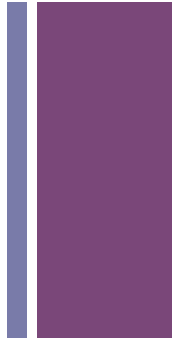


The case for conditioning registered water

Julia Blatt
Massachusetts Rivers Alliance
September 12, 2017



Massachusetts Rivers Alliance



- Association to Preserve Cape Cod
- Belmont Citizens Forum
- Berkshire Environmental Action Team
- Berkshire Natural Resources Council
- Biodiversity for a Livable Climate
- Blackstone River Coalition
- Boxborough Conservation Trust
- Center for Coastal Studies*
- Charles River Conservancy
- Charles River Watershed Association
- Charlestown Waterfront Coalition
- Clean Water Action
- Connecticut River Watershed Council*
- Conservation Law Foundation
- Environment Massachusetts
- Environmental League of Massachusetts
- Essex County Greenbelt Association
- Friends of Alewife Reservation
- Friends of the Assabet River NWR
- Friends of the Blue Hills
- Friends of the Malden River
- Greater Northfield Watershed Association
- Green Newton
- Groundwork Lawrence
- Hoosic River Revival
- Hoosic River Watershed Association
- Hop Brook Protection Association
- Housatonic Valley Association
- Ipswich River Watershed Association*
- Jones River Watershed Association
- Kestrel Land Trust
- Lowell Parks & Conservation Trust
- Mass Audubon
- Massachusetts Assoc. of Conservation Comm
- Massachusetts Land Trust Coalition
- Mass Org of State Engineers and Scientists (MOSES)
- Massachusetts Watershed Coalition
- Merrimack River Watershed Council
- Millers River Watershed Council
- Mystic River Watershed Association
- Nashua River Watershed Association
- Neponset River Watershed Association*
- North and South Rivers Watershed Association*
- OARS, for the Assabet, Sudbury, & Concord Rivers
- Parker River Clean Water Association
- Save the Bay – Narragansett Bay Riverkeeper
- Sea Run Brook Trout Coalition
- Shawsheen River Watershed Association
- Sudbury Valley Trustees
- Sudbury, Assabet and Concord Wild & Scenic River Stewardship Council
- Taunton River Watershed Alliance
- Taunton River Wild & Scenic Stewardship Council
- Ten Mile River Watershed Council
- The Nature Conservancy*
- The Trust for Public Land
- The Trustees
- Trout Unlimited, Greater Boston Chapter
- Trout Unlimited, Nor'East Chapter
- Trout Unlimited, Pioneer Valley Chapter
- Wastewater Advisory Committee (WAC)
- Water Supply Citizens Advisory Committee (WSCAC)
- Weir River Watershed Association
- Westfield River Watershed Association
- Westfield River Wild & Scenic Advisory Committee
- Westport River Watershed Alliance

+ What our petition asks for

New Water Management Act regulations:

- Lower 100,000 gpd threshold volume for water permits
- Application of standard conservation conditions to registrations (water conservation plans)
 - Efficiency Requirements
 - 65 residential gallons per capita per day (RGPCD)
 - 10% unaccounted-for-water (UAW)
 - BMPs (leak detection & repair, metering, pricing, public education etc.)
 - Seasonal limits on nonessential outdoor water use

