

# Massachusetts Drought Management Task Force – Meeting Summary

March 6, 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)  
Gardner Bent, 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)  
Jennifer Pederson, Massachusetts Water Works Association (MWWA)  
Lydia Olson, Massachusetts Rivers Alliance (MRA)  
Viki Zoltay, Department of Conservation and Recreation (DCR), Office of Water Resources (OWR)  
Karyn Lothrop, DCR Fire  
John Gregoire, Massachusetts Water Resources Authority (MWRA)  
Adam Kautza, DFG, Mass Wildlife  
Michael Botelho, Department of Agricultural Resources (DAR)  
Moussa Siri, Water Supply Citizens Advisory  
Robert Megnia, NOAA – National Weather Service

## Other Attendees:

Aaron Miller	Town of Wellesley	Jaclyn Aiston	Easthampton Water Dept
Aisha Revulus	EEA	Jason Duff	DCR OWR
Alex Taylor	DPU	Marcos Pareto	DPU
Andrew DeVries	Town of Westborough	Melissa Simoncini	Town of Concord
Britt Westergard	NWS	Michael Souza	MEMA
Brittany Segill	MassDEP	Moussa Siri	WSCAC
Bruce Broisman	DPH	Neal Strauss	NERFC
Dalene LaPointe	DPH	Purvi Patel	EEA
Deanna Marks	NWS Albany	Ryan Smith	Charles River Watershed Association
Dr. Christine Hatch	UMass Amherst	Sara Cohen	DCR OWR
Elizabeth McCann	MassDEP	Sylvia Reeves	NOAA
Eric Hooper	Town of Sharon		Sherborn Groundwater Protection
Erin Graham	DCR OWR	Thomas Trainor	Committee
Francesco		Todd Melanson	MWWA
Attacalite	DCR OWR	Vanessa Curran	DCR OWR
Greg Krom	Topsfield Water Dept		

## 1. Introductions: EEA, MEMA & Announcements

Rao called the meeting to order at 10:03 am and asked everybody to enter their names and affiliation to the chat. She introduced herself and her co-chair from MEMA, Ben Hiltunen. Hiltunen thanked everybody for their support of the Task Force. Hiltunen noted that MEMA recently added links regarding wildfires to Web EOC, a platform that MEMA uses to maintain situational awareness to better assist municipalities.

Rao acknowledged the changes happening with the federal agencies that are key Task Force partners. She expressed her gratitude for them continuing this important partnership despite the current challenges.

## **2. Approval of February 6, 2024 DMTF Meeting Notes**

Rao asked for a motion to approve the February 6 meeting notes. She explained there were some minor changes that were requested such as typos and changes to names of affiliations, but nothing significant. Pederson made the motion to approve and LeVangie 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 has focused on drought preparedness, focusing on the potential future need to provide more outreach to various water-using sectors. MEMA is coordinating with DFS and Chief Celino to evaluate the fire needs and what the water resource-related needs are for fire control. Hiltunen explained MEMA held a meeting with MEMA-West (Worcester County and westward) and are beginning to conduct outreach to local partners in general. MDAR is also assessing what types of outreach they will have to do if the drought persists into the growing season. DPH has started looking at outreach materials that they already have for private well owners and will modify as necessary.

## **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: Rob Megnia - National Weather Service**

February had slightly below normal temperatures and near normal precipitation. Precipitation was generally slightly below to slightly above normal (2-4 inches) for January. Temperatures were 1 to 3 degrees below normal on average. The 3-month and 6-month departures are starting to show signs of long-term dryness with 6 month percent of normal (PON) ranging from 40 to 80 percent of normal across The Commonwealth. The 3-month departures are only slightly below normal across most of eastern and southeastern MA. No substantial precipitation is forecasted over the next 7 days. Odds favor above normal temperatures and above normal precipitation through the end of March.

Melanson asked if precipitation was calculated by converting snow into rainfall. Megnia explained that all precipitation is converted into liquid precipitation, which can be somewhat misleading this time of year because of sublimation and how much water actually absorbs into the ground. Souza commented that the frozen ground this time of year makes it harder for water to seep into the ground.

### **Hydrologic: Gardner Bent- USGS**

The presence of ice in the stream is preventing computations of streamflow at many gages. For gages with little to no ice, average February streamflow conditions were mainly below to much below normal across the state, except a few locations in the southeast region were normal. For those same gages, streamflows at the end of February were slightly higher than at the beginning of the month with the rainfall event at the end of the month. Groundwater-level conditions during February were mainly below or much below normal across the state, and similar to January.

