Massachusetts Drought Management Task Force – Meeting Summary April 8, 2025, 10:00 am – 12:00 pm conducted remotely via Zoom

Attendees, Drought Management Task Force Members:

Vandana Rao, Co-Chair, Executive Office of Energy and Environmental Affairs (EEA)

Benjamin Hiltunen, Co-Chair, Massachusetts Emergency Management Agency (MEMA)

Bring Loving, United States Geological Survey (USGS)

Duane LeVangie, Department of Environmental Protection (MassDEP), Water Management Act

Tom Maguire, MassDEP, Wetlands

Kate Bentsen, Department of Fish and Game (DFG)

Todd Melanson, Massachusetts Water Works Association (MWWA)

Lydia Olson, Massachusetts Rivers Alliance (MRA)

Viki Zoltay, Department of Conservation and Recreation (DCR), Office of Water Resources (OWR)

Dave Celino, DCR Fire

Anne Carroll, DCR OWR

Dalene LaPointe, Department of Public Health

Matthew Walsh, Massachusetts Water Resources Authority (MWRA)

Joe Dellicarpini, NOAA – National Weather Service

Abe Farley, Northeast River Forecasting Center

John Scannell, DCR

Other Attendees:

Aisha Revolus	EEA	Greg Krom	Town of Topsfield
Allyssa Lane	Dedham-Westwood Water	Heather Stayton	City of Westfield
	District	James Boliver	Uxbridge Water Division
Anthony Comeau	Town of Natick	Jason Duff	DCR OWR
Brad Perron	SBWSB	Joe Holbeche	DMF
Brittany Segill	MassDEP	Jon Gervais	City of Worcester
Bruce Broisman	DPH	Jon Davine	DFS
Caitlin LeDuc	Town of Natick	Karyn Lothrop	DCR Fire
Carys Lustig	Town of Needham	Michael Souza	MEMA
Caulin Lauzon	MWRA	Patrick Cunningham	Worcester DPW&P Water
Christine Hatch	UMass Amherst	Rob Faley	Town of Chatham
Deanna Marks	NWS	Robert Worthley	Town of Foxborough
Elise Tarnauskas	Springfield Water and Sewer	Ron Strohsahl	Oxbow Associates, Inc.
	Commission	Sam Banas	USGS
Elizabeth McCann	MassDEP	Sara Cohen	DCR OWR
Emilia Dick Fiora del	CRWA	Shavaun Callahan	City of Gloucester
Fabro	D 0D 011/D	Toni Stewart	DCR OWR
Erin Graham	DCR OWR	Vanessa Curran	DCR OWR
Giovanna Recinos	City of Salem	William Chapman	Edgartown Water Department

1. Introductions: EEA, MEMA & Announcements

Rao called the meeting to order at 10:02 am, asked everybody to enter their names and affiliation in the chat, and reminded attendees that the meeting would be recorded for the purposes of meeting notes. She introduced herself and her co-chair from MEMA, Ben Hiltunen. Hiltunen welcomed attendees and thanked them for their time on the DTMF.

2. Approval of March 6, 2024 DMTF Meeting Notes

Rao asked for a motion to approve the March 6 meeting notes. Zoltay made the motion to approve and Melanson seconded the motion. The vote to approve was unanimous of those present.

3. Interagency Drought Missions Group

The mission group has met a couple of times since the last meeting and continued to discuss drought preparedness and communication for the spring season. Rao also noted that the Drought Resiliency and Water Efficiency grant program has awarded 13 grants to a variety of organizations and project types for a total of \$500,000. She hopes that the grant program will continue to be funded in future years.

4. Updates on Current Conditions and Impacts

Presentations for the updates below can be found on the mass.gov website here; a summary of each presentation is below.

Weather & Forecast: Joe Dellicarpini - National Weather Service

In March, the state experienced above normal temperatures and near normal precipitation. Precipitation was generally slightly below to slightly above normal (4-6 inches) for March. Temperatures were 3 to 5 degrees above normal on average. 3-month and 6-month departures continue to show longer term dryness with 6-month PON ranging from 40 to 80 percent of normal. Forecasts show 1-2 inches of new precipitation possible through early next week with the best chances across western MA. There is no signal for above or below normal precipitation in the extended outlooks beyond 10 days.

Hydrologic: Bring Loving- USGS

Rainfall and snowmelt events in March generally improved streamflow conditions compared to February. "Base-flow" conditions (streamflow when there isn't runoff) were still below normal at most sites but improved during March relative to daily normal flows. Flows are still below normal on the Cape and at several streams downstream of filling reservoirs. Groundwater-level conditions in March varied greatly from site to site but were generally normal to above normal in the western half of Massachusetts and normal to below normal in the eastern half. They also generally improved from February in the west and deteriorated in the east.

