

# Massachusetts Drought Management Task Force – Meeting Summary

May 7, 2026, 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)  
Duane LeVangie, Department of Environmental Protection (MassDEP), Water Management Act  
Jen 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)  
Anne Carroll, DCR OWR  
Dalene LaPointe, Department of Public Health (DPH)  
Bill Leatham, NOAA – National Weather Service (NWS)  
Moussa Siri, Water Supply Citizens Advisory Committee (WSCAC)  
Brian Loving, United States Geological Survey (USGS)  
Kate Bentsen, Department of Fish and Game (DFG), Division of Ecological Restoration  
Adam Kautza, DFG, MassWildlife  
Thomas Maguire, MassDEP, Wetlands Program  
Caulin Lauzon, Massachusetts Water Resources Authority (MWRA)  
Marcus Pareto, Department of Public Utilities (DPU)  
John Scannell, DCR  
Karyn Lothrop, DCR - Fire

## Other Attendees:

|                     |                                   |                   |                            |
|---------------------|-----------------------------------|-------------------|----------------------------|
| Alex Taylor         | DPU                               | Matthew Lanen     | Falmouth Water Department  |
| Allyssa Lane        | Dedham-Westwood Water District    | Megha Sudheendra  | Worcester Water (DPW)      |
| Andrew LaFleur      | Dartmouth Water & Sewer           | Michael Blanchard | Town of Dover              |
| Bailey Mullins      | DCR OWR                           | Michael Grega     | Littleton Water Department |
| Brittany Segill     | MassDEP                           | Michael Souza     | MEMA Meteorologist         |
| Caitlin LeDuc       | Town of Natick                    | Mike Retzky       | Town of Needham            |
| Clayton Weglarz     | Easthampton Public Works          | Paul Brinkman     | Pepperell DPW              |
| Crystal Stiles      | CIRES/NOAA NIDIS                  | Peter Speck       | NWS Albany                 |
| Deanna Marks        | NWS Albany                        | Prince Gyau       | DEP                        |
| Demetrios Vidalis   | Wellesley Water and Sewer         | Purvi Patel       | EEA                        |
| Drew Foley          | MWRA                              | Richard Bradley   | Green Industry Alliance    |
| Emily Maynard       | City of Worcester                 | Rob Faley         | Chatham DPW                |
| Erin Graham         | DCR OWR                           | Robert Worthley   | Town of Foxborough         |
| Giovanna Recinos    | City of Salem                     | Sara Cohen        | DCR OWR                    |
| Jason Duff          | DCR OWR                           | Steve Cusick      | Needham Water Department   |
| Jimmy Powell        | Jones River Watershed Association | Tim Pasakarnis    | Cape Cod Commission        |
| Justine Kent-Uritam | Dover Open Space Committee        | Todd Melanson     | Billerica Water            |

|               |                                     |                          |                                   |
|---------------|-------------------------------------|--------------------------|-----------------------------------|
| Laurie Ruzala | Yarmouth Water Department           | Toni Stewart             | DCR OWR                           |
| Lisa Kumpf    | Charles River Watershed Association | William Bercume-Brisbois | Needham DPW                       |
| Luke White    | Town of Yarmouth                    | Vanessa Curran           | DCR OWR                           |
|               |                                     | Pine duBois              | Jones River Watershed Association |

## 1. Introduction

Rao called the meeting to order at 10:03 a.m. and thanked everyone for attending. She asked attendees to enter their names and affiliations in the chat and reminded them that the meeting was being recorded for the purpose of meeting notes. She introduced herself and co-chair from MEMA, Ben Hiltunen. Rao and Hiltunen thanked everyone for their commitment to the Drought Management Task Force and the extended drought period we have been dealing with. Rao called for the approval of the March and April Task Force meeting notes. Both the March and April meeting notes were approved with minor corrections.

## 2. Updates on Current Conditions and Impacts

### Weather & Forecast: Bill Leatham – NOAA National Weather Service and Northeast River Forecasting Center

April brought 1.5 to 3 inches of total precipitation across the Commonwealth, with the highest totals in the west and around 1 inch for Martha's Vineyard and Nantucket. Departures from normal ranged from 0.5 to 3 inches below normal, with the largest deficit of 3+ inches on Nantucket. The 3-month and 6-month timeframes show similar long-term trends, tracking at 60% to 90% of normal statewide, except for Nantucket at 50%. The seven-day forecast projected 0.75 to 2 inches of precipitation statewide. Both the 6-to-10 day and 8-to-14 day outlooks lean toward above-normal precipitation and below-normal temperatures. The 3-month outlook leans toward both above normal precipitation and temperatures. River forecast ensembles show a very low flood risk over the next 10 days; while upcoming rainfall will cause river rises, no flooding is expected due to dry antecedent conditions.

