

# Massachusetts Drought Management Task Force – Meeting Summary

November 18, 2024, 11:00 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)  
Neal Strauss, National Weather Service (NWS), Northeast River Forecast Center  
Brian Loving, United States Geological Survey (USGS)  
Duane LeVangie, Department of Environmental Protection (MassDEP), Water Management Act  
Tom Maguire, MassDEP, Wetlands  
Dalene LaPointe, Department of Public Health (DPH)  
Anne Carroll, Department of Conservation & Recreation (DCR)  
Adam Kautza, Department of Fish and Game (DFG)  
Jennifer Pederson, Massachusetts Water Works Association (MWWA)  
Lydia Olson, Massachusetts Rivers Alliance (MRA)  
Dave Celino, DCR Fire  
Viktoria Zoltay, DCR  
Joe Dellicarpini, National Weather Service (NWS), Northeast River Forecast Center  
Moussa Siri, Water Supply Citizens Advisory Committee (WSCAC)

## Other Attendees:

Aisha Revolus	EEA	John Barrett	Adams Fire District
Christine Hatch	UMass Amherst, MA WRC	John Scannell	DCR
Danielle Burney	EEA	Karyn Lothrop	MA-DCR
David Smith	Town of Harvard	Kim Tilas	MET
Davis Scribner	City of Peabody	Michael Souza	MEMA
Deanna Marks	NWS Albany	Moussa Siri	WSCAC
	Town of Ware Water	Purvi Patel	EEA
Edgar Sykes	Department	Robert Worthley	Foxborough Water
Elizabeth McCann	MassDEP	Sam Banas	USGS
Emilia Fiora	CRWA	Sara Cohen	DCR
Erin Graham	MA OWR	Sean Harrington	Bellingham DPW
Jason Duff	DCR OWR	Simon van	
Jesse Riedle	Town of Bellingham DPW	Leeuwen	MEMA
	Jones River Watershed	Sky Berube	Town of Milton
Jimmy Powell	Association	Toni Stewart	DCR OWR
Jodi Raposa	Taunton Water Department	Vanessa Curran	DCR OWR

## 1. Introductions: EEA, MEMA & Announcements

Rao called the meeting to order at 11:02 am and introduced herself and her co-chair from MEMA, Ben Hiltunen. Hiltunen greeted everyone and thanked Rao for the contributions to the task force she has made. Rao asked everyone to put their name and affiliation in the chat window for attendance purposes and said the meeting was being recorded for the purpose of meeting notes.

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

Meeting minutes will be shared in time for the next meeting.

## 3. **Update on interagency Drought Mission Group**

Rao reminded everyone that we were already in a Level 2 drought for most of the state with some places being in a Level 3 drought now. Per the Massachusetts Drought Management plan, the inter-agency Drought Mission Group has been set up and met for the 1<sup>st</sup> time last week. The group talked about actions that need to take place and what other kind of assistance may be needed. Rao explained that the group was scheduling statewide conference calls for various user groups – initially, one with municipalities, and one for water suppliers. Rao mentioned that the agriculture sector is less impacted right now, so unlike the last time there is no need to reach out to this sector until the spring if the drought persists. On communication and outreach, staff is pulling together all communication resources developed in the past and see how they can help with messaging to the public; they are also looking into developing new communication tools. A 1-page Drought Alert was sent out after the last meeting, and another will be issued after this meeting and declaration. Rao encouraged everyone to share the Alert with other groups or social media platforms to help spread the word.

Lastly Rao discussed how this drought is impacting a particularly high level of fire danger. As a result, a lot of pressure has been placed on the firefighters. Recently because of the drought in 2 of the Northeast states, 2 firefighters were lost while combating fires. She introduced Dave Celino to say a few words about them and observe a minute of silence in their honor and service. Celino discussed the sacrifice that happens when firefighters go into a fire response, and because of the flash droughts it is an ever-increasing risk.

## 4. **Updates on Current Conditions and Impacts: DMTF member reports**

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

Presentations were made by NWS, DCR-Fire Danger, and the drought indices. The reporting period will be for the mid-October through mid-November period, focusing on the changes that we have seen for the first 2 weeks of November. Rao then opened the floor for updates from the members.

