THE COMMONWEALTH OF MASSACHUSETTS

WATER RESOURCES COMMISSION

100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for February 9, 2023

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

Minutes approved May 11, 2023

Members in Attendance:

Vandana Rao	Designee, Executive Office of Energy and Environmental Affairs (EEA)
Linda Balzotti	Designee, Department of Housing and Community Development (DHCD)
Kathleen Baskin	Designee, Department of Environmental Protection (MassDEP) (until 2:30 p.m. then Duane LeVangie)
Anne Carroll	Designee, Department of Conservation and Recreation (DCR)
Todd Richards	Designee, Department of Fish and Game (DFG)
Tyler Soleau	Designee, Massachusetts Office of Coastal Zone Management
Hotze Wijnja	Designee, Department of Agricultural Resources (DAR)
Thomas Cambareri	Public Member
Christine Hatch	Public Member
Vincent Ragucci	Public Member (until 3:00 p.m.)
Kenneth Weismantel	Public Member
Samantha Woods	Public Member

Others in Attendance:

Read Porter	EEA
Katie Ronan	Massachusetts Water Resources Authority (MWRA)
Kara Sliwoski	Massachusetts Office of Water Resources (OWR)
Becca George	DHCD
Sara Cohen	OWR
Rebecca Mulrean	EEA
Lexi Dewey	Water Supply Citizens Advisory Committee
Erin Graham	OWR
Jason Duff	OWR
Vanessa Curran	OWR
Liesel Hans	Alliance for Water Efficiency (AWE)
Viki Zoltay	OWR
Greg Dankert	Oak Bluffs Water District
Lynn Gilleland	Environmental Protection Agency (EPA) Region 1 Drinking Water
Kate Bentsen	MA Division of Ecological Restoration (DER)/DFG
Karl Anderson	FEMA Region 1
Ryan Kingston	Department of Energy Resources (DOER) Leading by Example (LBE)
Nadia Madden	DCR Flood Hazard Management Program (FHMP)
Robert Worthley	Foxborough Water Department
Sara Bower	Mass Rivers Alliance
Krista Lillis	Department Capital Asset Management (DCAM)
Joy Duperault	DCR FHMP

Don Kent	DCR
Jen Pederson	Massachusetts Water Works Association (MWWA)
Pine DuBois	Jones River Watershed Association

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 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. A roll call of members in attendance was taken.

Agenda Item #2: Executive Director's Report

Rao reported that EEA announced three climate related positions. In the past there was a state climatologist and an assistant state climatologist who were affiliated with the Commission. These positions had been left open since the passing of the last state climatologist. The whole approach to what a state climatologist does has evolved with respect to climate change, and the job is no longer just about precipitation. EEA announced the formation of the Office of Climate Science with a director and an assistant director. There are some other positions as well who will work on finance and outreach. The role of what typically a state climatologist does in other states will be satisfied by these multiple positions. The office will make EEA more robust in its assessment of climate, its response to climate, its engagement with the public, and its communication to the public on climate. Much of what Massachusetts is expected to experience with climate change has to do with water, so the new office will be closely connected to what the Commission does. Rao works very closely with the climate team on these issues, and she is excited to have employees coming on board who have strong backgrounds in climate science and communications.

The National Oceanic and Atmosphere Administration (NOAA) is organizing a workshop "Drought Assessment in a Changing Climate: State of the Science." The workshop will be cohosted by the National Integrated Drought Information System (NIDIS) and the United States Department of Agriculture (USDA) Climate Hubs. This workshop will explore the notion that drought assessment is being outpaced by climate change and will determine the implications to drought response and adaptation. Staff has been in active conservation with our New England partners. On Friday February 10th there is a pre-workshop webinar. The meeting will be held in Colorado February 28th - March 1st, but staff probably won't be allowed to go.

Rao opened the meeting to staff and Commissioners for announcements.

Baskin announced MassDEP grant funding available through the Bureau of Waste Site Cleanup, the Natural Resource Damages (NRD) Program. The funding opportunity is for the Head of the Neponset Sole Source Aquifer. The NRD program is offering a virtual presentation with more information. They are looking for projects on groundwater recharge, demand management, and integrated management. The MassDEP contact is Michelle Craddock. Baskin gave a brief overview of the NRD Program and mitigation.