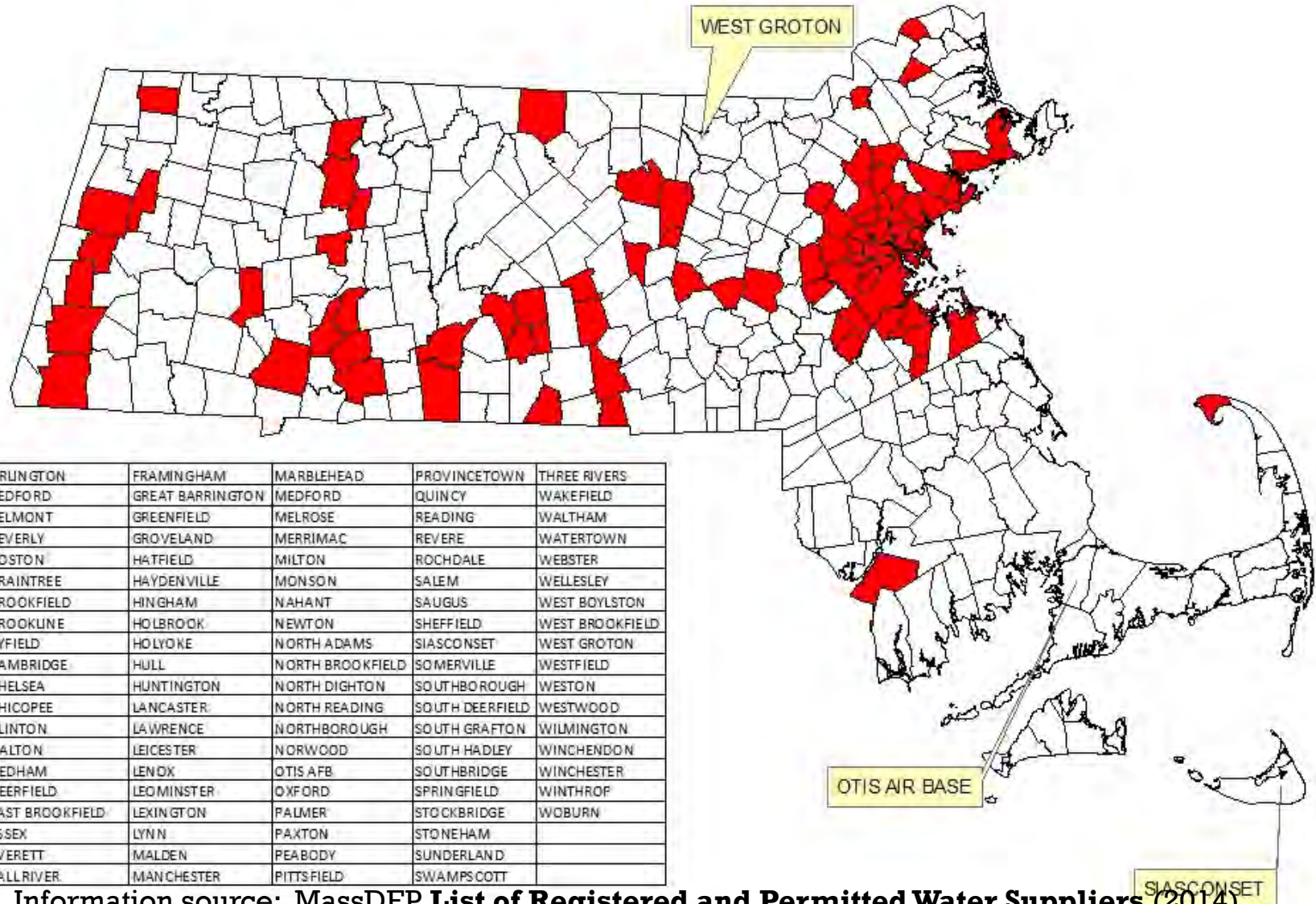


+ Brief background

- Fairhaven v. DEP (2010) SJC decision affirmed the authority of DEP to promulgate regulations conditioning registration renewals with reasonable conservation measures under the WMA.
- Currently registrants only required to document discretionary conservation measures.
- >60% of all authorized water withdrawals are unconditioned with respect to water conservation.
- Petition lays out legal arguments that demonstrate MassDEP is obligated to extend the Water Conservation standards to registered water users.



