



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

Meeting Minutes for November 12, 2015

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

Minutes approved December 10, 2015

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)
Rebecca Weidman	Designee, Department of Environmental Protection (MassDEP)
Catherine DeRonde	Designee, Department of Agricultural Resources (DAR)
Todd Richards	Designee, Department of Fish and Game (DFG)
Thomas Cambareri	Public Member
Raymond Jack	Public Member

Members Absent

Todd Callaghan	Designee, Massachusetts Office of Coastal Zone Management (CZM)
Paul Matthews	Public Member
Bob Zimmerman	Public Member

Others in Attendance:

Erin Graham	DCR
Pine duBois	Jones River Watershed Association
Michele Drury	DCR
Linda Hutchins	DCR
Anne Carroll	DCR
Jen Pederson	Massachusetts Water works Association
Lexi Dewey	Water Supply Citizens Advisory Committee
Gardner Bent	U.S. Geological Survey
Jeff Barbaro	U.S. Geological Survey
Laila Parker	DFG, Div. of Ecological Restoration
Sara Cohen	DCR
Vandana Rao	EEA
Marilyn McCrory	DCR

Baskin called the meeting to order at 1:05 p.m.

Agenda Item #1: Executive Director's Report

Baskin provided an update on the water needs forecasting effort. DCR staff has completed water needs forecasts in the Westfield River Basin, and Water Management Act permit renewal applications are due to MassDEP by November 30, 2015. Water needs forecasts in the Millers River Basin are in progress; a notice was published in the *Environmental Monitor* on October 19; and a basin outreach workshop will be held in Gardner on November 17. Water needs forecasts in the Chicopee River Basin are in progress.

Baskin introduced Graham to provide an update on hydrologic conditions for October 2015, noting that no comments on the proposed revisions to the format of the hydrologic conditions report had been received. Graham noted that the new Water Year began October 1. She reported that precipitation amounts in October were near normal for all regions. Streamflow was also near normal. Groundwater levels were normal except for the northeast region; however, this indicator did not reach triggers in the Massachusetts Drought Management Plan. Reservoir levels were normal.

Baskin noted that conditions have been very dry and requested clarification on the “normal” designations for October. Hutchins explained that the National Weather Service uses a 30-year rolling period by decade to determine variations from normal conditions, whereas DCR uses the whole period of record, which dates to the late 1800s. DuBois asked if any consideration is given to duration of rainfall events, noting that Silver Lake Reservoir, Brockton’s water supply source, is at its fourth lowest level since 1996. Baskin acknowledged the concern expressed by DuBois, especially when looking at conditions at specific sites. She noted that the analysis does not consider rainfall duration. She explained that a number of indicators are considered when evaluating drought severity, including, in addition to rainfall, groundwater elevations, agricultural indices, fire danger, streamflow, and reservoir levels. Hutchins added that Fall 2015 conditions have been unusual, including warm conditions in October.

Agenda Item #2: Vote on the Minutes of September 2015 and November 2014

Baskin invited a motion to approve the meeting minutes for September 10, 2015.

V O T E	A motion was made by Richards with a second by Balzotti to approve the meeting minutes for September 10, 2015.
	The vote to approve was unanimous of those present, with one abstention (Cambareri).

Yeo arrives.

Baskin apologized for the delay in compiling the minutes for the November 13, 2014, meeting and invited a motion to approve the minutes.

V O T E	A motion was made by Cambareri with a second by Jack to approve the meeting minutes for November 13, 2014.
	The vote to approve was unanimous of those present, with two abstentions (Balzotti and Richards).

Agenda Item #3: Presentation: Flood-Inundation Mapping

Baskin introduced Gardner Bent and Jeff Barbaro of the U.S. Geological Survey (USGS) New England Water Science Center to discuss a new flood inundation mapping tool. She noted that EEA had included the tool in an application for federal funds for disaster recovery resilience.

DeRonde arrives.

