



# Natick's 55 year water resource planning

**Town of Natick – July 26, 2023**

Springvale Treatment Plant

# Executive overview

- The Water Department, Administration and consultants have evaluated current and future options for the Town of Natick water sources and risks
- MWRA water is a recommended option to help supplement peak usage days and provide a back-up plan for emergencies
- This option manages risk and provides a less expensive option for the rate payers

## **Recommended action for the Board:**

**Continue to support the short term goals of the 55 year plan with the investments needed to treat PFAS at the Springvale Treatment plant while also addressing other water sources and infrastructure for the Town.**

**Sponsor an article for the fall town meeting for Natick to begin the process of joining MWRA to ensure water security for the future.**

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# 55 year water resource planning

- System capacity, capital planning and water sources take time to plan, fund, and execute
- Changing regulations add uncertainty (PFAS, Permit Restrictions, New contaminants to monitor)
- Use restrictions impact how Natick can use its current supply
- MWRA entrance fees are currently at no cost (\$12-15M savings)
- Short-term, Medium-term and Long-term planning are all equally important



# Current System



PFAS treatment vessel for  
being delivered

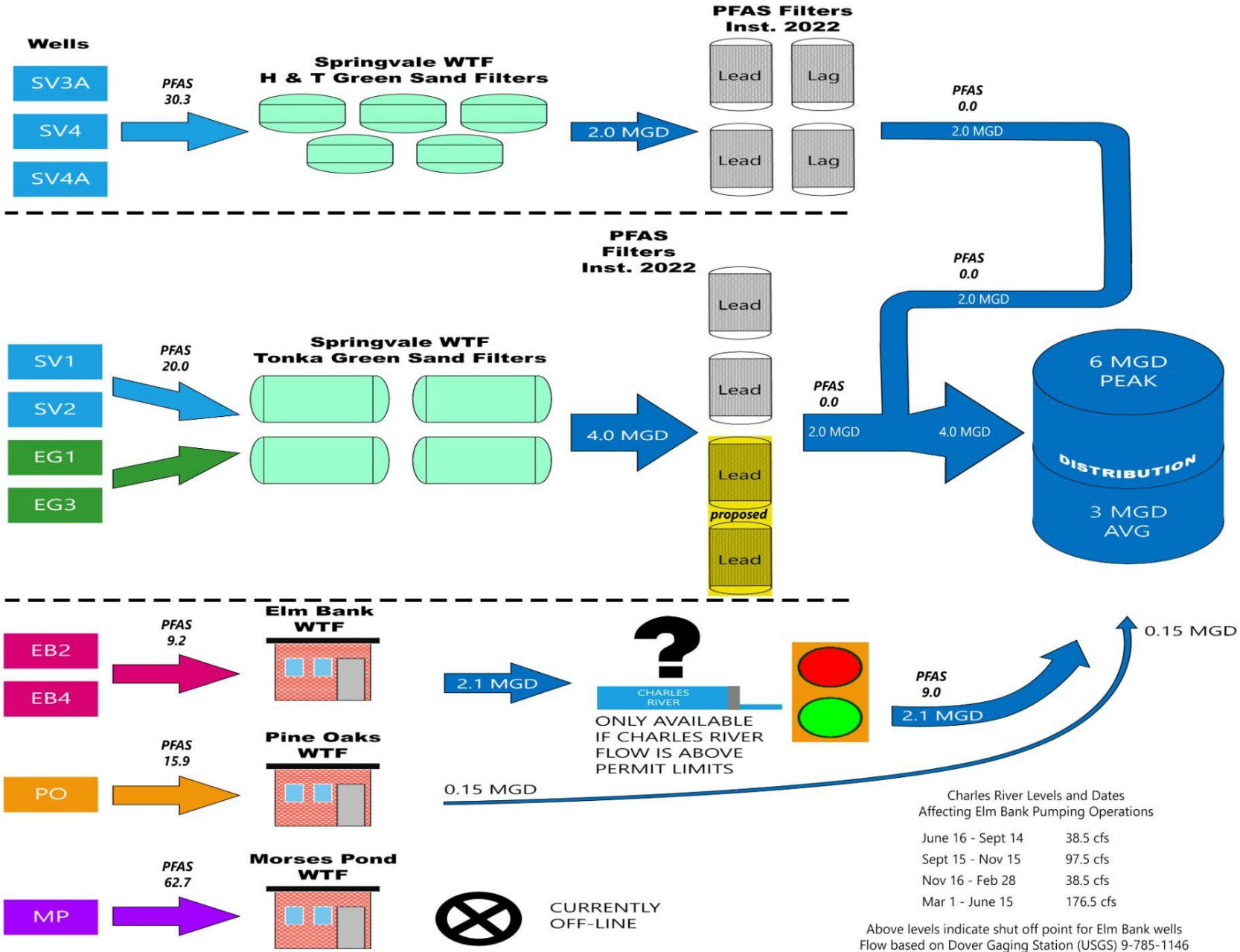
# *Town of Natick*

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## Current Water Supply System

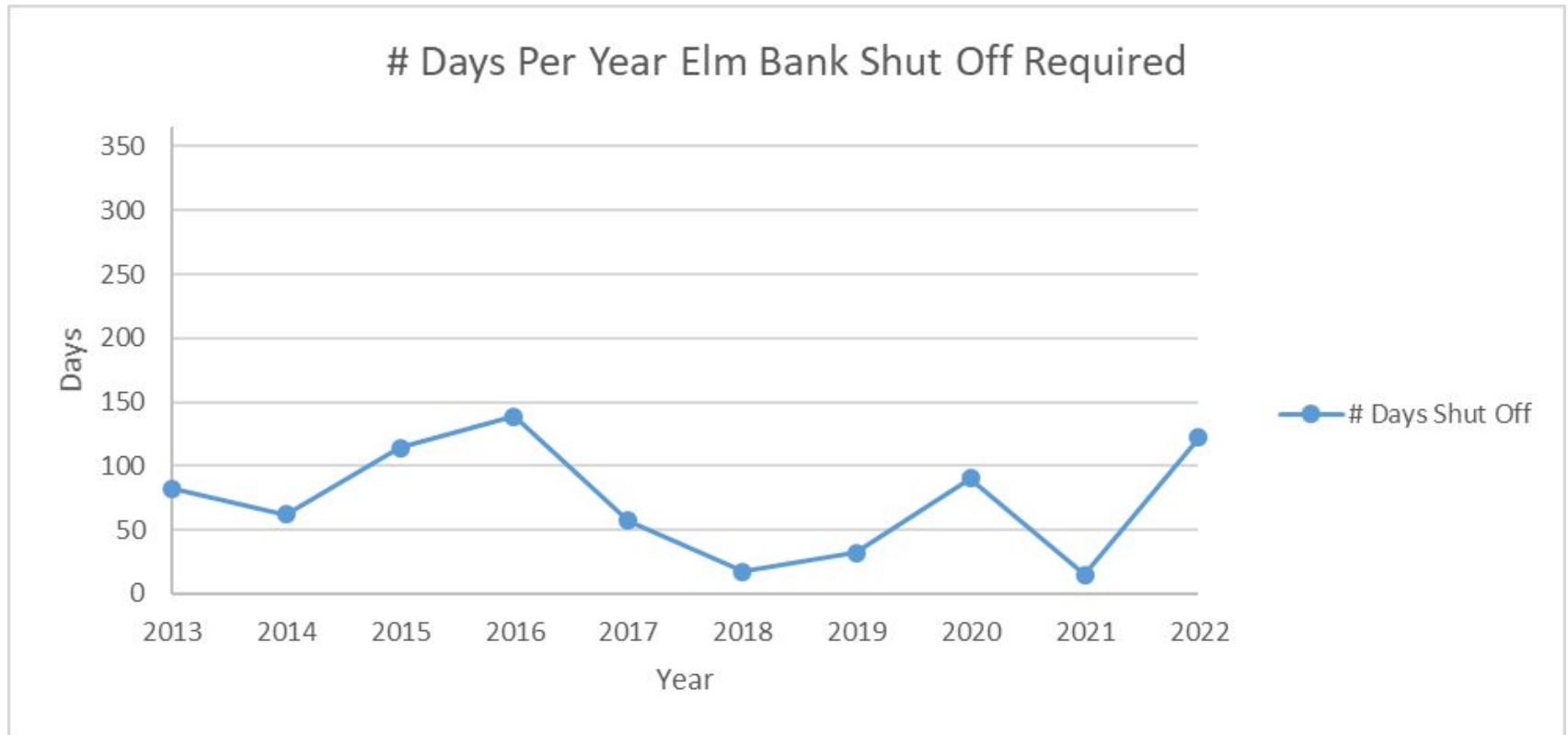
- 11 groundwater wells – Natick currently uses no surface water or MWRA water
- 4 Water Treatment plants at Springvale, Elm Bank, Pine Oaks, and Moses Pond
- Two storage tanks with 9-million-gallon total capacity
- Average yearly pumping for Natick is 1.2 billion gallons per year
- Average daily pumping is 3.3 million gallons per day
- Average peak day is 5.5 million gallons per day

