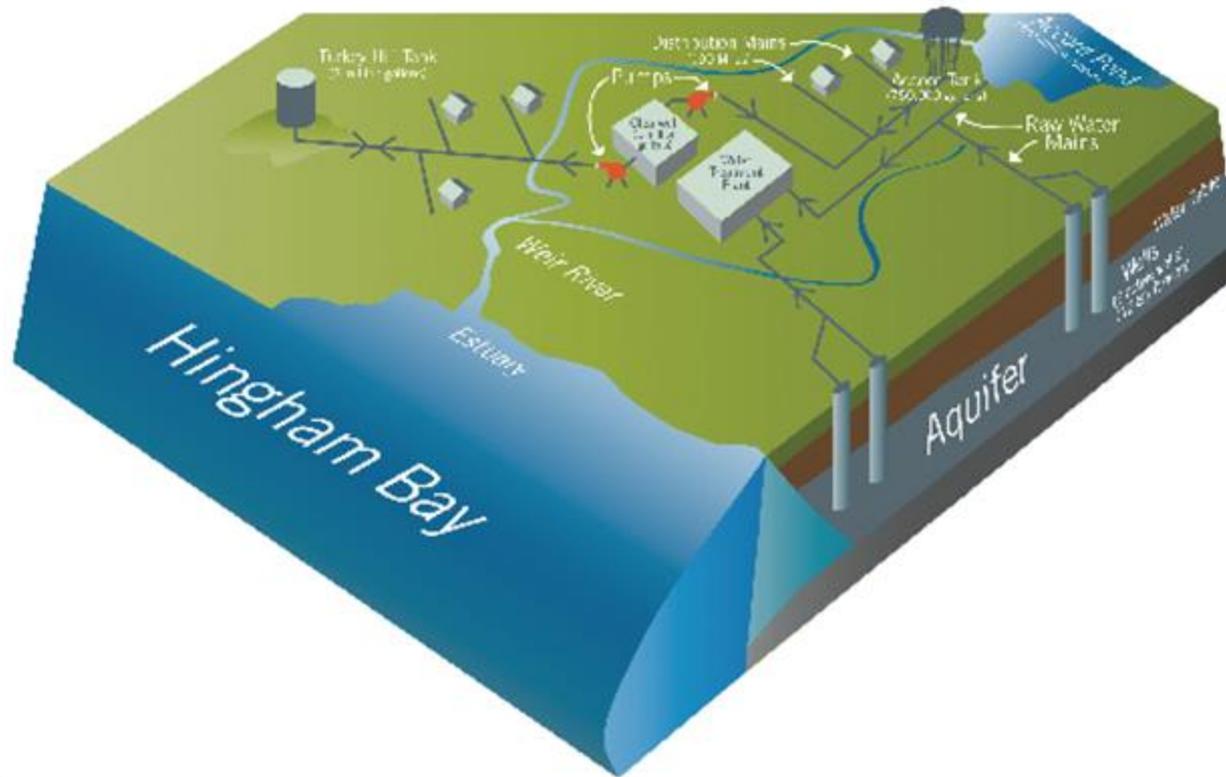


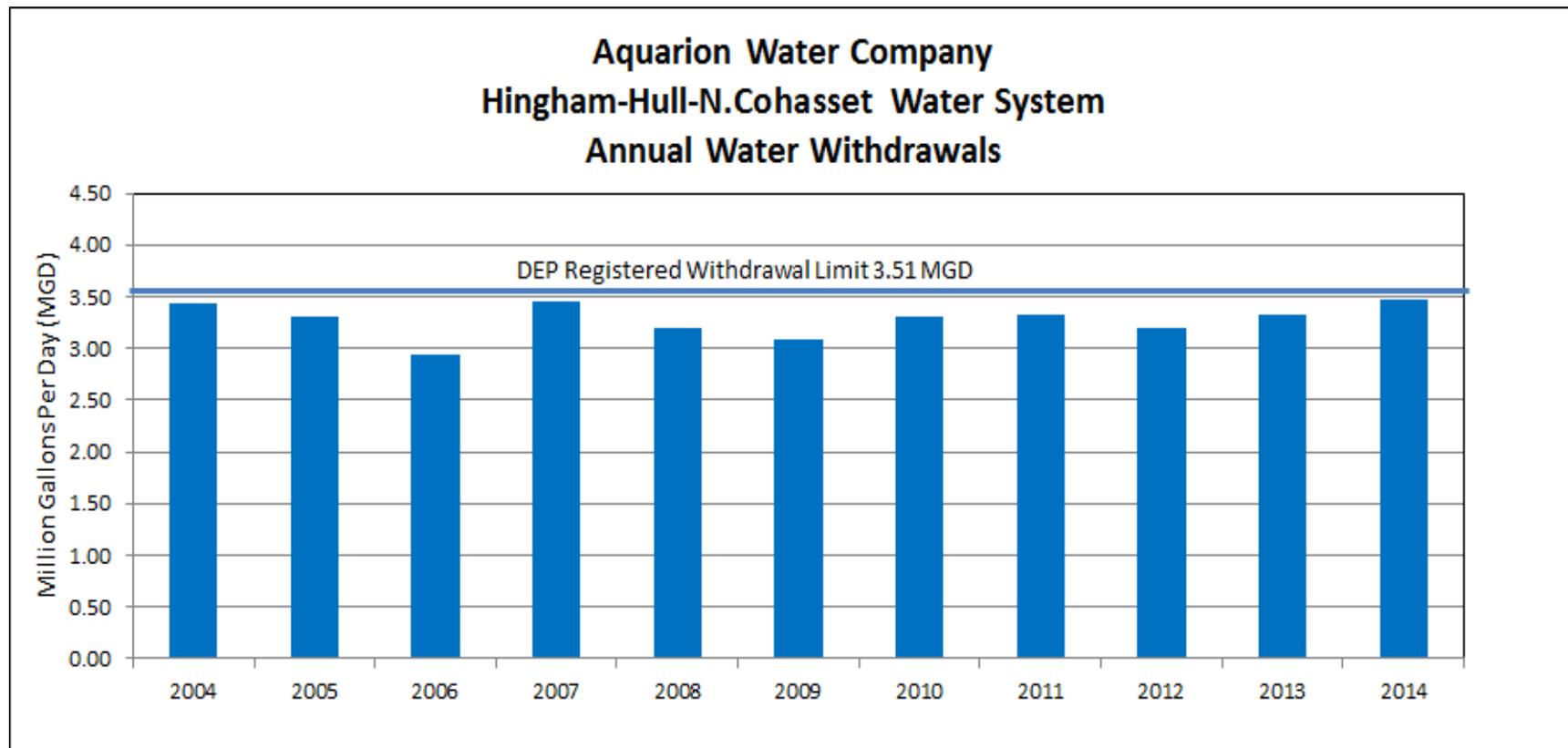
# Meeting with Water Supply Committee October 26, 2015