Rao noted the differences between the percentiles used by USGS and the state's DMP. The USGS considers 25<sup>th</sup>-75<sup>th</sup> percentile as normal, whereas the state's DMP has a cutoff of the 30<sup>th</sup> percentile. Pederson asked if the data was as of yesterday. Bent responded that the data was pulled on Monday, so there would be some differences if the data from today was shown.

Melanson asked if the groundwater calculations take into consideration the frost in the top layers of soil and how that impacts recharge. Bent replied that we likely are seeing less recharge due to the frost, but it is also likely variable based on the location and depth of wells.

Rao added that she had forgotten to mention an important new outreach product, a short video that could also be used as a reel on social media that provides tips to residents on how they can help conserve water during drought, focused on indoor water use because of the time of year of the current drought.

Links to the video on various platforms were provided:

Instagram- <https://www.instagram.com/share/BAaaoPLFI2>

X- <https://x.com/masseea/status/1895131114664063311?s=46>

LinkedIn- [https://www.linkedin.com/posts/masseea\\_even-with-the-recent-rain-and-snow-were-activity-7300894146322485249-Hwzx?utm\\_source=share&utm\\_medium=member\\_desktop&rcm=ACoAACGI7zwBRRko7fU6gGcKkzPjK0XUX\\_dqUeQ](https://www.linkedin.com/posts/masseea_even-with-the-recent-rain-and-snow-were-activity-7300894146322485249-Hwzx?utm_source=share&utm_medium=member_desktop&rcm=ACoAACGI7zwBRRko7fU6gGcKkzPjK0XUX_dqUeQ)

**Hydrologic: Neal Strauss, Northeast River Forecasting Center**

In February, river flows increased across most of the Commonwealth with the exception of decreasing flows noted in the Connecticut River Valley region. Streamflows were ranging from below normal to near normal. Snow water and snow depth values were below normal across most of the state at the end of February except closer to normal across far northwestern Massachusetts. The weather pattern remains active but progressive over the next 10 days. Increasing streamflows due to combined snowmelt and precipitation runoff near term with the most notable rises across northwestern portions of the state. More gradual melt runoff is in the forecast for the longer term. No additional significant precipitation is currently in the forecast until perhaps March 13-14. Thus, after a brief increase in streamflows, nearly steady or decreasing streamflows are forecast to prevail approaching mid-March.

**Water Supply: Duane LeVangie – MassDEP**

LeVangie stated that there was not much to report. Public Water Suppliers are not reporting any problems.

**Water Supply: John Gregoire – MWRA**

Quabbin is 83.7% full, which is technically below normal. The last time the reservoir was that low was in January of 2017. However, the reservoir is not low enough to trigger actions in their DMP. The Wachusett Reservoir is higher in elevation in normal for this time of year because water was transferred from Quabbin in response to the Quinapoxet dam removal and because of the drought. Precipitation across the watersheds was below the 5-year, 10-year, and long-term averages in February. Foss and Sudbury are in good shape and with the recent rains has allowed for releases into the Sudbury River. The Quinapoxet Dam has been removed and the upper and lower channels restored. Some bank stabilization is still needed which will be done in March when the ground has thawed. Turbidity is being monitored since the dam removal and there have not been any major issues.

**Water Supply: Jen Pederson– MWWA**

No reports of concerns from members. Melanson added that Billerica is not experiencing any supply issues. Simoncini also noted that Concord is not currently experiencing any drought impacts. Lastly, Aiston added that Easthampton is not experiencing issues either.

**Private Water Supply: Alex Taylor- DPU**

Aquarion has the following restrictions in place: Oxford has a ban on all non-essential outdoor water use; Dover is limiting outdoor water use to 9am-5pm; Pine Hill is limiting watering to two days per week between 7pm and 7am; the Ponds of Plymouth are limiting watering to one day per week between 5pm and 9am; and Sheffield has limited watering to one day per week between 5pm and 9am.

**Wetlands: Tom Maguire- DEP**

Nothing to report. Agencies have not been contacting local conservation commissions because all regions are clearly in drought and therefore there are no challenges to riverfront area designations happening.

**Fish and Game: Kate Bentsen- DER**

Bentsen reiterated that several sites have been impacted by ice which is impacting data collection. She showed a photo from a restoration site on Nantucket which shows low water levels. Bentsen explained that they will hopefully have more data to present next month. She also reminded that as the ice starts to melt it is a critical time for fish and amphibian migrations. Kautza added that DER will have more people in the field now that the ice has started melting and so might have more updates by the next Task Force meeting.