**Weather & Forecast:** Joe Dellicarpini - National Weather Service Observed Precipitation and Precipitation across the Commonwealth has been 3 to 4.5 inches below normal over the last 30 days with most of the state receiving less than 1 inch of precipitation. Amounts over the last 30 days have been less than 20 percent of normal. November had one rainfall event so far which resulted in 0.10 to 0.25 inches of rain (roughly 1.5-2 inches below normal). Temperatures have generally been about 2-5 degrees above normal over the last 30 days. The 3–4-week temperature outlook shows a 60-70% chance of above average temperatures. The first half of December should favor above normal temperatures.

Forecast: While most of the next 7 days looks to be on the dry side, there will be an opportunity for substantial rainfall on Thursday. A low-pressure system moving over The Northeast may bring anywhere from 0.5 to 1.25 inches of rain for portions of southern New England including The

Commonwealth of MA. The 6 to 10 day precipitation outlook from the Climate Prediction Center is leaning slightly toward higher probabilities of above normal precipitation, but this likely reflects the expected rain event on Thursday (day 6). The 8-14 day outlook on the other hand is leaning toward below normal precipitation. Through the end of November odds favor below normal precipitation. First half of December shows no clear signal for either above or below normal precipitation.

**Hydrologic: Brian Loving - USGS**

Brian Loving did not have any updates.

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

Neal Strauss did not have any updates.

**Water Supply: Duane LeVangie – MassDEP**

Levangie shared that MassDEP issued emergency declarations to Attleboro and Ipswich. In both cases the declaration allows them to increase pumping capacity or use sources outside their current authorizations. Attleboro is allowed to purchase from a neighboring community, and potentially purchase water from Pawtucket, RI. DEP also did a mailing to all public water systems after the previous meeting and included the Drought Alert.

**Water Supply: John Gregoire – MWRA**

John Gregoire did not have any updates.

**Water Supply: Jen Pederson– MWWA**

Pederson mentioned that after the last meeting Attleboro had reached out asking about financial resources. She asked Rao if she had any opportunities to investigate that further; that the drought plan refers to financial resources for agricultural losses. But that there are some financial impacts to Attleboro from purchasing water. Rao replied that they don't have anything yet, but they can start looking into it.

**Private Water Supply: Marcos Pareto- DPU**

Marcos Pareto did not have any updates.

**Wetlands: Tom Maguire- DEP**

The MassDEP Wetlands Program received a report that a pond in Bolton has dried up. The program has updated the MassDEP website with the dates that can't be used for observations of Rivers and Ponds to extinguish regulation of Riverfront Area and now Ponds and Lakes. MassDEP updated Wetlands website: Massachusetts Drought Implications for Riverfront Area | Mass.gov

**Fish and Game: Adam Kautza - DER**

Adam Kautza did not have any updates.

**Massachusetts Rivers Alliance: Lydia Olson**

Lydia Olson did not have any updates.

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

Moussa Siri did not have any updates.

**Agricultural: Michael Botelho- DAR**

Michael Botelho was not present but had reported to Rao an update to be shared with the task force. Rao reported from Botelho that livestock farms are likely the only farms needing water during this time of year and may be impacted by the drought. They are putting together some information to send over to those farms affected.

**Fire Danger: Dave Celino**

KBDI steadily increasing across the state. Cooler temperatures are slowing the progression. All districts are showing an increase in control challenges with fires burning in up to 8 inches. Historically low fuel moisture levels for November. There is an increasing stress on fire response with state and local level capacity. Local burn bans are going into effect across the state. There are 10 priority incidents across Western, Central and Northeast regions. Smoke effects from extended drought fires have impacted local communities. There is an ongoing safety alert for all fire response staff, that live and dead trees within active fire perimeters continue to be an increasing risk to fire fighters. KBDI data ranges from 300 to almost 600 across the state often associated with more severe drought with increased wildfire occurrence supporting intense, deep burning fires.

**Engineering: John Scannell- DCR**

John Scannell did not have any updates.

**Public Health: Dalene LaPointe**

LaPointe did not have any updates.

