Charles River Watershed Association

July 26, 2021

Via email

Commissioner Martin Suuberg
MassDEP, Water Management Program
1 Winter Street, 5th Floor
Boston, MA 02108
dep.talks@mass.gov

Re: Comments on Proposed Water Management Act Regulation Revision

Dear Commissioner Suuberg:

Charles River Watershed Association ("CRWA") submits the following comments on the Massachusetts Department of Environmental Protection's ("DEP") proposed revisions to the Massachusetts Water Management Act ("WMA") regulations, 310 CMR 36.00. CRWA's mission is to protect, preserve, and enhance the Charles River and its watershed through science, advocacy, and the law. CRWA has a long history of working with DEP and our watershed communities on water management issues, including implementation of the WMA.

The proposed regulations would impose conservation conditions on registrations in order to restrict non-essential outdoor water use by registrants during periods of drought. CRWA has long advocated for this, including by supporting Massachusetts Rivers Alliance's 2017 petition to DEP to condition registered withdrawals.[1] The proposed regulations are a critical first step toward adequately protecting our water bodies and water supplies. We urge DEP to adopt the proposed regulations with the additional recommendations discussed below, which will further strengthen the regulations in order to fully protect the Charles River and all waters of the Commonwealth while ensuring adequate water supply to meet our health and safety needs into the future.

Droughts are becoming more frequent and impacts are getting worse, posing a significant threat to the health of the Commonwealth's waters and our economy.

Droughts harm both water quality and quantity, posing significant threats to communities and ecosystems throughout the Commonwealth. In 2016-2017, we experienced the worst drought to hit Massachusetts since the 1960s, with ground and surface water levels reaching record lows for several consecutive months and widespread crop loss.[2] In 2020, we again experienced one of the hottest and driest periods on record, with drought conditions lasting from June until early December and the United States Department of Agriculture

[1] CRWA, Re: Massachusetts River Alliance's Petition to MassDEP to Condition Registered Withdrawals (Sept. 12, 2017).
[2] Mass. Exec. Off. Energy and Env'tl Aff. ("EEA"), Massachusetts Drought Management Plan (2019), https://www.mass.gov/doc/massachusetts-drought-management-plan/download.

("USDA") declaring every county in Massachusetts a 'drought disaster area' due again to widespread crop loss.[3]

Climate predictions indicate that the Commonwealth will continue to see increases in the occurrence and severity of droughts in the coming years.[4] Specifically, climate change is expected to exacerbate naturally-occurring droughts by increasing evaporation rates due to higher temperatures and lengthening periods without precipitation between rainfall events.[5] When rainfall does occur, it will be more intense, quickly running off of our expansive amounts of impervious surfaces before it can be absorbed back into the ground.[6] The forecasted reduction in snowfall will also reduce groundwater recharge.[7] As a result, we must adapt to a "new normal" where drought is more common, and protect our water resources accordingly.

The good news is that Massachusetts has taken significant steps in recent years to improve drought awareness and response. In 2018, the Commonwealth adopted the State Hazard Mitigation and Climate Adaptation Plan ("SHMCAP") in response to Governor Baker's Executive Order 569 on climate change.[8] The SHMCAP acknowledges the importance of building long-term drought resilience in Massachusetts, projecting that by the end of the century, consecutive dry days will increase by 18% and average summer precipitation will decrease.[9] To address this, Massachusetts updated its Drought Management Plan in 2019,[10] creating a systematic approach to assessing drought severity and impacts, including by directing the Drought Management Task Force to collect drought data and provide appropriate guidance for responding to droughts.[11]

The currently-proposed regulations are a reasonable step towards better protecting Massachusetts' water sources during periods of drought.

