



# Massachusetts Water Resources Authority

*Presented to*

**495/MetroWest Partnership**

***The Massachusetts Water Resources Authority (MWRA)  
Water System***

March 30, 2021

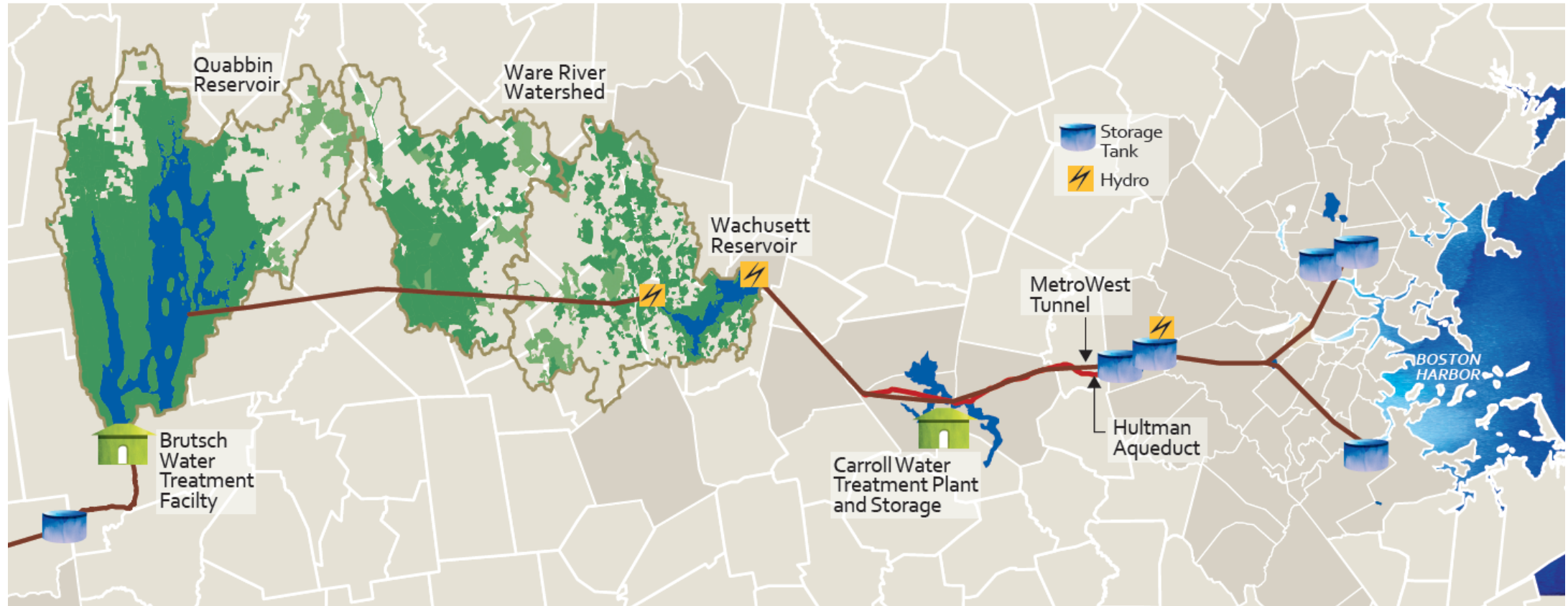


# Massachusetts Water Resources Authority

- MWRA is a public authority established by the Legislature in 1984
- Provides wholesale water and wastewater services
  - 3.1 million people and more than 5,500 large industrial users
  - In 61 metropolitan communities
- Water comes from protected Quabbin and Wachusett Reservoir in Central MA
  - Treated at the Carroll Water Treatment Plant in Marlborough
  - Average 200 million gallons per day of water supplied
- Deer Island Wastewater Treatment Plant in Boston Harbor
  - Average 350 million gallons per day of wastewater treated



