

March 23, 2018

Vandana Rao, Executive Director Massachusetts  
Water Resources Commission  
Executive Office of Energy and Environmental Affairs  
100 Cambridge Street  
Boston, MA 02114

Re: Comments on Proposed Changes to the Water Conservation Standards Sent  
via email to [Vandana.Rao@state.ma.us](mailto:Vandana.Rao@state.ma.us)

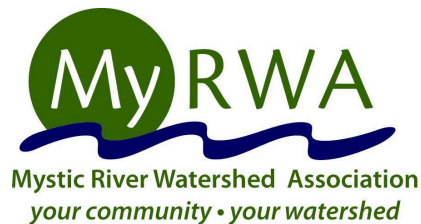
Dear Ms. Rao,

The Mystic River Watershed Association (MyRWA) is a non-profit organization dedicated to the preservation and enhancement of the Mystic River Watershed. The mission of MyRWA is to protect and restore the Mystic River, its tributaries, and watershed lands for the benefit of present and future generations and to celebrate the value, importance, and great beauty of these natural resources. This includes working to improve the water quality in the Mystic River and all of its tributaries.

Thank you for the opportunity to comment on the proposed changes to the Water Conservation Standards. We appreciate the extensive efforts of the Water Resources Commission to provide opportunities for stakeholder engagement since the revision process for the Standards began in 2013.

The purpose of the Standards is to “set statewide goals for water conservation and water use efficiency and provide guidance on effective conservation measures.” The Standards are incorporated into Water Management Act permits and other state policies, and also provide a critical opportunity for public education about the importance of water conservation. Thus, the Standards have an important role in safeguarding our water future in the Commonwealth.

Because many rivers and streams across the state suffer from chronic low flows, further degradation of these aquatic ecosystems is detrimental to wetlands, fish populations, water-based recreation and other water-dependent resources. Our water policies must promote sustainable water consumption and conservation measures that ensure the long-term sustainability of both our drinking water supplies and the environment around us. The Standards should help us meet this challenge in the face of changing climatic conditions.



With this purpose in mind, we strongly support the retention of the 65 Residential Gallons Per Capita Per Day (rgpcd) and 10% Unaccounted for Water (UAW) as *standards*. These measures are well within reason for our water supplies and are essential to ensure that we maintain strong, measurable goals for achievement of truly water efficient systems. In 2015, according to a MassDEP survey, 198 suppliers met or fell below the 65 rgpcd standard, 113 suppliers met the 10% UAW standard and 70 suppliers achieved both standards. It is critical that other suppliers are encouraged to move towards achievement of these standards to ensure that water is not wasted.

Our specific comments on the proposed Standards, organized by section, are provided below.

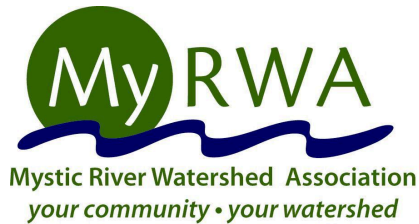
### **Introduction to the Water Conservation Standards**

We recommend the following changes:

- In “Intent and Purpose,” the list of programs affecting the planning and management of the Commonwealth’s water resources should be expanded to include other pertinent development and land use planning programs. We recommend the following change, “Together, the standards and recommendations should guide all programs affecting the planning and management of the Commonwealth’s water resources, including but not limited to: **local and state land use and development planning, local and state low impact development planning, local and state hazard mitigation planning, local and state drought management plans, local vulnerability assessment plans,** local and state water conservation plans, the Water Management Act, the Interbasin Transfer Act, and the Massachusetts Environmental Policy Act (MEPA).”
- In “Background and Goals,” the current list of intentions for the Standards negatively frames water conservation for the purposes of protecting environmental health. We suggest the following change, “3. **Protect stream health and aquatic ecosystems by reducing negative impacts of water use.**” We also question the inclusion of intention 5, “5. Spur economic development by helping ensure reliable and sustainable access to water.” We do not feel that this is an accurate reflection of the intentions of the Standards and recommend that this intention is removed.

We support the following revision:

- In “Background and Goals,” the addition of information regarding anticipated climate change impacts in Massachusetts and the potential environmental and economic effects highlights the pressing need for substantial water conservation measures to ensure sustainable use of limited supplies.



