THE COMMONWEALTH OF MASSACHUSETTS

WATER RESOURCES COMMISSION

100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for October 8, 2020

1:00 p.m., conducted remotely via Zoom

Minutes approved December 10, 2020

Revised minutes approved April 8, 2021

Members in Attendance:

Vandana Rao	Designee, Executive Office of Energy and Environmental Affairs (EEA)
Linda Balzotti	Designee, Department of Housing and Community Development (DHCD)
Anne Carroll	Designee, Department of Conservation and Recreation (DCR)
Kathleen Baskin	Designee, Department of Environmental Protection (MassDEP)
Hotze Wijnja	Designee, Department of Agricultural Resources (DAR)
Kate Bentsen	Designee, Department of Fish and Game (DFG)
Thomas Cambareri	Public Member
Vincent Ragucci	Public Member
Kenneth Weismantel	Public Member

Members Absent

Todd Callaghan	Designee, Massachusetts Office of Coastal Zone Management (CZM)
Marcela Molina	Public Member
Samantha Woods	Public Member

Others in Attendance:

Vanessa Curran	DCR, staff to WRC
Marilyn McCrory	DCR, staff to WRC
Erin Graham	DCR, staff to WRC
Sara Cohen	DCR, staff to WRC
Jennifer Sulla	EEA, Deputy General Counsel
Duane LeVangie	MassDEP
Julie Butler	MassDEP
Jennifer Pederson	Massachusetts Water Works Association (MWWA)
Katie Ronan	Massachusetts Water Resources Authority (MWRA)
Jeff Barbaro	US Geological Survey (USGS)
Kerry Malloy Snyder	Neponset River Watershed Association
Patricia O'Brien	Resident of Burlington
Amy Coppers Costantino	Wright-Pierce, representing Burlington
Lexi Dewy	Water Supply Citizens Advisory Committee (WSCAC)
Andreae Downs	Wastewater Advisory Committee to the MWRA
John Sanchez	Burlington DPW Director
Paul Sagarino	Burlington Town Administrator

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

Agenda Item #1: Welcome and Introductions

Rao invited all participants to introduce themselves. She went over logistics of a virtual meeting.

Agenda Item #2: Executive Director's Report

The Drought Management Task Force (DMTF) met yesterday and sent recommendations to the EEA Secretary, who will issue a press release within a day. Rao provided an update on the state's drought response to date. Following the response actions laid out for Drought Levels 1 and 2, in the recently updated MA Drought Management Plan (DMP), activity has included:

- Data gathering, analysis and reporting – This is led by Water Resources Commission (WRC) staff with others assisting and is conducted on an almost weekly basis; MassDEP, DAR, and DFG reach out to regional staff to collect information on drought impacts to their various constituencies.
- Coordination – This includes convening the DMTF on a monthly or bi-weekly basis to make drought recommendations to the Secretary. The formation of the Drought Mission Group begins at Drought Level 2, which includes staff from four EEA agencies, the Department of Public Health (DPH), and the Massachusetts Emergency Management Agency (MEMA). This group meets weekly or bi-weekly to assess conditions and strategize actions and communications. The group coordinates outreach to municipalities through MEMA's network, MassDEP, and soon through regional planning agencies' networks. WRC staff have developed a survey for local boards of health on the status of private wells in their communities. DAR is communicating with UMass Extension on drought impacts to farmers.
- Water Conservation – This involves decreasing state water use and providing guidance to the public on how to decrease water use. The state has a new water conservation website and reaches out directly to municipalities, water suppliers, watershed groups, and others with water conservation messages.
- Communication and Public Outreach – This includes preparing a status update to the governor, which the Secretary currently does weekly; monthly updates are provided to the Executive Office of Public Safety, which houses MEMA; press releases and media interviews are provided regularly; infographics and social media products have been developed for download and free use; and a newly consolidated state drought website houses all available outreach products and information on drought status and related resources.
- Technical Assistance – MassDEP and DAR regularly reach out to water suppliers and the farming community, respectively, on technical issues related to drought. Other state staff are available to stakeholders for technical assistance as requested.
- Financial Assistance – This involves working with DAR to explore funding options for impacted farmers. EEA has made funding available to the farming community through the Food Security Grant Program, which includes a category for drought impacts.
- Policy and Regulatory Action – MassDEP communicates with all Water Management Act permit holders after every DMTF meeting on the drought status, and relevant drought conditions in their permits.