# Agenda

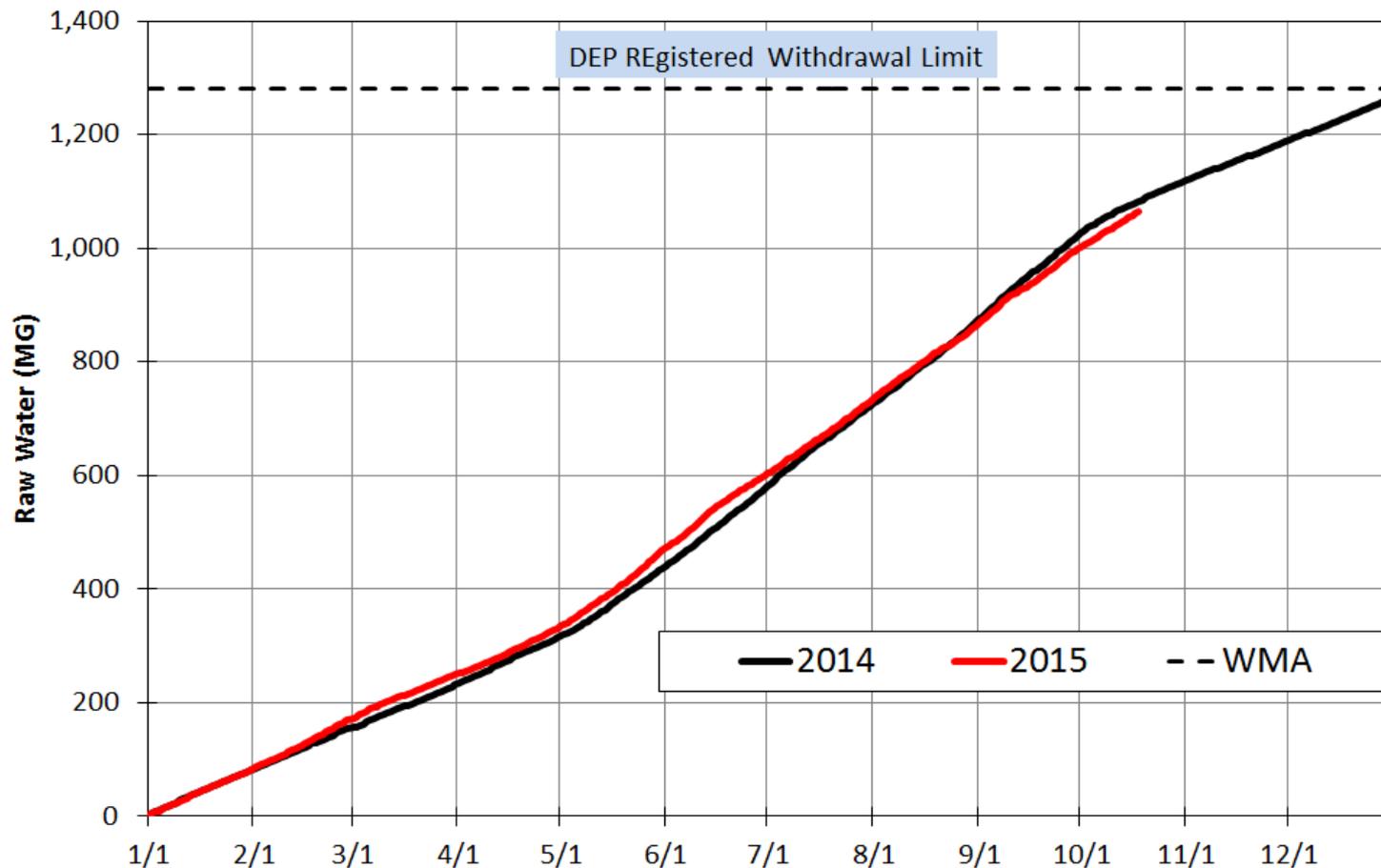
- Water Supply
  - Withdrawals / Limit
  - Leak Detection
  - Irrigation restrictions
  - Conservation - Amy Vicker's presentation
- Water Balance Program
- Copper sampling results

# Annual Water Withdrawals - Historic



# Annual Water Withdrawals - 2015

## Aquarion Water Company Hingham-Hull-N. Cohasset Water System