Massachusetts Towns With Registrations ONLY

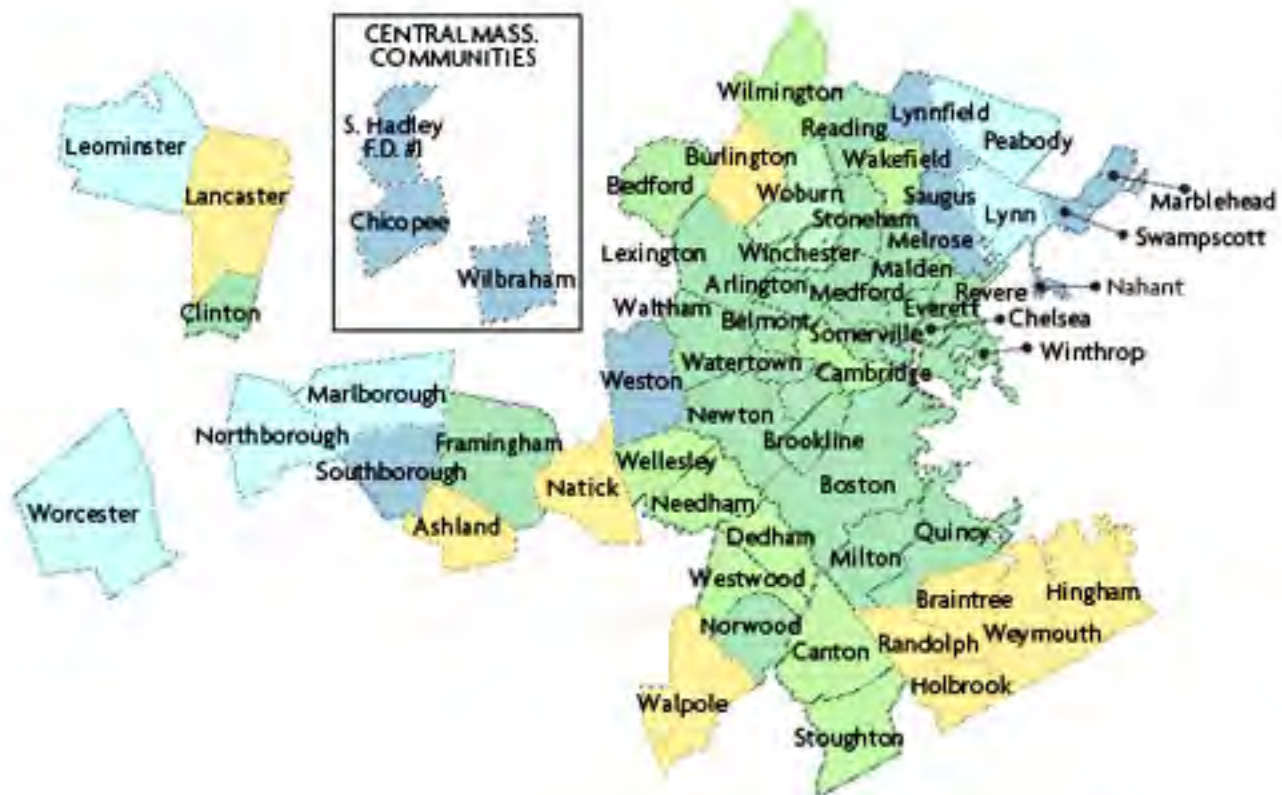


Information source: MassDEP List of Registered and Permitted Water Suppliers (2014)
 Kristen Thiebault 8/24/2017

