THE COMMONWEALTH OF MASSACHUSETTS

WATER RESOURCES COMMISSION

100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for June 9, 2022

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

Minutes approved 9/8/2022

Members in Attendance:

Vandana Rao	Designee, Executive Office of Energy and Environmental Affairs (EEA)
Linda Balzotti	Designee, Department of Housing and Community Development (DHCD)
John Scannell	Designee, Department of Conservation and Recreation (DCR)
Kate Bentsen	Designee, Department of Fish and Game (DFG)
Hotze Wijnja	Designee, Department of Agricultural Resources (DAR)
Duane LeVangie	Designee, Department of Environmental Protection (MassDEP)
Thomas Cambareri	Public Member
Vincent Ragucci	Public Member
Samantha Woods	Public Member

Members Absent

Todd Callaghan	Designee, Massachusetts Office of Coastal Zone Management (CZM)
Kenneth Weismantel	Public Member

Others in Attendance:

Erin Graham	DCR/Office of Water Resources
Marilyn McCrory	DCR/Office of Water Resources
Viki Zoltay	DCR/Office of Water Resources
Vanessa Curran	DCR/Office of Water Resources
Sara Cohen	DCR/Office of Water Resources
Kara Sliwoski	DCR/Office of Water Resources
Rebecca Quinones	MassWildlife
Jennifer Pederson	Massachusetts Water Works Association (MWWA)
Bethany Pucino	EEA Intern
Mark Clark	North Reading Water Department
Joe Parisi	North Reading DPW
Christine Hatch	University of Massachusetts Amherst
Katie Ronan	Massachusetts Water Resources Authority
Andreae Downs	Wastewater Advisory Committee
Becca George	DHCD
Lexi Dewy	Water Supply Citizens Advisory Committee
Sarah Bower	Mass Rivers Alliance
Read Porter	EEA
Isabel McCauley	

Rao called the meeting to order at 1:07 p.m.

Agenda Item #1: Welcome and Introductions

Rao announced that the meeting was being recorded and all votes would be taken by roll call. She invited those who wish to speak during the meeting to indicate this in the chat window. Members introduced themselves.

Agenda Item #2: Executive Director's Report

Rao made the following announcements:

- Reminder to Commissioners that in their monthly packet is a letter of Determination of Applicability for Plainville, which states that the Interbasin Transfer Act does not apply. This was determined by staff after a close evaluation of a complicated system.
- Announcement of the new Undersecretary of Environment, Gary Moran, replacing Beth Card
- The Drought Management Task Force met earlier in the day. Drought conditions have deteriorated across the state, particularly in the east. Recommendations for drought stages were Level 2 for the Northeast and Southeast regions; Level 1 for the Connecticut River Valley, Islands, and the Central regions; Level 0 for the Western and Cape regions. The Secretary will make the final declaration.

Additional Items:

- Wijnja announced that someone from *The Center Square* news organization interviewed EEA on drought conditions as affecting the agricultural community. DAR provided information on how the agency helps farmers prepare for drought and address water conservation.

Agenda Item #3: Hydrologic Conditions and Drought Status

Graham provided an update of current hydrologic conditions. The report is available at: https://www.mass.gov/info-details/monthly-hydrologic-conditions.

Highlights:

- May monthly average temperatures were the 13th warmest on record for state.
- Precipitation was very low in the Northeast, Southeast, and Central; other regions fared somewhat better.
- Streamflow was mostly below normal across the state, worsening over the month.
- Groundwater was more mixed across the state; all regions showing Level 1 index severity except the Western and Cape regions, which were normal.
- Lakes and Impoundments had some water bodies showing below normal conditions, especially in the Northeast, which is at Level 1, while the other regions were at Level 0.
- KBDI levels crept up in May, especially in the Central, Northeast, and Southeast regions, which were at Level 1.
- CMI was at Level 0; the proposed new Evaporative Demand Drought Index (EDDI) showed elevated levels across almost the whole state.
- The US Drought Monitor (USDM) is showing some level of drought for all but the western-most part of state.
- The forecast is showing above normal temperatures and no strong signal for precipitation for the month of June; the 3-month outlook shows a 50-60% chance for above normal temperatures, with the southern half of state showing above normal precipitation and the

northern half about equal chances for above and below normal. The hurricane season outlook predicts a busy season.

Discussion:
Rao reminded members that the Level 2 drought stage being recommended by the DMTF for the Northeast and Southeast regions would initiate greater inter-agency coordination around drought response and more intense communication efforts with municipalities and the public.

Agenda Item #4: Meeting Minutes, March 2022

Rao invited motions to approve the meeting minutes for March 10th,2022.

