



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

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**Meeting Minutes for MARCH 12, 2015**

100 Cambridge Street, Boston, MA, 1:00 p.m.

*Minutes approved April 9, 2015*

**Members in Attendance:**

Kathleen Baskin	Designee, Executive Office of Energy and Environmental Affairs (EEA)
Jonathan Yeo	Designee, Department of Conservation and Recreation (DCR)
Rebecca Weidman	Designee, Department of Environmental Protection (MassDEP)
Catherine deRonde	Designee, Department of Agricultural Resources (DAR)
Laila Parker	Designee, Department of Fish and Game (DFG)
Todd Callaghan	Designee, Massachusetts Office of Coastal Zone Management (CZM)
Raymond Jack	Public Member
Paul Matthews	Public Member

**Members Absent**

Thomas Cambareri	Public Member
Bob Zimmerman	Public Member

**Membership Vacancy**

Department of Housing and Community Development (DHCD)

**Others in Attendance:**

Michele Drury	DCR
Bruce Hansen	DCR
Eric Hooper	Sharon DPW, Mass. Water Works Assn.
Matthew Mostoller	Acton Water District
Jennifer Pederson	Mass. Water Works Assn.
Anne Carroll	DCR
Greg Eldridge	Haley and Ward
Sara Cohen	DCR
Duane LeVangie	MassDEP
Vandana Rao	EEA
Wayne Castonguay	Ipswich River Watershed Assn.
William Shaughnessy	Wellesley DPW
Erin Graham	DCR
Marilyn McCrory	DCR
Marilyn Contreas	Retired from DHCD
John Lebeaux	DAR

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Baskin called the meeting to order at 1:10 p.m.

**Agenda Item #1: Executive Director's Report**

Baskin invited Weidman to provide an update on MassDEP's 2014 draft Municipal Separate Storm Sewer (MS4) permit from USEPA. Weidman distributed copies of MassDEP's comment letter to EPA and summarized MassDEP's comments and concerns. Primary concerns include the cost to communities of the new requirements; the need to align MS4 requirements and the

state's stormwater standards; a shift away from a best management practices approach to water quality-based effluent limitations; tracking requirements; the time needed to implement requirements; and the need for training and templates to facilitate implementation. Yeo noted that DCR's Watershed Division expressed similar concerns in its comments to EPA. Pederson, Matthews, and Jack expressed appreciation to MassDEP for taking the time to offer thoughtful and extensive commentary, adding that it was well received in the regulated community.

Matthews asked Baskin about the status of DAR regulations on phosphorus fertilizer, noting that these have implications for the MS4 permits. Baskin responded the regulations are moving forward despite a freeze on new regulations.

Baskin made several announcements: March 22 is World Water Day, with the theme water and sustainable development. EPA's Fix-a-Leak Week is scheduled for March 16 to 22. Renewal of Water Management Act permits is in progress, and WRC staff are engaged in developing water needs forecasts for communities with expiring permits. Outreach meetings have taken place in the South Coastal, Cape Cod, Deerfield, Housatonic, and Buzzards Bay basins. Meetings are scheduled for the Ipswich River and North Coastal basins (March 24) and the Boston Harbor and Taunton River basins (April 23). Baskin invited commission members to request copies of water needs forecasts if they have an interest in a particular community or basin.

LeVangie added that agency staff had an opportunity to schedule consultation sessions with individual public water suppliers at the South Coastal Basin meeting. Carroll noted that following the delay in permitting resulting from the Permit Extension Act, water needs forecasts are being revised in accordance with the policy adopted by the Commission, and outreach on this effort has been through notices in the *Environmental Monitor*. Baskin added that an update can be provided at a future meeting on water needs forecasting, with a review by basin highlighting current water use and trends.

LeVangie noted that the agencies meet prior to each basin outreach meeting to identify needs for individual consultation on minimization, mitigation, and cold water fisheries, and these are summarized in a one-page sheet for each public water supplier. He added that mitigation has not been a major factor in most basins to date. Pederson commented that many public water suppliers may not have voiced questions or concerns at the outreach meetings because the information is complex and they are still trying to understand the implications. She added that many water suppliers also do not have the software (Microsoft Access) needed to use the online SWMI tool. Baskin suggested scheduling a demonstration of the SWMI tools available. LeVangie offered to run scenarios for those who need assistance.