Baskin announced that the Water Management Act regulations were promulgated on January 20,

2023. She thanked the Commission for their vote at their meeting.

Cambareri ask for an update on the Title V regulations and the public comment period. Baskin responded that there are proposed updates to Title V septic regulations and proposed new watershed regulations to reduce pollution in areas like Cape Cod where nitrogen is a problem. The comment period closed January 30, 2023. There were lots of comments and there was an extended comment period with added meetings and hearings. MassDEP is now considering options.

Woods reported that she saw a full-page promotion in the Boston Globe placed by the Conservation Law Foundation and other partners. She reported there is a job opening for a part-time position for fisheries habitat assessment and GIS at the North and South Rivers Watershed Association. A couple weeks ago a 5-inch precipitation event caused sanitary sewer overflows. A shellfish bed was closed and there is awareness because there is a notification system. With this awareness the overflows can be monitored and additional resources to prevent overflows can be pursued.

Carroll introduced Don Kent, Director of Research, in the newly formed DCR Office of Research. This position was created as a result of the DCR strategic readiness initiative.

Hatch shared a UMass press release about restoring wetlands and gave some highlights of the research she is conducting of restored cranberry bogs. For more information see https://www.cns.umass.edu/news-events/news/focusing-groundwater-rewild-wetland

Cambareri asked about EEA revising MEPA regulations and Rao replied she will check if anything is proposed.

Rao reported that it appears that Massachusetts is out of the drought. The Drought Management Task Force (DMTF) met yesterday and made a recommendation to the Secretary for normal conditions across the state.

Agenda Item #3: Update: Hydrologic Conditions

Rao introduced Erin Graham of DCR to provide an update on hydrologic conditions for January 2023.

Temperature: Monthly average temperatures were above normal across the state. The Worcester climate site had its warmest January on record, the Boston climate site had its 5th warmest January, and Massachusetts had its warmest January on record. The map in the Hydrologic Conditions Report shows a greater than seven-degree departure across the state with the scale used on the map. Other maps and tables found on the Northeast Regional Climate Center (NRCC) website, show the departure was more in the plus 8°to 9°F departure range with the Worcester site having a plus 10° F departure.

Precipitation: January precipitation was significantly above normal. According to the NRCC, it was the fourth wettest January on record for Massachusetts.

Streamflow: Monthly streamflow was significantly above normal except for Cape Cod Region, which was in the normal range. The time series showed flow in the above-normal range throughout the month.

Groundwater: January groundwater levels still varied with some wells still below normal and others above normal. Those that are below normal have shown continued recovery.
The regional medians of individual well percentiles improved in all regions as compared to December. At the end of January, the Islands Region was at index severity level 1, but the two wells monitored have since improved and now are both in the normal range.

Lakes & Impoundments: At the end of January, levels were above their 30th percentile except for Ashumet Pond on the Cape. Although the pond level increased, it stayed at the 17th percentile.

*Keetch Byram Drought Inde*x: This index is reported is seasonally.

Evapotranspiration: The Crop Moisture Index and Evaporative Demand Drought Index are reported seasonally.

Flooding: According to the National Weather Service E-5 report, some minor flooding from a storm on January 25th was reported at the Bridgewater gage on the Taunton River with limited impacts and no reports of flood damage.

Snow: Minimal snow cover remained in the Western Region and northern parts of the Connecticut River Valley and Central Regions at the end of the end of the month. The seasonal snowfall to data is still below average.

Massachusetts and United States Drought Monitor (USDM) Drought Status: The DMTF met February 8th and their recommendation to the Secretary is to remove all remaining areas of drought. The Hydrologic Conditions Report will be finalized once the press release is sent out. The USDM showed no areas of drought at end of January. The month started out with areas of D0 in the NE, Cape, Islands, and parts of the Western and CTRV Regions; those areas were gradually cleared by Jan 24th map.

National Oceanic Atmospheric Administration (NOAA) Temperature and Precipitation Outlook: The outlook issued 1/31 for February shows a 33-40% chance for above-normal temperatures. A 33-40% chance of above-normal precipitation is forecasted for the western half of the state, and equal chances for above-normal, normal, or below-normal precipitation in the eastern half. The outlook issued 1/9 for February through April shows a 33-40% chance of above-normal temperatures and equal chances for above-normal, normal, or below-normal precipitation.

NOAA Monthly and Seasonal Drought Outlook: The monthly outlook for February and the seasonal outlook for February through April show no drought development.

Accumulated Precipitation Departure Graph: The accumulated precipitation departure over the past 12-months shows the monitored stations near or above zero except for the Middleton station, which is down about seven inches.

