



WSCAC Meeting

Location: Held virtually

January 10, 2023 – 10:00 am

Members in Bold in Attendance:

Jerry Eves, WSCAC Chair

Michael Baram

Whitney Beals

William Copithorne, Town of Arlington

Steven Daunais, Tata & Howard

Kelsey Wentling, CT River Conservancy

Bill Fadden, OARS

James Guidod

Bill Kiley, BWSC

Paul Lauenstein

Martha Morgan, Nashua River Watershed

Martin Pillsbury, MAPC

Janet Rothrock, League of Women Voters

Bruce Spencer

Kurt Tramosch, Wayland Wells

Non-Members in Attendance

Lexi Dewey, WSCAC staff

Andreae Downs, WAC

Steve Estes-Smargiassi, MWRA

Katie Ronan

Kathy Murtagh, MWRA

Paul Savard, MWRA

Lexi Dewey opened the meeting and welcomed members and friends to the January 10th virtual WSCAC meeting. The following announcements were made:

- The updated government Conflict of Interest site will be available in mid-January.
- December draft minutes were approved with a quorum and by roll call vote (motion by Rothrock, seconded by Eves)

The following briefs were noted:

- Gov. Healey has named Rebecca Tepper as the administration's Secretary of Energy and Environmental Affairs. Tepper previously served as the energy and environment bureau chief at the Massachusetts Attorney General's Office. Tepper has worked in the attorney general's office since 2015, and previously served as the top attorney for the state's Department of Public Utilities, and the head of the Massachusetts Energy Facilities Siting Board. In her new role as secretary, Tepper will oversee the state's six environmental, natural resource and energy regulatory agencies including: DCR, Fish & Wildlife, MassDEP, DPU, DOER, and DPH.

Before starting in state government in 2009, Tepper worked for 15 years in the private sector as a partner at Rubin and Rudman LLP, a Boston-based law firm. She graduated from the University of Wisconsin/Madison and Boston University Law School.

As EOEEA Secretary, Tepper is also the new Chair of the MWRA Board of Directors.

- DCR-DWSP Quabbin-Ware announced that Ken Canfield is the New Chief Forester. He graduated with a Bachelor's Degree in Forestry from Humboldt State University in CA. He worked for the Maine Forest Service for 16 years before accepting a job as a forester with DCR-DWSP in the Ware River Watershed. He is a licensed forester in Maine and in Massachusetts. Herm Eck, the previous Chief Forester retired in June.
- At the WRC meeting last week, the Commission approved the final version of DEP's Water Management Act regulations. This will condition registered water use, which will require water conservation from 63 public water suppliers and 87 golf courses during droughts that are designated by the EOEEA Secretary Tepper.

MassDEP is expected to file the regulations today, so they can be promulgated and in effect within 2 weeks. MassDEP will renew water registrations by April 6, 2023, with these changes incorporated.

This final version includes:

- A new definition of "multi-year storage," means that the MWRA & Springfield Water are exempt from these regulations due to their MassDEP approved drought plans. (Fully supplied MWRA water communities will be able to continue outdoor water use during a state designated drought unless required by MWRA according to reservoir drought triggers)
- Watering public parks IS RESTRICTED during daytime hours
- Watering of publicly-funded shade trees IS ALLOWED at all times
- Registrants will have 2 years to adjust to the new requirements; some may need to change local bylaws, or local drought management plans. MassDEP will be providing education and working with registrants during that period.

James Guiod from the MWRA Advisory Board gave the following briefs:

- For the first time in 21 years, there is an election for an Advisory Board representative on the MWRA Board of directors without an incumbent running. Following 37 years of dedicated service as the last original member of the MWRA Board of Directors, John Carroll has decided to step down pending the election of his successor.

This presents a unique situation where there are actually two elections that will be conducted this year:

1. The election to fill out the remainder of Mr. Carroll's current term through June 30, 2023
2. The election to fill the full three-year term for this seat from July 1, 2023 through June 30, 2026

All members are strongly encouraged to consider running to serve in this position, which is critical to ensure the communities' and ratepayers' voices are heard strongly and directly at the MWRA Board of Directors. As in previous elections, the Executive Committee will serve as the Nominating Committee upon interviewing all candidates at the Executive Committee meeting on **Friday, March 10, 2023**.

- Staff have completed the Annual Water & Sewer Retail Rate Survey.
<https://www.mwraadvisoryboard.com/document-library/2022ratesurvey/>
WSCAC will have a presentation on the survey at a future meeting.

Paul Lauenstein mentioned that the rate noted by James of 3.15 % is a lot lower than the rate of inflation.

