



MASSACHUSETTS Rivers Alliance

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Via Email and Mail

August 2, 2016

Matthew Beaton, Secretary
Executive Office for Energy and Environmental Affairs
100 Cambridge Street
Boston, MA 02114

Re: Severe Drought Conditions in Massachusetts

Dear Secretary Beaton:

As environmental groups concerned with the Commonwealth's fresh water resources for all their uses—drinking water, fisheries and wildlife, recreation, agriculture, and industrial and commercial uses, we are writing to ask for your leadership during this time of severe drought in northeast and central Massachusetts. At the outset we thank you for your quick decision to issue a drought watch for these regions, and a drought advisory for the Connecticut River and southeastern regions, based on the Drought Management Task Force's July 7th recommendations. As you know the U.S. Weather Service predicts little rain this summer and above normal temperatures through September for the state. Groundwater and reservoir levels, with the exception of the Quabbin, are precarious, and rivers are at near- and record low flows.

The cost of this drought will be tremendous to the economy, businesses and industry, and agriculture as water becomes scarcer. It will impact tourism; we are already seeing curtailment of water recreation, both boating and fishing. Several rivers are already at record low flows. The drought also provides ideal conditions for widespread outbreaks of cyanobacteria, or toxic blue-green algae, harmful to public health and wildlife, and has contributed to the gypsy moth outbreak. Because there is a lag time from rainfall to aquifer replenishment, even if it ended in the fall, the drought's impacts will be felt for many months.

Given the serious depletion of the Commonwealth's water resources, a proactive state-led approach is now critical. It is important to get out in front on water conservation and particularly lawn watering, a nonessential use, before public wells and streams run dry

and reservoirs fall below drought capacities. It is simply not possible to remedy drought consequences after the fact. We also recommend consideration of other steps to better address water depletion earlier and more consistently.

We ask you, as the steward of the Commonwealth's water resources, to:

- Institute a public service campaign on the importance of eliminating lawn watering for all communities in areas classified in drought watch or advisory.¹ Eliminating all but hand-held hose watering of gardens can reduce water use by upwards of 30 percent. Residents should learn that dormant lawns will come back. Reminding citizens not to waste water indoors—by taking shorter showers, running washing machines and dishwashers only when full, flushing toilets less often, and fixing leaks are also important conservation measures.
- Work with the Department of Agricultural Resources and the Extension Service agencies to communicate water saving strategies to agricultural users.
- Issue water withdrawal permits subject to the new Water Management Act regulations as expeditiously as possible. Only nine permits have been issued to public water suppliers by MassDEP in the past 18 months. The regulations, which now require effective water conservation requirements, including mandatory limits on outdoor watering, were adopted in 2014. Over 100 water permits that were scheduled to be renewed in 2015 and 2016 under the regulations have been “administratively continued” by MassDEP for several years. Many of these communities, which should now be subject to these reasonable conservation conditions, have far fewer water-saving requirements in their current permits.
- Work with MassDEP to solve the problem of its untimely posting of public water suppliers' self-reported residential water use for the previous year and require MassDEP to publish the 2015 RGPCD list immediately. This is very important because many current permits tie ratcheted-down watering restrictions to whether a town met the 65-residential gallons per capita per day (RGPCD) standard the previous year. Although water suppliers report RGPCD for the previous year in March, MassDEP has yet to report these figures. Issuing these figures so late in the summer negates the major purpose of the RGPCD performance standard established by the Massachusetts Water Resources Commission (WRC)—to reduce outdoor watering at the beginning of the summer. It is incumbent upon MassDEP to confirm RGPCD figures by May so that communities can inform residents and institute permit watering restrictions before two-thirds of the summer has elapsed.

¹ We believe that all residents, including registered water users and the MWRA communities, should be educated about this.

- Work with the WRC to revisit the Drought Management Plan framework and required actions at each drought stage. The current plan uses a statistical approach based on a backward look at drought indices reached for a consecutive number of months and those indices, such as the lowest 25th percentile for the period of record for groundwater and streamflow for three or more consecutive months, to trigger even the lowest drought stage, is not effective for our warming world. This year's lack of snow pack and winter drought were early signals of the crisis to come, yet the Drought Management Task Force met for the first time in July.

Also, current naming of drought stages implies an impending, not an existing drought, which is confusing (for example, we are used to winter storm watches and warnings and winter storm advisories). We should consider adopting the National Drought Center's categories instead ("abnormally dry" to "exceptional drought").