Agenda Item #4: Vote: Meeting Minutes, November 10, 2022

Rao invited a motion to approve the meeting minutes for November 10, 2022.

VOTE	A motion was made by Hatch with a second by Ragucci to approve the minutes of the November 10, 2022 WRC meeting. The roll call vote to approve was unanimous of those members present with Weismantel abstaining.

Agenda Item #5: Presentation: An Overview of the FEMA Flood Mapping Process

Duperault introduced Karl Anderson, Federal Emergency Management Agency (FEMA), Region 1. The presentation can be found on the state website at the link: https://www.mass.gov/service-details/review-our-meetings

Anderson gave an overview of the FEMA flood mapping process focusing on the steps and how state and local officials can be involved in process. He provided definitions of key terms and noted that the official name is a FIRM, or Flood Insurance Risk Map, because historically the maps were primarily used for insurance risk purposes.

The process takes between four to five years with different phases. The first phase is the Discovery Phase. During this phase the focus is gathering data on a potential project scope and typically on a watershed basis. Local officials are given an overview of the process and description of required information. The end product is a Discovery Report. The report describes FEMA's priorities within the watershed. FEMA doesn't have the resources to study every stream, so prioritization is done during this phase.

During the Discover Phase input is requested during this phase. FEMA asks: "Where does it flood? Do you have any issues with existing maps? Have there been any infrastructure changes that affect how water moves? Are there any non-FEMA studies?" Sometimes communities have a small study, and less often a study covering the whole town.

The next phase is Data Development. Data are collected and analyzed about hydrology and hydraulics. The latest information about infrastructure is important as well as elevation data. Elevation data has improved dramatically in the past 10-15 years with the use of Light Detection and Ranging (LiDAR). FEMA FIRM represent a snapshot in time and do not reflect future climate change. The reason for that is the FIRM were designed for flood insurance policies; what is charged for one year if for that year's risk.

The data development will result in different types of studies. The first type of study is called an Approximate Study. This used to be very approximate, but now there are better defined elevations. The study uses a technique called Base Level Engineering. There isn't an on-the-ground survey, but the latest models are used to define risk.

The second type of study is called a "Redelineation". This type of study is done with the underlying flood data are still valid; there is no new hydrology, no new hydraulics, and not much development. Field survey data are used. There are no changes to Base Flood Elevations or

Floodways. New LiDAR is used to remap existing zones with the most up-to-date elevation data.

The third type of study is called a "New Detailed Study". This is the most comprehensive study type. There is all new hydrology, hydraulics, survey data, and elevation data. There are new Base Flood Elevations and Floodways.

The process of producing a map is on-going. FEMA partners with USGS and contracts with engineering firms. FEMA and Mapping Partners create draft FIRM products called "workmaps" and include a Flood Risk Review Meeting or "Workmap Meeting". Local officials can get a first look at the maps to provide review comments to FEMA since the local officials know their communities best. Maps are not public during this phase.

Using the input from the workmap meetings, FEMA makes changes to the maps and releases a Preliminary Map, which is released to the public. It is available on FEMA's Map Service Center website. There is a Community Coordination and Outreach meeting. This meeting always occurs after preliminary issuance near the beginning of the Appeal Period. The Appeal Period lasts 90 days by statute. Appeals need scientific and engineering data. If the Appeals come with excellent data and considered valid, changes will be incorporated.

The last phase (Final Maps) starts with a Letter of Final Determination (LFD), which is an official notice by FEMA that the map has been finalized and there will be no more changes. An Adoption Period follows, which is six months long by statute. Local communities must adopt the new map into their local ordinance. In much of Massachusetts this means Town Meeting. This limits the timeline, so Massachusetts always issues LFDs in December or January so towns can do what needs to be done for acceptance at spring Town Meeting ahead of the six-month deadline. During the Adoption Period there is a public meeting or open house so residents can get personalized information. The effective date is exactly six months from the LFD data. After this date the new map is officially in effect for both flood insurance and floodplain management purposes.

Anderson discussed current mapping projects in FEMA Region 1 within Massachusetts. There is active work in the Quinebaug watershed as well as eastern portions of the state in the Charles, Nashua, Merrimack, and Blackstone River watersheds. Additional work is being done in the Deerfield, Westfield, and Farm River watersheds. Further out on the schedule are the Hudson and Hoosic watersheds. There is a lot going on right. There wasn't a lot of working happening in the New England inland areas for a long time. Congress had mandated that FEMA study the New England coast, and now that the coastal maps are done, FEMA is focusing on the the riverine inland parts of New England. Some maps haven't been digitized in the western part of the Massachusetts.

