

# THE COMMONWEALTH OF MASSACHUSETTS WATER RESOURCES COMMISSION

100 CAMBRIDGE STREET, BOSTON MA 02114

### **Meeting Minutes for July 7, 2016**

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

Minutes approved August 11, 2016

#### **Members in Attendance:**

Kathleen Baskin Designee, Executive Office of Energy and Environmental Affairs (EEA)
Linda Balzotti Designee, Department of Housing and Community Development (DHCD)

Jonathan Yeo Designee, Department of Conservation and Recreation (DCR)
Douglas Fine Designee, Department of Environmental Protection (MassDEP)

Todd Richards Designee, Department of Fish and Game (DFG)

Raymond Jack Public Member Kenneth Weismantel Public Member Bob Zimmerman Public Member

**Members Absent** 

Gerard Kennedy Designee, Department of Agricultural Resources (DAR)

Todd Callaghan Designee, Massachusetts Office of Coastal Zone Management (CZM)

Thomas Cambareri Public Member
Paul Matthews Public Member

**Others in Attendance:** 

Anne Carroll DCR
Duane LeVangie MassDEP
Michele Drury DCR
Erin Graham DCR

Adam Kautza DFG, Div. of Fisheries & Wildlife

Sara Cohen DCR Veronica O'Donnell MassDEP

Jennifer Pederson Massachusetts Water Works Association

Marilyn McCrory DCR

Michelle Craddock DFG, Div. of Ecological Restoration

Jennifer Sulla EEA

Gardner Bent U.S. Geological Survey
Peter Weiskel U.S. Geological Survey
Matt Ely U.S. Geological Survey

Andreae Downs Wastewater Advisory Committee
Julia Blatt Massachusetts Rivers Alliance

Greg Cooper MassDEP

David Antos Massachusetts Rivers Alliance
Gabby Queenan Massachusetts Rivers Alliance

Baskin called the meeting to order at 1:00 p.m.

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

Baskin reported on the meeting of the Drought Management Task Force on July 7, 2016. The task force recommended a drought watch to the Secretary of Energy and Environmental Affairs for

two of the state's six drought regions (Central and Northeast) and a drought advisory for two regions (Connecticut River Valley and Southeast). Assuming the secretary accepts these recommendations, the task force will meet monthly until conditions return to normal. Baskin noted that it took three months of dry or below-normal conditions to trigger the drought declaration, and it will take several months of normal conditions to remove the declaration. She thanked the state, federal, and nongovernmental partners involved in the task force.

Carroll provided an update on hydrologic conditions. She noted that conditions quickly deteriorated between May and June, and a key factor was the lack of rain. She reviewed the status of each of the hydrologic parameters: precipitation (percent of normal: advisory or watch level in four regions), the Standardized Precipitation Index (advisory level in three regions), streamflow (advisory or watch level on four regions), groundwater (advisory or watch level in five regions), reservoir levels (watch level in three regions). She noted that the national Drought Monitor today shows drought intensifying to level D2 (severe drought) across much of Massachusetts. She added that DCR staff are exploring the feasibility of expanding the network of groundwater wells and reservoirs that DCR monitors.

Baskin announced that she felt honored to have had the opportunity to chair the Water Resources Commission for the past eleven years and would be moving on to a new opportunity. She expressed appreciation to commission members for their dedication, and she thanked WRC staff and the other EEA agencies for their support. She expressed gratitude for the opportunity to have worked with many stakeholders. Yeo, Carroll, and Jack thanked Baskin for her leadership on important water resources issues and her service to the commission and the commonwealth.

## <u>Agenda Item #2: Presentation and Discussion: Proposed Regulation Amendment – Certification</u> Requirements for Certain Regulated Sectors ("Environmental Results Program")

Baskin introduced Veronica O'Donnell of MassDEP to discuss proposed changes to regulations for the Environmental Results Program (ERP). O'Donnell explained that the ERP is an umbrella program that draws from other regulations. She explained that the proposed changes consist of streamlining procedures and making corrections to better align various regulations. Revisions are proposed to the following regulations:

- 310 CMR 7.26 Air Pollution Control Regulations Industry Performance Standards
- 310 CMR 70.00 Environmental Results Program (ERP) Certification Regulations
- 310 CMR 71.00 Industrial Wastewater Regulations for Photo Processors and Printers
- 310 CMR 73.00 Amalgam Wastewater and Recycling Regulations for Dental Facilities
- 310 CMR 4.00 Timely Action Schedule and Fee Provisions

For each regulation, she explained its purpose and briefly outlined the proposed changes. Changes include reducing the number of regulated entities, replacing an annual certification with a one-time certification process for certain regulations and changing the certification time period for other regulations, aligning certification renewal with the schedule for other license renewals, adjusting fees, and correcting cross references in various regulations.

O'Donnell outlined the public process and schedule for public hearings. The public comment period ends August 11, 2016. She offered to provide a link to the web page for MassDEP's proposed and recently promulgated regulations (available at

http://www.mass.gov/eea/agencies/massdep/service/regulations/proposed-and-recently-promulgated-regulations.html).

