



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

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WSCAC Virtual Meeting

October 10, 2023 – 10:00 am

WSCAC Members in Bold in Attendance:

Michael Baram

William Copithorne, Town of Arlington

Steven Daunais, Tata & Howard

Kelsey Wentling, CT River Conservancy

Gerald Eves, Trout Unlimited

Bill Fadden, OARS

Bill Kiley, BWSC

Paul Lauenstein, Chair

Martha Morgan, Nashua River Watershed

Martin Pillsbury, MAPC

Janet Rothrock, League of Women Voters

Bruce Spencer, retired DCR Chief Forester

James Guidod, MWRA Advisory Board

Non-Members in Attendance:

Moussa Siri, WSCAC staff

Andreae Downs, WAC staff

Steve Estes-Smargiassi, MWRA

Becky Weidman, MWRA

Katie Ronan, MWRA

Colleen Rizzi, MWRA

Vanessa Curran, DCR-Office of Water Resources

Alison Field-Juma, OARS

WSCAC Business

Andreae Downs, the Executive Director of the Wastewater Advisory Committee (WAC) to the MWRA, hosted the meeting. Andreae greeted the participants and said a word about Lexi stepping down and welcoming Moussa, the new executive director. She then passed the floor to Paul Lauenstein, the WSCAC Chair, who opened the virtual WSCAC October 10th meeting. Below are the key points of the meeting.

- Introduction of all participants and Paul as the chair of the WSCAC Executive Committee
- Vote to approve the minutes of the October 2nd WSCAC Committee meeting
 - Bruce Spencer made a motion to approve the minutes
 - Motion seconded
 - All in favor and one abstention (Steven Daunais)
- Moussa Siri was introduced as the new WSCAC Executive Director. He called for the support of the entire committee and reiterated the importance of working as a team.
- Paul briefly noted the WSCAC mission and discussed his thoughts on the following:

- As human beings, we owe it to future generations to transition to a more sustainable future. Massachusetts has set a goal of net zero greenhouse gas emissions by 2050. Reaching that goal will require contributions from every sector of the economy, including water supply. As members of WSCAC, we have an opportunity to influence MWRA to shrink its carbon footprint while enhancing carbon sequestration of the forests and the wetlands of the Quabbin, Ware, and Wachusett watersheds.
- MWRA communities currently withdraw about 2/3 of the safe yield of the watersheds, leaving 1/3 to support ecosystem services such as carbon sequestration rendered by forests, wetlands, and rivers of the watersheds. With PFAS and other contaminants pressuring other communities to join the MWRA system, the challenge will be to accommodate new member communities without further compromising ecosystem services provided by the watersheds. That will require improvements in water use efficiency throughout the MWRA service area.
- Water conservation was a founding principle of WSCAC. In the 1980s, demand for water in the greater Boston area reached 330 million gallons daily (mgd), which exceeded the 300 mgd safe yield of the watersheds. WSCAC opposed a proposal to divert water from the Connecticut River to supplement the reservoirs and advocated instead for fixing leaks and promoting water conservation. As a result, the average daily demand has been reduced to an average of 200 mgd.
- Preserving MWRA's filtration avoidance waiver requires protection of water quality. Sustainable forest management is one of several practices that can enhance the carbon-sequestering capacity of over 100,000 acres of forests in watersheds. Discrepancies between forestry policies detailed in DWSP's water management plan and current logging practices persist. Since the moratorium on logging ended in 2013, WSCAC has been calling for the resumption of third-party oversight of logging operations to ensure adherence to DWSP's Land Management Plan and the STAC report. The late Whit Beals, who served on WSCAC's Executive Committee and also the New England Forestry Foundation for many years, advocated for such oversight. When I spoke with him a few days before he passed away, he reiterated his belief that third-party oversight of logging operations in the watersheds is needed.

MWRA Advisory Board Briefs-James Guiod

Copied from Romero, Matthew's email: “This week, Advisory Board staffer James Guiod unexpectedly and suddenly passed away. We do not have many details at the moment, but our thoughts and prayers are with his family at this time. James was an integral part of the Advisory Board's team whose upbeat and positive attitude was always a blessing, and whose energy and enthusiasm were contagious. James's two big goals had been to run a marathon in every state in the union, and to visit every national park in the US and its territories - and he had made an impressive dent on these goals already. Most recently, he was dabbling with stand-up comedy, even testing out new jokes at open mics around New England (as well as on his Advisory Board and MWRA colleagues). He was one of a kind and will truly be missed.”

