

# Massachusetts Drought Management Task Force – Meeting Summary

January 7, 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)  
Andrew Loconto, National Weather Service (NWS)  
Brian Loving, United States Geological Survey (USGS)  
Duane LeVangie, Department of Environmental Protection (MassDEP), Water Management Act  
Tom Maguire, MassDEP, Wetlands  
Irena Draksic, Department of Public Health (DPH)  
Anne Carroll, Department of Conservation & Recreation (DCR), Office of Water Resources (OWR)  
Viki Zoltay, DCR OWR  
Kate Bentsen, Department of Fish and Game (DFG)  
Jennifer Pederson, Massachusetts Water Works Association (MWWA)  
Lydia Olson, Massachusetts Rivers Alliance (MRA)  
Dave Celino, DCR Fire  
John Gregoire, Massachusetts Water Resources Authority (MWRA)

## Other Attendees:

Abe Farley	NOAA	Francesco Attaccalite	DCR OWR
Aisha Revolus	EEA	Jason Duff	DCR OWR
Alex Taylor	DPU	Joe Holbeche	DMF
	State of CT - Office of Policy and Management	John Scannell	DCR
Becca Dahl		Karyn Lothrop	DCR Fire
Britt Westergard	NWS Albany	Marcos Pareto	DPU
Bruce Broisman	DPH	Michael Souza	MEMA
Caitlin Spence	EEA	Michael Botelho	MDAR
Christine Hatch	UMass Amherst	Nancy Cohen	New England Public Radio
Dalene LaPointe	DPH	Purvi Patel	EEA
Deanna Marks	NWS Albany	Sara Cohen	DCR OWR
Elizabeth McCann	MassDEP	Toni Stewart	DCR OWR
Emilia Fiora	CRWA	Vanessa Curran	DCR OWR
Erin Graham	DCR OWR		

## 1. Introductions: EEA, MEMA & Announcements

Rao called the meeting to order at 10:04 am. She introduced herself and her co-chair from MEMA, Ben Hiltunen, and thanked him and MEMA for all the operational support during the recent drought periods. She explained that recent precipitation events have improved drought conditions, which would be seen in the upcoming presentations. Rao mentioned that the drought mission group had met in between meetings and continued discussions on what type of outreach would be most effective for droughts this time of year. Staff are also working with a marketing team help develop some new outreach materials for winter droughts. There were no other updates or announcements.

## **2. Approval of December 5, 2024 DMTF Meeting Notes**

Rao asked for a motion to approve the December 5 meeting notes. Pederson made the motion to approve and Bentsen seconded the motion. The vote to approve was unanimous of those present.

## **3. 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: Andrew Loconto - National Weather Service**

December had near normal temperatures and precipitation. Precipitation was within an inch of normal for most of the Commonwealth, although slightly above normal (1-2 inches) in part of southeast Massachusetts. Temperatures were within a degree of normal. 3-month and 6-month precipitation departures have shown some recovery with most areas 50-75% of normal and some areas closer to normal (75-100%). The outlook is showing dry and cold this week, with the potential for a coastal storm to bring up to 0.50" precipitation (snow) next weekend but uncertainty is high. Odds favor below average temperatures and precipitation through the middle of the month. With a possible trend toward a wetter pattern for late January but no clear signal for above or below normal temperatures.

### **Hydrologic: Brian Loving - USGS**

The precipitation events of Dec. 10-11 and 28-31 greatly improved streamflow conditions relative to seasonal norms, and late December conditions were much better than late November across the Commonwealth. Streamflow at most stations was normal by the end of December, except for a few stations in the Central and Northeast Regions that were below normal (10-25th percentiles). Groundwater conditions also improved from November to December in all drought regions except the Cape and Islands, where below normal rainfall caused continued declines in water levels at most wells.

### **Hydrologic: Abe Farley, Northeast River Forecasting Center**

Presently, chances for significant precipitation in the 10 day ensemble window are minimal. However, there is quite a bit of uncertainty into this weekend. River ice development with below freezing temperatures is expected to continue in the short term. Streamflows are expected to continue to remain stable or recede without much in the way of snowmelt or liquid precipitation in the ensemble forecast period.

### **Water Supply: Duane LeVangie – MassDEP**

Two water suppliers requested emergency declarations from DEP a couple of months ago, Ipswich and Attleboro. Conditions have improved for both. Ipswich has lifted its emergency declaration. Attleboro is still under theirs, but conditions are improving. Rao asked for clarification on how communities get out of an emergency declaration. LeVangie explained they can only do a 6 month maximum declaration, so that is the typical timeline, but if conditions improve the communities can request for it to be lifted earlier. Specific requirements depend on unique circumstances of their community and the drought conditions they are experiencing.