### Hydrologic: Brian Loving – USGS

Streamflow conditions statewide declined in April due to below normal rainfall and early spring runoff. Conditions worsened in the west but showed improvements in the Southeast and Cape for April. Individual gage data revealed that while April rain briefly lifted southern streams into the normal range, they quickly reverted to below normal base flows by the end of the month. Groundwater levels reacted slowly to below-normal April rainfall, leaving monthly averages better than February because March precipitation delayed the drop in water levels. However, local data shows a steep downward trend; the Wellfleet well on the Cape remains normal after hitting record lows in early March, while the Templeton well in north-central Massachusetts has dropped below normal after hitting March record highs. Overall, while April groundwater averages ranged from normal to above normal, levels statewide are currently declining due to a lack of precipitation.

**Water Supply: Duane LeVangie – MassDEP**

LeVangie reviewed the Water Management Program's outdoor water restriction framework for the irrigation season. Permitted systems must restrict non-essential outdoor use when streamflows fall below the June Aquatic Base Flow (ABF) trigger for three consecutive days in May and June, or the August ABF trigger from July through September. Responding to Pine DuBois, LeVangie clarified that groundwater elevations are used instead of streamflow for the Cape, Islands, and Southeastern Massachusetts due to groundwater dominance. Registered-only systems (65 of the state's 239 public water systems; 174 are permitted) follow restrictions tied directly to Task Force drought declarations. Golf courses must also reduce non-essential irrigation based on these declarations or 7-day low flow triggers, excluding tees and greens, with exceptions for event facility ornamentals. As of May 5<sup>th</sup>, 17 stream gauges fell below triggers for three days, and three groundwater wells triggered for at least 60 days. Systems on Nantucket and Cape Cod should implement restrictions, while Martha's Vineyard is exempt. No 7-day low flow triggers have been met. Statewide, 89 public water systems are implementing restrictions: 5 voluntary and 84 mandatory. Of the mandatory systems, 38 limit watering to 1 day or less outside the hours of 9 to 5, and 46 limit it to 2 days or more outside those hours, as shown on the year's first restriction map. Bridgewater and Milford remain under emergency declarations. In Milford, Echo Lake has risen slightly; the system has stopped purchasing water from its neighbor and is close to bringing wells back online to ease surface water burdens.

**Water Supply: Caulin Lauzon – MWRA**

Quabbin Reservoir stayed steady over the past month but remains below normal operations at just under 85% capacity, dropping roughly 0.4 feet in elevation since the last meeting. The Quabbin transfer to Wachusett has been turned back on at 300 million gallons per day, helping Wachusett rise significantly above 389 feet and return to its normal operating range; this transfer is expected to stay active through October for water quality and elevation maintenance. Combined precipitation for the Quabbin and Wachusett watersheds was around 2 inches in April, falling back below long-term averages after a brief return to normal in March. Sudbury and Foss reservoirs sit right in the middle of their normal operating bands with all gates closed and no active water releases, showing only slight elevation bumps from recent rainfall.

**Water Supply: Jennifer Pederson – MWWA**

Pederson discussed takeaways from the Mass Water Works April roundtable. Members requested stronger state messaging to support mandates; Rao suggested offline discussions on effective formats, and Patel recommended utilizing existing outreach videos and infographics. For specific system updates, Burlington's reservoir is 4 feet below normal, requiring supplementation from an MWRA connection due to fish spawn river-pull restrictions. Salem and Beverly report nearly full reservoirs, Billerica has restrictions due to tank maintenance, and Edgartown reports no issues with its water table matching the 10-year trend. In Provincetown, access issues with a USGS gauge require resolution, while Orleans faces a

citizens petition for less restrictive rules after implementing handheld-only watering to match the Cape's Level 2 drought status.

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

Millbury and Oxford customers are at a drought level 1, with non-essential outdoor uses allowed one day per week. For Dover customers, non-essential outdoor water use is allowed 2 days a week, and the same for the Pine Hills customers.

**Wetlands:** Tom Maguire – DEP

Maguire reported that there has been no contact with conservation commissions, but the Central region says they noted the pond levels seemed to be below normal.

**Fish and Game:** Kate Bentsen – DER; Adam Kautza – DFG

Bentsen shared an update from Brad Chase noting that spring flows were unusually limiting for some river herring runs during their migration and spawning season. On the Jones River, herring were observed congregating at the base of the Forge Pond Dam, where sustained flows are needed for several months to allow passage. In the central region, low flow conditions and early algae growth are developing ahead of schedule at Broad Meadow Brook in Worcester, risking low dissolved oxygen levels for aquatic life. In contrast, beaver dams on a former Northampton golf course are buffering drought impacts by raising groundwater levels and maintaining base flows. Finally, lower April and May water levels create a risk of vernal pools drying out before breeding amphibian larvae can fully develop.