As a WSCAC committee member, James Guiod was an outstanding person who supported our mission and worked hard to help us fulfill it successfully. He will be missed and never forgotten.

MWRA Briefs-Steve Estes-Smargiassi

- The MWRA continues to do regular testing for Per- and Polyfluorinated Substances (PFAS) under the state requirements for PFAS and the EPA unregulated contaminants rule (UCMR5) requiring testing for 29 for current federally unregulated PFAS.
- Looking forward to EPA's upcoming rules, presumably later this year, regulating several PFAS.

- MWRA continues testing, and results continue to be similar to what has been seen so far.
 - Testing shows a small number of PFAS compounds at an extremely low level and are barely detectable.
 - These compounds are both at the detection level but below the quantification level, meaning that we know that PFAS compounds are there, but we cannot say more than that.
 - No changes in the overall circumstances.
- Testing results are posted on the MWRA website.
- MWRA is working with the Board of Directors on how MWRA may respond to a proposed settlement offer by a couple of the chemical companies that produce these compounds. These companies are offering limited and narrow settlements to those who have been harmed by the presence of PFAS in their water. MWRA is working with the BOD to see if to stay in this narrow settlement for the small amount of cost seen so far or to opt out of a chance of future cost.
- PFAS is in the news a lot and will be a big deal nationwide when the EPA issues the new rules because a lot of systems around the country are detecting some of the newly regulated PFAS at a level above the proposed maximum contaminant level (MCL).
- Reservoir operations objectives:
 - Regulate reservoir water quality: make sure water quality is as high as it can be through how we manage the flow between the three sources (Quabbin reservoir, Ware River, and Wachusett reservoir)
 - Manage the flood control: make sure in case of a major rainstorm or hurricane, we have enough storage capacity to ensure we do not release the full force of the watershed down the river.
 - When wet summer, it is not easy to transfer the Quabbin reservoir water to the Wachusett reservoir at the highest level wanted.
 - Well-aged Quabbin water dilutes the impact of fresher Wachusett water and improves several measurements of water quality. We measure, for example, the UV254 absorbance (which influences how much ozone or chlorine is needed, etc.).
- Lead levels are being measured across public water systems. MWRA is piloting a number of changes in regard to rules that EPA would apply to all communities after October of next year.

Presentation I:

Interbasin Transfer Act (IBTA) with Vanessa Curran, DCR Office of Water Resources

Vanessa Curran introduced herself and described the IBTA:

- Described what actions trigger the Act, which includes any proposed action that increases the Present Rate of Interbasin Transfer
- Walked us through the types of transfers (water supply, wastewater, and wastewater triggered by the development of water supply source)
- Described each type of transfer
- Enumerated transfers that are exempted from the ITA, such as:
 - Existing systems
 - Intra-town transfers
 - Replacement of existing sources with new sources of the same capacity
- Other exemptions, including the reactivation of unused but not decommissioned sources, providing redundancy, addition of individual connection, increase in WMA permit, etc. These actions do not fall under the ITA as long as the original capacity is not exceeded. Other exceptions are emergency connections authorized by DEP.
- Provided the levels of review and requirements to be met to join the MWRA water system
 - Determination of Applicability
 - Determination of Insignificance
 - Application for Approval

- Provided guidance about the experts' availability and the necessity to consult with the experts as soon as possible. She described the application for the approval process, the timeline for an application for approval, and her contact information if she had any questions.