Rao also explained that she is working with DMTF members to take advantage of mailing lists they have to help disseminate drought related information. Staff are inquiring into whether they could use the National Oceanic and Atmospheric Administration (NOAA) weather mobile alerts program to send local drought alerts with links to the state web site. Staff are also working on a one-page digest to go along with press releases, including drought status and the steps the state would like various sectors to take. Finally, staff together with a hired consultant, are creating infographics specific to each level of drought with steps people can take to address the drought.

Discussion:
Pederson asked if there is a regular schedule of tweets for the drought. Rao confirmed that there are discussions to have regular tweets using some of the new social media assets, tailored by season, target audience, and most pressing content, such as heightened fire danger.

Agenda Item #3: Hydrologic Conditions Report - March 2020

Graham provided an update on the hydrologic conditions for September 2020, which can be read in full at https://www.mass.gov/doc/september-2020-hydrologic-conditions/download:

- Precipitation: The Western and CT River Valley regions had close to normal precipitation in September, while other regions saw ongoing dry conditions. The Index Severity Levels for the regions are: Western at Level 1; CT Valley and Central at Level 2; Northeast, Southeast, and Islands at Level 3; and Cape Cod at Level 4.
- Streamflow: This index continued to be low across the state with conditions mostly worsening over the month. The Western Region improved from Level 3 to 2, while the Southeast degraded from 2 to 3. The other regions held steady at Level 2.
- Groundwater: This index varied across state and within regions, with some wells at record lows. The Northeast region is at Index Severity Level 1; the Cape and Islands are at Level 0; all other regions are at Level 2.
- Lakes and Impoundments: The two reservoirs in the Western region tripped their drought plan triggers but not this index. In the CT River Valley region, the Quabbin is okay but the other system is low, and the Index Severity Level is 1. The Central Region is at Level 0, but information is missing from two systems. The Northeast is at Level 1. The Southeast is at Level 3, with one system at its lowest September value in the database.
- KBDI: There are high values across the state, with Index Severity Levels at 2 or 3.
- Crop moisture: This index ranges from abnormally dry to excessively dry with Index Severity Level 1 or 2 across the state.
- Temperature: For most of the state, September was around 2 degrees above normal.
- Drought Conditions: The US Drought Monitor (USDM) shows the full state in drought, with southeastern MA having the worst conditions.
- Forecast: For October, the state has some areas with no strong signal for precipitation and others showing 30-40% chance of below normal precipitation. The whole state has a 50-60% chance of above normal temperatures. For the 3-month outlook, temperatures have a 60-80% chance of being above normal, while precipitation shows no strong signal for the state.
- Drought Outlook: October shows drought removal likely in the west, with the rest of the state improving, and the 3-month outlook shows drought removal for the whole state except the southeast, which should still improve.

Discussion:

- Wijnja commented that as of that morning the USDM status for the northeast was extreme.

Agenda Item #4: Vote on the Minutes of September 2020

Rao invited motions to approve the meeting minutes for September 10, 2020. Pederson had proposed an edit to the draft minutes, which is now reflected.

VOTE	A motion was made by Weismantel with a second by Ragucci to approve meeting minutes for September 10, 2020, as amended per the edit provided by Pederson. The vote to approve was unanimous of those present.

