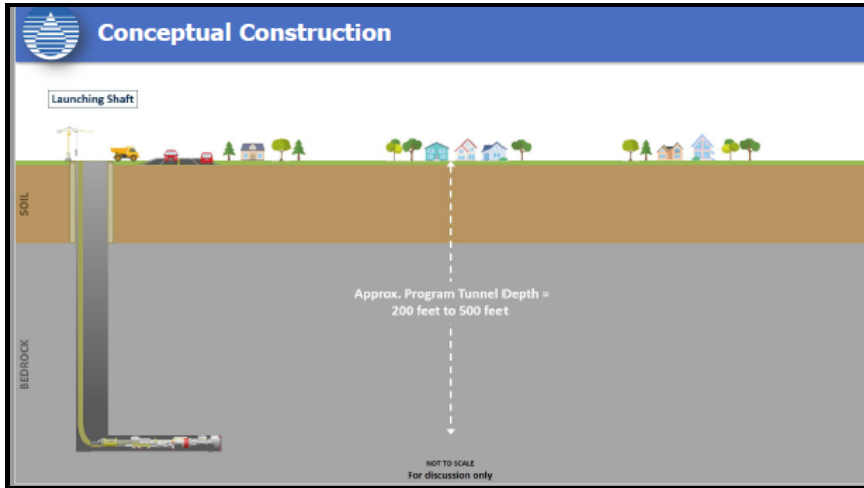




Program Description and Tunnel Configuration

- North Tunnel – Approximately 4.8 miles from Weston to Waltham.
- South Tunnel – Approximately 10 miles total, constructed in two segments from Weston to Mattapan.
- Both tunnels have a 12-foot internal diameter.
- Constructed 200–500 feet below ground in competent bedrock.
- South Tunnel segments must operate together to provide full redundancy.





Program Phasing and Work Completed

- Phase 1 (2020–2023): Preliminary design and environmental review **completed** ✓.

- Surface pipeline alternative evaluated and rejected due to community impacts.
- Phase 2 (2023–Early 2026): Extensive geotechnical borings **completed** ✓.
- Phase 3 (2025–2028): Detailed engineering, permitting, land acquisition, and municipal coordination **ongoing**.

Construction Approach and Engineering Methods (see slides for more pictures)

- Use of Tunnel Boring Machines (TBMs) for deep rock excavation.
- Launching and receiving shafts 25–40 feet in diameter and 250–400 feet deep.
- TBMs expected to advance approximately 50 feet per day.
- Excavated rock removed through tunnel to minimize surface trucking.
- Concrete lining installed to ensure structural integrity and hydraulic performance.
- Raised bore shaft method used where feasible to eliminate blasting and reduce surface footprint.
- Majority of construction activity occurs underground.

Construction

Early Concepts
 Prelim. Design & EIR
 Geotechnical Investigations
 Final Design
 Construction
 Operations

Tunnel Construction:

- South Tunnel
- North Tunnel

Early Enabling Construction Work:

- TBM Power Supply
- Dewatering Drainage Line, Needham
- Building Demolition, Waltham
- Tandem Trailer Parking Relocation, Weston

Launch Shaft Site

Early Concepts
 Prelim. Design & EIR
 Geotechnical Investigations
 Final Design
 Construction
 Operations

MWWST Shaft 5A – During Construction

MWWST Shaft 5/5A – Post Construction

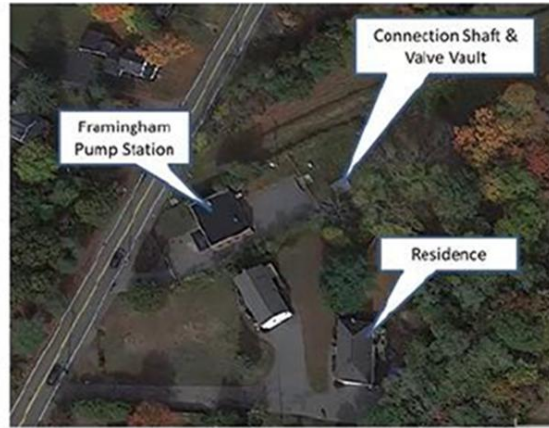
- Launching shaft is the only access until the TBM reaches and breaks through into the receiving shaft
- All launching shaft sites are located adjacent to the highway to reduce traffic impacts on local streets

Surface Infrastructure and Operational Improvements

- Construction of major valve vaults and control chambers at tunnel endpoints.
- Intermediate valve vaults integrate new tunnels with existing pumping stations.
- Facilities allow isolation of tunnel sections for inspection and maintenance.
- Significantly improves operational flexibility and system control.



Shaft L, Framingham



Edgell Rd Riser Shaft, Framingham



Permanent infrastructure

- Infrastructure is mostly below grade
- Top of shaft structure and valve vaults (~2 ft above grade)
- Connection and surface piping (all buried)



Post Construction Operations

- Operations
 - Regular inspections/security checks
 - Occasional water quality sampling
- Occasional maintenance/repairs
- Site maintenance
 - Snow removal
 - Lawn care
- No increase in traffic or noise

Community Coordination and Outreach

- Public information sessions conducted during planning and design phases.
- Ongoing coordination with municipalities and state agencies.
- Construction impacts (traffic, noise, staging) addressed in advance.
- Community approvals required prior to shaft site construction.

Schedule and Strategic Significance

- Preliminary Design & EIR: 2020 – 2024 Complete ✓
- Final Design: 2024 – 2029 Ongoing
- Power Supply Construction: 2025 – 2028 Ongoing
- Early Enabling Projects Construction: 2026 – 2028 NDDL Soon
- Land Acquisition: 2021 – 2028 Ongoing
- South Tunnel Construction: 2028

- North Tunnel Construction: 2029
- New Tunnel System in Operation: by 2040

Note: a link will be provided as soon as the slides are available for those interested in learning more about the presentation.

Adjournment

- The WSCAC Chair called for a motion to adjourn the meeting.
- The meeting adjourned at approximately 11:30 AM.
- The next meeting is scheduled for February 12, 2026, as a joint session with the Advisory Board and WAC to discuss MWRA budgets.