Anderson showed a list of contacts for FEMA Region 1 and said that Joy Duperault is the state contact.

Rao asked how often maps are updated, what is the trigger to update a map, and what is the funding source? Anderson answered that the funding is appropriated by Congress. Each FEMA region gets a budget every year. Sometimes a region is given a specific mandate, like coastal. It is possible for other organizations to provide funding. For example, Amherst elected to study the

whole town, although it is uncommon to do that. It is possible to provide funding if all FEMA specifications are followed so FEMA will adopt the map. There are volumes of paper of what is required to meet FEMA specifications so typically an engineering firm is hired. As far as frequency, maps are updated as frequently as possible, although FEMA has to prioritize. In the western part of the state- Berkshire, Franklin, and Hampton counties, the maps are so old that they are not even digitized; they are old paper maps with no ortho photos, and they were done by town. After the work that is being done now there will be hardly any paper maps left.

Hatch thanked Anderson. Hatch asked given that certain areas haven't been studied in a long time because they are less dense, shouldn't the focus be on these areas? What about pluvial areas that might not be included in the LiDAR or in a HEC-RAS modelling? Anderson answered that it is complicated. There is a database called the Coordinated Needs Management System (CNMS). The database contains every reach in the country, and there is a series of data points for each reach, for example, the study's age and the population density. That is in the foundation used for deciding focus areas, but not the only factor. There is no single formula. A lot of factors are considered, and FEMA does the best they can. FEMA did consider areas that haven't been looked at in a long time in New England. These areas might not get a Detailed Study, but they will at least get an Approximate Study, which are model backed and use excellent topographical data. The areas that haven't been studied in a long time will be in a much better situation once this round of work is finished. Regarding pluvial flooding, this is out of the FEMA FIRM scope, but is being considered at higher levels within FEMA. The 2-D models can help in these areas, but more thinking needs to be done around standards and implementation, especially in urban areas. FEMA has been working on this, but not so much in urban areas. The FIRM program was developed for flood insurance policies, and FEMA realizes it could be doing more.

Rao asked about the future floodplain- where does climate change come into play? Is there some way of delineating where the floodplain might be in the future? Anderson answered that right now they do not have a way. FEMA doesn't want people charged for insurance for the risk in 30 years, so the FIRMs don't show future risk. FEMA recognizes the need for resilience. There has been some thought at the national level and there is a local pilot program in the Housatonic to do that type of work with USGS.

Duperault added that Congress only allocates a couple million dollars per year, so there is not a lot of funding available for this type of mapping.

Rao thanked Anderson for the presentation.

Agenda Item #6: Discussion: Key Takeaways from the AWE 2022 Water Efficiency Scorecard for Massachusetts

Carroll thanked AWE for the scorecard and introduced Liesl Hans, Director of Programs for AWE.

Hans gave an overview of AWE and thanked those involved with this project including the Environmental Law Institute, state agency personnel, and the Project Advisory Committee.

Hans gave an overview of the scorecard. It is an evaluation of state water efficiency and sustainability policy. It is not an evaluation of local water agencies or policies nor is it an assessment of actual water use (e.g., gallons per capita per day) or water availability. The focus is residential, commercial, industrial, and institutional water use. Some policies that are evaluated can relate to agriculture water use, but that is not the focus.

The goals of the scorecard are to encourage states to adopt laws and policies that promote water conservation and efficiency, to highlight exemplary laws that can be foundational for other states, and to identify opportunities for states to improve. The report includes individual state scorecards with recommendations.

Water efficiency is important no matter what the water supply situation is. Benefits include saving energy, climate change resilience, and minimization of the need of infrastructure expansion.

Some changes from the last state scorecard in 2017 include new categories: Water-Land Use Planning Integration, State Funding for Water Bill Assistance, State Funding and Support for Water Reuse, and Accounting for Energy Savings from Water Efficiency.

Some states have made great progress since the 2017 survey, while others made little or no progress. The main survey category where progress was made was point-of-sale plumbing efficiency requirements; ten states adopted standards that go beyond federal standards. In addition, three states added conservation planning requirements, and 19 states require some level of water-land use planning coordination.