Agenda Item #5: **Presentation and Discussion: Draft Final Staff Recommendation for the Town of Burlington's Application for Approval of an Action to Increase the Present Rate of Interbasin Transfer of Water from the MWRA System**

Rao reminded those present that the WRC has heard presentations on this project in the past and staff have received public comment. Today's presentation reflects a few changes and is the penultimate leg before the final vote next month. Anne Carroll provided a presentation reviewing the public comments received and the staff responses including some recommended changes. The presentation can be viewed in full here: https://www.mass.gov/doc/presentation-draft-staff-recommendation-on-burlingtons-ita-application/download

Highlights:

- Comments were received from six entities, mostly on proposed conditions of approval.
- Last month, staff reviewed all the comments and provided responses.
- This month's package includes a redline of the staff recommendation, reflecting the changes based on the comments received. The presentation reviewed each recommended change.
- Next step is to bring a final staff recommendation to the WRC at the November meeting.

Discussion:

Weismantel stated he did not have a problem with the changes and liked the rewording. However, he would like the minutes to reflect that the town would not have to go through a MEPA process in the future to obtain amendments to the Commission's final decision. Rao confirmed this to be true. Baskin asked whether clarification was needed that if Burlington wanted more water, that would trigger MEPA. Rao explained that the concern Weismantel had raised had to do specifically with when Burlington moves off the remainder of its local sources and fully onto MWRA, which would trigger a rewrite of the conditions but not MEPA involvement, as MEPA's decision with respect to this particular transfer of up to 6.5 MGD is complete. Any new transfer above this volume would require MEPA involvement. Weismantel stated that this transfer is unusual in approving a total amount not expected to be used, provided the applicant continues to use its local source. Rao clarified that in the application Burlington anticipated that in five to ten years it will likely phase out its local source. WRC staff

advised Burlington to apply for the full amount rather than having to return for another approval, which reflects WRC practice of advising communities to think long term.

Weismantel thanked staff member Sara Cohen for the information exchange and conversation he had with her on water rates. He is still concerned that the conditions emphasize the wrong thing, targeting the people who don't use the most water and who stay within the base allocation. He calculated that the base allocation for secondary residential meters multiplied by the customers who stay within that allocation amounts to 3,247 gallons per day, which is insignificant by Interbasin Transfer standards and compared to 6.5 MGD. Similarly, for commercial accounts, the base allocation multiplied by the 403 customers who stay within this volume amounts to 44,000 gallons per day. He believes the proposed conditions will amount to changes that won't have any effect and feels the changes should be focused on higher users.

Weismantel also expressed concerned about the word "should" in conditions #3, 4, 5, 7, 8, 9, 11, and 12 and asked if legal counsel thinks these should be "shall". He also did not understand how condition #6 related to an interbasin transfer and did not think it should be included, as private well water does not cross a basin line. Under condition #8, he suggested adding the word "annually" to read: "The town should reach out to the top ten users annually..." For condition #10, he would like the referenced conditions to be spelled out rather than referenced.

Baskin seconded the concern about "should" v. "shall", advising staff to review the whole document to clarify the distinction between enforceable measures and advisory comments. Rao acknowledged this concern and will review the Decision language with legal counsel. Baskin also addressed Weismantel's concern that condition #6 on private wells was not jurisdictional under the Interbasin Transfer Act (ITA). She sees private wells as related to the lack of viable in-basin sources and is concerned that if regulation of these wells were relaxed, this demand on the local aquifer could increase. She supports keeping this condition, so this use continues to be tracked.

Ragucci asked whether the requirement to move to quarterly billing within two years, as stipulated in condition #4, could be lengthened if it proves difficult. Rao invited the town of Burlington to address their timing needs related to this condition. Paul Sagarino stated that Burlington is going through a difficult time with their budget due to COVID-19 and will likely shrink the workforce over the next year or two, so quarterly billing would be a challenge if it requires an additional staff person. John Sanchez confirmed it would likely need another staff person. He stated that the town had requested five years and would need at a minimum three years. He would also like condition #4 to reflect that the change to quarterly billing would be contingent on getting town approval. Rao asked WRC members whether they would be willing to add a year or so to give Burlington more time to meet this condition.