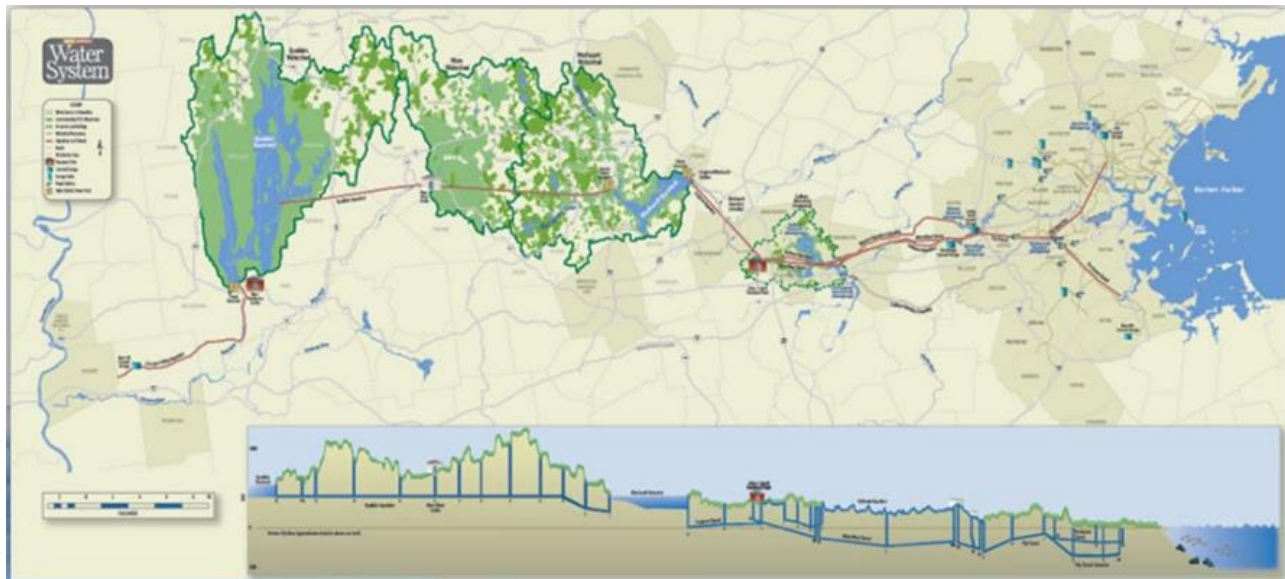
Note: to learn more about this presentation, refer to the link below:
<https://www.mwra.com/monthly/wscac/2023/101023-interbasin.pdf>

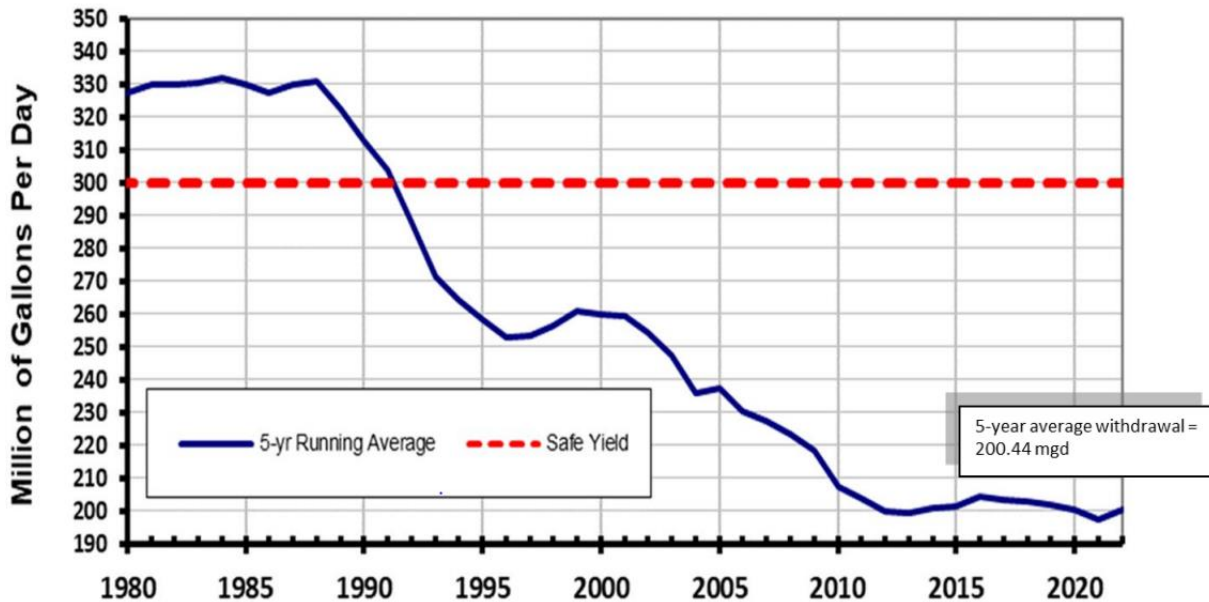
Presentation II:

Planning for the Future: Exploring the Feasibility of Expanding MWRA's Regional Water System with Rebecca Weidman, Deputy Chief Operating Officer, MWRA

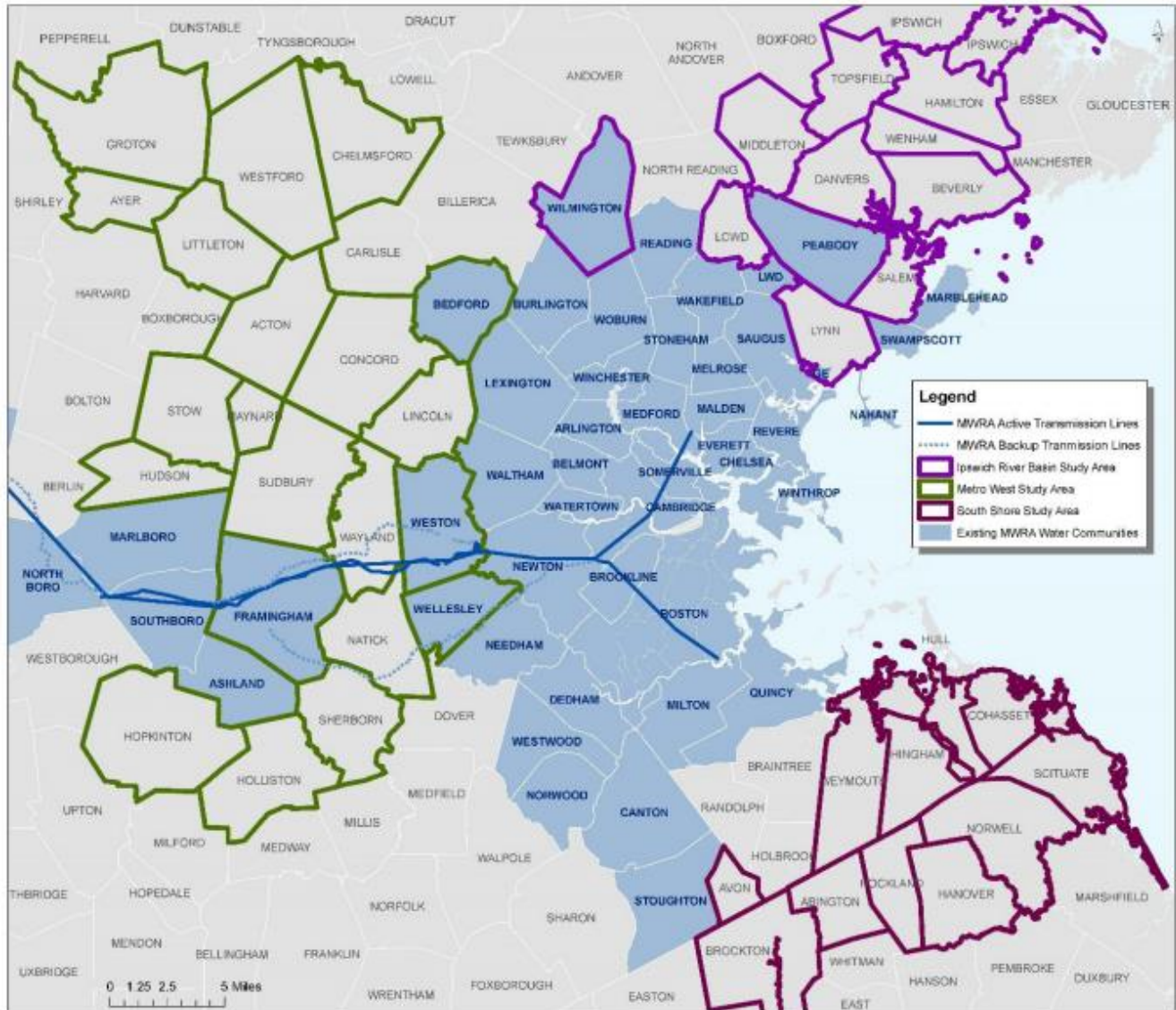
Becky introduced herself and presented the feasibility of Expanding MWRA's Regional Water System. She described the MWRA's current system and its historical withdrawal and the MWRA's capacity to provide additional water and presented the MWRA System Expansion Feasibility Study.