There was lack of state action or progress on funding for customer water bill assistance, climate action planning by water utilities, drought preparedness planning, state funding for conservation and efficiency, and supporting conservation-oriented rates.

This year states were ranked instead of receiving a letter grade as in past surveys. California ranked the highest. The top ten ranked weren't necessarily in water-scarce areas. The survey awarded up to 89 points and the average was 23. New York made the most progress since 2017 and moved into the top ten largely by adopting plumbing efficiency standards, adopting requirements for utilities to do drought preparedness plans, and adding funding for water conservation. Washington also made significant progress by adopting plumbing efficiency standards and scoring well in water and land use planning. Also new in the 2022 survey was regional rankings. Massachusetts ranked 13th overall in the United States with New Hampshire and Rhode Island ahead of Massachusetts in the New England Region.

The changes in key policies included the changes made in plumbing fixture standards. Often those were seen with changes in energy efficiency standards, which often gets a lot of support regardless of the state.

Hans discussed the survey category of Water Loss Policies. Water loss control is increasingly important as infrastructure continues to age. Georgia ranked the highest in this category and is doing a lot of great work. Additional sub-questions to explore within water loss control include structure of a limit, audit reporting requirements, and audit validation requirements.

The Water Conservation Planning asked a variety of questions related to planning including if a plan was generally required or if it was tied to a water right. Sub-questions were required contents, stakeholder input requirements, evaluation criteria, frequency of updates, and implementation requirements.

Rao asked why there is a distinction being made between a general requirement and a requirement tied to a water right. Hans answered that there are two different planning processes that were identified as ways as water conservation planning comes about. Ideally states would have a general water conservation requirement for all entities regardless of what is happening with their water supply situation as to acquiring a new water right. However, in some states, water conservation planning only comes about as part of acquiring a water right or water use permit. Both are important, but in different ways. General planning is great, but if a utility is looking to expand water supply, a utility should demonstrate that they can do all they can before expanding their supply. Carroll added that state staff has been taking a closer look at this question because she thinks that almost all Massachusetts water is covered under a permit or right. Massachusetts could never get points in the other category. She said the state will be looking to make sure they are doing all they can. Liesl said this question highlighted how differently states operate. Some states operate more at the state level, while others have regional groups. The way you approach makes a difference. If you can prove that the way you approach effectively means that all water suppliers have an active water conservation plan, then how in future versions of the scorecard can those states be rewarded and acknowledged for meeting the intent of the question.

LeVangie asked about taking a deeper dive to see if Massachusetts was scored accurately, and, if so, how increase our score.

Hans discussed Drought Preparedness. This is an area that Massachusetts has room to improve. Only two states have added this since 2017, which was a surprise.

Climate Action Policies asked about if states require utilities to have climate related plans in place and if states provide funding or assistance. California was the only state to get credit for both. Massachusetts only provides funding or technical assistance. Climate change is water change, so this is very important and connected to drought planning.

Water and Land Use Planning asked about integration or water and land use planning. This is critical as areas grow- are they doing it in the context of the water resource and, in areas where growth is occurring, is it in a conscious way? In places where there are constrained water supplies is that the growth in a conscious and intentional water-efficient way? There are a lot of good examples across the United States.

There wasn't a lot of change in the State-provided Funding and Technical Assistance category except for New York. However, it was good to see that states did sustain and increase their level of funding. For the next scorecard there might be an effort to somehow normalize the state funding.

Utility rates can be a strong signal of the impact of being wasteful. The survey asked about

volumetric billing and conservation-oriented rates, which include including block, seasonal, and budget-based rates. There hasn't been a lot of work at the state level on this, but these types of rates could be a very powerful policy or at least the state shouldn't be putting barriers up to these types of rates.

This year there was a question if states were providing state funding for customer water bill assistance. All states except North Dakota are using the Low Income Household Water Assistance Program (LIHWAP). These federal funds are temporary and available only through September 30, 2023. There is a recommendation to make LIHWAP permanent and AWE would like states to supplement the federal funding and to help utilities remove barriers for low-income assistance.

Water Reuse is a new category this year. This was interesting because it highlighted how many different departments respond to the survey. This is another category that AWE will improve to ensure that the scorecard captures state reuse efforts rather than differences in how reuse is implemented. Most states use revolving fund rather than dedicated funds for reuse.

