



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for July 13, 2023

Meeting conducted remotely via Zoom meeting platform, 1:00 p.m.

Minutes approved October 12, 2023

Members in Attendance:

Vandana Rao	Designee, Executive Office of Energy and Environmental Affairs (EEA)
Duane LeVangie	Designee, Department of Environmental Protection (MassDEP)
Tyler Soleau	Designee, Massachusetts Office of Coastal Zone Management (CZM)
Vanessa Curran	Designee, Department of Conservation and Recreation (DCR)
Kate Bentsen	Designee, Department of Fish and Game (DFG)
Hotze Wijnja	Designee, Department of Agricultural Resources (DAR)
Chris Kluchman	Designee, Executive Office of Housing and Livable Communities (EOHLC) replaced by Becca George at 2:25pm
Christine Hatch	Public Member
Kenneth Weismantel	Public Member
Samantha Woods	Public Member

Members Absent:

Thomas Cambareri	Public Member
Vincent Ragucci	Public Member

Others in Attendance:

Erin Graham	DCR/Office of Water Resources (OWR)
Jason Duff	DCR/OWR
Kara Sliwoski	DCR/OWR
Viki Zoltay	DCR/OWR
John Scannell	DCR
Read Porter	EEA
Jennifer Pederson	Massachusetts Water Works Association
Ian Cooke	Neponset River Watershed Association (NepRWA)
Katie Ronan	Massachusetts Water Resources Authority (MWRA)
Lexi Dewey	Water Supply Citizens Advisory Committee (WSCAC)
Lance DelPriore	Foxborough Department of Public Works
Robert Worthley	Foxborough Department of Public Works
Chris Gallagher	Foxborough Department of Public Works
Sean Osborne	OSD Engineering Consultants
Suzanna Sullivan	NepRWA
Sarah Miller	DAR
Richard Bradley	Green Infrastructure Alliance, Federal NALP GAC & Superscape Landscape
Katharine Lange	Massachusetts Rivers Alliance
Nadia Madden	DCR Flood Hazard Management Program

Stephen Estes-Smargiassi MWRA

Rao called the meeting to order at 1:04 p.m.

Agenda Item #1: Welcome and Introductions

Rao announced that the meeting was being recorded for the purpose of the meeting minutes and all votes would be taken by roll call. All attendees were asked to type their name and affiliation in the chat window for the purposes of documenting attendance in the meeting minutes. Rao invited those who wish to speak during the meeting to indicate this in the chat window. Erin Graham conducted a roll call attendance of Commission members.

Agenda Item #2: Executive Director's Report

Rao started her report by drawing people's attention to the meeting package which included quarterly updates on special projects. She opened it up for questions and comments. Without questions and comments, she offered to take questions and comments via email.

July is the smart irrigation campaign month hosted by the Environmental Protection Agency (EPA). The EPA campaign encourages water-efficient irrigation practices and technologies to save water outdoors.

The state's new Office of Climate Science has been established and has three members – the director and two assistant directors. One assistant director focuses on the topics of freshwater and inland water resources and temperature and the other focuses on the topics of marine and coastal water resources. They will be scheduled to introduce themselves and the Office of Climate Science to the WRC.

Flooding has been prevalent in New England the first couple of weeks of this month with significant impacts. Erin Graham will present more information during the hydrologic conditions report.

Agenda Item #3: Hydrologic Conditions

Rao introduced Graham to present the Hydrological Conditions Report for June 2023 (<https://www.mass.gov/doc/2023-June-hydrologic-conditions/download>).

- *Temperature*: Monthly average temperatures were normal to below normal across the state except for high temperatures in the southern central part of the state, Cape Cod and Islands
- *Precipitation*: Mainly normal to above normal
- *Soil Moisture*: The crop moisture index showed slightly dry/favorably moist conditions
- *Evapotranspiration*: Conditions were below normal
- *Streamflow*: Beginning of the month was below normal with significant improvement second half of the month leading to normal conditions for this drought index.
- *Flooding*: There was no flooding in June. In the last several days however [July 10 to July 13], flooding has occurred in the Connecticut River Valley and Western Massachusetts. Flooding damage included road washouts, undersized culvert blowouts, flooded cars, and washed-out agricultural fields. The Millers and Connecticut Rivers experienced a 1 in 10 and 1 in 25 year floods, respectively.

