
THE MASSACHUSETTS WATER RESOURCES COMMISSION



Kayakers on the Ipswich River

ANNUAL REPORT, FISCAL YEAR 2018



Commonwealth of Massachusetts

CHARLES D. BAKER
Governor

MATTHEW A. BEATON
Secretary
Executive Office of Energy and Environmental Affairs

MEET THE WATER RESOURCES COMMISSION

THE COMMISSION'S ROLE AND STRUCTURE

The Water Resources Commission (Commission) was established in 1956 by the Massachusetts Legislature and is responsible for developing, coordinating, and overseeing the Commonwealth's water policy and planning activities to ensure that Massachusetts will have plentiful water to support health, safety, economic development, and ecological vitality for generations to come.

The eleven-seat Commission includes appointees from six state agencies and five public members.

The Commission's Executive Director, based at the Executive Office of Energy and Environmental Affairs (EEA), and its technical staff, based at the Department of Conservation and Recreation's (DCR) Office of Water Resources, work with state and federal agencies and members of the public to support the Commission's work.



Browns Brook, Holland, MA, June 2018
Photo: Kate Bentsen, DER

RESPONSIBILITIES OF THE COMMISSION

1. Spearhead **water policy** and **long-range water resources planning** for Massachusetts
2. Manage a **statewide precipitation network** for monitoring and critical research
3. Cooperate with the United States Geological Survey (USGS) to provide timely **scientific research and real-time hydrologic monitoring statewide**
4. Administer the **Interbasin Transfer Act** to ensure environmental protection when it is necessary to transfer water or wastewater between the major river basins of the state
5. Closely track hydrologic conditions and advise the state **Drought Management Task Force** in response to drought conditions
6. Provide **Water Needs Forecasts** for approximately 180 communities for their long-range planning and for use in applying for water withdrawal permits
7. Establish statewide **Water Conservation Standards** to encourage efficient use of water
8. **Review and approve water regulations** as mandated by statute
9. Provide a **forum for public input, coordination, and diverse viewpoints** on current and long-term water policies and issues at monthly meetings

These responsibilities establish the scientific and policy foundation for the sustainability of Massachusetts' water resources.

COMMISSION PROGRAMS	PROGRAM DESCRIPTIONS AND FY 2018 WORK
<p>TRACKING HYDROLOGIC CONDITIONS AND ADVISING ON DROUGHT</p> <p>www.mass.gov/dcr/water-data-tracking</p> <p>www.mass.gov/dcr/drought</p> <p>www.mass.gov/orgs/drought-management-task-force</p>	<p>WRC staff monitors and analyzes water conditions monthly and produces a report covering precipitation trends, river conditions, groundwater levels, and levels at reservoirs, lakes, ponds, and other impoundments. Staff uses these data to monitor for droughts and to advise the state's Drought Management Task Force when conditions warrant.</p> <p>Operational since 1956, the precipitation monitoring network provides data from more than 60 active monitoring stations in Massachusetts. These data are used to:</p> <ul style="list-style-type: none"> • monitor for drought • support climate and other research • update design standards for infrastructure <p>In FY2018, staff continued to work on revising the Drought Management Plan following the 2016-2017 drought to allow for earlier detection of drought onset and potentially earlier actions to mitigate impacts. In addition, staff is working with Public Water Suppliers (PWSs) to develop guidance for PWSs on creating and implementing local water supply DMPs.</p>
<p>THE USGS COOPERATIVE PROGRAM</p> <p>www.mass.gov/cooperative-water-resource-planning-program</p>	<p>The U.S. Geological Survey and the Commonwealth of Massachusetts have had a water resources partnership since 1904, when the state's first modern stream gage was installed in the Connecticut River. The Cooperative program currently maintains:</p> <ul style="list-style-type: none"> • 58 real-time streamflow gages, • 4 tidal gages, • 4 weather stations, and • 81 groundwater observation wells <p>In FY2018, staff managed replacement of 31 groundwater wells across the state with real-time wells, with grant funding from USGS headquarters. Field work in cooperation with New England USGS and the State Geologist's Office will be completed in FY 2019.</p>
<p>THE INTERBASIN TRANSFER ACT (ITA)</p> <p>www.mass.gov/interbasin-transfer-act</p>	<p>The ITA protects Massachusetts' vital water resources and the communities that rely on them. It ensures:</p> <ul style="list-style-type: none"> • Communities transferring drinking water and wastewater between river basins practice water conservation • Hydrology in the donor basin is protected • The process is transparent and promotes public input <p>In FY2018, the WRC revised the ITA regulations (the first revision since 1985), with a vote in December 2017 and promulgation in March 2018. In addition, policies that have been superseded by the revised regulations were rescinded, and updates to the ITA guidance documents were started. Staff also worked on ITA-related projects: they held a pre-application meeting with representatives of the 1,400-acre Union Point development, and began a review of the Final Environmental Impact Report/ITA application from Ashland. Staff also followed up on continued compliance with conditions for ten previously approved ITA applications.</p>

