



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

Meeting Minutes for April 10, 2008

Minutes approved February 12, 2009

Members in Attendance:

Kathleen Baskin	Designee, Executive Office of Energy and Environmental Affairs
Jonathan Yeo	Designee, Department of Conservation and Recreation
Glenn Haas	Designee, Department of Environmental Protection
Gerard Kennedy	Designee, Department of Agricultural Resources
Mark Tisa	Designee, Department of Fish and Game
Joseph E. Pelczarski	Designee, Massachusetts Office of Coastal Zone Management
Thomas Cambareri	Public Member
Scott Horsley	Public Member
David Rich	Public Member
Bob Zimmerman	Public Member

Others in Attendance:

Michele Drury	DCR	Alex Hackman	DFG/Riverways
Linda Hutchins	DCR	Gabrielle Stebbins	DFG/Riverways
Bruce Hansen	DCR	Margaret Kearns	DFG/Riverways
Sara Cohen	DCR	Eric Hooper	Town of Sharon
Erin Graham	DCR	Jennifer Pederson	Massachusetts Water Works Assn.
Marilyn McCrory	DCR	Whit Davis	CDM
Anne Monnelly	DCR	Eileen Simonson	WSCAC
Tom Lamonte	DEP	Paul Lauenstein	Neponset River Watershed Assn.
Duane LeVangie	DEP	Tom Philbin	Mass. Municipal Assn.
Vandana Rao	EOEEA	Becky Smith	Clean Water Action
Marcus Waldron	USGS	Mike Gildesgame	Appalachian Mountain Club
Dave Armstrong	USGS	Margaret Van Deusen	Charles River Watershed Assn.
Pam Heidell	MWRA		

Agenda Item #1: Executive Director's Report

Baskin called attention to a letter to the Water Resources Commission from Rep. Joyce Spiliotis requesting a cease-and-desist order on water withdrawals by Aggregate Industries in Peabody. Baskin said she had responded in writing, on behalf of the Commissioners, that the matter is being investigated by MassDEP.

Baskin reviewed proposed field trips for the commission in May and October.

Drury provided an update on water needs forecasts being prepared for four public water suppliers with registrations and/or permits in the Hudson River Basin. She said DCR and MassDEP staff had met with the water suppliers in March. She noted that the data provided by the water suppliers did not meet the standards for developing forecasts described in the commission's Water Needs Forecasting Policy. Therefore, DCR staff is recommending interim allocations for any Hudson Basin water supplier who wishes to renew or apply for a new Water Management Act permit. She noted that current average withdrawals for many of these water suppliers are below their registered amounts, and water use has declined since 1988.

Hansen provided an update on the hydrologic conditions for March 2008. He said that March was the second month in a row in which the state had experienced above-normal rainfall conditions. He noted concerns about potential flooding, particularly with the considerable snowpack that is present in the north-central and western regions of the state. Pelczarski reported the most recent National Weather Service forecast for potential flooding.

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

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

V	A motion was made by Haas with a second by Zimmerman to approve the meeting minutes for October 2007.
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E	The vote to approve was unanimous of those present.

Agenda Item #3: Discussion: Revisions and Additions to MassDEP Regulations

Haas outlined the schedule for updating the regulations in 314 CMR sections 2.00, 5.00, 6.00, and 12.00, and for adding section 20.00, including the public comment period. Ferris said the regulations address groundwater, water reuse, permitting, operation and maintenance. He summarized the proposed changes and additions to the regulations and the reasons for making the changes.

For the groundwater and permitting regulations, Ferris said one of the goals was to streamline the permitting and reduce MassDEP's time frame for review. Some of the other changes involve splitting the permitting process into two pieces by moving the geohydrologic review to the beginning of the process; revisions to Zone II standards; allowing MassDEP to issue general permits for certain activities where the same permit is routinely issued; expanding the list of activities not requiring groundwater permits; incorporating stormwater into the groundwater regulations; and developing financial assurance mechanisms. He described the general permit process in more detail. He clarified that the regulations govern wastewater disposal exceeding 10,000 gallons per day. He noted that a task force consisting of diverse stakeholders provided advice on the changes.

He added that MassDEP is also proposing changes that will reduce the backlog of existing permits awaiting renewal. Such permits will be renewed through an administrative review process, as long as they meet three conditions: no changes to the existing permit, no changes to the existing treatment plant, and no operational problems at the treatment plant. This renewal

process should take only 45 days. He emphasized that no changes are proposed to the process for obtaining individual permits; however, the timelines will be shorter.