# MWRA Water System





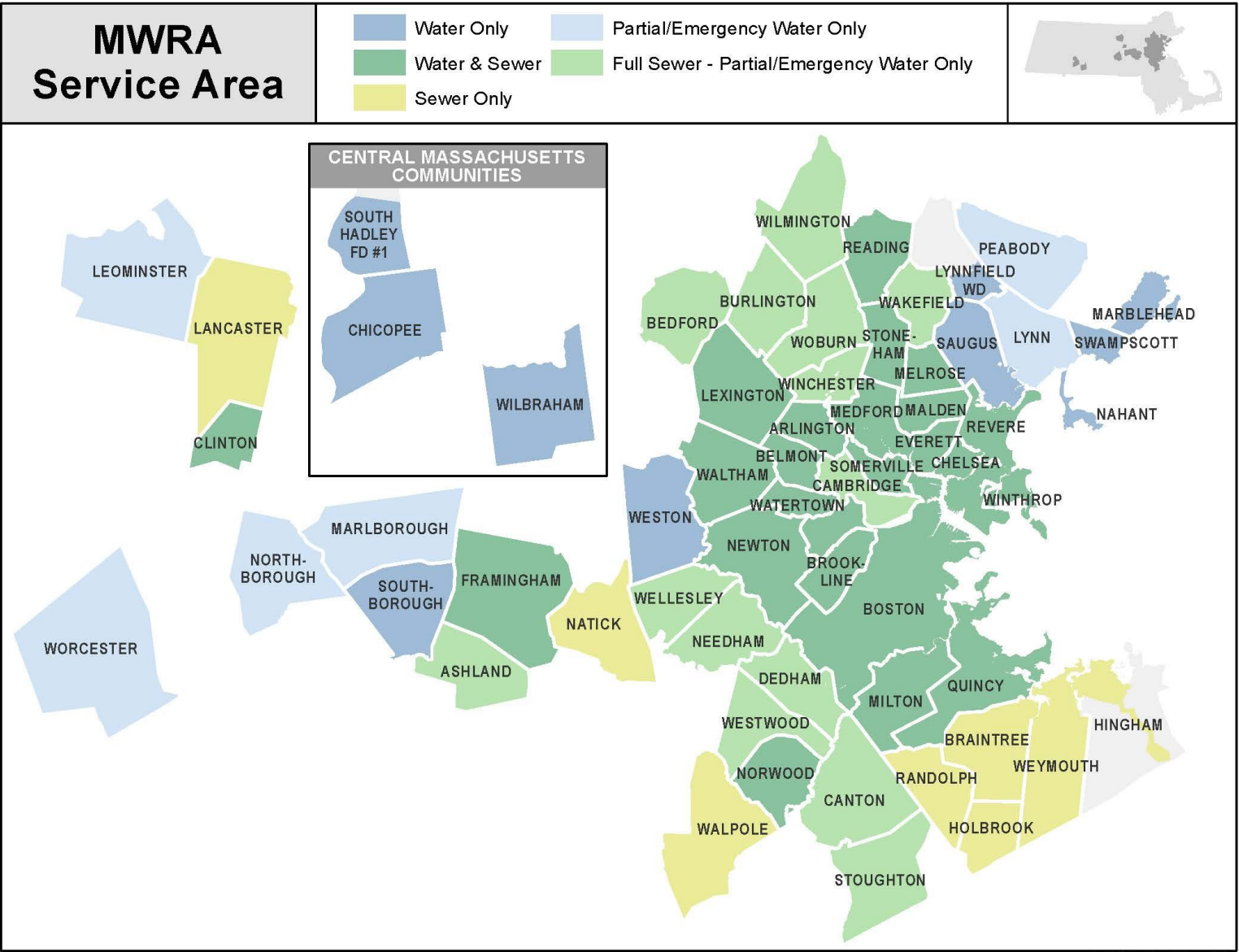
# Quabbin Reservoir







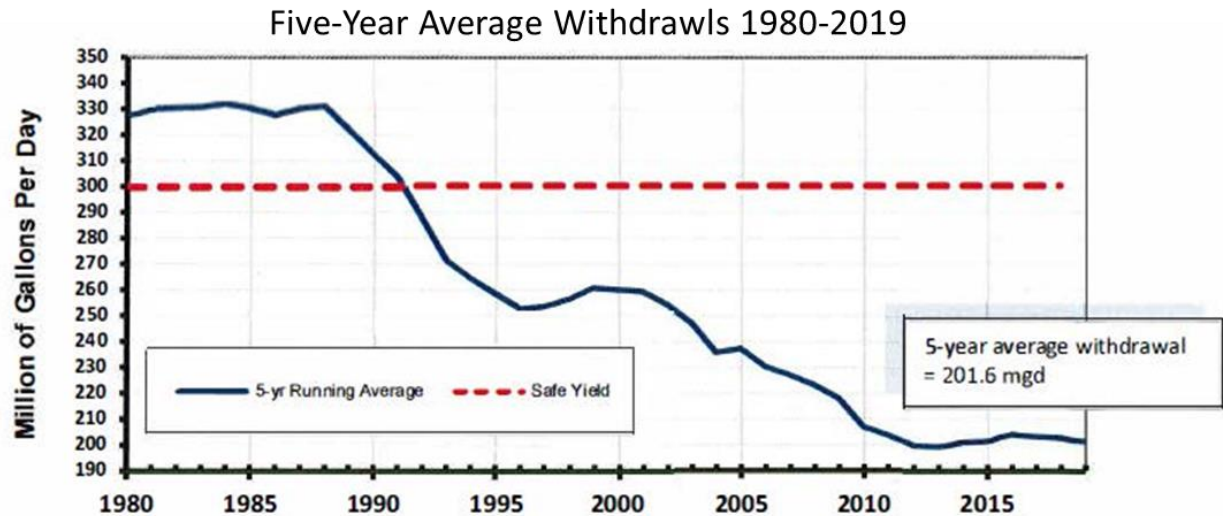
# MWRA Service Area





# MWRA Water System - Capacity for Demand

- Abundant Supply
  - Quabbin Reservoir can store up to 412 billion gallons
  - Wachusett can store up to 65 billion gallons
  - About 5-6 years of supply
- MWRA water system demand has decreased
  - 1980 peak demand was 342 mgd
  - 2019 demand was 196.6 mgd
  - Safe Yield is about 300 mgd
- Capacity to service and accommodate growth & economic development of existing member communities
- And capacity to expand service area to provide water to additional communities





#### TOURISM

## **OSLO HAS MOST EXPENSIVE BOTTLED WATER; BOSTON HAS BEST TAP WATER IN US**



Oslo has emerged as the city where a bottle of water is the most expensive, and is almost triple the median price in 120 cities surveyed by Holidu, a search engine for vacation rentals. Tel Aviv, New York, Stockholm, and Helsinki are the next most expensive locales to purchase a 16.9-ounce bottle of water, Holidu said in a study released Thursday. Meanwhile, Boston ranked highest in terms of water quality among American cities, and was 24th overall. Boston is followed by Seattle and Portland. Data for the water-quality index come from the UN and the World Health Organization. — BLOOMBERG NEWS



## OP.10 Admission of New Community to the MWRA Water System

- Governs communities seeking admission to the MWRA water system
- Two types of permanent connections to MWRA
  - Direct Connection to MWRA System
  - Indirect Connection through MWRA community
- Communities consult with MWRA staff to determine initial feasibility and logistic of potential connection
- OP.10 outlines admission process and requirement
- Admission is ultimately subject to approval by the MWRA Advisory Board and Board of Directors





## Benefits of Joining MWRA under OP.10

- Abundant water supply and excellent water quality
  - Large, protected watersheds act as a natural filter
  - Ozone and UV Treatment
- Water Quality Sampling & Reporting
  - 24/7 monitoring
  - Access to laboratory services – Lead and Copper Rule, SDWA
  - Monthly water quality reports & Consumer Confidence Report (CCR)
- Eligible for MWRA Loan Programs
  - Local Water System Assistance Program
  - Lead Service Line Replacement Loan Program
- Technical Support
  - Training opportunities