- MWRA's current system and historical withdrawal
 - MWRA provides an average of 200 million gallons per day (mgd)
 - MWRA provides these 200 mgd to over 2.5 million customers in 53 communities, with a peak demand of 350 million gallons
 - A map of the MWRA water system and a graph of overtime water demand (reservoir withdrawals from 1980 to 2022) were provided and respectively shown below.





- MWRA’s capacity to provide additional water
 - Safe yield = 300 MGD
 - Average five (5) reservoir withdrawals (2013-2018) = 203 MGD
 - Potential population growth and emergency demand = 46 MGD
 - Conservative Estimate of Future Use = 249 MGD
 - Available supply for new communities = 51 MGD (average or ≈ 76.5 MDG on a maximum demand day)
- MWRA system expansion feasibility study
 - System expansion feasibility study areas with 12 Communities (Demand ≈ 42.1 MGD) in the Ipswich River Basin, 10 Communities (Demand ≈ 40.5 MGD) in the South Shore, and 21 Communities (New Demand ≈ 45.3 MGD) in the Metro West.
 - A very broad review, with no assumptions about whether communities are actually interested in joining.



- Goals for the Metro West (see presentation)
- Study Assumptions, Costs, and Schedules (see presentation)
- Potential MWRA expansion to Metro West
 - **Communities included in the study:** Acton, Ayer, Bedford, Chelmsford, Concord, Groton, Holliston, Hopkinton, Hudson, Lincoln, Littleton, Maynard, Natick, Sherborn, Stow, Sudbury, Wayland, Wellesley, Westborough, Westford, Weston
 - **Considered Multiple Connection Points** (See presentation)
- Overview of all Projects included in the Study

CONCEPTUAL PROJECTS:

Project 1a (and 1b)
Service to Communities North of the MetroWest Water Tunnel

Project 2
Service to Weston, Wellesley, and Natick

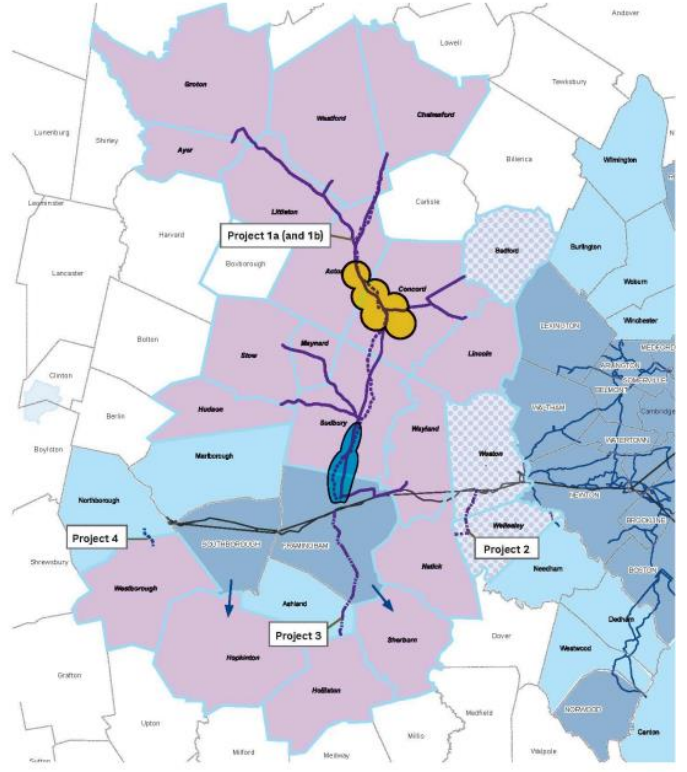
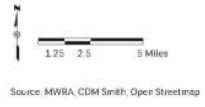
Project 3
Service to Holliston