- Support efforts to encourage green infrastructure low impact development (GI) that captures stormwater on site and returns it to the ground to replenish the aquifers from which Massachusetts communities withdraw water. GI has multiple co-benefits including the ability to store flood flows, reduce stormwater pollution, reduce landscape irrigation water demand, and lessen heat island effects. We note that the recently-issued US EPA Region 1 municipal stormwater general permit will help increase the use of GI. Additionally, efforts to remove infiltration and inflow from sewer pipes should be redoubled. As much as 60 percent of the water treated at the Deer Island Treatment Plant and other regional wastewater plants is clean groundwater and rain that has leaked or been directed into the pipes, effectively dewatering large areas of eastern Massachusetts.
- Convene a work group to explore making private (non-agricultural) irrigation wells subject to the same outdoor watering restrictions as public water supply wells. Most of these wells are withdrawing from the same aquifers as the municipalities, impacting the water supply and exacerbating the impacts of withdrawals on low streamflows. Unrestricted use of private irrigation wells in the face of town watering restrictions also raises an issue of fundamental fairness of this common shared resource.
- Hire a new EOEEA Director of Water Policy to fill the vacancy left by the director's recent departure. This important person helps to develop and to implement statewide water policy.

A representative group from our organizations would like to meet with you at your earliest convenience and in advance of the next Drought Management Task Force meeting on August 11, 2016 to discuss these recommendations. We stand ready to

assist you and look forward to working with you to manage this essential resource for the health, safety, economic vitality and environmental sustainability of our Commonwealth.

Sincerely,

Berkshire Environmental Action Team (B.E.A.T.)
Blackstone Headwaters Coalition
Blackstone River Coalition
Blackstone River Watershed Association
Charles River Conservancy
Charles River Watershed Association
Charlestown Waterfront Coalition, Steering Committee
Clean Water Action
Connecticut River Watershed Council
Conservation Law Foundation
Eel River Watershed Association, Ltd.
Environmental League of Massachusetts
Essex Country Greenbelt Association
Friends of the Blue Hills
Greater Boston Chapter Trout Unlimited
Green Newton
Hoosic River Revival
Hoosic River Watershed Association
Hop Brook Protection Association
Ipswich River Watershed Association
Jones River Watershed Association
Lowell Parks and Conservation Trust
MA/RI Council Trout Unlimited
Mass Audubon
Massachusetts Association of Conservation Commissions
Massachusetts Land Trust Coalition
Massachusetts Rivers Alliance
Massachusetts Society of Municipal Conservation Professionals
Massachusetts Watershed Coalition
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 Sudbury, Assabet and Concord Rivers
Parker River Clean Water Association
Save the Bay - Narragansett Bay Riverkeeper
Sea Run Brook Trout Coalition

Sudbury Valley Trustees
Sudbury, Assabet and Concord Wild and Scenic River Stewardship Council
Ten Mile River Watershed Council
The Trustees
Water Supply Citizens Advisory Committee
Weir River Watershed Association
Westfield River Watershed Association

cc: (Via email)
Hon. Charlie Baker
Hon. Karyn Polito
Joel Barrera, Deputy Chief of Staff
Kurt Schwartz, Director, Massachusetts Emergency Management Agency
Ned Bartlett, Undersecretary, Executive Office of Energy and Environmental
Affairs
Vandana Rao, EOOEA Acting Director of Water Policy & Chair, Water Resources
Advisory Committee
Martin Suuberg, Commissioner, Department of Environmental Protection
Becky Weidman, MassDEP & Chair, Water Management Resources Advisory
Committee
Leo P. Roy, Commissioner, Department of Conservation and Recreation
George Peterson, Jr., Commissioner, Department of Fish and Game
John Lebeaux, Commissioner, Department of Agricultural Resources
Hon. Anne Gobi, Co-chair, Joint Committee on Environment, Natural Resources,
and Agriculture
Hon. Paul Schmid, Co-chair, Joint Committee on Environment, Natural
Resources, and Agriculture

A snapshot of current drought conditions on the Commonwealth's rivers and streams



The **Nashua River** at Macpherson Road in Ayer. Photo courtesy of the Nashua River Watershed Association (August 1, 2016).



The **Parker River** and its tributaries are suffering from the drought. Penn Brook in Georgetown, almost completely dry, is on the left. Above right are shells of Blandings Turtles, a state-listed threatened species. The dry streams have left these turtles exposed and vulnerable to predators; shells were collected by volunteers at the Parker River Clean Water Association. Photos courtesy of the Massachusetts Rivers Alliance (July 27, 2016).



Nashoba Brook, a tributary of the **Assabet River**, in West Concord. Photo courtesy of OARS (July 19, 2016).



With little to no rain in sight, the **Weir River** (above) in Hingham continues to reach record low flows. Photo courtesy of North and South Rivers Watershed Association (July 21, 2016).



The fisherman who took this photo in West Concord's Nashoba Brook (see above) told OARS staff that without enough water in the stream, this fish had "nowhere to go." Photo courtesy of OARS (July 19, 2016).



On July 26, there was no water flowing over the Gavins Pond dam's spillway, in Foxborough. When there is no flow over the dam, Billings Brook, just below (at right, in a 2014 photo) dries up, as do a series of three ponds fed by this brook. This normally does not occur until late August or early September, if it happens at all. This is in the **Taunton River** watershed. Photos courtesy of Paul Lauenstein (photo on left, July 26, 2016, photo on right, late summer 2014).



The **Ipswich River**, in Ipswich, below a dam. Photo courtesy of Environmental League of Massachusetts (July 31, 2016).