# Natick Water Treatment



# *Town of Natick*

## Elm Bank - An unpredictable water source

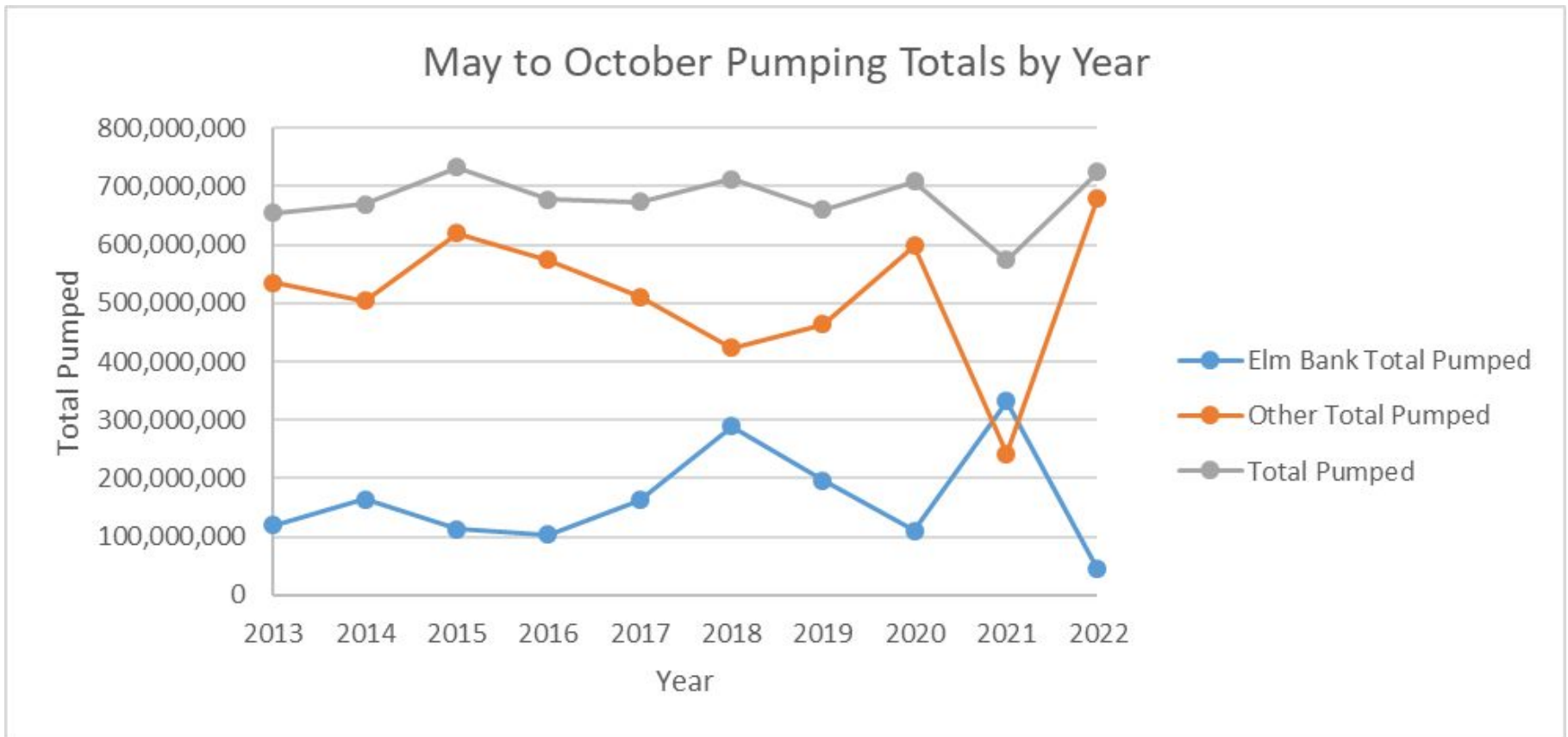


\*An average of 73 day per year



# Town of Natick

## Elm Bank - Will it be available when we need it?





# Natick Water Supply SWOT Analysis

## Strengths:

- Abundant water supply without restrictions
- System infrastructure in good condition
- Multiple wells
- Ability to deliver lower cost water
- Good planning and forecasting
- PFAS infrastructure started

## Weakness:

- Elm bank location and use restrictions
- PFAS detected in all water sources
- Morses pond well contamination
- Limited reserve funding
- Complicated system (many moving parts)
- Space constraints on Springvale WTP site
- Challenging back-up supply in emergency

## Opportunities:

- Grant funding
- Ability to consider a hybrid supplemental supply
- Location of existing MWRA piping
- MWRA entrance fees waived through 2027
- Potential to sell water to other communities

## Threats:

- Federal or State regulation changes
- Water use restrictions
- Supply chain issues
- Increasing costs
- Natural disaster/Pandemic