Project 4
Service to Westborough

Project 5
Wheeling to Hopkinton and Sherrborn

LEGEND

- Study Community
- Study Community (MWRA served)
- MWRA Member Community
- MWRA Partially Served Community
- Expanded MWRA Service Area
- Existing MWRA Distribution System
- Existing MWRA Transmission System
- Proposed Pipe Route (Project 1a)
- Proposed Pipe Route (Project 1b)
- Proposed Pipe Route (Project 2)
- Proposed Pipe Route (Project 3)
- Existing Pipe Route (Project 4)
- Represents Wheeling (Project 5)
- Assumed Transmission Main Pumping Station (Location TBD)
- Assumed MWRA Storage (Location TBD)



o Metro West Project 1a and 1b

CONCEPTUAL PROJECTS:

Project 1a
Service to Communities North of the MetroWest Water Tunnel using Rail Trails

Project 1b
Service to Communities North of the MetroWest Water Tunnel using Local Roadways

LEGEND

- Study Community
- Study Community (MWRA served)
- MWRA Member Community
- MWRA Partially Served Community
- Expanded MWRA Service Area
- Existing MWRA Distribution System
- Existing MWRA Transmission System
- Proposed Pipe Route (Project 1a)
- Proposed Pipe Route (Project 1b)
- Assumed Transmission Main Pumping Station (Location TBD)
- Assumed MWRA Storage (Location TBD)
- Proposed Community Pipe Connection with Expected Service Volume
- Proposed Community Pump Station
- Existing MWRA Service Volume



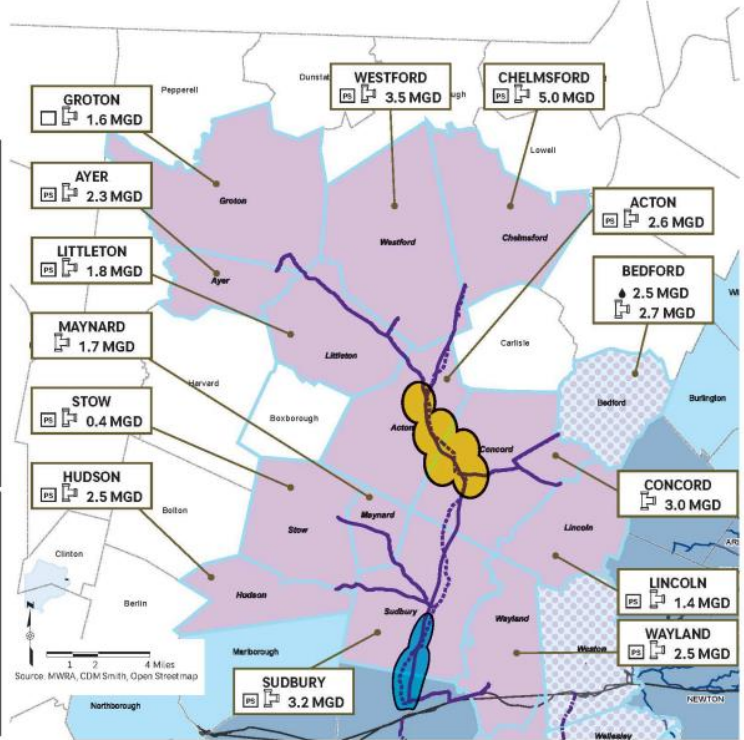
Conceptual Project Cost Estimate

Item Description	Cost Estimate (\$ millions)	
	Project 1a	Project 1b
Pipe and Appurtenances Construction	\$470	\$490
Allowance for Pumping Stations, Storage, Chemical Feed Stations Construction	\$130	\$130
Design and Construction Phase Engineering	\$150	\$160
Project Contingency	\$190	\$200
CONCEPTUAL PROJECT COST (2022 dollars)	\$940	\$980
CONCEPTUAL PROJECT COST (2028 dollars)	\$1,120	\$1,160
<i>Design/Construction Duration</i>	<i>25-30 years</i>	<i>25-30 years</i>