**Massachusetts Rivers Alliance: Lydia Olson**

Olson provided a verbal report from OARS that there were reports of water discoloration at taps in their watershed caused by excessive organic material in water that they believe is caused by drought conditions. Melanson commented that discoloration in treated water is not related to drought but caused by normal sedimentation in the system. He explained that it can also sometimes be caused by sedimentation in water heaters if they are not flushed regularly.

**Water Supply Citizens Advisory Committee: Moussa Siri**

Siri noted that the water conservation subcommittee met last week. They discussed current efficiency standards for water using fixtures and were concerned that the plumbing code still only requires 1.6 gallons per flush (gpf) for toilets. Rao responded that there was a statute requiring toilets sold in the state to be rated for 1.28 gpf. A follow-up communication with the plumbing board after the meeting confirmed that the 1.28 gpf requirement is incorporated into the energy code (225 CMR 9: Appliance energy-efficiency standards, testing and certification program) and therefore is required by statute. They also confirmed that the board will be incorporating the 1.28 gpf standard into the plumbing code during the next round of revisions so that the two documents match.

Other topics the subcommittee discussed included using water rates to help drive efficiency, the drought bill, how PFAS issues will impact pressure on the MWRA system, and generally what more actions the Task Force can take to encourage water conservation.

**Agricultural: Michael Botelho- DAR**

No updates to report.

**Fire Danger:** Karyn Lothrop

No updates to report.

**Engineering:** John Scannell- DCR

Not present at meeting.

**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 have been continued impacts to streamflow and groundwater. The most recent U.S. Drought Monitor is showing very similar drought conditions at the end of February as the end of January.

The Standardized Precipitation Index (SPI) is mostly normal across the state, with some below normal in the Northeast, Cape, and Islands. Precipitation deficits since August are between 5-13 inches. The 6-month lookback was used because the drought has been ongoing for at least six months. Impacts are also being seen in the 9-month lookback for precipitation. Streamflow is mostly below normal across the state, with all Regions at level 3 except the Cape which is at level 2, and the Southeast which is at level 1. Groundwater is highly variable across the state, ranging from above normal in the northeast corner to much below normal in other areas. Most of the state is seeing below normal levels, ranging from level 1 to level 3. The Lakes and Impoundments index is also variable, ranging from systems at 100% full to systems that are much below normal.

Melanson commented that their stream gage is showing a steady increase since mid-February and asked how the streamflow index shown here is calculated. Zoltay responded that the value per region is a median, which is calculated using daily data from individual gauges over the month of February and taking the median of that dataset. Melanson also asked how many streamflow gages are missing data due to ice and how that impacts averages. Rao responded that the gages that are iced are not included in the analysis, but staff feel confident that the remaining gages are representative of the conditions. Maguire added that precipitation drives streamflow, so there is no reason to expect the streamflow would be normal or above normal with such low precipitation.

## **6. Discussion of Drought Level Recommendations for each Region**

Central and Northeast- Conditions have worsened overall in these Regions for most indices. The staff recommendation is to hold both Regions at Level 3- Critical Drought. There was unanimous agreement to keep at Level 3- Critical Drought.

Southeast, Cape Cod, and Islands- Conditions have remained mostly consistent since last month. The staff recommendation is to keep these Regions at Level 2- Significant Drought. There was unanimous agreement to keep at Level 2- Significant Drought.

Western- Conditions have worsened due to lack of precipitation in this Region in February. The staff recommendation is to move the Western Region from Level 1- Mild Drought to Level 2- Significant Drought. There was unanimous agreement to move the Western Region to Level 2- Significant Drought.

Connecticut River Valley (CTRV)- Conditions have worsened due to missing most of the precipitation that other regions experienced in February. The staff recommendation is to move the CTRV back to Level 3- Critical Drought. There was unanimous agreement to move the CTRV Region to Level 3- Critical Drought.

**Summary of Recommendations:**

Central, Northeast, CTRV – Level 3- Critical Drought

Western – Level 2- Significant Drought

Southeast, Cape Cod, Islands– Level 2- Significant Drought

**7. Recommendations for Drought Level Response Actions**

Rao asked for any suggestions for items to add to the Press Release. LeVangie recommended making it clear that the declaration is based on conditions for the month of February and does not consider early March. Zoltay suggested adding a reminder that occasional rainfall might temporarily increase streamflow but does not end a drought. Rao requested feedback on the drought alert. Gregoire said they would post the new drought video to MWRA's website.

**8. Next Steps**

The recommendations will be brought to the Secretary for a decision on an updated declaration. The Task Force will likely meet again the week of April 7<sup>th</sup>. Siri mentioned WSCAC has a meeting on April 8<sup>th</sup>.

**Meeting Ended:** The meeting adjourned at 11:51 am.