Ragucci acknowledged that communities are facing financial hardship and the difficult politics of hiring for this purpose under these circumstances. He favored extending the timeline. Baskin stated that MassDEP Commissioner Suuberg has been working with water systems, and loss of revenue is a concern of his, especially for towns like Burlington with a huge commercial sector. Baskin supported extending the timeline for quarterly billing beyond two years, although would be concerned that five years may reduce the sense of urgency too much. Weismantel supported extending condition #4 beyond two years and suggested to Burlington that when they switch to quarterly billing, they bring one quarter of the revenue into the previous fiscal year, which can

help with shortfalls. Rao invited WRC members to confirm if they were comfortable changing condition #4 to 4 years and adding language requiring documentation of progress toward this goal between now and then. WRC members broadly supported this compromise verbally and in the Zoom chat. Ragucci asked if this support required a motion? Rao clarified it didn't, because this is just a discussion to tee up a vote next month. Rao appreciated everyone's feedback and reminded them that Burlington already has automatic metering infrastructure (AMI), so the data required for quarterly billing are available, which should help with the transition. Weismantel asked if the tiers will be adjusted when going to quarterly billing. Cohen confirmed the tier volumes would be halved to reflect the halving of the timeframe.

Pederson expressed disappointment that no change was made to Condition #3. As Burlington meets the Water Conservation Standards (WCS) for pricing, this condition is excessive. Cohen reminded participants that pricing is an area where the ITA regulations go beyond the WCS and explicitly require that rates send a conservation signal, which is only a recommendation in the WCS. Rao pointed out that quarterly billing is also explicitly required by the regulations as well as in the WCS and reminded people that WRC staff worked with Burlington to find ways to comply with these requirements.

Pederson asked whether condition #6, related to private wells, would need town approval and whether the language of the condition needed to reflect that. Rao agreed to look into that.

Rao will send a copy of the final recommendation in advance of the November meeting, reflecting changes based on the discussion, and request a vote at that meeting. A positive vote will allow Burlington to move forward with the rest of the process. It is currently operating under a MassDEP emergency declaration.

Rao had to leave meeting at this time and turned the chair role over to Anne Carroll.

Agenda Item #6: **Presentation: USGS New England Well Network Geodatabase, 2017**

Carroll introduced Jeff Barbaro, who provided his background. Barbaro has been in the USGS Northborough office (currently the New England Water Science Center) for 17 years. He manages the Water Availability and Use section for the Center and is a groundwater hydrologist.

Barbaro provided an overview of a dataset USGS developed during the 2016-17 drought to better enable analyses that could help explain the variable responses to drought conditions exhibited by the monitoring wells in the groundwater network. The intention was to better organize the information already contained about each well to facilitate such an analysis. Additionally, the project was an opportunity to merge the data from the former individual state offices to be able to better undertake regional analyses under their current New England-wide focus. Barbaro credited Laura Hayes, John Mullaney, and Ann Chalmers with doing much of the project work. Barbaro's presentation can be viewed in full here: https://www.mass.gov/doc/presentation-geospatial-dataset-for-wells-in-the-new-england-groundwater-level-network-through/download

Highlights:

- The database has 426 wells, including active network and study wells and discontinued wells.
- The database has 90 attributes for each well.

- The database is dominated by wells in stratified drift, with fewer till and even fewer bedrock wells.
- Length of flow path to nearest water body and proximity to high capacity public water supply wells are two statistics that could help anticipate when a well might be more influenced by these proximal entities than by the overall groundwater situation.
- Some applications for groundwater level data in the database include:
  - Drought prediction and management
  - MA Title V septic system permitting
  - Regional or state network gap analysis
  - Assessment of climate change and salt water intrusion
  - Groundwater/surface water model calibration
  - Bedrock surface mapping
  - Monitoring levels in major aquifers, physiographic regions, river basins
  - Other regional and local hydrologic investigations
- For more information, see the project webpage at: https://www.usgs.gov/centers/new-englandwater/science/geospatial-dataset-wells-and-attributes-newengland-groundwater?qt-science_center_objects=0#qtscience_center_objects

Discussion:
Carroll thanked Barbaro for explaining the well network and all the uses mentioned.