Pederson asked if the beaver dams were causing worse conditions in other parts of the area. Bentsen responded that no worsened conditions were observed because the site has ample space to flood without damaging infrastructure, adding that the permeable beaver dams provide more continuous flow than a human made dam located downstream. Rao and Bentsen then discussed whether earlier spring flow peaks represent a multi-year trend shifting seasonal high flows from April to March. Bentsen noted that climate change patterns are expected to cause warmer, wetter winters and hotter, drier summers, which can disrupt the timing of animal breeding and spawning schedules.

**Massachusetts Rivers Alliance:** Lydia Olson

On Cape Cod, the Childs and Quashnet rivers showed improvements following weekend rain, but three brooks in Westport exhibited unexpectedly low water levels. In the Taunton River watershed, flows at the Assawompsett Pond complex and Washburn Road falls recovered significantly compared to last year's severe drought. In the northeast, first-time reports from the Shawsheen River in Billerica revealed below-normal flows of 26 cubic feet per second (cfs) compared to pre-drought 2020 baselines of 111 cfs. In the western region, the Cold River in Savoy showed minor recovery from last year due to April snowmelt. Finally, a time-series from the Hudson River watershed in Williamstown tracked a progression from low drought levels last summer to peak flows during March snowmelt, followed by a slight decrease into April.

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

Siri reported that streamflows at six monitoring sites improved compared to late 2024 but remain insufficient to replenish the Quabbin Reservoir. He is establishing permanent landmark reference points at each location to visually track water level changes. On the Connecticut River, Siri observed a record high flow of approximately 10,000 cubic feet per second; however, after consulting with Brian Pearson, he clarified that this elevation was artificially caused by the opening of the Turners Falls Dam.

**Agricultural: Michael Botelho – DAR**

The irrigation season has not yet started, and field crops are not yet in the ground. A recent late frost caused bud drop for some tree fruit growers, but outside of that event, no agricultural impacts or issues were reported.

**Fire Danger: Karyn Lothrop – DCR**

No reports.

**Engineering: John Scannell – DCR**

No reports.

**Public Health: Dalene LaPointe – DPH**

No reports.

**3. Presentation of Index Severity Levels per MA DMP**

Zoltay reviewed the six monitored indices, explaining how individual station percentile values are calculated using full historical records to determine index severity levels. Zoltay outlined the state's drought regions and major watersheds, noting that because major basins do not align perfectly with drought regions; basin scales are evaluated for localized drought designations. In the context of the current drought since its start in mid-August 2024, Zoltay noted that conditions have ebbed and flowed. While March precipitation and snowmelt provided significant recovery, April brought below-normal precipitation and a lack of remaining snow, causing significant degradation in streamflows and backsliding in groundwater.

The latest U.S. Drought Monitor map reflected this decline, showing D1 (MA Level 2) status in the Connecticut River Valley and D0 (MA Level 1) status in the Southeast. Precipitation deficits have been tracked on the mainland since June 2025 with Middleton in the Northeast showing a 15-inch departure and on the Cape and Islands since November 2024, with deficits ranging from 7.5 to 12.5 inches. Zoltay reviewed look back period percentile values by region, noting that 1-month and 36-month look back periods are provided for information only. In response to a past request from Pederson, Rao and Zoltay confirmed that an 18-month midpoint precipitation lookup is being integrated into the automated system

and will be available for Task Force consideration next month before eventually displaying on the dashboard. Streamflow has mimicked precipitation and declined sharply due to low April rainfall and unrecovered groundwater base flows. All regional streamflow medians show elevated index severity levels, with the Connecticut River Valley, Central, and Northeast Regions tracking as extremely low. Groundwater monitoring wells are similarly impacted at level 1 or level 2 across all regions except the Southeast, which sits just above the 30<sup>th</sup> percentile. Conversely, topsoil moisture remains normal though larger woody debris remains dried out from long-term drought. Lakes and impoundments continue to show severe impacts, particularly in the Northeast and Southeast regions, while only the Western and Connecticut River Valley regions look normal.

## **5. Discussion of Drought Level Recommendations by Region**

**Western** – Regional streamflow has fallen to an Index Severity Level (ISL) 2, tracking near the level 3 cutoff. Zoltay noted that even where groundwater indicators appear normal, they sit on the lower end of the range and fail to provide sufficient base flow without active precipitation. Pederson advocated for holding this Region at Level 0 – Normal Conditions for another month, pointing out high precipitation lookbacks and full lakes, but Zoltay cautioned against delaying action for a full month given the fast rate of degradation. Lothrop provided field notes from Dave Celino, clarifying that while fire occurrences are below the 5-year average, total acres burned are above average due to two large fires at Fort Devens. She reported that soil 4 inches deep is extremely dry and the spring KBDI is trending higher than historical records, and lake boundaries at Myles Standish sit 4 to 8 feet out from solid water, preventing crews from drafting. The staff recommendation was to move the Western Region to Level 1 – Mild Drought. Most Task Force members agreed to move the Western Region to Level 1 – Mild Drought.