Registrants, whose withdrawal limits are based on their extraction rates from 1981-1985—long before climate change impacts were widely understood—currently are not subject to water conservation conditions and have few obligations when it comes to reporting on their withdrawals.[12] In the absence of conservation requirements, registrants can continue to extract

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[3] *See* USDA, *USDA Designates Three Massachusetts Counties as Primary Natural Disaster Areas*, (Oct. 29, 2020), https://www.fsa.usda.gov/news-room/emergency-designations/2020/ed_2020_1029_rel_0246.
[4] EEA, SHMCAP at 4-48 (2018), https://www.mass.gov/files/documents/2018/10/26/SHMCAP-September2018-Full-Plan-web.pdf.
[5] *Id.*; National Integrated Drought Information System, *Flash Drought*, https://www.drought.gov/what-is-drought/flash-drought (last visited May. 24, 2021).
[6] Mass. Drought Mgmt. Plan at 9.
[7] *Id.*
[8] Mass. Exec. Order. No. 569 (Sept. 16, 2016), https://www.mass.gov/executive-orders/no-569-establishing-an-integrated-climate-change-strategy-for-the-commonwealth.
[9] SHMCAP at 5.
[10] Mass. Drought Mgmt. Plan at 7.
[11] *Id.*
[12] *See* 310 CMR 36.04-11.

water at volumes up to their legal right even when environmental conditions indicate that less water should be extracted, making water sources more vulnerable during droughts and periods of water scarcity.

Further, watersheds span municipal boundaries, and many communities in Massachusetts rely on shared water sources. The current lack of conservation conditions on registrants creates inequities, as some communities who are required by permit to conserve water will nevertheless be negatively impacted by neighboring communities who continue to withdraw at unsustainable rates. For example, in the Ipswich watershed, the disparate regulatory treatment of users has precipitated community conflict and threatens adequate water conservation during droughts.[13]

In times of necessity like those posed by drought, DEP must exercise its authority to impose conservation conditions on registrants so as to protect other users. Restricting activities like watering lawns, washing cars, and filling swimming pools are imminently reasonable requests when there is increased stress on water supplies. These water conservation conditions will better protect our water sources, ensuring that adequate amounts of water are available for both in-stream uses and drinking water supplies.

The proposed regulations do not infringe upon the essential water needs of registrants. Customers of registered water suppliers would still be allowed to use water indoors as they normally do. Water use for health and safety reasons and to meet core business functions would also not be affected by the proposed regulations, nor would activities like food production. While we acknowledge that water suppliers facing competing demands are rightfully focused on funding to operate and upgrade their systems, such funding should not come at the expense of healthy and sustainable water sources. We urge DEP to work with water suppliers to find solutions to fully fund their operations and keep rates affordable while also protecting our waters. Water conservation coalitions and other support service providers can help water suppliers comply with these regulations at little additional cost.

In addition to the proposed regulations, DEP should go further in protecting our water sources to ensure resilience in the face of climate change and increased drought.

Allowing 24 months from renewal of registration statements to implement these regulations is too long a delay.

The regulations should take effect sooner than 24 months after issuance of the registration statement. This is especially important now that registration renewals have been extended until April 2023. We are likely to experience more extreme dry conditions over the next four years, which could be mitigated by these conservation measures if they are implemented sooner.

[13] American Rivers, America's Most Endangered Rivers (2021).

The currently-proposed exemption that allows certain registrants to implement their own outdoor water use restrictions in accordance with an accepted drought management plan should be further clarified to ensure adequate water conservation.

The draft regulations would allow qualifying registrants to obtain an exemption from the new water conservation conditions by calculating their own drought stages and establishing conservation conditions through an individual drought management plan. However, as currently written, the proposed regulations may result in conditions that are less protective of water resources than those established by proposed section 36.07(2)(c)(1) in accordance with Massachusetts Drought Management Plan.[14] To ensure adequate water conservation, registrants who qualify for this exemption should be required to propose restrictions that are at least as strict as those established by proposed section 36.07(2)(c)(1). Moreover, a provision should be added to the regulations requiring individual drought management plans to be based on best available local data and updated regularly. These additions would still allow registrants to develop drought management plans that account for their individual circumstances, while establishing a consistent baseline for restrictions on non-essential outdoor water use.

This is particularly important in the Charles River watershed, where water supplied by MWRA represents a significant amount of the registered water use by watershed communities. To qualify for the exemption, MWRA communities should be subject to restrictions at least at strict as those that would be established by proposed section 36.07(2)(c)(1).

There should be greater consistency between the conservation requirements for registrants and permittees.