- *Groundwater*: Ranged from below normal to above normal but regionally all were normal except the Islands which was at index severity level (ISL) 1
- *Lakes and Impoundments*: Most are above the 30th percentile/100% full with all regions in normal status
- *Keetch Byram Drought Index*: All regions were normal except the Connecticut River Valley which was at ISL 1
- *US Drought Monitor*: Some dry areas are shown in the map ending June 27 but as of this morning's release there are no drought conditions shown.
- *NOAA July Outlook*: Chances are leaning for above-normal temperatures and above-normal precipitation
- *NOAA 3-Month Outlook*: Chances are likely for above-normal temperatures and equal chances for below-normal, normal, or above-normal precipitation

Kluchman asked for a comparison of the wet conditions between July this year and in 2021. Hatch confirmed that it is extremely wet in the western part of the state. Bentsen reported that the DER Culvert Replacement Municipal Assistance program works to replace undersized culverts for public safety and ecological benefit. There were some culvert blowouts, including some repeat failures, where the culverts were too small to pass the floodwaters and associated sediment and debris. Carrie Banks, point person for DER's Stream Continuity Program, has been collecting information on culvert failures – if you have information to share, please send it to Carrie. Her email is Carrie.Banks@mass.gov.

Hatch added that MassDOT's Rivers and Roads Training programs for DPWs have done a lot to educate the first responders about fluvial geomorphic hazards and how rivers work to encourage correctly sizing culverts. MassDOT sponsored a project in the Deerfield watershed that assessed road stream crossing condition across the watershed using numerous factors. Because of that work many of the places that had been damaged during Irene were able to withstand the July high flows well. There are now upsized culverts along Route 8, and large wood still successfully directing flow away from a retaining wall.

Another resource is the Stream Continuity program, and the North Atlantic Aquatic Connectivity Collaborative which has mapped many of the culverts across New England up to Maine and assessed their status. It is not as detailed as the Deerfield assessment but is a very comprehensive network: <https://streamcontinuity.org/naacc>.

Rao asked Hatch about agricultural damage. Hatch confirmed that there have been farms inundated and many will have lost their whole year's crop. Wijnja added that Commissioner Randle was out visiting impacted farming areas in Western Massachusetts. He also mentioned that DAR staff was directed to collect damage information when they are in the field and visiting farms.

Agenda Item #4: Vote to approve meeting minutes for April 13, 2023

Rao invited a motion to approve the meeting minutes for April 13, 2023 with a correction of one typo of Pederson's name.

V O T E	<p>A motion was made by Weismantel with a second by Woods to approve the meeting minutes for April 13, 2023.</p> <p>The vote to approve was unanimous of those present.</p>
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Woods informed attendees that Cary Wolinsky passed away from heart failure. He and his son Yary Wolinsky owned Trillium Studios and created three educational documentaries on climate change and water, including one on drought, through Turnaround Films .

Agenda Item #5: Presentation: Foxborough’s Updated Drought Plan and Water Conservation Plan/Activities

Curran acknowledged the attendance of the project team - Bob Worthley, Superintendent of the Water and Sewer Division, Chris Gallagher, Director of the Department of Public Works, and Lance DelPriore, Town Engineer, and from the Neponset River Watershed Association, Ian Cooke, Executive Director, and Suzanna Sullivan, Water Stewardship Manager.

As a quick introduction, this project is in the headwaters of the Ten Mile Basin. The Atlantic White Cedar swamp area serves as habitat for protected species – Hessel’s hairstreak butterfly, the then state-listed spotted turtle and now the spotted salamander. Foxborough’s Witch Pond wells, Well 14R and 15, are in this area adjacent to the swamp. The initial WRC approval was in 2001 which was amended in 2013 and 2022. The 2022 Amendment required a revised drought management plan (DMP) and revised water conservation plan (WCP).

Foxborough’s drought management plan now references the state’s DMP for drought levels and associated outdoor watering restrictions, as requested by the state. In addition, actions with respect to the water system are implemented at each drought level such as postponing nonessential flushing at Level 3.

As part of the revised water conservation plan, Foxborough submitted the following items – M36 audits in 2021 and 2022, 2022 unaccounted-for-water (UAW) values of 14.8%, and documentation for both. In addition, Foxborough is continuing with annual audit and leak detection, using the results to guide next steps.

Curran invited Worthley to provide additional information about their activities. Worthley introduced himself and summarized the recent history of Foxborough’s activities. Foxborough performed the M36 audits and there was not one big factor identified as the cause of UAW, but many factors. COVID supply issues delayed replacement meter orders but they just received a large order which will now result in replacing half of the meters. Showing a 2021-2023 demand graph, Worthley showed how the demand significant reduced in March of 2022 and remained so to-date. It took repeated years of leak detection, but they finally found one big leak on an abandoned property leaking into sand and gravel surroundings. This led to water being absorbed and not daylighting leaving it undetected for years.