Comments, questions, and discussion: In response to concerns about the proposed one-time certification process, O'Donnell explained that MassDEP has found that once entities certify, they tend to stay in compliance. Furthermore, new ownership triggers a new certification. O'Donnell also clarified that though many regulations are touched by the ERP, the Water Resources Commission approves those DEP regulations involving wastewater discharges. She also clarified that entities that dispose of wastewater through septic systems will remain fully regulated. Fine and Baskin noted that revised regulations will be brought back to the commission just before promulgation, at which point it will be difficult to incorporate any changes. Therefore, any concerns should be brought up during the public comment process.

#### Agenda Item #3: Presentation: Community Water and Energy Resources Centers

Baskin introduced Bob Zimmerman of the Charles River Watershed Association (CRWA). Zimmerman provided background on a project for which CRWA received grant funding to study the feasibility of Community Water and Energy Resources Centers. He explained that to restore natural systems, it is important to think differently about the way we use and dispose of water, using nature as a model. He outlined four lessons provided by natural processes: (1) each waste product becomes a resource; (2) water is slowed down, infiltrated, and used several times; (3) flexibility, adaptability, and interconnectedness increase the capacity to handle extreme events; (4) diversity provides resilience.

He explained how these principles are applied in a Community Water and Energy Resource Center (CWERC). Such centers would replicate the land-water connection and its efficiencies by treating and reusing water locally, capturing and using thermal energy, producing and using biogas, capturing nutrients for resale, and producing compost for resale. He contrasted this approach with the current engineering standard of using water once, collecting wastewater in sewers, and disposing of treated effluent into waterways, in some cases, far out at sea. He added that sewers also inadvertently collect clean water through inflow and infiltration.

Zimmerman described the feasibility study, including site screening and selection, conceptual design, and modeling of inputs, outputs, costs, and projected revenues. He noted that the treatment centers would pay for themselves without charging for processing waste. He estimated that CWERCs could reduce potable water use by fifty to sixty percent.

He then discussed the value to urban areas of stream daylighting and use of green infrastructure, both of which can provide both flood control and pollution reduction benefits. He also outlined the results of an evaluation of social welfare benefits, including reductions in energy use and emissions, avoided costs, and the benefits resulting from greening and open space. He outlined the outlined the technical challenges and economic and regulatory barriers of implementing the concept but expressed optimism that a demonstration project would be completed.

Questions and discussion concerned how the proposed system of pipes would avoid current problems related to infiltration, the sources and quantities of food waste and septage for the waste processing plant, how water would be reused and distributed for reuse, whether pumping costs were considered, the benefits of interconnecting the CWERCs, and how sea level rise in

coastal areas may affect the depth of the water table and the infiltration capacity of soils. In response to a question about whether this type of system has been built elsewhere, Zimmerman responded that all of the technologies are proven technologies, but no entity has proposed abandoning centralized wastewater collection and treatment systems and replacing them, over time, with decentralized, distributed waste processing systems in large urban areas. In response to a question about the high cost of retrofits and how those were factored in, Zimmerman described how a system of trading could help pay for green infrastructure.

Fine commended Zimmerman for innovative thinking. Baskin added that such an approach may be of interest to communities on Cape Cod. She urged that commission members continue to discuss systematic approaches to connecting water, wastewater, stormwater, and energy.

Meeting adjourned, 2:30 p.m.

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

- 1. Hydrologic Conditions in Massachusetts, June 2016 Summary (available at <a href="http://www.mass.gov/eea/agencies/dcr/water-res-protection/water-data-tracking/precipitation-composite-current-conditions.html">http://www.mass.gov/eea/agencies/dcr/water-res-protection/water-data-tracking/precipitation-composite-current-conditions.html</a>)
- 2. Massachusetts Drought Status, draft map as of July 7, 2016
- 3. MassDEP background document dated May 25, 2016: Proposed Changes to Compliance Certification Requirements for Photo Processors, Printers, and Dentists
- 4. Presentation by Veronica O'Donnell: Proposed Changes to Environmental Results Program regulations
- 5. MassDEP Background Document dated June 23, 2016: Proposed Changes to Compliance Certification Requirements for Photo Processors, Printers, and Dentists
- 6. MassDEP Public Hearing Legal Notice regarding public hearings on amendments to regulations at 310 CMR 7.26, 70.00, 71.00, 73.00, and 4.00.
- 7. Presentation by Robert Zimmerman: Urban Water Transformation: Designing Infrastructure for a Livable Future.
- 8. Drought Management Task Force meeting agenda, July 7, 2016
- 9. Correspondence dated May 31, 2016, from Water Resources Commission to Jancaterino Realty Trust concerning the nonapplicability of the Interbasin Transfer Act to a proposal to connect to the MWRA sewer system.
- 10. Correspondence from Water Resources Commission regarding the Aquaria Taunton River Desalination Plant:
  - a. Dated May 31, 2016, to MEPA Office, regarding Aquaria's proposal to replace the existing marine life exclusion system
  - b. Dated June 22, 2016, to Aquaria LLC, regarding agency review of Aquaria's 2015 annual impingement and entrainment report and annual inspection report
- 11. Interbasin Transfer Act project status report, June 22, 2016

Compiled by: mjm

Agendas and minutes are available on the web site of the Water Resources Commission at <a href="www.mass.gov/eea/wrc">www.mass.gov/eea/wrc</a> under "MA Water Resources Commission Meetings." All other meeting documents are available by request to WRC staff at 251 Causeway Street, 8<sup>th</sup> floor, Boston, MA 02114.