Greater consistency in the water conservation requirements for registrants and permittees would help address equity concerns, ease regulatory oversight, and protect Massachusetts' waters. As a baseline, the currently-proposed restrictions on non-essential outdoor water use based on drought severity should also apply to permittees as part of the conditions under 310 CMR 36.28. While DEP currently has the authority to condition permits on the implementation of appropriate water conservation measures, the regulations do not currently specify any quantifiable restrictions for non-essential outdoor water use for permittees.[15] Extending the proposed regulations to permittees would establish a minimum conservation requirement for large water users during periods of drought without hindering DEP's ability to impose additional conservation requirements for individual permittees as necessary to protect water sources.

The proposed regulations should also allow DEP to impose additional appropriate water conservation measures on registrants beyond those required during times of drought in order to further promote water conservation and hold registrants to similar standards as permittees.

[14] *See proposed* 310 CMR 36.07(2)(c)(1); *id.* at 36.07(2)(c)(3); Mass. Drought Mgmt. Plan.
[15] *See* 310 CMR 36.28(3)(e).

Over time, registrations should be phased out and all large water users should be required to obtain permits for water withdrawals.

Here in Massachusetts, the practice of allocating permanent entitlements to water in the form of registrations was developed long ago, without any understanding of or accounting for climate change.[16] Today, we have a much deeper understanding of the threats posed by climate change now and in the future, including threats to our water sources.[17] Permanent allocation of set water volumes hinders the flexible water management strategies necessary to ensure protection of our water sources and statewide resilience to climate change.[18] The permit system, on the other hand, has enhanced both data collection and water management efforts. Phasing out current registrations and moving all users to a permitting system would provide DEP with the flexibility needed to protect our water sources for generations to come.

DEP should add water conservation requirements for withdrawals in severely stressed sub-basins, defined by DEP as groundwater and/or biological category 4 and 5.

Regulating registrations only during drought in these highly impacted areas is too late and will do little to improve their condition. It is illogical that registrations in these sub-basins will remain exempt from common sense standard water conservation requirements under DEP's proposed regulation under most circumstances.

Effective water conservation can help avoid drought and minimize its impacts.

Water conservation is one of the most important tools we have to avoid the worst impacts of drought. Conserving water helps ensure that there are sufficient amounts of water in our rivers, streams, and aquifers during times of decreased rainfall.[19] This in turn protects water quality and aquatic habitat, and makes us more resilient even as our water resources are placed under increased stress. Successful water conservation requires that water not be depleted from sources at unsustainable rates in general, and especially during periods of drought.[20]

Limiting non-essential outdoor water use, i.e., outdoor water use that is not required for health and safety reasons or to meet core business functions, is a basic and effective water conservation measure. The Drought Management Plan provides recommended non-essential outdoor water use restrictions based on drought level.[21] Although the Plan encourages

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[16] *See* DEP, Fact Sheet: Water Management Act – Registration and Permitting, https://www.mass.gov/service-details/fact-sheet-water-management-act-registration-and-permitting (last visited July 26, 2021).
[17] SHMCAP at 4-48.
[18] *Id.*
[19] EPA, Drought Resilience and Water Conservation: Technical Brief at 1 (2016), https://www.epa.gov/sites/default/files/2016-06/documents/epa_drought_technical_brief_may_2016.pdf.
[20] *See id.*
[21] Mass. Drought Mgmt. Plan at 41. Drought levels range from Level 1 "Mild Drought" to Level 4 "Emergency Drought," and are based on multiple factors such as precipitation, temperature,

appropriate conservation measures, there are currently few enforcement mechanisms to require large water suppliers, particularly those who hold registrations under the WMA, to impose reasonable water conservation measures during periods of drought.[22]

The Water Management Act requires conserving water to ensure sustainable use now and in the future.

