



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

Meeting Minutes for November 8, 2007

Minutes approved May 20, 2008

Members in Attendance:

Kathleen Baskin	Designee, Executive Office of Energy and Environmental Affairs
Marilyn Contreas	Designee, Department of Housing and Community Development
Jonathan Yeo	Designee, Department of Conservation and Recreation
David Terry	Designee, Department of Environmental Protection
Gerard Kennedy	Designee, Department of Agricultural Resources
Mark Tisa	Designee, Department of Fish and Game
Thomas Cambareri	Public Member
Scott Horsley	Public Member
John Lebeaux	Public Member
David Rich	Public Member

Others in Attendance:

Steve Asen	DCR	Duane LeVangie	DEP
Michele Drury	DCR	Holly Elwell	Tufts University
Linda Hutchins	DCR	Daniel Latham	Tufts University
Bruce Hansen	DCR	Katie Resnick	Tufts University
Sara Cohen	DCR	Jennifer Pederson	Mass. Water Works Assn.
Erin Graham	DCR	Paul Lauenstein	WSCAC/Neponset River Watershed Assn.
Frank Hartig	DCR	Joanna Carey	DFG, Riverways
Marilyn McCrory	DCR	Kurt Tramposch	SUASCO Watershed Community Council
Anne Monnelly	DCR	Tom Philbin	Massachusetts Municipal Assn.
Vandana Rao	EOEEA	Jon Beekman	SEA Consultants
Caroline Fischer	CDM	Jayne Harmann	Tufts University
Russ Cohen	DFG, Riverways	Colleen Butler	Tufts University
Alexandra Kleyman	Tufts University	Rebecca Cutting	MassDEP
Peter Weiskel	USGS	Luba Zhaurova	Tufts University
Eileen Simonson	WSCAC		

Agenda Item #1: Executive Director's Report

Hansen provided an update on the hydrologic conditions for October 2007. Stream flows at the end of October remain generally below normal in most of the state, and a Drought Advisory for most of Massachusetts remains in effect.

Baskin reported that recent studies point to dramatic changes in temperature and precipitation and that the Patrick administration sees climate change as an important issue to be addressed. Horsley asked if DCR precipitation normals should be adjusted, since the record indicates an increase in precipitation over time. Hutchins responded that staff could recalculate the data to establish 30-year normals from 1970 to 2000, and added that even 160 years of climate data is a small period of record. Baskin announced that the Drought Management Task Force would meet again on November 16 to determine if there should be any changes to the drought declaration.

Agenda Item #2: Vote on the Minutes of July 2007

Baskin invited motions to approve the meeting minutes for July 2007.

V O T E	A motion was made by Lebeaux with a second by Tisa to approve the meeting minutes for July 2007.
	The vote to approve was unanimous of those present, with three abstentions.

Agenda Item #3: Discussion: Water Needs Forecasting Policy and Methodology: Revisions and Response to Comments

McCrorry provided a presentation on the updates to the Water Needs Forecasting Policy and Methodology. She summarized the major revisions to the methodology made in response to comments. These key changes included the following:

1. forecasts of nonresidential water needs will use employment data instead of being tied to growth in residential population;
2. treatment plant losses will be disaggregated from other categories of water use and carried forward as its own category;
3. Office of Water Resources staff will provide a suite of projections to MassDEP for water needs forecasts developed for Water Management Act permit applications, and this range of projections will reflect different time frames for meeting the state's water conservation standards; and
4. changes in the way the Water Resources Commission reviews and approves forecasts are being requested.

On the fourth issue, McCrorry noted that approximately 190 permits are scheduled for renewal between 2008 and 2015. To accommodate this workload, the proposed revisions to the policy state that the Water Resources Commission will delegate to WRC staff the authority to implement the approved methodology, waiving its formal review and approval process for each individual forecast, while leaving open the option for WRC review of individual forecasts on a case-by-case basis. She also described the public comment process on the revisions to the policy and methodology, and noted that public comments will continue to be accepted until November 19, 2008. She added that WRC approval of the revisions would be sought at the December commission meeting.

Baskin asked for commissioner comments on the proposed change (page 3 of the policy document) involving commission approval of water needs forecast. Extensive discussion of this issue followed. Yeo noted that DCR does not have the staff needed to handle the workload of

forecasts at this point, and that the proposed change is critical to handling the workload. Drury added that regular updates on progress would be provided to the commission as attachments in the monthly mailing, but discussion of individual forecasts would appear on the commission agenda only if requested. Horsley said that, since the methodology has been revised, he would like the WRC to see the first few forecasts, or perhaps forecasts in basins with higher stress, so that commissioners could understand how the methodology is being implemented. Baskin noted that the forecasting methodology does not consider sources, but indicates only the volume of water needed at some point in the future. Cambareri requested a one-page summary of the level of effort involved in bringing each forecast to the commission for review and approval.