  - Technical and Emergency Assistance
- Water Conservation/Demand Management Program
- Management of Compliance with NEW DEP and EPA Requirements



## OP.10 Admission Process & Requirements

- Water supply planning and effective demand management measures
  - Often begins prior to formal admission process
- Information on requested water demand from MWRA
  - Average Day Demand
  - Maximum Day Demand
  - Peak Demand
- Local support – Town or City Council vote
  - Indirect connections also require support from transporting community
- Regulatory Approval
  - Legislation
  - **Massachusetts Environmental Policy Act (MEPA) Review**
  - **Interbasin Transfer Act review by the Water Resources Commission (WRC)**
  - MassDEP



## OP.10 Costs of Connection

- Community is responsible for costs associated with connection
  - Direct or Indirect
- Entrance Fee –
  - Provides equity to existing member communities
  - Based on Net Assessed Value (NAV) of MWRA water system and new community system shares
  - Current Entrance Fee for 1 mgd customer is approx. \$4.4 million
  - 25 year interest free payment plan with 3 year grace period
- Annual Water Assessment
  - FY21 rate per million gallons is \$4,320.63
  - FY21 assessment for a 1 mgd customer is approx. \$1.6 million
  - Projected to increase 3.9% annually through FY30



## OP.10 Application and Approval

- MWRA staff work with community throughout the admission process
  - Provide Donor Basin Analysis for MEPA process
  - Answer questions and provide support
- Application – Documentation that all requirements have been met
- Admission is subject to approval by the MWRA Advisory Board and MWRA Board of Directors
- Length of process varies – estimate about 2 years
- Water Supply Contract governs relationship between MWRA and member community



## OP.05 Emergency Connections

- Applies to direct and indirect emergency connections to MWRA water system
- Requires an Emergency Declaration from MassDEP
- Short Term Emergency Connection
  - Up to 30 days
  - Approval by the MWRA Executive Director and COO
- Long Term Emergency Connection
  - Up to 6 months
  - Approval by MWRA Board of Directors
- Emergency Water Supply Agreement between MWRA and community
- Escalating premium on water rates and net asset value contribution
  - Can be applied to Entrance Fee if community joins MWRA under OP.10





## Contact Information

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