Bent provided background on the project, which started in 2010 as a partnership among federal agencies to develop standards for flood inundation maps. He explained that the purpose of the project was to develop a tool to reduce vulnerability to flooding and to further understanding of the natural processes that produce flood hazards. The interactive map developed by USGS is

a real-time tool that visually relates USGS streamgage data and the National Weather Service flood forecast for those gages, along with high-water marks and LiDAR elevation data that are used to calibrate a hydraulic model. He reviewed the data needed to create the maps. The result is a series of sequential maps showing probable areas of flooding.

Bent described locations in New England where USGS has conducted or has proposed flood inundation mapping (FIM) studies, noting that some proposed studies will require installation of new USGS stream gages. He outlined potential FIM studies in Massachusetts, noting that such studies can be completed on any river reach with a USGS stream gage. He provided a live demonstration of the online tool and provided sample reports on published maps (see list of exhibits at the end of these minutes). He described the benefits of the tool, including preparedness, response, recovery, mitigation and planning, environmental and ecological assessments and potentially helping communities with their community rating under the national flood insurance program.

Questions and discussion addressed potential uses of the FIM tool for updating Federal Emergency Management Agency (FEMA) flood maps, uses in coastal areas, how the tool would show pulse events, and sources of funding for flood inundation mapping and associated streamgages.

Yeo departs.

Agenda Item #4: Presentation: Overview of the Interbasin Transfer Act

Baskin introduced Michele Drury, of DCR to provide an overview of the Interbasin Transfer Act and the application and approval process.

Drury explained that an overview of the full approval process was thought to be beneficial for new commission members since there are several potential Interbasin Transfer Act (ITA) projects on the horizon. She reviewed the application process and timelines for approval of an interbasin transfer. She explained that a full application for approval under the ITA triggers an Environmental Impact Report under the Massachusetts Environmental Policy Act (MEPA) process. The ITA and regulations require that the MEPA process be completed before the Water Resources Commission can hold public hearings or make a decision on an application for approval. She outlined the steps in the approval process and the timeline for public hearings, presentation of the staff recommendation, and the WRC decision. She reviewed the eight criteria that the WRC must consider in its decision to approve or deny a request for an interbasin transfer.

Questions and comments concerned the public hearing process and the eight criteria.

Baskin and Drury discussed potential ITA projects on the horizon.

Meeting adjourned, 2:40 p.m.

Documents or Exhibits Used at Meeting:

1. WRC Meeting Minutes:
 - September 10, 2015
 - November 13, 2014
2. Public Notice from the Massachusetts Water Resources Commission published October 19, 2015, in the MEPA *Environmental Monitor*: Receipt of a Request for Approval of an Action to Increase the Present Rate of Interbasin Transfer under the Interbasin Transfer Act, MGL Chapter 21 Section 8B–8D.
3. Public Notice published October 19, 2015, in the MEPA *Environmental Monitor*: Schedule for Preparation of Water Needs Forecasts for Public Water Suppliers with Water Management Act Permits in the Millers River Basin
4. Interbasin Transfer Act project status report, October 27, 2015
5. Hydrologic Conditions in Massachusetts, October 2015 Summary (available at <http://www.mass.gov/eea/agencies/dcr/water-res-protection/water-data-tracking/precipitation-composite-current-conditions.html>)
6. Presentation by Gardner Bent: Flood Inundation Mapping Science. Background information available at http://water.usgs.gov/osw/flood_inundation/. Flood Inundation Mapping web application available at <http://wimcloud.usgs.gov/apps/FIM/FloodInundationMapper.html>
7. Handout: Sample USGS Scientific Investigations Reports, including Flood Inundation Maps for the Deerfield River, Franklin County, Massachusetts, from the Confluence with the Cold River Tributary to the Connecticut River (SIR 2015-5104)
8. Presentation by Michele Drury: Overview: Interbasin Transfer Review and Approval

Agendas, minutes, and meeting documents are available of the web site of the Water Resources Commission at www.mass.gov/eea/wrc under “MA Water Resources Commission Meetings.”