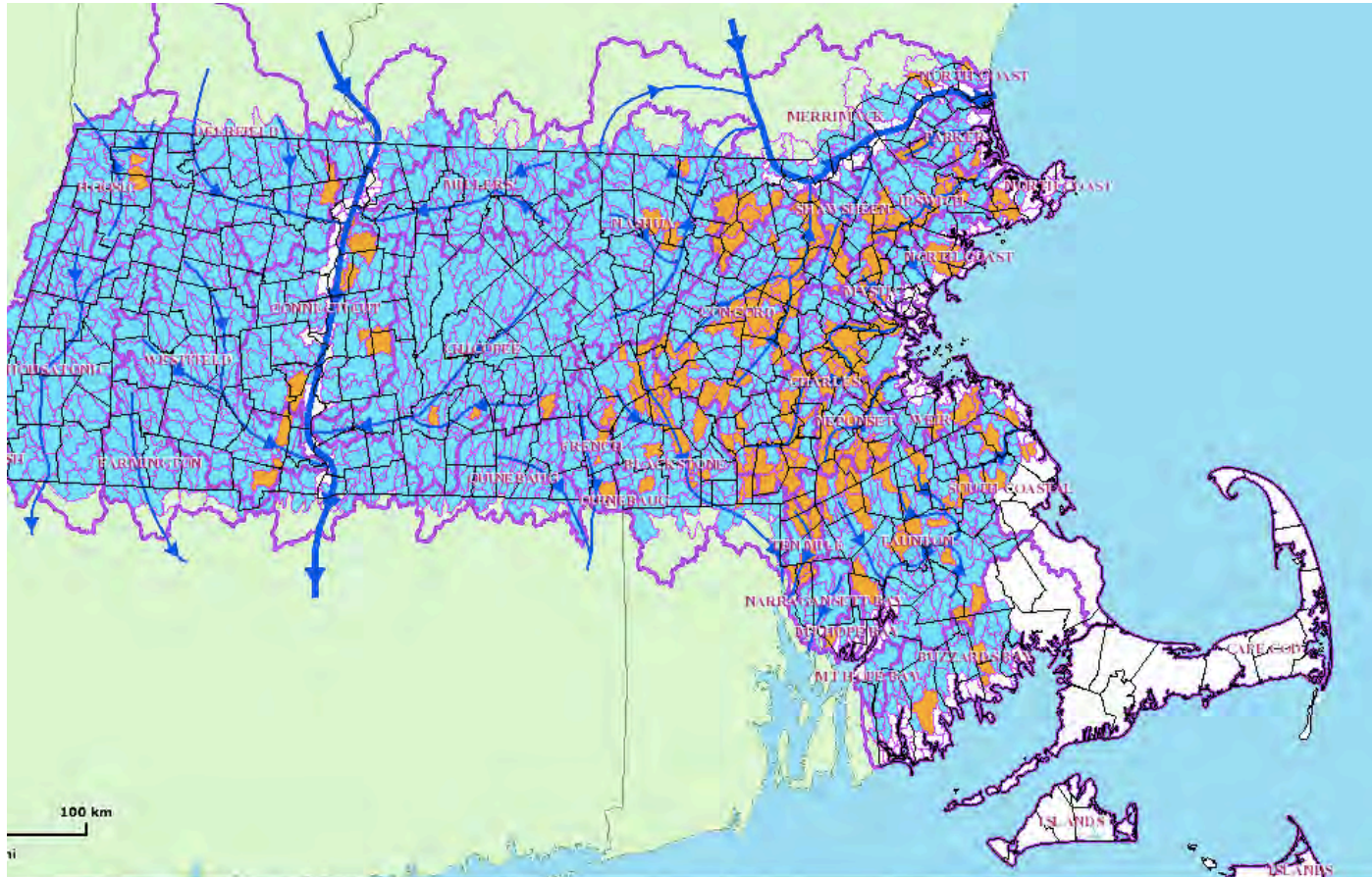


MWRA SERVICE AREA

- Water only
- Sewer only
- Water and sewer
- Partial/emergency water only
- Full sewer, partial/emergency water only



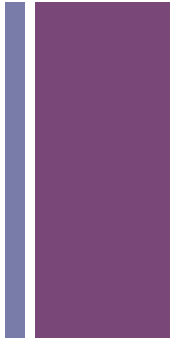
+ SWMI Interactive Map



Net depleted subbasins. Shows subbasins whose unaffected August median flow is more than 25% depleted after accounting for groundwater withdrawals and groundwater discharges.



Registered-only and rivers



- Depleted subbasins in: Assabet, Blackstone, Charles, Chicopee, Concord, French, Ipswich, Connecticut, Hoosic, Merrimack, Nashua, Neponset, North Coastal, Parker, Saugus, Taunton, and Weymouth/Weir watersheds.
- With MWRA customers, ~60% of the state's water allocation.

+ Why does it benefit the public to require registrants to conserve water?



+ Water is connected

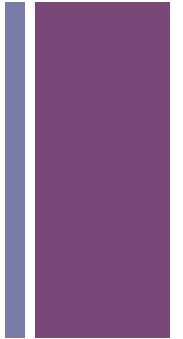
- USGS, DCR study: Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins – not site-specific but establishes collective impact in a basin.



- USGS, Mass DEP, DCR, and DFG: Factors Influencing Riverine Fish Assemblages in Massachusetts