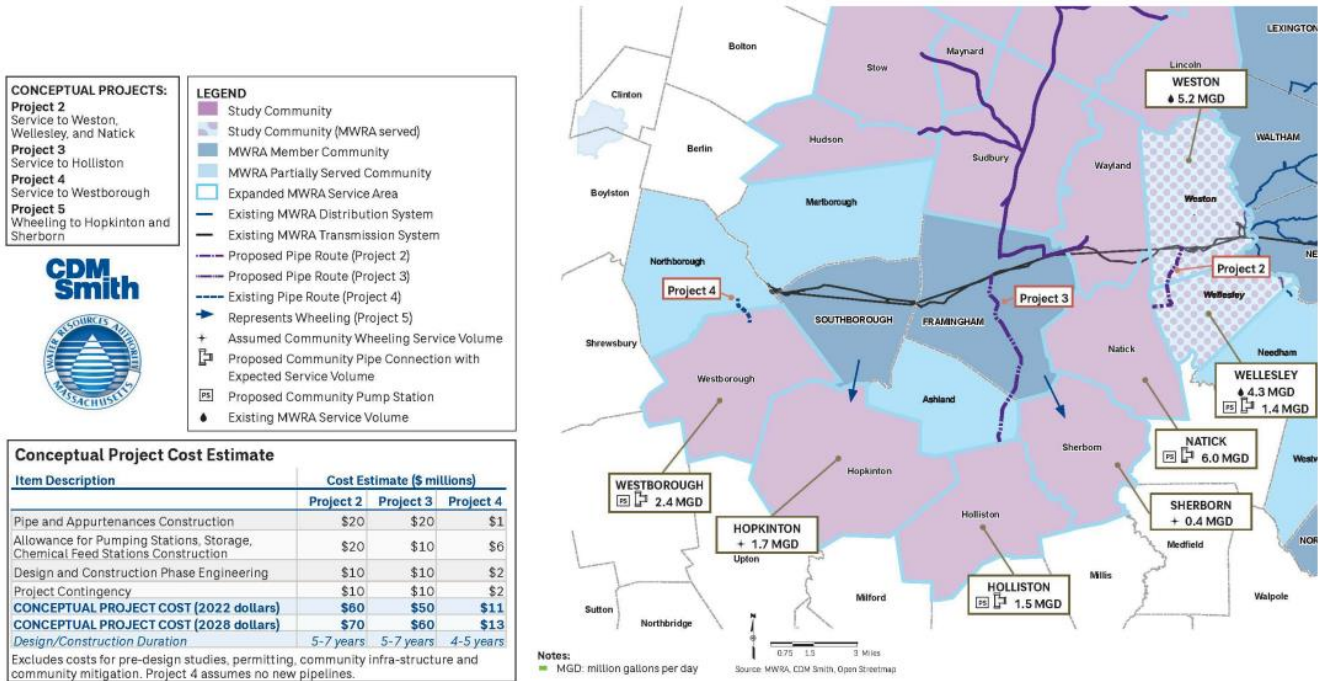
Excludes costs for pre-design studies, permitting, community infrastructure and community mitigation.

Notes:

- MGD: million gallons per day
- Due to differences in hydraulics between Projects 1a and 1b, it is anticipated that Sudbury will not require its own community pump station for Project 1b.



o Metro West Projects 2 through 5



o Study Update and Next Steps

- This study was one of three recently completed feasibility studies <https://www.mwra.com/02org/html/expansion.html>
- MWRA’s Board of Directors Waived MWRA’s Entrance Fee
 - Up to 20 MGD for new communities seeking admission
 - Must have water quality or quantity issues or need additional water for economic development
 - Must complete the MWRA Admission process by December 31, 2027 (does not require completed connection to MWRA’s system)

o Next Steps:

- Working with interested communities
- Potential for a fourth study in the Quabbin Watershed

Note: Please click the following link to learn more about this presentation:

<https://www.mwra.com/monthly/wscac/2023/101023-system-expansion.pdf>

Other business

Paul Lauenstein, WSCAC Chair, reminded participants about the upcoming November 16th joint meeting with WAC at 10:30 a.m., during which meeting MWRA's Energy Manager, Kristen Patneau, will provide an overview of MWRA's Energy and Sustainability Program. He concluded that the topic should be of great interest and encouraged attendants to participate. He then concluded the meeting by making a motion to adjourn the meeting.

Meeting adjourned