## Chapter 1.0 – Comprehensive Water Resource Planning and Drought Management Planning

We recommend the following changes:

In Section 1.2 “Recommendations,” we urge the Commission to make Recommendation 2 Communicate with other local officials a *standard* rather than a recommendation. Communication during periods of water shortage is particularly crucial to ensure that information is shared with the proper authorities and disseminated to the public so that critical water conservation efforts can take place. We also urge the Commission to make the following addition to the current text, “To aid in community planning and decision making, water suppliers should keep local officials (Conservation Commissions, Zoning and Planning Boards, Selectmen, and other agencies concerned with development), **state agency officials, and the general public when appropriate** informed of water consumption and supply availability.”

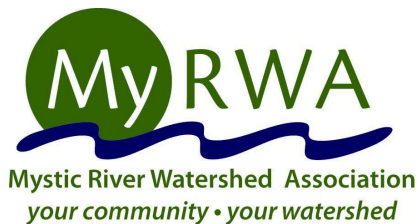
We support the following revision:

- In Section 1.2 “Recommendations,” in Recommendation 3 Water Banks/Water-Neutral Community Development, the addition of the example of a reduction of two gallons for every one gallon added is both illustrative and informative in providing a concrete example of potential water strategy savings.

## Chapter 2.0 – Water Loss Control

We support the following revision:

- As stated earlier, we strongly support the listing of Standard 2 Minimize real and apparent losses by meeting or demonstrating steady progress toward meeting unaccounted-for-water (UAW) of 10% or less as calculated on the Annual Statistical Report form and approved by Massachusetts Department of Environmental Protection (MassDEP) as soon as practicable as a *standard*. The current language sufficiently encourages suppliers to move towards these standards while allowing considerable flexibility for those who are unable to meet these standards in the short term. It is essential that these concrete, measurable goals be maintained as standards to promote water efficiency in our existing supply systems.



## Chapter 3.0 – Metering

We recommend the following changes:

- In Section 3.2 “Recommendations,” the listing of Recommendation 1 Billing should be a *standard* rather than a recommendation. Numerous studies, including a recent 2016 University of California Davis Energy and Efficiency Institute study, note that as consumers become more informed about their water consumption rates through monthly billing, they become more water conscious and efficient in their water use. Listing Billing as a standard will heighten the importance and necessity of this action to promote water conservation.

We support the following revision:

- In Section 3.1 “Standards,” the listing of Standard 8 Billing Frequency is an important addition to ensure that customers have accurate, current and comparable data about their water usage. We strongly support the listing of Billing Frequency as a *standard*.

## Chapter 4.0 - Pricing

We recommend the following changes:

- In Section 4.1 “Standards,” the full cost of water should include the mitigation of environmental impacts from water use. We recommend the following change, “Full cost recovery can be achieved with any form of rate structure, as long as all costs are recovered, including primary costs (e.g. operations and capital expenses) and supporting costs (e.g. **environmental impacts**, watershed protection and public education).”
- In Section 4.2 “Recommendations,” Recommendation 1 Use Price Signals to Reduce Inefficient and Nonessential Use and Recommendation 2 Establish an Enterprise Fund should be *standards* rather than recommendations. We strongly urge the Commission to revisit this issue and move these two components to the standards section. While recognizing that every water supply system has its idiosyncrasies, ultimately the inclusion of rates that reflect extreme water shortages or even seasonal rates encourages the conservation of water in every community during times of critical need. By establishing an enterprise fund, suppliers can account for the total costs of operating their systems while guaranteeing that revenues derived from water supply activities are returned for water supply expenditures. Both components should be encouraged more strongly by listing them as standards to ensure that they are adopted by water suppliers.

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- In Section 4.2 “Recommendations,” Recommendation 6 Engage in Positive Messaging and Recommendation 7 Engage the Public in Rate Making should include encouragement for partnering with local environmental groups, in particular water groups, to accomplish these recommendations.

We support the following revision:

- In Section 4.2 “Recommendations,” the listing and encouragement of monthly billing in Recommendation 5 Use Billing Practices that Support Price Signals is a positive change that promotes access to and awareness of pertinent water consumption rates and ultimately results in more sustainable water usage by consumers.