The Water Management Act was enacted in 1985 for the purpose of protecting the Commonwealth's water supply in the face of growing demand.[23] Prior to the WMA's enactment, a study commissioned by the executive branch found that the Commonwealth's water supply policies in the 1970s were too accommodating to water demands and "if resource and environmental values are to be protected, a new response in the form of managing demand will be required."[24] A similar study commissioned by the Legislature called for a more comprehensive and centralized approach to water conservation[25] and proposed the adoption of the WMA.[26]

The purpose of the WMA, as stated under § 3, is to ensure sufficient quality and quantity of water for all citizens now and in the future through the "effective planning and management of water use and conservation in the Commonwealth."[27] The WMA requires DEP, after conferring with the Water Resources Management Advisory Committee[28] and receiving approval from the Water Resources Commission of EEA,[29] to "adopt such regulations as it deems necessary to carry out the purposes of the [WMA].... ensuring, where necessary, a balance among competing water withdrawals and uses."[30]

To ensure adequate supply for current and future water use, the WMA regulates water withdrawals across Massachusetts.[31] The WMA primarily addresses the water withdrawals of two types of large water users—registrants and permittees.[32] Registrants are those who have a renewable right to withdraw over 100,000 gallons per day (gpd) or over 9 million gallons within

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and streamflow. Drought level is declared by the Secretary of EEA based on a recommendation from the Drought Management Task Force, who reviews all pertinent drought data and considers current impacts.

[22] Mass. Drought Mgmt. Plan at 20-26.

[23] *See Fairhaven v. DEP*, 920 N.E.2d 33, 39 (Mass. 2010).

[24] Massachusetts Water Supply Policy Statement: Summary Report at 2 (1978).

[25] 1983 Senate Doc. No. 1826.

[26] *See Fairhaven*, 920 N.E.2d at 38.

[27] G. L. c. 21G, § 3.

[28] The Water Resources Management Advisory Committee collaborates with DEP to review regulations and permitting issues related to the WMA.

[29] The Water Resources Commission of EEA works on developing, coordinating, and managing Massachusetts' water policy and planning activities.

[30] G. L. c. 21G, § 3.

[31] DEP, Water Management Act Program, https://www.mass.gov/water-management-act-program (last visited July 2, 2021).

[32] *See* G. L. c. 21G.

any three-month timeframe.[33] This right is given to those users who were active between 1981-1985 and registered by 1988.[34] The amount of water registrants are currently entitled to is based on their extraction rates from the years of 1981-1985.[35] Since 1988, permits are generally required for users who were not 'grandfathered in' (i.e., do not qualify as registrants) and withdraw over 100,000 gpd or over 9 million gallons within any three-month timeframe.[36]

It is DEP's responsibility, as the agency assigned with carrying out the WMA, to impose appropriate water conservation conditions on registrants.

Under the WMA, "[DEP] may, by regulation, establish, for any particular water source, a lower threshold volume than that generally applicable in the commonwealth upon findings that such water source is in need of special protection."[37] Factors like over-consumption and drought necessitate such special protection for water sources.[38]

DEP already possesses the regulatory authority to impose water conservation conditions on permittees.[39] DEP also has the authority to impose conservation conditions on registrants during the registration renewal process, as confirmed in 2010 by the Supreme Judicial Court of Massachusetts.[40] In the *Fairhaven* case, the Court held that under § 3 of the WMA, DEP may impose conservation measures on *all* water users, stating that "[DEP] may, by regulation, impose conservation measures on registrants, provided that those measures do not infringe the registrants' entitlement to existing withdrawals."[41] Specifically, the Court found that seasonal withdrawal conditions, like limiting outdoor water use in the summer, would not deny registrants their entitlement and would not be an overreach of DEP's authority, given that the registrants could still withdraw their full entitled quantity of water over the course of the year.[42] The time has come for DEP to exercise this authority and protect our water sources.

Thank you for considering these comments.

Sincerely,

Heather Miller

Heather Miller, Esq.
General Counsel & Policy Director

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[33] DEP, Fact Sheet: Water Management Act – Registration and Permitting.
[34] *Id.*
[35] *Id.*
[36] *Id.*
[37] G. L. c. 21G, § 4.
[38] G. L. c. 21G, § 3.
[39] *See* 310 CMR 36.29.
[40] *Fairhaven*, 920 N.E.2d 38.
[41] *Id.* at 42.
[42] *Id.* at 40.