COMMISSION PROGRAMS	PROGRAMS DESCRIPTION AND FY 2018 WORK
<p>WATER NEEDS FORECASTS</p> <p>www.mass.gov/files/documents/2018/10/09/waterneedsforecast-policy-method.pdf</p>	<p>Commission staff work with public water suppliers to develop 15-to 20-year water needs forecasts, using a methodology approved by the Commission.</p> <p>The forecasts are used by suppliers in applying for Water Management Act (WMA) permits and in long-range planning.</p> <p>In FY2018, staff worked with 18 public water suppliers in four river basins (Merrimack, Parker, Ipswich, and Narragansett) to develop or revise forecasts. Staff also participated in outreach workshops in two basins, helping to explain the forecast process and the WMA permit renewal process.</p>
<p>WATER CONSERVATION STANDARDS</p> <p>www.mass.gov/service-details/details-on-the-2018-massachusetts-water-conservation-standards</p>	<p>The Commission establishes the Massachusetts Water Conservation Standards, which, since 1992, have set statewide goals for water-use efficiency and provide guidance for effective conservation. In recent fiscal years, staff initiated a broad, substantive review and update of the standards, working with industry experts, key stakeholder groups, and other agencies, to incorporate the latest thinking on best practices and industry standards.</p> <p>In FY2018, staff finalized the revised Water Conservation Standards document, with review and approval by the Commission in May 2018.</p> <p>As a follow-up to the revised Pricing chapter, the staff is pursuing additional actions to support suppliers in setting financially sustainable, conservation-oriented water rates. In FY2018, staff partnered with the Division of Ecological Restoration (DER) to conduct a broad survey of MA water suppliers to assess their rate-setting challenges, with over 100 suppliers responding. Staff and DER then conducted an in-depth case study review of seven individual supply communities to summarize key lessons learned from rate-setting successes and challenges and identify areas of needed support. A report summarizing findings and a summary of the survey results can be found at https://www.mass.gov/service-details/water-rates.</p>
<p>OVERSIGHT OF STATE WATER PROGRAMS</p>	<p>By statute, the Commission reviews certain water regulations promulgated by the Department of Environmental Protection (DEP), and other water resource-related programs, providing an additional public forum for comment.</p> <p>In FY2018, the Commission was briefed on activities relating to the Sustainable Water Management Initiative grant program, DAR's Agricultural Enhancement Program's drought-related grants, CZM's stormwater and climate resiliency programs, a DER pilot project using Community-based Social Marketing tools in summer water conservation programs, and the Natural Resources Damages and Ground Water Restoration program.</p>

THE COMMISSION AT WORK, FY2018

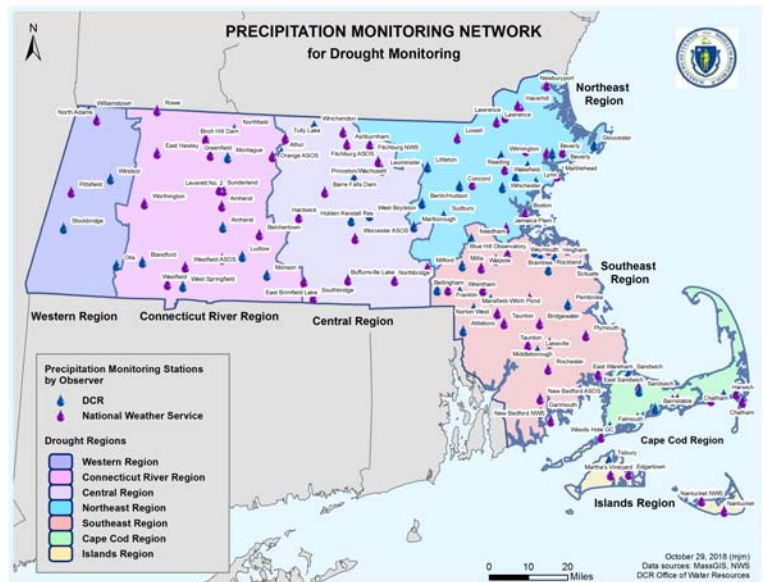


WRC staff member Viki Zoltay with State Geologist Steve Mabey overseeing well replacement, Dec. 2017



Water Resources Commission, May 2018

Precipitation and groundwater are 2 of the 7 drought severity indices that WRC staff monitor.



WRC staff member Erin Graham with Sam Banas of USGS taking monthly measurements of groundwater levels.



Outreach meeting on water needs forecasts in the Merrimack River Basin, Sept. 2017

COMMISSION MEMBERS AND KEY CONTACTS

AGENCY MEMBERS:

Exec. Office of Energy and Environmental Affairs
Chair & Member – **Matthew A. Beaton**, Secretary
Designee – **Vandana Rao**,
Commission Executive Director

Dept. of Housing and Community Development
Member – **Chrystal Kornegay**, Undersecretary
Designee – **Linda Balzotti**

Department of Conservation and Recreation
Member – **Leo Roy**, Commissioner
Designee – **Anne Carroll**

Department of Environmental Protection
Member – **Martin Suuberg**, Commissioner
Designee – **Douglas Fine**

Department of Agricultural Resources
Member – **John LeBeaux**, Commissioner
Designee – **Hotze Wijnja**

Department of Fish and Game
Member – **Ron Amidon**, Commissioner
Designee – **Todd Richards**

Office of Coastal Zone Management
(non-voting member)
Member – **Bruce Carlisle**, Director
Designee – **Todd Callaghan**

PUBLIC MEMBERS:

Robert Zimmerman, Charles River Watershed
Association (retired, June 2018)

Thomas Cambareri, Cape Cod Commission

Kenneth Weismantel, Hopkinton, MA

Marcela Molina, Boston, MA

Vincent J. Ragucci, North Reading, MA

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Vanessa Curran, Water Resources Scientist

Erin Graham, Environmental Engineer

Marilyn McCrory, Water Resources Planner

Viki Zoltay, Hydrologist



Reservoir gage, A-1 Reservoir,
Westborough, MA

Cover photo: Anne Carroll, DCR