There was also some discussion of the impact of basin stress classification on the forecasting policy and WMA permitting. LeVangie stated that permitted volumes should not be considered entitlements to water and that MassDEP expects to implement new stress classifications as they become available.

Beekman commented that government is the largest institutional user in the state and urged the state to take the lead in conservation. Baskin responded that the state has initiated a “Leading by Example” program and the EEA has an intern examining opportunities in public institutions such as universities and prisons.

Russ Cohen noted a distinction between a “needs forecast” and a “demand projection,” and stated his endorsement for a methodology that builds water conservation into the needs calculations as a way of ensuring sustainable water use.

Pederson commented that the Massachusetts Water Works Association prefers the definition of unaccounted-for water used by the American Water Works Association. Baskin responded that the commission would be interested in new ways of analyzing data.

LeVangie outlined the upcoming schedule of WMA permit renewals, starting in April with communities in the Hudson basin. These communities will need forecasts three to four months before permit expiration so that they can decide whether they need to renew their permits or if their registered volumes alone will meet their future needs.

Agenda Item #4: Presentation: 2007 Index Streamflows for Massachusetts

Hutchins provided an update on the efforts to develop index streamflows for Massachusetts. She defined index streamflows as a representation of the range of natural streamflow conditions that would be expected in the absence of significant human alteration. Such streamflows are considered targets that would support healthy aquatic ecosystems in Massachusetts. She added that index streamflows are not intended as regulatory thresholds and do not represent minimum streamflow requirements. Rather, they represent a goal against which streamflow statistics from other rivers in Massachusetts can be measured. She noted that the draft document is an interim product that will continue to be refined as information from new gages becomes available. USGS is developing data for 66 index gages, which is expected to be published in the next few months. This data set will expand the time frame for the statistics from the original 23 gages that were analyzed from 1976 to 2000 to a larger set of 66 index gages with statistics from the period of 1960 to 2004.

She described the document as a catalog of streamflow statistics from 66 index gages located in and around Massachusetts. Three approaches were used to develop the index streamflows: (1) Target Hydrograph Approach; (2) Aquatic Base Flow methodology; and (3) Indicators of Hydrologic Alteration, based on freeware available from The Nature Conservancy. She reviewed the methods, showed example applications, and summarized results to date. She noted that site-specific studies are preferable and said the document offers guidance on site-specific methodologies for determining appropriate target streamflows suitable for aquatic habitat. The Index Streamflows document offers guidance on selecting the most similar index gage to a site of interest. She also outlined the schedule for public notification and comment.

Horsley asked about the range in urbanization in the basins where index gages are located. Hutchins said USGS would provide that information in its publication at a later date. Horsley asked for an example of how index streamflows might be used. Hutchins replied that MassDEP could use the best index gage in its Water Management Act permitting policy. Levangie suggested considering how index streamflows could be used in evaluations of safe yield.

Russ Cohen noted that a stream that naturally flows low is particularly sensitive to any drawdown and cautioned that an extra level of scrutiny is needed when anything is done to alter hydrology.

Weiskel commented that the latest version of the index streamflows report provides the ability to estimate median monthly flows and that this provides a better picture of the annual flow regime.

Agenda Item #5: Update: 2007 Work Plan and Discussion of 2008 Work Plan

Baskin reviewed the 2007 WRC Work Plan and noted accomplishments. She also presented the draft 2008 Work Plan for discussion, highlighting significant focuses for staff effort. She invited suggestions for additional work, comments on priorities, or suggestions on tasks to remove. Horsley commented that a focus on climate change would be consistent with the governor's emphasis. Baskin responded that she would invite a guest speaker to address this topic. Horsley asked about the timing of the USGS Sustainable Yield Estimator. Weiskel responded that beta testing was currently in progress at MassDEP and publication was expected by September 2008. Rich suggested developing categories of priorities.

Meeting adjourned

Attachments distributed:

- Current Water Conditions in Massachusetts, November 8, 2007
- Presentation handouts, Revisions to Draft Policy for Developing Water Needs Forecasts for Public Water Suppliers and Communities and Methodology for Implementation
- Memorandum to WRC from Staff, Nov. 8, 2007. Proposed WRC 2008 Work Plan
- Memorandum to WRC from Staff, Jan. 23, 2007. MA Water Resources Commission Proposed 2007 Work Plan
- WRC 2007 Final Work Plan Accomplishments
- 2007 Draft Index Streamflows