Hydrologic: Abe Farley, Northeast River Forecasting Center

There has been some improvement to precipitation departures in the near term, but departures are still slightly below normal for parts of MA in the past 30 days. Snow is essentially gone throughout the state. The headwaters of Connecticut and Merrimack still have snow; however, modeled snow depth is generally a bit less than normal. The key messages are: 1) recent accumulated precipitation departures are trending closer to normal, and 2) expected wet/unsettled weather late this week and into the weekend will likely cause some river rises.

Water Supply: Duane LeVangie – MassDEP

No concerns have been expressed by water suppliers. MassDEP has been reaching out to suppliers to remind them to review their registrations and permits to make sure they are in compliance. The first watering restrictions map will be published soon.

Water Supply: Matthew Walsh – MWRA

The Quabbin was below normal for the last couple of months but is back in normal operations as of April 1. There was no snowpack in the watershed this year so there is no snowmelt contributing to the reservoir. Once the transfers start again it will likely cause levels to go back down below normal. Walsh reminded that the below normal threshold is according to MWRA's drought plan, but it does not mean there are any concerns over the supply. Since the last meeting the reservoir has increased by approximately 1.8 feet or 13 billion gallons. The Wachussett was impacted by the normal transfers being stopped during the recent dam project but is back to normal now. Sudbury and Foss are back within the normal operating bands.

Water Supply: Todd Melanson – MWWA

MWWA held a roundtable for members on 3/26 to discuss how they are preparing for the watering season. Many members communicated concerns over messaging surrounding water use restrictions during the non-watering season. They also expressed concerns over water use restrictions for suppliers that have no supply issues, leading to concerns over the public not trusting the drought declaration process. The suppliers are concerned that residents will not follow restrictions when they are needed. A concern over lost revenue was also raised, as well as residents being unhappy that they are being told to restrict their water use when rates are already being raised to cover new expenses related to PFAS and lead/copper rules. Melanson reviewed several updates from suppliers that were given during the roundtable including Weston, Monson, Springfield, Turner Falls, Edgartown, Dedham-Westwood, Franklin, Weir River Water System, Topsfield, Hopkinton, Worcester, and Billerica.

Rao noted that Melanson raised several good points and thanked MWWA for hosting that roundtable. She explained that residents tend to think droughts are over after one or a few precipitation events, so messaging to help explain the nuances of drought is important and she welcomes feedback on how to best do that. EEA has been trying to direct messaging during the winter months toward indoor water conservation because it is acknowledged that people are not using water outdoors. Carroll suggested a coordinated meeting with MWWA to discuss this issue.

Melanson asked why the East Weymouth and Hobbs Brook stream gages were both reportedly below normal when the surrounding gages are normal. Maguire commented that Hobbs Brook may be affected by the Cambridge Reservoir and that East Weymouth may be affected by the fish ladder. Loving confirmed that both of these sites represent flow that is below structures that are holding back water and added the following links for additional information: Whitmans Pond Fish Ladder at East Weymouth, MA - USGS Water Data for the Nation and Hobbs BK Below Cambridge Res NR Kendall Green, MA - USGS Water Data for the Nation

A suggestion was made that it may be time normal conditions are reevaluated. Rao explained that with the current methodology "below normal" means anything below the 30th percentile, which takes into consideration recent conditions as well as the full period of record for a particular site. The percentiles are technically changing as droughts become more frequent and recent data gets added to the period of record.

Private Water Supply: Alex Taylor- DPU

Not present at meeting. Rao summarized updates that were sent to her by email. DPU had no significant updates since last meeting. All private water supply systems have some level of restrictions in place that have continued following the drought over the winter.

Wetlands: Tom Maguire- DEP

No reports from conservation commissions recently.

Fish and Game: Kate Bentsen- DER

Bentsen described observations of vernal pool sites that had low water levels in March that now have higher levels in April. She reminded the Task Force of the importance of vernal pools for amphibian life cycles and how this is another factor to consider when discussing drought conditions. She did not have an update from DMF on herring migrations but reminded that it is herring migration season.

Massachusetts Rivers Alliance: Lydia Olson

There were brief reports from a few member organizations. One report described that brush fires were starting early in the Merrimack Valley around Lowell. There were also multiple reports from the Taunton River watershed that flows are lower than they should be this time of year. There is hope that the conditions will improve with the recent precipitation.

Water Supply Citizens Advisory Committee: Moussa Siri

Not present at meeting.

