

February 20, 2018

Vandana Rao, Water Policy Director Office of Energy and Environmental Affairs 100 Cambridge Street Boston, MA 02114

By email: vandana.rao@state.ma.us

Re: Written Comments on Proposed Updates to the Massachusetts Drought Management Plan

Dear Ms. Rao,

We appreciate the substantial efforts that the staff and members of the Drought Management Task Force have undertaken to update the Massachusetts Drought Management Plan. We feel confident that many of the proposed changes will improve the state's timeliness and overall response to future droughts. We also recognize that there are a few areas where some of the current proposals could be strengthened in the draft Plan.

The Mystic River Watershed Association (MyRWA), was founded in 1972 to protect and restore the river, its tributaries, and watershed lands for the benefit of present and future generations. They Mystic River and its tributaries represent a tremendous asset for people to recreate at and a critical habitat for key species like river herring. As an urbanized landscape we have reduced recharge of the aquifer. As an urbanized landscape with drinking water withdrawals, we have a further depleted aquifer. The result is streams that periodically go dry, impacting ecosystem health and the plight of the river herring. Addressing issues on protections of minimum flow of streams is a critical step in safeguarding these local stream and pond environments.

On behalf of the Mystic River Watershed Association\_we appreciate the opportunity to share the following comments.

#### Section 1: Introduction

• **Support** the inclusion of *Section 1.3.1. Massachusetts' Climate – Past, Present and Future (page 7).* This section provides detailed descriptions of the new climatic norms climate scientists anticipate that we will see our region with a particular emphasis on the likely increasing occurrence of droughts. We appreciate the inclusion of this information as it points to the acute importance of drought preparedness and response in the state.

### Section 2: Authority and Coordination

- **Propose** that in *Section 2.2.1 Composition (page 10)*, that the composition of the Drought Management Task Force is modified to include:
  - (1) a representative from the watershed non-profit community. The current make-up of the task force does not currently include any representatives who can speak with authority on the conditions of particular streams and rivers. Though the Division of Ecological Restoration and Division of Fisheries and Wildlife may share updates about some river conditions, they often lack the time and resources to monitor and report on all regions in the state. The watershed community is well positioned to fill this role as it is well connected and individuals from this community have local expertise that they can share with the rest of the Task Force to ground statewide assessments.

- (2) a hydrologist from one the major Massachusetts universities or colleges. An
  additional hydrological expert with connections to resources outside of USGS would
  provide a potentially informative perspective to add to the Task Force.
- **Propose** that in *Table 1. Responsibilities of State and Federal Agencies (page 12)*, under "MassDEP," the following change:
  - o "Provide list of all communities with mandatory and voluntary watering restrictions and declared water emergencies"

## Section 3: Drought Assessment and Determination

- **Propose** that in *Section 3.1 Drought Levels (page 13)*, that "Level 1-Mild Drought" is changed to "**Moderate** Drought." "Moderate" conveys a stronger sense of severity than "mild." While we acknowledge that the U.S. Drought Monitor uses similar nomenclature for one of their drought levels, we feel strongly that the use of the term "mild" may lead some to think that the current drought conditions should not be taken seriously.
- **Propose** that in *Section 3.4.3 Streamflow (page 20)* "Figure 4: Massachusetts Stream Gage Network for Drought Monitoring," that Drought Management Task Force staff reviews the current composition of the network gages. It appears that there are no gages in the Cape Cod and Islands Regions. If there are no options for gages in these areas, additional information should be provided in this section regarding how the Task Force will make assessments without any reporting data on this metric from these two regions.
- **Propose** that in *Section 3.4.5 Lakes and Impoundments (page 23)* "Figure 6: Massachusetts Lake and Impoundment Monitoring Network for Drought Monitoring," the inclusion of additional data points for the network. The current listing includes primarily water supplies, with only a handful of lakes or impoundments. In addition, the number of data points is extremely limited in many of the regions. For example, both the Connecticut River Region and the Southeast Region have only two data points. Additional lakes and ponds should be considered for inclusion in the network to ensure that reporting on this metric is truly reflective of conditions in the region.

### Section 4: Process of Determining Drought Status

- **Propose** in Section 4.3 End of Drought (page 29), the following change:
  - "Determinations regarding the end of a drought focus on the precipitation and groundwater indices. These metrics will be prioritized when evaluating declarations for the end of a drought."

# Section 5: Drought Communication

- **Support** the inclusion of *Section 5: Drought Communication (page 29)*. This additional information clarifies the communication responsibilities of all relevant state agencies and establishes a strong framework for engaging regularly with the public about water conditions.
- **Propose** in Section 5.1 Communication Platforms (page 30), the addition:
  - "The following direct forms of communication will also be utilized, as appropriate...