Water-Energy Nexus points were earned if a state has a policy to account for energy savings that occur with water savings from water efficiency and/or water loss control, also called embedded energy. Nearly every state requires some type of energy efficiency program where hot water energy savings are accounted for, but only three states have statewide policy accounting for embedded energy.

Hans discussed the MA scorecard. The top recommendations were requiring drought preparedness plans, require rate structures that encourage conservation, and require coordination between land use and water planning.

More detail about the points awarded for each category can be found in the report. Additional opportunities for more points are the water loss category (by incorporating non-universal numeric limits and requiring more regular reporting of water loss audits), the water conservation planning category (by adopting as a general planning requirement, not only tied to permits/water rights), and the customer bill assistance category (by providing funding and removing any barriers to utilities use of utility revenue for customer assistance programs).

Hans highlighted resources available on the AWE website including the scorecard webpage, a legislative watch page, and a state fixture standard matrix.

Carroll gave some additional highlights. Massachusetts improved its ranking since 2017. Massachusetts was one of the five states to get full credit for the Plumbing Fixtures and Standards and Codes category. The Municipal Vulnerability Preparedness (MVP) Program and the MassDEP M36 Grant Program received recognition in the scorecard report.

Carroll asked for comments about the three recommendations and all opportunities and what should be pursued in next five years keeping in mind approaches that maximize the ability to work with stakeholders. How will we measure success?

Rao recognized Ryan King from the LBE team, which does outreach to the public sector, and Krista Lillis from DCAMM.

Kingston focuses on the decarbonization of and the reduction of fossil fuels at state facilities. Executive Order 594 has some items on water conservation, so always looking for water efficiencies at state facilities. However, it is hard to get metering data to track savings.

Pederson was shocked at the Massachusetts score given that MWWA members are subject to a great many conservation conditions. How did Massachusetts get a zero on conservation rates.

Hans replied that some questions allow for a smaller number of points if they apply to a portion of the state, but this question does not. AWE could look more closely to consider if there are conditions in place such that most water suppliers implement conservation rates and therefore are meeting the overall intent of the question.

Woods asked the staff if the state do more to encourage conservation rate structures. Is it in the water conservation standards. Cohen answered it is Water Conservation Standards document as a recommendation. There was a lot of intense discussion during the last version. Rao said it is something we should be discussing, and we can look at it again when the Water Conservation Standards are updated.

Woods said the two places got zero was the water conservation rates and the bill assistance. Is there a way we can work on this in a complimentary fashion. Carroll answered that the Commission did make a commitment to move forward on this topic on the support side through case studies and work with DER and AWE. Cohen agreed that the approach has been one of technical assistance and asked Hans to consider this.

LeVangie asked if the conditions on registrants is considered drought preparedness planning? This was a category where points were left on the table. Rao answered that this type of planning is being done at the state level through the state drought plan, some through the MVP Program, and through the required MassDEP Contingency or Emergency Plans. We don't have a neat box of drought management planning at the local level, but we are already doing it in an unobvious way.

Weismantel noted that 20 points were not awarded in water conservation planning and drought planning is another category where there are more possible points. He said Massachusetts did well, although he was surprised by some of the states that did better. The goal isn't necessarily to get points, but to do that right thing. He appreciates the scorecard, but points shouldn't be the goal, actual water savings should be.

Rao suggested that AWE consider looking at residential use. Average residential use in Massachusetts is 55 residential gallons per capita-day (rgpcd). Many states across the country are much higher, so the starting point should be taken into account. Massachusetts has been putting 65 rgpcd policies and standards in place over the past twenty years due to its hydrologic and geologic situation. Rao agreed with Weismantel that the scorecard is helpful, but recommendations should be considered through the lens of greatest efficiencies in Massachusetts. Maybe planning is one, but there are others. The land-water nexus is a big one, which we do in a more diffuse manner.

Hans said that water use and benchmarking has come up is discussions. In a future iteration AWE might start asking states if they are tracking the information. AWE could try to make states realize it is a good practice to track water use across its providers.

Kingston said the AWE Scorecard looks very similar to the American Council for Energy-Efficient Economy (ACEEE) Energy Efficiency Scorecard, which has a few potential points for government lead initiatives efforts. He asked if a future AWE Scorecard iteration might have a category for water conservation targets, policies, or practices at state facilities, municipalities, and other government owned lands? He suggested it would be a good way to learn about other practices from other states.

Hotze noted the low score on the drought preparedness. He looked at a couple other states scorecards- New Hampshire and Rhode Island to compare regionally and to see where Massachusetts could possibly improve.