Agricultural: Michael Botelho-DAR

Not present at meeting.

Fire Danger: Dave Celino

Celino reiterated the early start to the fire season in the Merrimack Valley. Year to date there have been about 341 wildfires across the state. Effects from drought and large fuels from ongoing drought conditions are being seen. January saw over 40 fires, which was well above normal. February was slow, but March numbers are showing above normal numbers as well. Most of the fires have been small. Prescribed fire season has started.

Rao asked about the recent Cape fires. Celino explained that the surface fuel got very dry on the Cape over the winter which contributed to the large fires in March. There are no major safety issues out there yet, but it is something they are keeping their eyes on.

Engineering: John Scannell- DCR

No updates to report.

Public Health: Dalene LaPointe

No updates to report.

5. Presentation of Index Severity Levels as per MA DMP

Zoltay briefly reviewed the DMP indices, how severity levels are calculated, and the drought Regions. She reviewed recent hydrologic history that led to current conditions. The precipitation deficit causing the

current drought conditions started in mid-August and continually got worse through mid-October, leading to record low streamflows across much of the state. There was some precipitation toward the end of November which brought temporary relief. December brought normal to above-normal precipitation which helped improve conditions, but January saw below normal precipitation which brought streamflow and groundwater levels down. February had mostly normal precipitation, but there were continued impacts to streamflow and groundwater. March had normal precipitation which brought improvements to streamflow and groundwater except in the Cape and Islands. The most recent U.S. Drought Monitor is showing improvements in March compared to February.

The Standardized Precipitation Index (SPI) is mostly normal across the state, with even a few above normal gages. Precipitation deficits since mid-August are between 4-12 inches. The 6-month lookback was used because the drought has been ongoing for at least six months in all Regions. Streamflow is mostly normal or above normal across the state, with a few dry areas, especially the Cape which is at index severity level 3. Ice conditions are no longer impacting readings. Groundwater is highly variable across the state, ranging from above normal to much below normal. The western side of the state is mostly normal. Groundwater in the Southeast and Northeast is at level 1, while the Cape and Islands are both at level 2. The Lakes and Impoundments index is also variable, ranging from level 1 to level 3 depending on the Region.

6. Discussion of Drought Level Recommendations for each Region

Cape Cod and Islands- All indices are still at varied severity levels. Groundwater is trending down on the Cape and is at severity level 2 for both Regions. The staff recommendation was to hold both Regions at Level 2 – Significant Drought. There was unanimous support among Task Force members to hold the region at Drought Level 2.

Northeast- Conditions have improved a lot in this Region. Streamflow is back to normal, but the other indices are still showing various severity levels. The staff recommendation was to move to Level 2 – Significant Drought. There was unanimous support among Task Force members to move to Level 2.

Western and Southeast- Conditions have improved in both Regions, although drought conditions are still present according to the indices. The staff recommendation was moving both Regions to Level 1 – Mild Drought. There was discussion on the 6-month lookback period and how that might impact the public perception of drought declarations in Regions that appear wet currently. It was noted that once warmer temperatures set in, ET effects will be more evident when combined with the long-term precipitation deficits. After discussion, there was unanimous support among Task Force members to move to Level 1.

Connecticut River Valley (CTRV) and Central- Both Regions have seen improvement, and the staff recommendation was to consider moving to either Level 1 – Mild Drought or Level 2 – Significant Drought. There was a recommendation to keep these Regions at Level 2 to avoid jumping too many Levels. There was also discussion on the 6-month precipitation lookback and how it compares to the 1 and 2-month lookback periods. The groundwater improvements were noted as having seen substantial recovery. For the CTRV region a few Task Force members suggested a Level 2. For the Central Region, the task force also discussed whether this warranted a jump of two versus one drought levels within the span of one month. After some discussion, all members agreed to recommend moving this region by two levels, to Level 1 Drought.

Summary of Recommendations:

Northeast: Level 2 – Significant Drought

Western, CTRV, Central, and Southeast: Level 1 – Mild Drought

<u>Cape Cod and Islands</u>: Level 2 – Significant Drought

7. Recommendations for Drought Level Response Actions

Rao asked for any suggestions for items to add to the Press Release. There was a suggestion to include messaging that conditions are improving overall, except in the Cape and Islands Regions. Another suggestion was to include messaging that expectations for fire season are still unclear, but hopefully conditions will not be as bad as they were in the fall.

8. Next Steps

The recommendations will be brought to the Secretary for a decision on an updated declaration. The Task Force will meet again in May.

Meeting Ended: The meeting adjourned at 11:55 am.