Baskin invited all to a celebration after today's meeting to honor the service of Commission members Marilyn Contreas and John Lebeaux. Contreas has retired from state service, and Lebeaux resigned from the Commission as a public member in order to accept an appointment as Commissioner of the Department of Agricultural Resources. In response to a question from Pederson about filling the public member vacancy on the Commission, Baskin said the Secretary is aware of the vacancy, and some expressions of interest had been received.

Hansen provided an update on the hydrologic conditions for February 2015. February precipitation was about ninety-seven percent of normal statewide, with the majority as snow

and the highest amounts falling in the northeast region. Many areas of eastern Massachusetts are approaching record yearly snowfall totals. Because little infiltration is taking place, groundwater levels were below normal in three regions and generally normal elsewhere. Streamflows were below normal but started recovering at the beginning of March. Reservoirs are generally normal statewide. Drought indicators show normal conditions and drought conditions unlikely to develop through May. Yeo called attention to a *Boston Globe* article on the snow pack, with comments from WRC staff member Linda Hutchins. He added that staff have been analyzing snowpack, and the water levels in the Quabbin and Wachusett reservoirs are being lowered to accommodate runoff of water held in storage in the snowpack.

**Agenda Item #2: Vote on the Minutes of February 2015**

Baskin invited motions to approve the meeting minutes for February 12, 2015.

V	A motion was made by Matthews with a second by deRonde to approve the meeting minutes for February 12, 2015.
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**Agenda Item #3: Discussion: Update on the Revision of the Water Conservation Standards: Chapter 2 (Water Loss Control) and Chapter 3 (Metering)**

Baskin noted that key chapters of the Water Conservation Standards are being updated by Commission staff, with advice obtained through a robust stakeholder process. She thanked staff and stakeholders who have been engaged in this process for the past two years. Baskin introduced Anne Carroll and Erin Graham of the Department of Conservation and Recreation.

Carroll provided an overview of the Water Conservation Standards and the updating process. She noted that the purpose of the standards is to set statewide goals for water conservation and efficiency and provide guidance on conservation measures. She described the distinction between standards and recommendations. She also summarized the history of the standards and the current revision process, timeline, and next steps. She outlined the goals of the revisions currently underway.

Graham summarized proposed revisions to two of the document's chapters: Chapter Two, Water Loss Control, and Chapter Three, Metering. She noted that the major focus of the chapter on water loss control is to incorporate the latest guidance from national and international professional organizations. The proposed revisions also provide consistency with MassDEP practice in Water Management Act permitting.

She explained that the proposed revisions outline the steps of comprehensive water loss control, starting with a water audit, and summarize the categories of leakage control strategies. She described proposed changes to the standards, including replacing the "ASR audit" requirement with the UAW calculation, modifying the language on leak detection frequency and required analysis, and changing the leak repair standard to reflect the latest guidance. She also outlined proposed changes to the recommendations, which include an expanded recommendation on water audits and new recommendations on a water loss control program, pressure management, leakage in service connections, and automated leak detection. In addition, she strongly recommended the two EPA references listed in the Resources section of the chapter.

Graham also described proposed changes to the metering chapter, including proposed new standards on metering water sources and calibration requirements of master meters, new recommendations on billing frequency and smart metering, and minor revisions to standards on meter repair, replacement, sizing, and calibration.

Discussion ensued on the performance standard of ten percent unaccounted-for water and the need for flexibility in enforcing the standard. Pederson commented that the American Water Works Association methodology can produce helpful results, but is complex and requires resources. She added that public water suppliers must still meet the ten percent standard and asked if the concept of functional equivalency should be included in the Water Conservation Standards. Baskin and Rao explained that the Water Conservation Standards is a policy document, and the wording of the standard, “meet or demonstrate steady progress towards meeting...” provides a basis for flexibility in permitting. Yeo concurred that such flexibility is essential, as aging infrastructure makes it difficult for many communities to meet the performance standard. He urged MassDEP to continue to work closely with regulated entities to ensure that progress is being made while recognizing constraints.

There was also discussion of whether ten percent is too low and an appropriate metric. Shaughnessy discussed multiple sources of metering inaccuracy. He added that percentages fluctuate over time and suggested fifteen percent as a more realistic standard. Hooper questioned the use of a percentage as a metric, as percentages can change as the total volume of water pumped changes. Mostoller noted that an audit of the Acton system showed that, even if the system were new, it would lose eleven percent. Pederson commented that failure to meet the ten percent standard can be interpreted as mismanagement on the part of the water supplier. In response to the comment that UAW should be higher because of unavoidable annual real losses, Graham responded that ten percent UAW is meant to be a rule-of-thumb and increasing it would be conflating the two different methodologies.