Pederson is disturbed by the notion that this scorecard gives that Massachusetts is not at the top of the list. Do we care about getting more points? MWWA thinks Massachusetts is way ahead in conservation. She questioned how Massachusetts staff answered the questionnaire as compared to other states. She doesn't want to see the scorecard used to regulate water suppliers because they are regulated enough. She is bothered by the fact that this scorecard would be used to further rachet down water use. She fully supports the notion drought preparedness and planning. MWWA gave an alternate proposal to the state to have each supplier develop a drought plan when the state proposed conditioning registrations. However, the state went down a different path.

Hatch thanked Hans. She suggested moving forward on the subject of the land use connection to water. There is a fair amount of power in land use regulation by Conservation Commissions. In general, when there is development, it is assumed that the water is there; it is treated as an afterthought.

Rao said development in the wetland resource areas are regulated, but there is a strong land conservation effort in this state. There is a push from EEA to use the land for protection and a strong recognition of that nexus.

Kent commented that there are other metrics that quantify our improved water efficiency. The scorecard is helpful, but its scale and simplicity can misrepresent Massachusetts efforts.

Rao said that other states might not have these metrics like Massachusetts does so instead the questions were about programs and planning efforts to effect the change. Maybe that was why the focus was on broad programs. Hans replied that that is a great observation. It is a balance of ensuring survey is manageable. AWE staff closely looks at responses and asks for follow-up citations. There is a recognition that every state operates differently so the survey is limited policies and regulations that can be compared across states. She is open to looking at other metrics in a future version.

Rao said it was helpful to take an introspective view and look to see what questions are being asked. Rao suggested to ask about rgpcd. It is baffling how other states are using over 100 rgpcd

when needed indoor water use 25-50 rgpcd.

Weismantel doesn't think Massachusetts is getting credit for things like the Interbasin Transfer Act or MassDEP's permitting process and the focus on unaccounted-for-water.

Cambareri was surprised at the ranking with all the work that was done in the 1980s and more recently. Cambareri didn't understand why there was such a low score on water loss.

Rao answered that Massachusetts did get some points for unaccounted-for-water. She thinks the scorecard helps us take a critical look at our practices. The scorecard gives us an opportunity to look at practices from other states.

Carroll answered Cambareri's question about unaccounted-for-water. The reason Massachusetts didn't get the full points was because the standard is still 10% unaccounted-for-water instead of a full shift to a water loss control program, which is reflected in our Water Conservation Standards. We've been moving in that direction. Carroll found the scorecard helpful to see what other states are doing, for example, in the land use category. Also, the AWE has been hosting peer-to-peer discussions. If staff finds anything interesting, particularly in land use, it will be brought to WRC for further discussion.

Cambareri and Rao thanked AWE for the time and work put into the scorecard.

Kent said that the scorecard accomplished what AWE wanted to accomplish – we are discussing it and focusing on it. We may have had our feelings hurt a bit, but it is poking us and saying, "don't get complacent". There are other ideas out there, so keep up the work.

Rao said she will pull other agency staff together to see where further gains can be made.

Dewey thanked Hans and complimented the presentation. It is wonderful to have opportunities for improvement. In terms of drought planning, she said there are many communities west of Worcester that don't have individual drought plans. In the past three droughts it has been difficult to get a united effort. The state drought plan has been good, and the outreach has gotten continuously better, especially with the drought dashboard. "However, there are still small communities that could use help putting together a drought plan. It would be good to have state money for grants like the MVP Program through which regional planning agencies can assist communities with developing drought plans.

Rao thanked Hans and gave appreciation for the work AWE does.

Rao invited a motion to adjourn.

VOTE	A motion was made by Weismantel with a second by LeVangie to adjourn the meeting. The roll-call vote to approve was unanimous of those present.

The meeting adjourned at 3:33 p.m.

Documents or Exhibits Used at Meeting:

1. WRC Meeting Minutes: November 10, 2022
2. Correspondence dated January 17, 2023, from the Water Resources Commission to the MEPA Office regarding the Environmental Notification Form (ENF) for Lincoln Logistics, Middleborough
3. The Alliance for Water Efficiency (AWE) 2022 State Policy Scorecard for Water Efficiency and Sustainability for Massachusetts
4. Final Water Management Act regulations (310 CMR 36.00)
5. Interbasin Transfer Act project status report, January 30, 2023

Compiled by: eg
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.*