# Planning for the Future



Air Stripping process for  
VOC treatment at  
Springvale Treatment Plant

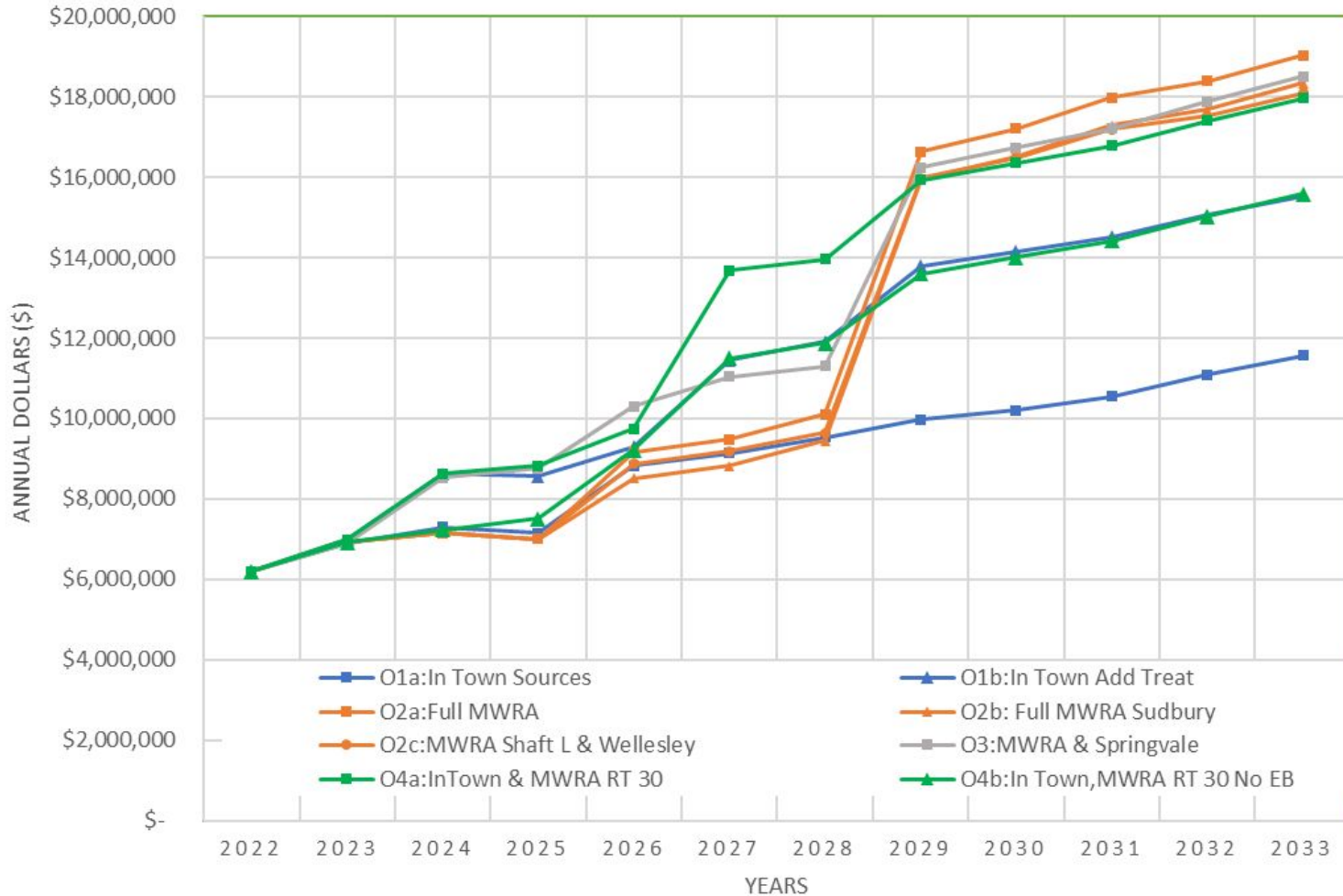
# Assessing the Options

Option	Cost	Least Risk	Natick control over water supply	Score
1a Natick water sources - Addressing PFAS only	1	8	5	14
1b Natick water sources - addressing possible future contaminants	2	7	4	13
2a Full MWRA connection (Shaft L and N)	7	1	6	14
2b Full MWRA connection (Shaft L and Sudbury Aqueduct))	6	3	7	16
2c Full MWRA connection (Shaft L and indirect connection to Wellesley)	8	2	8	18
3 Hybrid (25% MWRA) no Elm Bank well (multiple MWRA connections)	5	4	2	11
4a In-Town & MWRA addressing future containments with Elm Bank (supplemental connection)	3	6	3	12
4b In-Town & MWRA addressing future containments without Elm Bank (supplemental connection)	4	5	1	10

\*Scoring is ranked 1-8 best to worst. The lower the score the more favorable the option.