    Outreach to regional planning agencies"

# Section 6: Summary of Responsibilities by State Agency

- **Propose** in Section 6.4 Department of Environmental Protection (MassDEP) (page 45), the following change:
  - "MassDEP's Water Management Act Program tracks the implementation of water use restrictions by registered and permitted communities across the state and regularly prepares maps showing the status of restrictions."

# Section 7: Drought Preparedness and Response Actions of State Agencies

• **Support** the inclusion of "Table 9: State Preparedness Actions" in *Section 7.1 State Agency Drought Preparedness Actions (page 38)*. This table provides greater clarity regarding the responsibilities of relevant agencies in ensuring improved responses to future droughts. We ask

that additional information is provided in this section regarding the timeline for implementation of the new tasks assigned to each respective agency and what entity will be responsible for overseeing the progress of each task.

- **Propose** in "Table 9: State Preparedness Actions" in *Section 7.1 State Agency Drought Preparedness Actions (page 38)*, the following additions:
  - O Under "Data Gathering, Analysis and Reporting" in the "MassDEP" category, "Gather data on which municipalities have passed bylaws confirming their authority to require nonessential outdoor watering restrictions, and those that have incorporated local bylaws requiring these restrictions for private wells."
  - Under "Policy and Regulatory Action" in the "DMTF" category, "Review the
     *Massachusetts Drought Management Plan: Preparedness and Response* every five years
     in conjunction with updates to the State Hazard Mitigation and Climate Adaptation
     Plan and update as needed."
  - O Under "Water Conservation" in the "All agencies" category, "Coordinate with farmers and growers in the agricultural community to ensure water savings programs are well-publicized and incentivized."
- **Support** the inclusion of "Table 10: State Drought Guidance" in *Section 7.2 State Agency Drought Response Actions (page 40)*. This guidance includes the appropriate corresponding restrictions for each drought level that will ensure water is conserved efficiently and effectively in times of water scarcity. It will also provide support to communities that seek to implement stronger watering restrictions than defined in their permit that want additional justifications for doing so.
- **Propose** in "Table 11a: State Agency Drought Response Actions During a Level 1 Mild Drought" in *Section 7.2 State Agency Response Actions (page 42)* the following change:
  - "Apply the Massachusetts drought management nonessential outdoor water-use restrictions to all state entities and encourage other water users to do the same."

### Section 8: Drought Preparedness and Response Actions – Guidance for Communities

- **Support** Section 8.1 Community Drought Preparedness Actions (page 48) "Action 1: Develop a Water Conservation Program." The additional focus on long-term planning and year-long water conservation efforts conveys the importance of continuous messaging and preparedness for municipalities.
- **Propose** in *Section 8.1 Community Drought Preparedness Actions (page 52)* "Action 2: Develop a Local Drought Management Plan" that additional information is provided under subsection 4 "Establish Triggering Levels" to clarify how local trigger levels will correspond with drought declarations from EEA regarding the status of respective drought regions.
- **Propose** in *Section 8.1 Community Drought Preparedness Actions (page 54)* "Action 1: Develop a Water Conservation Program" and "Action 2: Develop a Local Drought Management Plan" that a reference is made that financial support for these actions can be achieved through the state Municipal Vulnerability Preparedness program.

### Section 10: Drought and Emergency Declarations: Legal Authorities and Powers

- **Support** the inclusion of *Section 10.1 Local Government (page 56)*. Additional information and clarity regarding the authority of municipalities to implement nonessential outdoor watering restrictions will aid communities in justifying their respective bylaws and motivate communities without these bylaws to implement them.
- **Propose** in Section 10.1 Local Government (page 56), the following change:
  - "Municipalities may regulate through such bylaws or ordinances the use of water from public or private water systems, including voluntary or mandatory water-use restrictions."

- **Propose** in *Section 10.2.1 Governor-Declared State of Emergency (page 57)* the following change:
  - o "This broad authority should provide the Governor the power to take necessary steps, such as restraining the use of water on private property to address **a drought.**"

### Appendices:

- **Support** the inclusion of *Appendix F: Private Wells-Frequently Asked Questions (page 67)*. This section provides greater clarity regarding the impact of private wells on aquifers and encourages conservation of all water resources during a drought, a crucial message to convey in communities that are currently not implementing outdoor watering restriction bylaws that include private wells.
- **Propose** in *Appendix F: Private Wells-Frequently Asked Questions (page 67)* the following change:
  - "During periods of drought, especially when conditions are severe (Level 1 Mild Drought and higher)..."
- **Propose** that an additional appendix is created to provide guidance for communities regarding their authority to prohibit illicit withdrawals from streams and rivers during a drought. This is a commonly reported issue and only a few communities have addressed this concern through the passage of local bylaws.

Thank you for your time and consideration. I may be reached at 781-316-3438 or patrick.herron@mysticriver.org.

Sincerely,

Patrick Herron
Executive Director

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