Annual Water Withdrawal - Cumulative



# Leak Detection

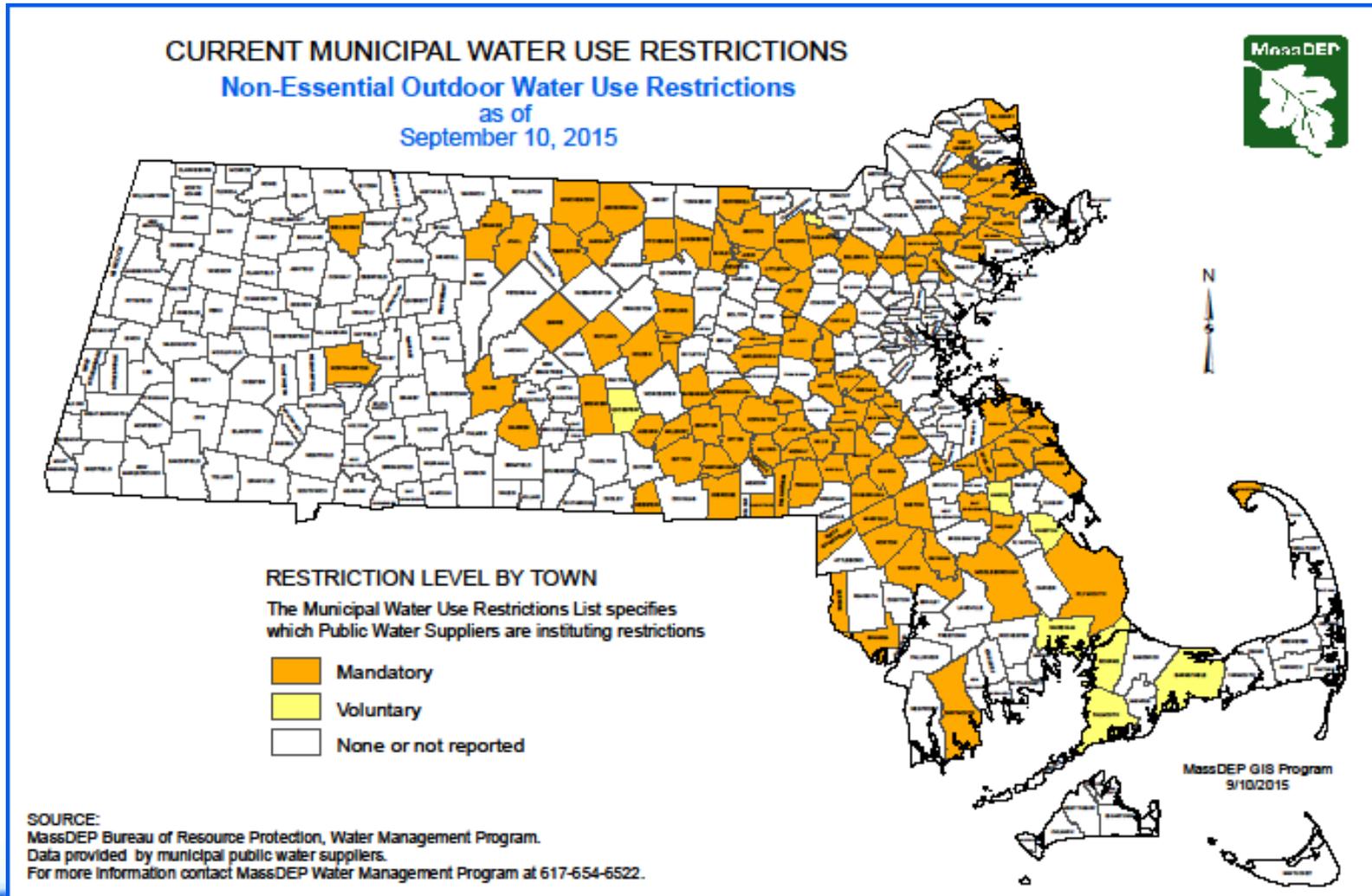
- October, November, December 2014
  - Found 23 leaks, fixed 19 leaks (4 hydrants remain to be fixed)
  - Estimated leakage found 0.28 MGD
- April, June, August, October 2015
  - Found 35 leaks, fixed 31 leaks (4 hydrants remain to be fixed)
  - Estimated leakage found 0.26 MGD