# Assessing the Options

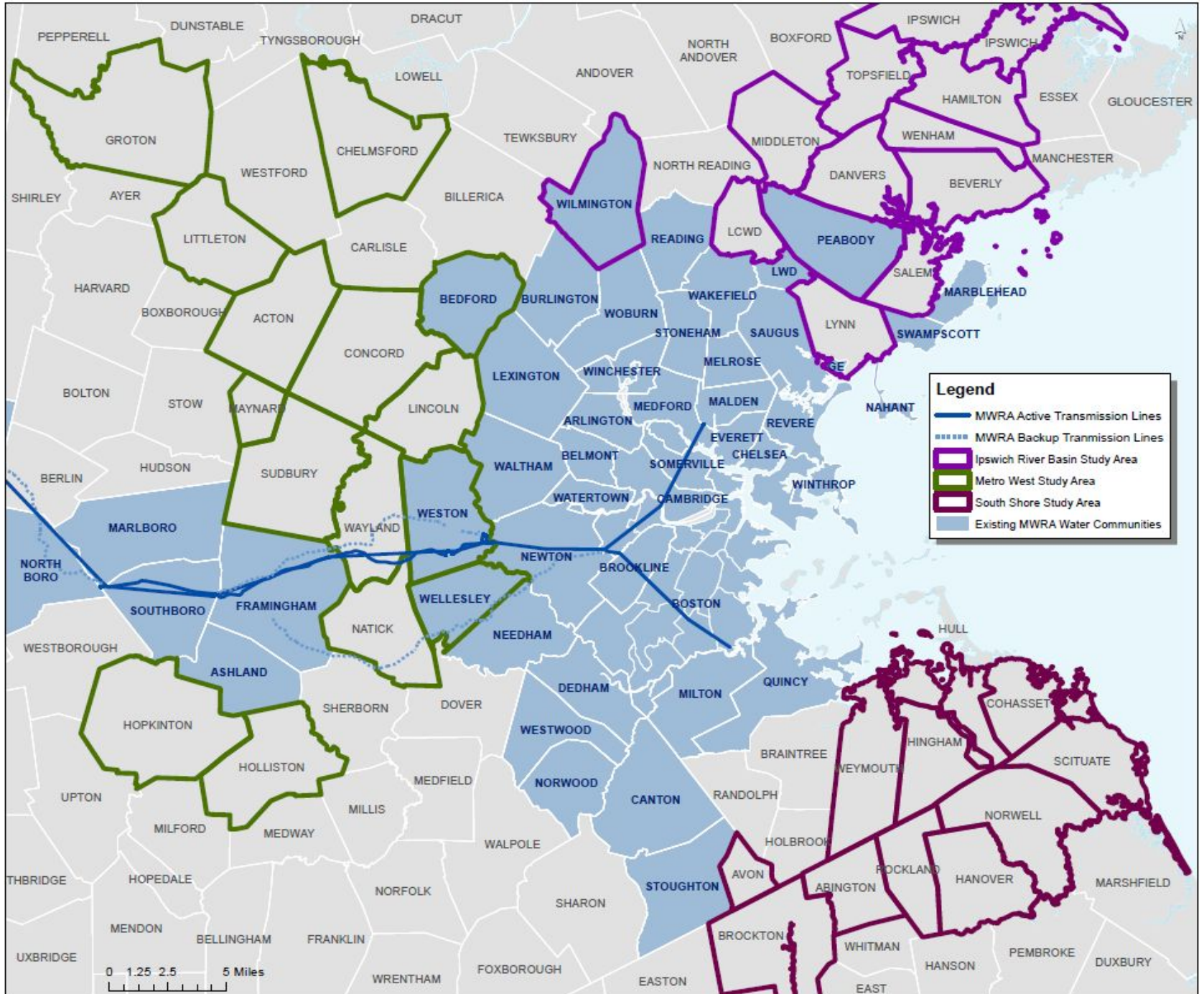
23 YEAR CAPITAL DEBT & O&M PROPABLE COST  
WATER SOURCE OPTIONS



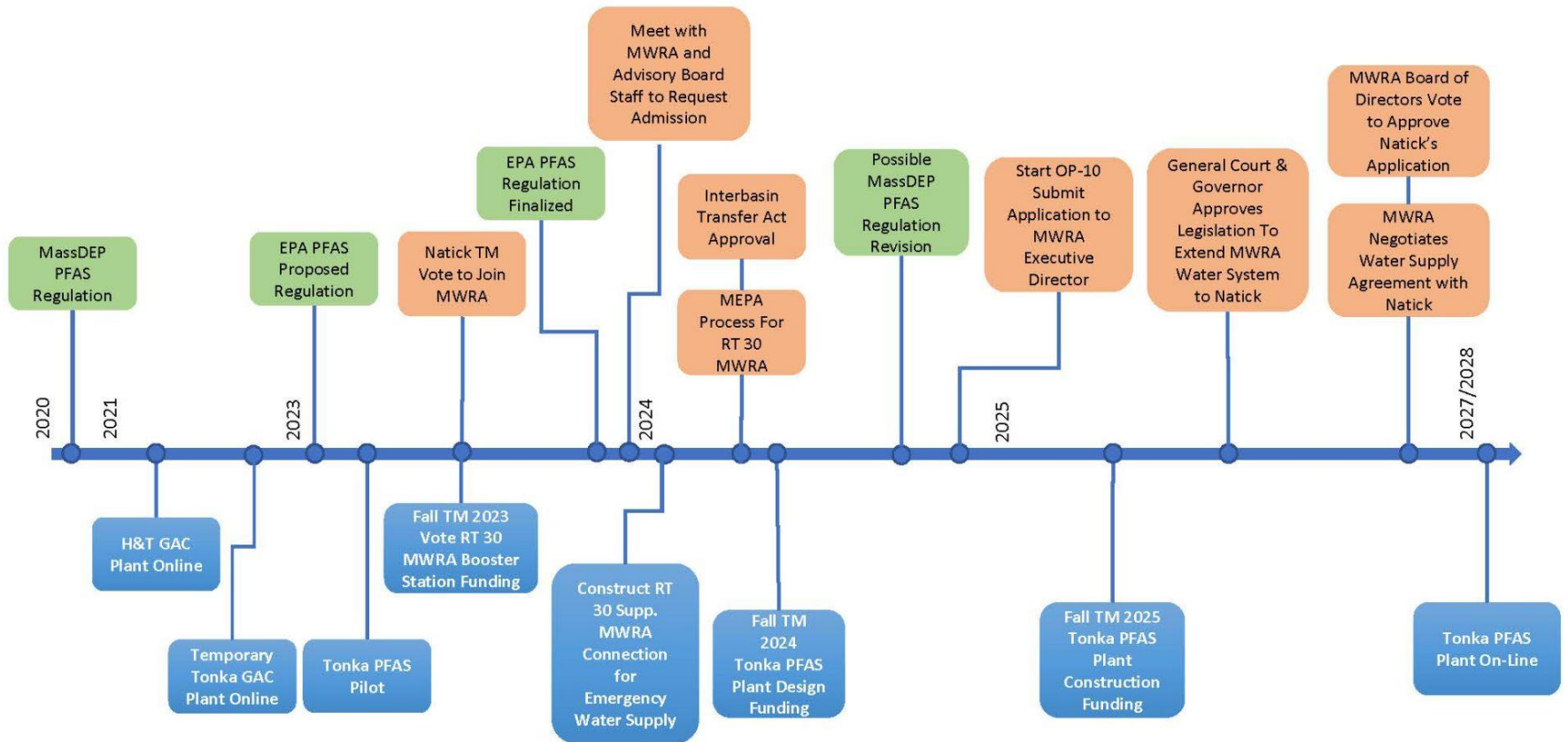


# Why consider MWRA now?

- Elm Bank is not a reliable water source and likely will be a challenge to treat for PFAS
- Natick PFAS treatment is currently limited to Springvale
- New EPA/DEP regulation changes will limit Natick's current capacity to meet PFAS regulations at all water sources
- MWRA has capacity and is looking for new members
- The MWRA entrance fee is currently waived for new members because of PFAS contamination (\$12-15M savings)
- Scalable resource
- Metrowest expansion plans
- Potential to use the supplemental capacity to wheel water



# Short-term Water Source Milestones



# Summary Action

**Recommended action for the Board:**

**Sponsor an article for the fall town meeting for Natick to begin the process of joining MWRA to ensure water security for the future.**

**Adopt option 4b through continued support of the short term capital plan and the projects needed to provide clean and sustainable water for Natick's future.**



# Thank You