## **Chapter 5.0 – Residential Water Use**

We support the following revisions:

- As stated earlier, in Section 5.1 “Standards,” we strongly support the retention of 65 Residential Gallons Per Capita Per Day as a standard. Given that the Massachusetts average for rgpcd is currently *lower* than 65 rgpcd, the language for this standard is extremely generous for suppliers who are currently not meeting this standard. It is essential that we maintain this concrete standard for water efficiency to ensure that conservation and sustainable use of supplies is encouraged. We urge the Commission to promote this as a *minimum* rather than an end goal for level of efficiency.
- In Section 5.2 “Recommendations,” Recommendation 9 Update the State Plumbing Code is crucial and should be made a priority. Outdated water-use standards for plumbing fixtures hamper potential increased water savings and water efficiencies.

In Section 5.2 “Recommendations,” Recommendation 10 Create Incentives, including rebates, for installing water-efficient plumbing fixtures and appliances is essential to ensure that progress is made in the normalizing of water-efficient fixtures and appliances. By reducing some of the upfront costs, there is great potential for substantial water efficiency gains to be made.

## **Chapter 6.0 – Public Sector**

We applaud the Commission for including this chapter and recognizing the importance of improving efficiencies and promoting water conservation in municipal and state buildings, facilities and landscapes. To promote the truly universal and sustainable use of water, it is crucial to have compliance at every level.

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## Chapter 8.0 – Agricultural Water Use

We support the improvements made to this chapter, in particular the focus on efficient watering systems and the use of organic matter to promote healthy soils that are drought-tolerant. The standards and recommendations included in this Chapter will promote water conservation in one of the most consumptive sectors of our economy.

## Chapter 9.0 – Outdoor Water Use

We recommend the following changes:

- Include the potential environmental impacts in the description of potential outcomes from spikes in water demand during times of water scarcity. We suggest the following change, **“High summer water use also contributes to diminished streamflow, creating stress on the local environment and the wildlife it supports.”**
- In Section 9.1 “Standards,” Standard 4 Adopt and implement a water-use restriction bylaw, ordinance, or regulation could be strengthened to promote the adoption of these measures to include private wells. These bylaws, ordinances and regulations are the only means to ensure that there is enforcement of nonessential outdoor water restrictions, crucial mechanisms to reduce excessive water usage during periods of water scarcity. It is imperative that these measures are kept in place as standards and that *every* town puts in these measures. While we applaud the Commission for listing private wells, the current language leaves doubt as to the impact of private wells on water supplies. We suggest the following change, “Adopt and implement a water-use restriction bylaw, ordinance, or regulation, which applies to both municipal water customers and **if possible**, those with private wells.”

We support the following revision:

- We appreciate the inclusion of the case study on Scituate’s reduction of its water use. Scituate struggled with significant water shortages during the drought of 2016 and their creative measures to reduce per capita use proved extremely effective. This example illustrates important, persuasive measures that can lead to significant water conservation.

## Chapter 10.0 – Public Education and Outreach

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We support the following revision:

- The standards and recommendations described in this chapter are crucial to ensuring the success of conservation measures promoted in these communities. In particular, we

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appreciate the inclusion of Partnerships as a standard to encourage collaboration and shared resources among environmental organizations, water suppliers and municipalities. We urge the Commission to work with the Executive Office of Energy and Environmental Affairs to offer grant programs for water suppliers that wish to develop their own programs to accomplish these goals for public outreach.

## Appendices

We support:

- The inclusion of Appendix A Water Bank Guidance to ensure that financial actions can reduce demand. We urge the Commission to support the passage of House bill H.2116 in the legislature to ensure that there is definitive agreement on the allowance of water banks under existing statute.
- The inclusion of Appendix B Model Bylaws and in particular, the inclusion of bylaws that address private wells. Access to information regarding the implementation and success of existing private well bylaws was indicated as an obstacle by many towns and water suppliers. This information will be extremely helpful in encouraging the inclusion of private wells under nonessential outdoor water use restriction bylaws when possible.
- The inclusion of Appendix J Massachusetts Drought Management Outdoor Water Use Restriction Guidelines which provides relevant key guidance for recommended restrictions at each drought level. This guidance provides a crucial baseline for every supplier to consider in the implementation of their restrictions. Having more uniform drought restrictions will improve the effectiveness of the measures that are implemented and reduce the confusion and ineffectiveness that we saw during the drought of 2016 with our current patchwork system.

We wish to acknowledge the work of the Water Resources Committee, its task force members, and staff on this important document; we are glad to see it move forward. Thank you for considering our comments. Please contact us if you have any questions.

Sincerely,



Patrick Herron, Executive Director  
Mystic River Watershed Association

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