Hatch, Woods and Rao congratulated Foxborough on their persistence and success.

Curran continued describing residential water conservation activities which have reduced per capita consumption to 52 gallons per capita per day, well below the standard of 65. Activities included a rebate program in collaboration with NepRWA which NepRWA will elaborate on. They also submitted the required Water Conservation Questionnaire that will be included in future years with Foxborough's Annual Monitoring Reports.

Next, Curran described required activities during an Emergency Declaration but stated that such conditions have not occurred since 2020, which was prior to the 2022 Amendment. Activities are related to exhausting all other supply options, maximizing pumpage from other sources and up to a total ban on outdoor watering. Curran noted that Foxborough has also done work to improve system resilience.

Finally, industrial, commercial and institutional water use conservation was also implemented in collaboration with NepRWA. The Water Conservation Questionnaire also included this user group. Curran invited Sullivan to continue the presentation on Foxborough's water conservation program. Foxborough and Walpole are both working with NepRWA for residential outreach and therefore will have coordinated messages and similar looking materials. Social media efforts covered water conservation, lawn care, and drought restrictions. NepRWA and Foxborough attended a local farmers market promoting the rebate program and giving away free water efficient fixtures. Direct mail was sent to over 9,000 residents and businesses via Every Door Direct Mail discussing recent water department activities, the rebate program, leak detection, water restrictions, and tips for healthy lawn. This will be done twice per year. An annual press release will be published announcing the start of water use restrictions.

Rebate applications for the 2022-2023 year have doubled in comparison from the year prior. This may have been from promotions in the newsletter and/or from social media advertisements. NepRWA will be working with Foxborough on tracking rebate forms moving forward.

Sullivan continued by discussing the industrial, commercial and institutional (ICI) outreach efforts. Sullivan reached out in-person and followed up with emails and calls to top users but had little response. In Foxborough the high school is the 16th biggest user. Recommendations to the town for next year include setting aside \$10,000 to contract a water auditor for ICI customers and using \$20,000 in rebates to distribute among residential and ICI customers. The water auditing will be open first to the top 25% of water users and then be opened up to all ICI customers and possibly municipal buildings depending on how many customers reach out for services. In addition, they will pursue opportunities for grant funding of audits and outreach costs.

Rao commented on the value of the partnership between Foxborough and NepRWA.

Woods commended NepWRA for reaching out to ICI customers. North and South Rivers Watershed Association has tried the same and also had difficulty getting responses. Woods asked how NepRWA estimated the cost of doing the ICI water audits. Sullivan responded that the hours were estimated and multiplied by the staff's wage rate.

Weismantel congratulated Foxborough on their great progress. He asked Worthley how many of the meters they will be able to install the rest of the year. Worthley said that they will be hiring a bulk meter installer and getting them all done.

LeVangie commented that finding the large leak is significant. To help with the cost of conservation and potentially finding water losses MassDEP offers the WMA Program Grant and the M36 Audit Grant.

Pederson also commended the town and asked about the impact of the cost of this work. Gallagher stated that it's been about 6 percent increase per year. This includes having to make some well replacements. They were about to start replacing cast iron but then PFAS became a priority. To cover costs, Foxborough is looking to increase revenue by 12 percent. If two more plants are potentially needed because the new lower PFAS limit is passed, more will be needed. Foxborough received an SRF loan for the PFAS work. They have also recently split their rates into residential and non-residential.

Woods asked about the cost of the conservation work. Worthley estimated it at \$30,000 per year which is equivalent to replacing many fire hydrants. Gallagher noted that staff and commissioner are all onboard with spending money on conservation and the residential per capita per day has reduced to 52 gallons per capita per day shows that.

Kluchman left at 2:25 pm and George stepped in as designee.

Pederson asked about the difference between towns in requiring or not requiring WRC approval for demand management plans and water conservation programs. Rao noted that it depends on the wording of the conditions written in a decision.

Rao thanked the presenters and invited a motion to adjourn the meeting.

V O T E	A motion was made by Weismantel with a second by Curran to adjourn the meeting. The roll-call vote to approve was unanimous of those present.
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Meeting adjourned at 2:34 p.m.

Documents or Exhibits Used at Meeting:

1. WRC Meeting Minutes, April 13, 2023
2. Quarterly Update on WRC Special Projects
3. Interbasin Transfer Act project status report, June 22, 2023

Compiled by: (VZ)

Agendas, minutes, and other documents are available on the web site of the Water Resources Commission at <https://www.mass.gov/water-resources-commission-meetings>. All other meeting documents are available by request to WRC staff at 251 Causeway Street, 8th floor, Boston, MA 02114.