Protect local rivers and streams

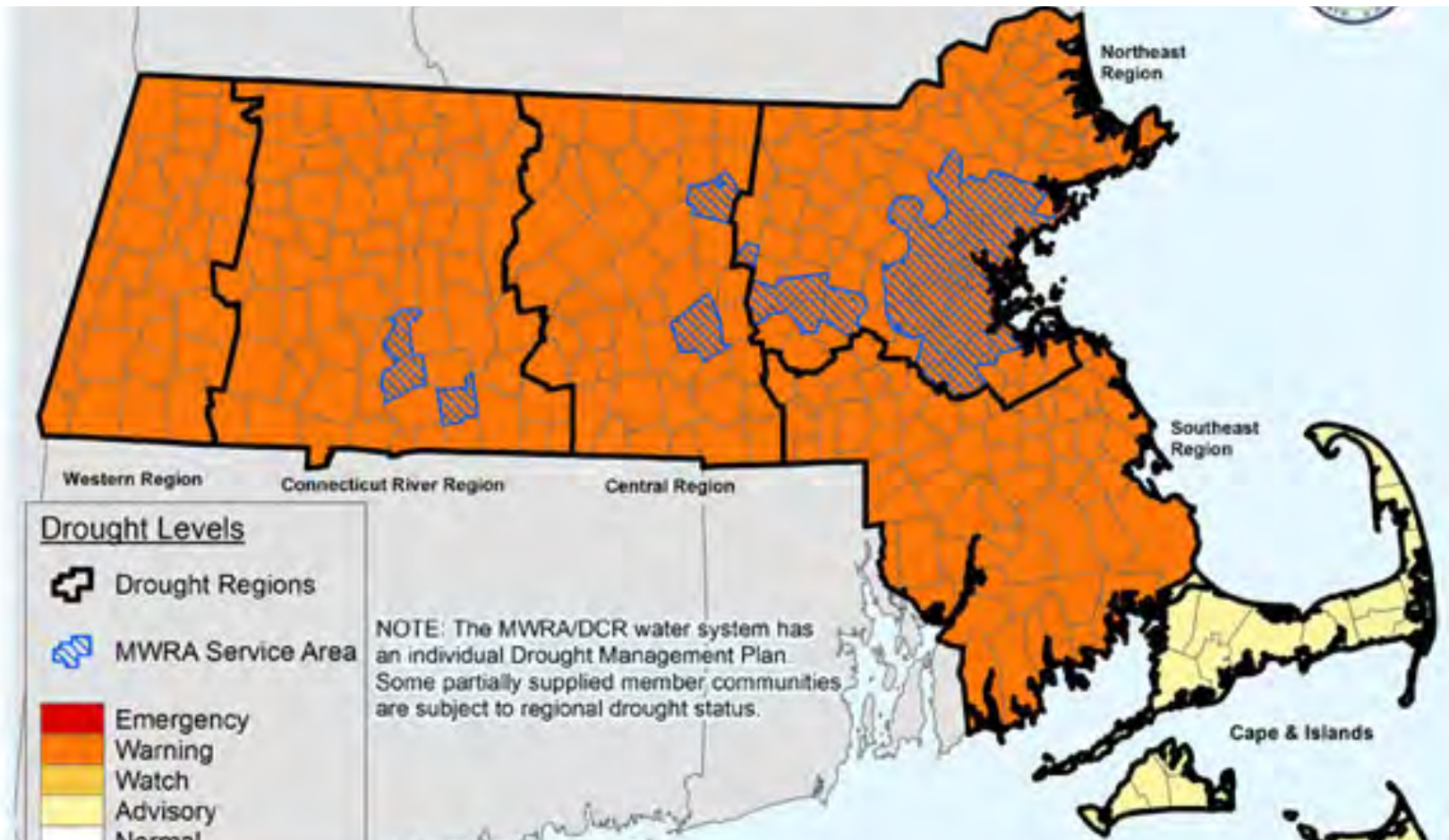


- Unnaturally low flows lead to:
 - Higher water temperatures
 - Growth of nuisance plants
 - Less dilution for pollutants
 - Lower dissolved oxygen levels
 - Failure for fish and other aquatic wildlife to survive or thrive
 - Loss of river recreation and enjoyment for Massachusetts residents



+ Climate change resiliency

Climate change is bringing more droughts to Massachusetts.



+ Climate change resiliency

- Increasing Temperature and Changing Precipitation Patterns:
 - Increase intensity of floods and droughts
 - Increasing precipitation in winter and spring → floods
But precipitation patterns consistent in summer and fall
 - Rising temps melt snow earlier in the spring, increase evaporation
 - Increases in impervious cover means less water recharge
- Result is depleted stream flows, drier soils in the summer and fall
- The ability to condition registrations would help the state comply with E.O. 569, which directs the EOEEA Secretary to “build resilience and adapt to the effects of climate change.” (9/16/16). Conservation sustains both our streams and our water supplies.



+ Fairness



- It doesn't make sense that some water suppliers and residents are required to comply with basic conservation requirements and others aren't.
- Lack of conservation requirements for some water suppliers is particularly unfair to others who are downstream.
- The current policy is unconnected to environmental needs.

+ Public Trust Doctrine

- Water Management Act's origins can be traced back to the Commonwealth's Constitution and the Public Trust Doctrine, a principle that serves the collective interest of all citizens of the Commonwealth.
- Water Resources Commission, in adopting the Water Conservation Standards, "recognizes the Commonwealth's interest in protecting water resources as public resources to be held in trust for current and future generations."
- To avoid the application of these performance standards to registered water withdrawals undermines and defeats the collective interest of the public in public trust property.