### **Water Supply: John Gregoire – MWRA**

Quabbin is about 85% full. Minimal elevation has been lost since the last task force meeting and they remain in normal operations. While levels have been approaching the below-normal threshold, the recent improvement in conditions seem to be helping. Rao asked what the different thresholds that MWRA sets for the Quabbin means for their operations. Gregoire explained that MWRA has their own drought plan

which outlines their process. He noted that even if levels dip below normal their operations do not change much because they have such a large storage capacity. If more extreme conditions start to be experienced it triggers certain actions according to their DMP.

Wachusett has been intentionally lowered by turning off the Quabbin transfer for an ongoing dam removal project. However, they recently made the decision to turn on the Quabbin transfer into Wachusett to start recovering some of the elevation loss caused by the ongoing drought. MWRA's precipitation monitoring is showing similar trends as others have described with some recovery over the last month. Sudbury Reservoir has been intentionally lowered for a spillway construction project. They typically do a winter drawdown at Foss Reservoir for invasive aquatic plant control, but they are not doing it this year because of the drought.

**Water Supply: Jen Pederson– MWWA**

No reports of concerns from members.

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

Aquarion is currently operating under the October 1 drought declaration for their regions. Their Millbury and Oxford customers have a ban on all non-essential outdoor water use. Dover, Pine Hills, and Sheffield customers also have an outdoor ban on non-essential water use, and with the exception of ornamentals and flower gardens.

**Wetlands: Tom Maguire- DEP**

Most of the contacts they have had recently with conservation commissions have been on observations that were made before the Secretary's Drought Declaration, where some streams and rivers were observed to be not flowing, which has implications for protections under the Wetlands Protections Act. MassDEP has started conversations about possible future changes to the existing process for observations of no flow, which currently is structured so that observations never sunset. There have not been any formal regulation changes at this time.

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

No updates to report.

**Massachusetts Rivers Alliance: Lydia Olson**

Mass Rivers has no updates on any significant concerns. They received a few verbal updates from members that river flow has improved in some areas.

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

No updates to report.

**Agricultural: Michael Botelho- DAR**

No updates to report.

**Fire Danger: Karyn Lothrop**

KBDI has returned to 0 from recent precipitation. They have received a few reports of some small grass fires, but they are essentially back to normal with very little fire danger.

**Engineering: John Scannell- DCR**

No updates to report.

**Public Health: Dalene LaPointe**

No updates to report.

**4. Presentation of Index Severity Levels as per MA DMP**

Zoltay 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 some temporary relief. December brought normal to above-normal precipitation which helped improve conditions more substantially. The U.S. Drought Monitor is also showing improved conditions in much of the state.

The Standardized Precipitation Index (SPI) has improved a lot since October. All gages are back to either normal or above normal according to the 1-month SPI. There have also been improvements to the precipitation deficit. The 6-month SPI is still showing drought conditions ranging from level 1-3 for all Regions except the Islands. Streamflow also improved a lot in December, with many gages moving into normal levels. The Streamflow Index now shows the Western, Southeast, and Cape Cod Regions at normal levels, while the CTRV, Central, and Northeast are still at either level 1 or 2. Groundwater is more variable because the rate of recharge depends on factor such as depth of aquifer and soil types. Overall, groundwater levels improved in December, with Western, CTRV, Southeast, and Cape Cod at normal, and Central, Northeast, and Islands at level 1. Lakes and Impoundments are still below normal in all Regions except Cape Cod.

**5. Discussion of Drought Level Recommendations for each Region**

Central and Northeast- There has been improvement in these two Regions, but most indices are still showing drought conditions. Therefore, the staff recommendation was Level 2- Significant Drought for both Regions. All task force members agreed with Level 2.

Islands- With only two indices available and both showing either level 1 or 2, the staff recommendation was to keep the Islands Region at Level 1- Mild Drought. All task force members agreed with Level 1.

Cape Cod- The groundwater has decreased since last month and will likely continue to decrease due to the lag time between precipitation and recharge. The staff recommendation was to keep at Level 1.

Western- Conditions overall have improved a lot. Precipitation and Lakes/Impoundments are now the only indices showing below-normal conditions. The staff recommendation was for either a Level 1 or 2. All task force members recommended Level 1.

CTRV- Conditions overall have improved in this Region as well. Precipitation is still at level 2, and Streamflow and Lakes/Impoundments are both at level 1. The staff recommendation was for either a Level 1 or 2. There were mixed opinions among task force members regarding Level 1 or 2 for this Region.

It was mentioned that with Precipitation still below normal, the groundwater and streamflow will likely go back down.

Southeast- All task force members agreed with the staff recommendation of Level 1 without discussion.

**Summary of Recommendations:**

Central, Northeast, CTRV – Level 2

Western, Southeast, Cape Cod, Islands – Level 1

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

There was a recommendation to include messaging on overall improvement of conditions. However, there should also be a reminder that the state is still experiencing drought conditions and it will take some time for conditions to improve enough for the state to be out of drought.

**7. Next Steps**

The recommendations will be brought to the Secretary for a decision on an updated declaration. The task force will meet again on February 6<sup>th</sup>.

**Meeting Ended:** The meeting adjourned at 11:15 am.