Steve Estes-Smargiassi and Katie Ronan provided the following MWRA Briefs:

Steve noted that the Quabbin Reservoir is 88.5 % full as of today which is a bit above normal for this time of the year. The Quabbin transfer has stopped. The Wachusett Reservoir is stratified, and has a higher water level than normal. MWRA is transferring water from the Ware River which they are allowed to do during this time of year when the river has a 85 mgd flow rate. They transferred approximately 400mgd over 3 days in December. They are transferring again now for several days. The MWRA uses this as an opportunity to stay current on exercising this part of the system.

Steve mentioned that due to the new conditions in the MassDEP's Water Management Act passed in January, the MWRA will be updating their drought plan. Drought planning will be discussed in more detail next month at our February meeting.

The MWRA will begin replacing the fluoride system at CWTP over the next few months. Outreach on the shutdown has been provided to DPH, MassDEP and MWRA communities.

Janet asked if fluoride binds to soil. Steve said it didn't appear to be an issue but said he would check into it further. Paul asked the level of fluoride is in MWRA water. Steve said it is 0.7 milligrams per litre. The target has been lowered due to fluoride being present in food.

Kelsey asked when MWRA's drought plan will be updated and whether there will be a public comment period. Steve said he didn't know if MassDEP would provide a comment period. He doesn't expect any substantive changes in the drought plan. The key difference that sets MWRA apart from other systems is the specific circumstances of the Quabbin Reservoir which sets the drought stages.

Steve mentioned that MWRA is continuing to get ready for their move out of the Charlestown Navy Yard. Some staff including Planning and the MWRA Advisory Board will move to the Chelsea facility and others to Deer Island. There are many files to go through in the Planning Dept. with a lot of interesting historical documents. There were substantial changes in the drinking water regulations when MWRA was created, including the 1986 and 1996 amendments to the Safe Drinking Water Act.

Lexi asked about an update on Covid levels and Steve noted that the wastewater information used by Biobot is available on the MWRA website. Quite a few staff have been out due to Covid. Andreae mentioned that WAC's next meeting will have a presentation by Biobot. All are welcome to attend.

Katie provided a system expansion update. The focus now is on the Metrowest study with approximately 20 communities participating. Information is being collected from each community which will be used by CDM Smith to prepare the report that will be available this spring. MWRA staff plan to meet with several south shore communities for further discussion on the feasibility study prepared for that region.

Lexi mentioned that Rep. Saunders and Sen. Comerford (SD 2089) representing Quabbin towns have expressed an interest in learning more about MWRA's system expansion. Both legislators have filed bills focusing on the sale of Quabbin water and equity for their communities.

Paul Lauenstein noted that the town of Sharon has decided not to join MWRA and will be building a multimillion dollar treatment plant which will treat only 2 out of the 6 public drinking water wells. PFAS

levels in the remaining wells are lower than MassDEP's 20ppt limit. Despite the entrance fee waiver, the cost of MWRA water was the main factor in the town's decision to build a new treatment plant.

Janet asked if any municipalities are testing for pharmaceuticals such as SSRIs and hormones. These have not been found in the Quabbin. Steve said that drinking water suppliers do know how to remove these chemicals but are the levels significant? Less is always better. Carbon filters can remove some of these chemicals. Janet mentioned that much of the data focuses on males and not pregnant females or small children. Steve agreed. He noted that due to all the protected land in the watersheds, MWRA doesn't have to worry about using filters.

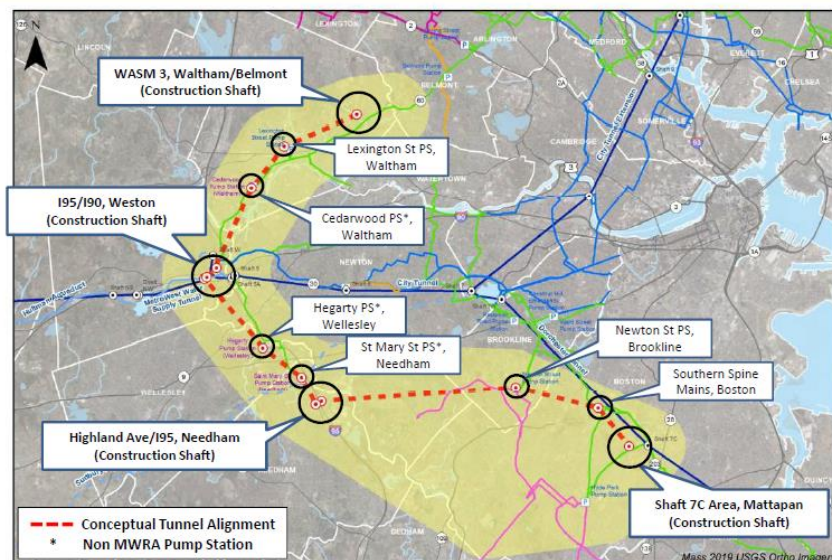
PRESENTATION-MWRA Metropolitan Water Tunnel Program Update with Paul Savard, P.E., Deputy Director, Design & Construction and Kathy Murtagh, Director

Lexi introduced Paul Savard and Kathy Murtagh. Paul reviewed the earlier steps in the tunnel program and where the group is in the process now. He noted that the purpose of the tunnel project is to increase water system redundancy so that the existing tunnels can be taken offline if needed for repairs.