	Pipeline	Service	Valves	Hydrant	Total
Hingham	4	10	0	15	29
Hull	5	5	2	15	27
Cohasset	0	0	0	2	2
Total	9	15	2	32	58

# 2015 Water Restrictions

- **1,800** homes surveyed.
- **89%** were aware of the restrictions.
- **87%** supported restrictions as a way to ensure DEP limits were not exceeded.
- **74%** thought restrictions were fair and reasonable.
- **77%** did not think it would be reasonable to pay more for water to ensure that there is enough water to allow for irrigation without any limitations.

# Communities with Water Restrictions



# Conservation Initiative: Amy Vickers

- Nationally recognized conservation expert.
- Author of the award-winning *Handbook of Water Use and Conservation: Homes, Landscapes, Businesses, Industries, Farms* (WaterPlow Press).
- Prepared 2000 Water Conservation Plan for Hingham-Hull-N. Cohasset Water System.
- Author of the national water efficiency standards for plumbing fixtures adopted under the U.S. Energy Policy Act of 1992.

# Water Balance Program

- Developed as part of the 2000 Water Conservation Plan
  - Required by the 1999 Administrative Consent Order (ACO)
- Applies to new & expanded projects, except:
  - residential development with only a single service connection
  - new and/or expanded water use developments that are expected to require less than 100,000 gallons per year of water
- Options:
  - **Applicant-Directed Conservation** – Applicant identifies and implements water conservation activities through retrofits approved by Aquarion.
  - **Water Banking** - Applicant provides funding for a Water Bank that will be used by Aquarion to fund conservation efforts.
  - **Supplemental Source of Water Supply** – 1. Applicant identifies and develops a supplemental source of supply for Aquarion. 2. Applicant finances the development of a supplemental source of supply.

# Lead and Copper

- Test lead & copper levels at ~30 homes and 2 schools every 3 years.
- Primary source is corrosion of household plumbing.
- If >10% of home results exceed Action Levels, take corrective actions.
- September 2015 testing:
  - lead below Action Level.
  - copper above Action Level in 77% of samples.
- Communications:
  - Required - Report results to homeowners & schools within 30 days.
  - Required – Include in annual Consumer Confidence Report (CCR).
  - Also, we reviewed results with Boards of Health and School officials.
- Treatment - Adjusted treatment to improve corrosion control (raised pH).
- Copper Re-testing:
  - Required in the first half of 2016.
  - However, we decided to re-test in October.

**Thank you**

**Questions**