Mostoller clarified some key concepts that will make the best use of the AWWA guidance: (1) the audit should come first and be used to determine what level of leak detection is needed, if any; (2) the audit needs to be validated; (3) there is a role for the Commonwealth in implementing the AWWA guidance, specifically, in providing services and resources, as other states have done, to validate the audits.

Discussion ensued on the resources needed to support the AWWA audit and M36 processes. Pederson acknowledged that the AWWA methodology is useful because it helps systems prioritize where best to direct their resources, but implementing the methodology requires expertise and resources. She requested a conversation about funding, noting that other states have allocated State Revolving Fund dollars for training in the AWWA methodology. She suggested that systems willing to follow the M36 process should be considered in compliance. LeVangie responded that follow-through on the recommendations of the M36 process would also be needed.

LeVangie responded that MassDEP intends to review the revised standards and reevaluate functional equivalence in light of the latest thinking incorporated into the Water Conservation

Standards. He added that the best management practices that constitute functional equivalence will be a topic for discussion by the Water Management Act Advisory Committee. LeVangie added that the ten percent standard is considered a “first cut.” If a water system does not meet the ten percent standard, MassDEP will require an audit to help the water supplier identify the problems and the best management practices needed to reduce water losses. Carroll suggested staff consider adding these concepts to the Water Conservation Standards.

Baskin requested that the Water Management Act Advisory Committee address the issue of functional equivalence within the context of the new regulations to provide more clarity to the regulated community. Jack and Yeo agreed that functional equivalence is the best mechanism for MassDEP to work with regulated entities on addressing compliance with water loss control standards.

Other comments:

- Chapter 2 Water Loss is very technical- who is the audience? (Pederson).
- There are many options for communities to meet the ten percent standard (Castonguay).
- States using the AWWA audit methodology have had issues with valid data. Tennessee has a minimum requirement for a data validity score. (Graham)
- The term “smart metering,” can raise concerns about privacy and health impacts (Pederson).

Discussion ensued on the process, timeline, and schedule for revisions, comments, responses to comments, discussion at the Commission, and a vote on the final draft. Jack requested an opportunity to comment in the context of the whole Water Conservation Standards document. It was agreed to extend the schedule, with an interim deadline of the April WRC meeting for comments on Chapters Two and Three.

### **Recognition of Commission Members Marilyn Contreas and John Lebeaux**

Baskin welcomed long-time members of the Water Resources Commission, Marilyn Contreas and John Lebeaux. Baskin commended Commissioner Contreas’s twenty years of service to the Commission and expressed appreciation for her dedication. Contreas thanked Commission members and staff for the opportunity to learn about their concerns and priorities and how these relate to housing issues. Baskin also commended Commissioner Lebeaux’s ten years of service to the Commission and the valuable perspective he brought as a business owner and municipal leader. Lebeaux thanked his colleagues on the Commission for the opportunity to work together and gain a better understanding of the regulatory process. Yeo commented that the municipal experience that both Commissioners Contreas and Lebeaux brought to the Commission is invaluable to any state board.

Meeting adjourned, 2:25 p.m.

### **Documents or Exhibits Used at Meeting:**

1. WRC Meeting Minutes for February 12, 2015
2. Draft revisions, Massachusetts Water Conservation Standards:
  - Chapter 2, Water Loss Control – draft, redline
  - Chapter 2, Water Loss Control – draft, clean version
  - Chapter 3, Metering – draft, redline

- Chapter 3, Metering – draft, clean version
- 3. Correspondence dated January 29, 2015, from Water Resources Commission to MEPA office regarding Notice of Project Change for the Brice-Lemon Estates project, Rutland.
- 4. Public Notice dated February 17, 2015: Schedule for Preparation of Water Needs Forecasts for Public Water Suppliers with Water Management Act Permits in the Ipswich River Basin
- 5. Interbasin Transfer Act project status report, February 25, 2015
- 6. Current Water Conditions in Massachusetts, March 12, 2015
- 7. Correspondence dated February 27, 2015, from MassDEP to USEPA Region 1 regarding MassDEP comments on EPA's Draft 2014 MS\$ permit
- 8. American Water Works Association. 2009. *Water Audits and Loss Control Programs*. Manual of Water Supply Practices – M36, 3<sup>rd</sup> ed. Denver, CO.

*Agendas, minutes, and meeting documents are available on the web site of the Water Resources Commission at [www.mass.gov/eea/wrc](http://www.mass.gov/eea/wrc) under "MA Water Resources Commission Meetings."*