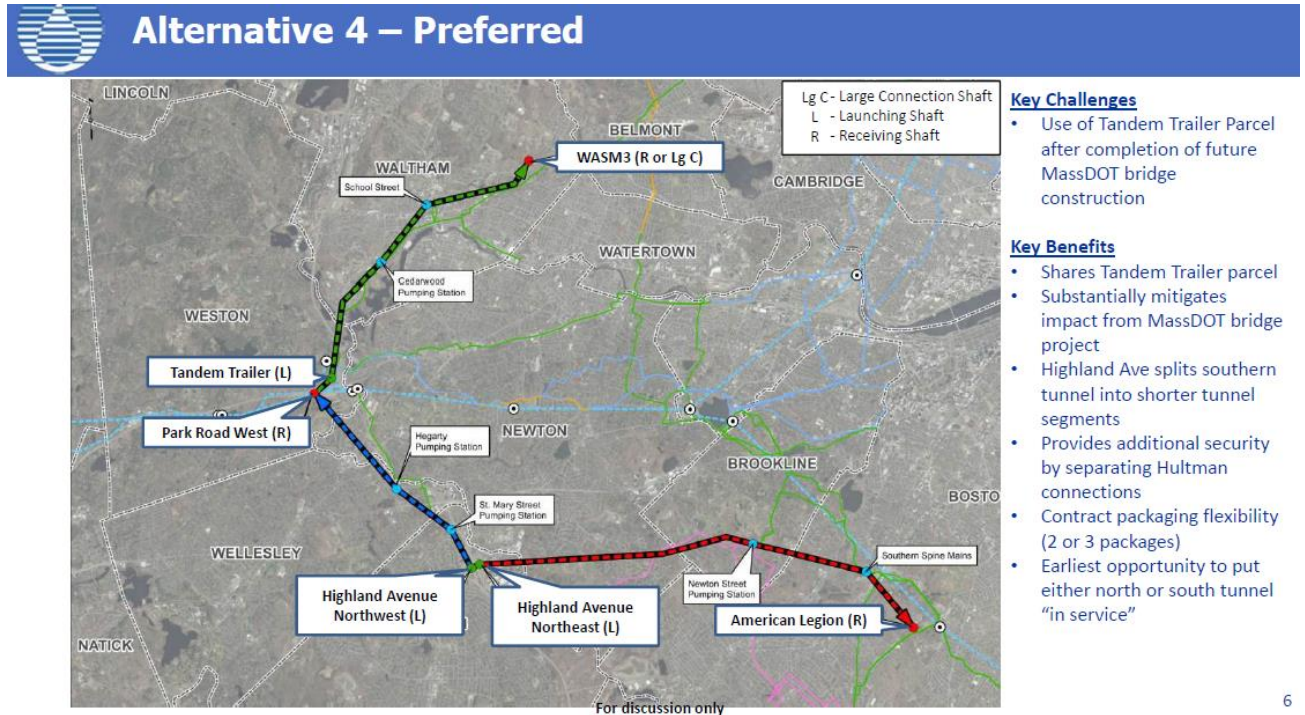
- Preferred Alternative 4 as documented in the DEIR submitted to MEPA in October 2022
- Secretary's Certificate and Scope received in December 2022
- Supplemental DEIR required to address Fernald property alternatives
- Preliminary design
- Geotechnical work continues
- Continued community and environmental justice public outreach
- Upcoming work

Metropolitan Water Tunnel Program

- ~14 miles of 10 ft diameter, hard rock, pressure tunnel
- Time to complete: 17 to 23 years (design - commissioning)
- Current plan is for tunnels to begin in the Mass Pike/Route 128 vicinity
- Northern Tunnel - ~4.5 miles, ends in Waltham/Belmont area @ WASM3
- Southern Tunnel - ~10 miles, ends in Mattapan near Shaft 7C
- Anticipate first tunnel construction procurement to start in 2027



Paul noted that the tunnel group began with 30 options for location and alignment. They reduced to 10 options and finally to 1 preferred option with 2 backups as written in the DEIR submitted to MEPA in October 2022. The Secretary’s Certificate and Scope was published in the Environmental Monitor in December.