Cambareri commented that he has using USGS data for over 40 years and expressed appreciation for the cooperative work between the USGS New England Water Science Center, MassDEP, and the DCR Office of Water Resources, which he said is essential for water resources management and helps the Cape Cod Commission (CCC) understand and relate important information to the public. He looks forward to seeing the new Frimpter method Barbaro mentioned. Barbaro thanked Cambareri for the CCC's long-time measurements on Cape Cod.

Carroll added her thanks for groundwater monitoring efforts to the MassDEP Staff, UMass, and the WRC staff at DCR. In particular, Vanessa Curran, along with her daughter, has been conducting all of DCR's groundwater monitoring responsibilities since the pandemic started.

Pederson asked whether there has been any movement on an MWWA suggestion to test the groundwater monitoring well network for PFAS to determine occurrence statewide, under MassDEP's voluntary sampling program. Barbaro said the USGS has never sampled the whole network for regional groundwater quality. They did some water quality monitoring in NH for MBTE and in MA for arsenic and uranium, but the latter involved sampling private wells. Baskin explained that the current funding through the MassDEP program is for public systems and private drinking water wells, so could not be used for this network, but she would like to look at where they might be able to find funding for sampling the network wells for water quality.

Cambareri added that MassDEP's recent adoption of new drinking water standards for six PFAS compounds is an incredible advancement. With the increased monitoring that has resulted, MA will see more detections. He supported Pederson's suggestion to gather background data on

PFAS beyond drinking water supplies, to help understand PFAS levels in the environment, whether from septic discharge, the atmosphere, or other sources.

Baskin confirmed that MassDEP's PFAS regulations were published on October 2, 2020, implementing maximum contaminant levels as part of drinking water standards for six PFAS compounds, out of several thousand. MA is one of a very few states in the nation to have issued such standards. MA public water suppliers have been working hard to get out ahead on this issue, including volunteer monitoring, which has enabled a number of them to take advantage of $2 million in remediation grants. MassDEP is working to identify sources of PFAS, including: land applications of residuals; wastewater river inflow, effluent, and sludge; riverine systems upstream and downstream of wastewater treatment plants; and unimpacted streams. Voluntary private well monitoring would ideally be focused on MA communities with the least service by public supply, as these wells would not have the benefit of sampling from nearby public wells.

Bentsen asked Barbaro to talk more about trend analyses from the climate network. Barbaro responded that the Center has done some work on trends that are part of national studies, which have included MA and New England, but they have not done studies specifically on trends of the wells in the state. They did do some trend analysis in updating the Frimpter method, but that was not a systematic trend analysis for climate change.

The meeting was adjourned at 3:00pm with a motion by Weismantel, seconded by Balzotti, and agreed to by a unanimous roll call vote of those present.

Documents or Exhibits Used at Meeting:

1. Hydrologic Conditions in Massachusetts for September, 2020
2. WRC Meeting Minutes: September 10, 2020
3. Interbasin Transfer Application, Proposed Connection to the MWRA Waterworks System, Town of Burlington:
   a. Draft for Water Resources Commission Discussion: WRC Staff Recommendation dated October 8, 2020, redline copy
   b. Draft for Water Resources Commission Discussion: WRC Staff Recommendation dated October 8, 2020, clean copy
   c. Correspondence dated September 21, 2020, from Water Resources Commission to John G. Sanchez, town of Burlington, regarding extension of timeline for decision on the requested action to increase the present rate of interbasin transfer
4. Interbasin Transfer Act project status report, September 25, 2020

Compiled by: SC

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.*