**Connecticut River Valley (CTRV) and Central** – Rao explained that conditions are similar across both areas, with regional streamflows dropping to ISL 3 and groundwater levels showing a significant downward dip. She noted that an average of these tracking parameters supports a Level 2 designation, which is further supported by the fire department's reports regarding dry conditions and low water levels across regional water bodies. Staff recommended moving both regions to Level 2 – Significant Drought. All Task Force members agreed to move the CTRV and Central Regions to Level 2 – Significant Drought.

**Northeast** – Precipitation, streamflow, and lakes and impoundments have worsened to ISL 3. Maguire noted that river hydrographs show a sawtooth pattern indicating a lack of groundwater base flow support, while Loving pointed out lingering effects from March rains. There was a division on whether a Level 2 or Level 3 designation was warranted. Olson favored Level 3 due to dry soil conditions and fire danger reported by DCR Fire, while Pederson opposed a two-level jump, stating that Level 2 water restrictions are already in place and matching other regions makes sense for public messaging. Leatham projected statewide 7-day totals of 0.75 to 1.5 inches, and LeVangie confirmed no Northeast gages have hit 7-day low flow triggers. The staff recommendation was to move the Northeast Region to Level 2 – Significant Drought; there was some discussion about whether the region should be at a Level 2 or Level

3. Most Task Force members agreed to move the Northeast Region to Level 2 – Significant Drought. Rao suggested that if the indices further deteriorated during the month, then she would call a mid-month meeting to assess the Northeast conditions and potentially recommend a change in designation.

**Southeast** – Regional conditions declined in the Southeast Region, with groundwater plunging from the 70 to 32 percentile and stream flow moving to ISL 1. Lakes and impoundments conditions declined significantly to an ISL of 3, which Graham clarified was based on a single reporting system that had been actively managed for winter flood control. Olson and Zoltay supported moving to Level 1 due to the steep groundwater drop and a continuing regional drying trend, while Maguire noted much-below-normal conditions in the Taunton River Valley of Bridgewater. Pederson strongly advocated for a conservative approach to hold at Level 0 for another month, pointing out that precipitation and groundwater are still technically within the normal range, and noting the lake data represents only two data points. LeVangie raised the need for consistency if the Task Force changes the status of Cape Cod. The staff recommendation was to move the Southeast Region to Level 1 – Mild Drought. Most Task Force members agreed to move the Southeast Region to Level 1 – Mild Drought.

**Cape Cod** – Streamflow conditions are at ISL 1, groundwater at ISL 1, and lakes and impoundments at ISL 2. Zoltay clarified that a split in precipitation index severity levels (level 1 for the 12-month look-back and level 2 for the 24-month look-back) stems from tracking the current regional drought duration since November 2024. Rao explained that when balancing the variables, conditions land between Level 2 and Level 1. The staff recommendation was to move Cape Cod to Level 1 – Mild Drought. All Task Force members agreed to move the Cape Cod Region to Level 1 – Mild Drought.

**Islands** – Both counties experienced monthly groundwater degradation due to a lack of precipitation and zero remaining snowmelt. Zoltay reported that Dukes County groundwater dipped below the 30<sup>th</sup> percentile range into an ISL 1, while Nantucket regressed further to the 17<sup>th</sup> percentile, representing an ISL 2. Rao noted for Nantucket the previous National Weather Service data highlighting the rainfall deficit compared to Martha's Vineyard and the mainland. The staff recommendation was to move Dukes County to Level 1 – Mild Drought and Nantucket to Level 2 – Significant Drought. All Task Force members agreed on Level 1 – Mild Drought for Dukes County and Level 2 – Significant Drought for Nantucket County.

**Summary of Recommendations:**

Southeast: Level 1 – Mild Drought

Northeast: Level 2 – Significant Drought

CTRV: Level 2 – Significant Drought

Central: Level 2 – Significant Drought

Western: Level 1 – Mild Drought

Cape Cod: Level 1 – Mild Drought

Islands: Duke's County Level 1 – Mild Drought; Nantucket County- Level 2 – Significant Drought

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

Rao summarized the recommendations for drought levels that had been discussed throughout the meeting. The press release and other communications should come out in the next few business days.

## **7. Next Steps**

The recommendations will be shared with the Secretary of EEA for a final decision on updated drought declarations. Social media outreach will be coordinated via the MassWaters Instagram page. Task Force members are encouraged to share and amplify drought messaging. The Task Force will meet again in early June. Rao will evaluate whether an additional mid-month interagency call is needed.

**Meeting Ended:** The meeting adjourned at 12:03 pm.