VOTE	A motion was made by Cambareri with a second by Ragucci to approve the meeting minutes for March 10th, 2022. The roll-call vote to approve was unanimous of those present, with the exception of Bentsen, who abstained.

Agenda Item #5: WRC Work Plan for FY2023

The proposed WRC Work Plan for FY2023 was included in the monthly packet. The plan was reviewed in detail during the May meeting. Curran briefly reviewed it again, including updates since the May version. Highlights of the presentation included:

- Funding was secured for a cooperative project with USGS to revise methods for the Lakes and Impoundments Drought Index, so the plan reflects that this project will be moving forward. The prior version stated that staff were seeking funding for this work.
- The DMTF will be meeting in the next few weeks to incorporate the new Evaporative Demand Drought Index (EDDI) into the hydrologic monitoring program and the Drought Management Plan, to replace CMI.
- Staff will continue to update the Water Conservation online toolkit, as well as work to highlight water conservation success stories at WRC meetings, the latter of which is a new addition based on a recommendation by Commissioner Wiesmantel.
- Curran and Rao introduced Bethany Pucino as summer intern at EEA working on Water Conservation for school age children and the public.
- Interbasin Transfer Act (ITA) reviews ongoing or anticipated include Foxborough, Groton, Lynnfield Center, and Westport. The ITA Performance Standards will also be updated.
- USGS studies coordinated by Viki Zoltay include the Climate and Streamflow Projections and Risk project, a Low Flow Statistics project, and a Groundwater Historical Data project in coordination with MassDEP.
- The Growing Wild for Pollinators project was presented at the May meeting. As a follow up to that meeting, by request, Curran highlighted a link to the *Lawn to Pollinator Habitat Savings Calculator* from that presentation: https://www.mass.gov/info-details/sustainable-landscaping-at-state-facilities#resources-and-tools-to-get-started-.

VOTE	A motion was made by Ragucci with a second by Cambareri to approve the WRC Work Plan for FY 2023. The vote to approve was unanimous of those present. Woods was temporary away from the meeting during the vote.

Duane LeVangie joined the meeting at 1:50pm.

Agenda Item #6: Advanced Metering Infrastructure (AMI) Water Meter Replacement Project

Rao introduced Mark Clark from North Reading. She reminded participants that North Reading came through the ITA recently. Clark presented on North Reading's success with its AMI program. The full presentation slides are available at: https://www.mass.gov/doc/forwebnorth-reading-water-meter-replacement-project/download

Highlights include:

- The program to replace all town customer meters with new AMI meters began in the spring of 2018; about 99% of AMI meters were installed within the program's first year.
- The large majority of North Reading customers are residential.
- The total project cost just under $2M, funded through Enterprise debt service, which amounts to about $400 per account. This includes contracting with a third party to assist in the conversion process. Ongoing subscription for the software is $12-15,000 per year.
- A series of data collectors across town collects data from individual meters and sends that to the Water Department. This system can read new meters in units down to 0.1 gallon; the prior system meters recorded usage to the nearest 1,000 gallons.
- New system reads meters 24 times per day, reading 98-99% of the system in six seconds; a few meters are still read manually for a variety of reasons. The prior process provided four readings per year, and it took six weeks for a single employee to complete all reads. Currently the department still bills quarterly.
- Customers can sign up for notifications if their usage is high or abnormal. They can also register for a WaterSmart portal for detailed review of their usage. About 14% of customers have done this.
- On demand readings can be provided by the department for any customer at any point directly from the office in addition to hourly readings. The prior system used a combination of drive-by units, manual-read meters, non-standard meters.
- The system relies on three software systems: MUNIS for billing and consumption history; Neptune360 for meter reading, reports on top ten water users at every reading and total daily consumption; WaterSmart for customer portals that use algorithms to help customers analyze their use and make recommendations for conservation behaviors or leak detection.
- Data collectors share locations with water towers, which are naturally at higher elevations.
- Clark presented some visuals of the information available through the Neptune and Water Smart dashboards.
- The project required significant funding and impacted water rates. It also required interacting with all customers, which can involve many unique complications. It was useful to use subcontractors. Overall, the benefits of the conversion are worth it. These include: leak detection, burst pipe detection, irrigation identification, customer service improvement, outdoor water restriction enforcement, and time savings (meter readings; diagnostics).
- New versions of these systems can do even more than North Reading's system, such as acoustically identify leaks in utility mains.

Discussion Questions and Answers, and Comments:

- How is efficiency defined in Water Smart? North Reading uses the default settings of the program, which might be defined as the lowest 15% of users but Clark wasn't certain.