The green line above is the northern tunnel which can be operated independently, and the blue line and red line make up the tunnel to the South. Due to the 10 mile length of the southern tunnel, the preferred alternative breaks up this tunnel into 2 segments. The blue line is 3.4 miles and the red line is 6.8 miles long.

The Fernald property, owned by the City of Waltham is the preferred site for the end of the northern tunnel. The temporary area to be used for the tunnel would be 4.5 acres. The permanent shaft area would be 1.5 acres along with the permanent valve vault area of 0.2 acres. Waltham has not agreed to the use of this site so in the Secretary’s Certificate, the MWRA has been asked to address alternatives to this site in the Supplemental DEIR.

The red line showing the second half of the southern tunnel would end at the American Legion site. The temporary area for the shaft would be 2.8 acres and temporary piping would be 2 acres. The permanent site area would be 1.65 acres.

The geotechnical investigation has been ongoing and will continue for several years to assist with the design and construction of the tunnels.



Program Wide Geotechnical Investigation Overview

- The geotechnical investigation started in the spring of 2021 and will last for several years to support the design and construction of the Program
- Anticipate up to ~100 deep test borings along the proposed tunnel alignment plus additional shallow test borings for near surface infrastructure
 - 16 deep test borings were conducted over the past 2 years
 - Planning for ~30 to 35 deep test borings in 2023 plus additional shallow test borings
- Planning on conducting surficial geophysical survey at select locations along the proposed tunnel alignment
 - 42 surficial geophysical survey lines were conducted over the past 2 years
- Planning multiple phases over the next ~4+ years to conduct the remaining work



For discussion only

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Geotechnical Work Supporting the Tunnel Design



Outcrop Mapping



Surface Geophysics



Deep Borings



Rock Core Logging



Geologic Mapping



Tunnel Alignment

In the preliminary design phase, the following are included:

- Preliminary design report and drawings
- Contract packaging, phasing and sequencing
- Identify land acquisition needs
- Updated cost estimates and program schedule

Additional stakeholder and community outreach will continue including:

- Consultations with state agencies including MEPA, DEP, MHC MassDOT and others
- Working group meetings
- Meeting with community representative of the seven communities where the tunnel will be constructed

Staff plan to submit the Supplemental DEIR to MEPA in the spring of this year and finalize the FEIR for submittal to MEPA in the fall. The expert panel will continue to meet regularly. Staff will prepare for final design and construction management service contracts. Tunnel construction contracts will follow.

Bill Fadden asked about where tunnel construction debris will go. Paul said the debris will be moved off site by the contractor but locations are not yet known. Bill asked about the tunnel redundancy and Paul mentioned that the current City Tunnel and Dorchester Tunnel can't be taken off line. The new tunnels will allow the existing tunnels to be repaired and taken off line if needed for any reason.

Paul Lauenstein asked about worker safety during tunnel construction. Kathy said that the contractor is required to have a safety plan to address potential medical problems. Paul also asked about the kinds of rock the Tunnel Boring Machine (TBM) will be working on. Kathy said that the machine will be a large variety of rock types which will be known from the borings being done. TBM machines are built to address the varied types of rock they will be working with.

Bill Kiley asked how many TBMs will be used. Paul noted that 2 or 3 machines are likely to be used according to contractor sequencing. Rock cutter discs are replaced as needed through a contractor maintenance plan. The hope is that the machines will work through 50 feet per day but it depends on issues that may be encountered and addressing maintenance schedules. Machines can be refurbished by the contractor for other jobs.

Andreae asked if the public will be able to track the progress of the TBMs? Kathy said they aren't sure yet how or what kind of technology can be used for that. But that they want to engage people in the process. This kind of project is an opportunity to inspire people. MWRA's school program will most likely be involved along the way. Andreae noted that Twitter has some good infrastructure feeds that may be useful. Kathy and Sean Navin agreed that the project will offer many opportunities to involve the public.

Lexi asked about a potential Interbasin Transfer Act issue raised by the Water Resources Commission regarding the potential to increase the amount of water that is currently transferred through the new tunnels. MWRA staff member Colleen Rizzi noted that no additional water will be transferred above the current amount.

Lexi thanked Kathy and Paul for the presentation which is available below.

<https://www.mwra.com/monthly/wscac/2023/011023-MWTPUpdate.pdf>

Carmine DeMaria is MWRA's Community Relations Coordinator and is available for questions. Website information on the tunnel program is available at:

Tunnels.info@mwra.com

<https://www.mwra.com/mwtp.html>

The meeting was adjourned.

WSCAC and WAC will hold a joint meeting with the MWRA Advisory Board on March 16, 2023 via Zoom.

The topic will be MWRA's Proposed Fiscal Year 2024 Current Expense Budget & Capital Improvement Program

Please visit [our website](#) for more information on these meetings.