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

Zoltay provided an overview of recent hydrologic history showing the precipitation deficit starting in mid-August. September starting to show impacts on stream flow as below normal and precipitation continued to be below normal all the way through mid-November. October started showing significant record low stream flows across the state and as of mid-November that number has increased. The US Drought Monitor has extended their level 2 drought across most of the state, which is equivalent to our level 3 drought. Zoltay also shared that the US Drought Monitor shows the Southeast, Cape and Islands in a level 0, equivalent to our level 1. This is mostly driven by lack of precipitation.

Because of recent fast onset, or fast intensifying droughts, we have gone to weekly monitoring although the indices are looking back at least a month, if not more. SPI across the state is at the 0-2 percentile or index severity level (ISL) 4. Up to 10 inches of precipitation deficit since mid-August. SPI percentiles are showing record lows, with Western, CTRV, and Central showing 0 percentile for 90 days look back. Also, the Northeast and Southeast showing 1 percentile for 90 days. Mostly driven by lack of precipitation. But combining evapotranspiration and precipitation, it adds another inch of deficit, so it is more accurately 11 to 12 inches of deficit.

Streamflow is showing at ISL4 at 0-2 percentile some of which are record low flows at individual gauges. Everywhere except for the Cape is below normal streamflow. Western, CTRV, Northeast, and Southeast regions are at an ISL 3 for streamflow, while Central region is at a ISL 4. Groundwater index shows Western and Central regions at ISL 2, while CTRV and the Northeast show a ISL 3. KBDI-Fire Danger shows Western and CTRV at a ISL 2; Central, Northeast, and Southeast at ISL 3. There is no lakes and

impoundments data for this mid-meeting as the data comes in for the regularly scheduled monthly time. In summary, all indices have gone up in severity.

## **6. Discussion of Drought Level Recommendations**

Rao comments that she has never seen values of zero for index severity levels reminding the task force of how concerning this drought is. Rao asked for a vote that the Cape and Islands stay at level 0. Followed by saying the other 5 regions are clearly at least a level 3. She then asked the task force vote on those 5 regions to be at level 3. Jen Pederson asked a question about whether the declaration would be from mid-October to November? Or from the date of the last declaration to today? Rao explained that the last declaration had the conditions effective October 1<sup>st</sup> so even though it was declared in November it is always a look back, and that this declaration will go back to October 15<sup>th</sup> as the starting point for these conditions. Rao explained that it is always a staggered look at conditions over at least a 30-day period. Zoltay explained that the declaration was effective October 1<sup>st</sup> until updated. Rao added the new map will say starting October 15<sup>th</sup> till whenever it gets updated.

Rao then asked for members to put their vote in the chat window for level 3 drought in the Western, CTRV, Northeast, and Southeast regions. The members voted yes to level 3 drought for these regions. They then discussed whether Central region should be at level 3 or 4 drought. Lydia Olson from Mass Rivers Alliance advocated for level 4 for the Central region because of the extensive reports on how all the tributaries for the major rivers in the region have been dry and the major rivers have had low flow. Task force members reviewed the indices for the Central region and considering the forecasted upcoming precipitation preventing the worsening of conditions, members agreed to keep Central region at level 3.

### **Summary of Recommendations:**

Cape Cod, Islands: Level 0 – Normal condition

Western, CTRV, Central, Northeast, Southeast: Level 3 – Critical Drought

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

Rao said that there will need to be strong outreach to communities, private well owners in particular, about how drought impacts them equally, and the kinds of actions that they should also be taking along with those who are supplied by a public water supply system. Rao added that as an interagency group we are preparing for the eventuality of a Level 4-Emergency Drought in any region. Coordination has been taking place with the Governor's office as well as MEMA and EEA. Legal teams are working on thinking this through and seeing what this would mean, what it would look like if there were an emergency drought declaration by the Governor.

## **8. Next Steps**

Rao thanked everyone for their time and for keeping the meeting brief. She added that she will try to schedule these shorter meetings for an hour and 15 min while we are still meeting more frequently. The press release will go out soon and shed reminded everyone of the next meeting being on December 5<sup>th</sup> which will be a full two-hour meeting.

### **Meeting Ended**

The meeting adjourned at 12:11pm.