- How are water conservation recommendations in Water Smart selected? North Reading uses the program default recommendations, but Clark feels these could be stronger.
- Can the department use data to help enforce outdoor watering restrictions? Yes, the system can identify how many days of irrigation occurred in the past week for each account, which helps in reaching out to customers in violation of restrictions for warnings or enforcement.
- What does the $2M cost of the project include? The five radio data collectors, approximately 49,000 meters, the third-party contractors and hired engineers, all over about 18 months.
- What can the state do to help support suppliers in adopting this technology? The most important impetus is getting the information out through presentations and shared stories.
- What was the cost and scope of the initial engineering study that led to this project? The town needed to replace meters anyway, so the study focused on options and laid out the logistical constraints and feasibility of the AMI system. Cost may have been around $18,000 for that study but Clark could not recall exactly.
- Ragucci commented that the relay stations can be piggy-backed on existing electric utility AMI systems, where those are set up in a town. Clark agreed, although this was not an option in North Reading.
- Pederson commented that across the industry and state there have been some significant levels of customer concerns not only about the radio waves but about privacy concerns, due to the granularity of the data and the behavioral insight that provides. Also, issues have been raised about this being public data and therefore individual water use could be subject to public record requests. In some situations, departments have had to deal with customer consent forms to install these meters. Clark agreed that this can be an issue, but privacy and technology concerns have been expressed by a very small number in North Reading.
- Rao thanked Clark for the presentation and offered to help provide a state platform to help share this information with other suppliers.

Agenda Item #7: Congratulations and well wishes in honor of Marilyn McCrory's retirement

Rao shared with attendees that Marilyn McCrory would be retiring at the end of June. She expressed both delight on Marilyn's behalf and sadness about her departure. Rao said she has come to rely on Marilyn for so many things it's hard to imagine how the WRC staff could have functioned without her. She commented on her work on water conservation policy, WRC administration, and water conservation implementation within DCR. Rao feels this as a big loss. She wishes we could do this send-off in person. She congratulated Marilyn and wished her well in retirement.

Carroll added that Marilyn represents the best of government. These traits include being efficient and effective, transparent and inclusive, and responsive to public needs. Achieving this requires so many individual tasks and efforts behind the scenes that Marilyn tends to with ease and dedication and grace. Carroll continued that the office's communication really benefited from Marilyn's vision and perseverance. As a result of her efforts, staff communications have more pictures and clearer text. She even helped coordinate training for the whole staff on good communication. During the current times when people question government so constantly, it's more important than ever to have people like Marilyn on the team.

Cambareri added that he was appointed to WRC on 2006. Over his time on the WRC Marilyn has been a rock-solid staff person, good natured, dependable, and welcoming with a great smile.

These things make a difference in the work of institutions. He thanked Marilyn for all she has done and wished her well. He hopes she comes back as an appointed WRC member.

Marilyn commented that it has been an honor to be staff to the WRC. The Commission addresses really important issues – sustainable water management, water conservation standards, drought management, water needs forecast methodology, environmental regulations. It has been an honor and very enlightening to witness all the conversations. She has always been impressed by the respectful tone and thoughtful discussions of the WRC and feels it could be a model for governance. She works with a talented and dedicated group of people as staff to the WRC and is proud of the work the WRC does. It makes a difference in people's lives and to the Commonwealth.

Pederson thanked Marilyn for her utmost professionalism, working with water suppliers, and getting involved with the association's conservation committee. She stated that Marilyn always did the best job on meeting minutes, and she could always know exactly what happened if she missed a meeting. She wished Marilyn the best and would have loved to have been able to bring her cookies for the celebration.

LeVangie noted that Marilyn has had a couple of the more difficult water needs forecast issues, and she is so thorough that nobody could ever question her methods due the detail of her work. He invited her to attend future meetings to keep up with the fun.

Cohen stated that she was really going miss Marilyn and although she would have other opportunities to share her thoughts directly with Marilyn she wanted to say in front of the group how much she appreciated the time she got to spend with her over the years as a great friend and person, in addition to the quality of her work.

Curran commented on Marilyn's general great positive attitude and the influence that has had on the office. She will miss that!

Rao closed the meeting by formally thanking Marilyn on behalf of the Secretary for her work for the Commonwealth.

V O T E	A motion was made by LeVangie with a second by Balzotti to adjourn the meeting. The roll-call vote to approve was unanimous of those present.

Meeting adjourned, 2:55

<u>Documents or Exhibits Used at Meeting or Attached with the Monthly Packet:</u>

1. WRC Meeting Minutes: March 10, 2022
2. WRC Work Plan, FY2023
3. Correspondence dated May 24, 2022 from Water Resources Commission staff to the Town of Plainville
4. Interbasin Transfer Act project status report, May 27
5. Hydrologic Conditions in Massachusetts, May 2022

6. Presentation by Mark Clark on the Advanced Metering Infrastructure project in North Reading

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.*