Kennedy asked who is affected by these regulatory changes, and Ferris responded that the regulations apply to any entity that discharges wastewater to the ground, whether sanitary or industrial, if such discharges exceed 10,000 gallons per day. He added that any entity with discharges below this threshold is covered by the Title V septic system regulations, with the exception of industrial dischargers, which require a groundwater discharge permit. In response to questions from Yeo and Simonson, Ferris said there would be no changes in a Zone A and that stormwater general permits would not be allowed in Zone A, Zone I or Zone II. However, he said, individual permits can be issued for Zone II. Additional discussion addressed questions related to total organic carbon (TOC) and financial assurance requirements for permittees.

Haas added that an important change is the elimination of the requirement to connect to a sewer system if a project is near a sewer that has capacity. The revised regulations allow a groundwater discharge permit as an option.

Ferris also summarized the proposed new regulation for reclaimed water (314 CMR 20.00). He said the goal is to provide for safe use of reclaimed water in industrial and residential settings. He explained that the new regulation incorporates the existing reuse policy as well as research on this topic. He added that it expands the allowable uses of reclaimed water. He outlined three tiers of reused water and their allowable uses. He invited comments on how far to expand uses of Class A reclaimed water (which has the most stringent standards).

Simonson requested that public hearings be conducted in a location west of Worcester. She also asked if there was any exclusion on disposal of Class B nonprocess reclaimed water in areas that might affect wildlife, which might browse on tree nursery or forest lands. Haas responded that the standards focus on protecting human health.

Cambareri expressed concern that direct public notice be provided to municipalities and regional planning entities on the geohydrologic studies associated with the groundwater discharge regulations. Ferris responded that the geohydrologic study in itself does not authorize discharge of wastewater to the ground. He reviewed the opportunities for public comment and said typically MassDEP notifies local Boards of Health about a project. Haas added that perhaps public notice in the local newspapers should be considered.

Pederson expressed concern, on behalf of public water suppliers, about protection of current and future water supplies with discharges in Zone IIs. She requested that guidance be developed before regulations are promulgated. She also expressed concern that regulations are being put in place before the results of research on pharmaceuticals in drinking water have been assessed. Haas responded that, because the discharge regulations are tied to the drinking water standards, they would automatically be updated should the standards change.

Pederson also requested that, in the future, more advance notice on public information sessions be provided. Philbin offered *The Beacon*, a publication of the Massachusetts Municipal Association, as a resource for public notice.

In response to a question from Kearns, Ferris confirmed that the regulations had provisions for discharges in environmentally sensitive areas.

Agenda Item #4: Update: 2008 Index Streamflows for Massachusetts

Baskin noted that only minor changes have been made to the index streamflows document since the last presentation to the Water Resources Commission. Hutchins summarized the index streamflows document, describing it as a catalog of statistics. She noted that index streamflows represent near-natural streamflow characteristics for Massachusetts and are based on flow statistics for 61 U.S. Geological Survey index gages. She noted that the index streamflows were developed by a Task Force of stakeholders. She said the document provides guidance on identifying the most similar index gage for a particular project. She pointed to examples showing how index streamflows could be used, adding that the document outlines site-specific investigation methodologies, which are preferred. She noted that index streamflows are not regulatory standards until or unless they are incorporated into regulatory programs. She also outlined the schedule for publication of the final document and the public review process, and requested review and a vote by the commission.

Baskin confirmed that the commission preferred to delay a vote on index streamflows until the May meeting because the final document had just become available. She commended MassDEP and DCR for advancing implementation of the Massachusetts Water Policy by moving forward with both the water reuse regulations and development of index streamflows.

Agenda Item #5: Presentation on Pilot Study Results: Relationships between Flow Alteration, Land Use, Water Quality, and Fish Community Composition

Baskin introduced Armstrong by noting that EEA had funded a pilot project to examine the relationships between fish populations and different types of impairment to riverine systems. She noted that this presentation represents the deliverable of the pilot study.

Armstrong summarized the preliminary results of the pilot study conducted for the Ipswich, Sudbury-Assabet-Concord, and Blackstone River Basins. He described three objectives: to assess the degree of flow alteration, including withdrawals and returns; to classify the basins by degree of urbanization and natural basin characteristics; and to compare classification of fish communities. He provided an overview of the extensive data available on these three basins, including data on water withdrawals and returns, fish communities, land-use characteristics (in GIS), dams and impoundments, water quality, and physical basin characteristics.

Armstrong described the methods for screening fish data and classifying fish by habitat use and pollution tolerance. He described measures of flow alteration and outlined the six statistics that were selected to represent different bioperiods for fish. He also briefly reviewed the results of previous similar studies (Coles et al, 2004; see Attachments listed at the end of this document). Armstrong then outlined the results of the pilot study, showing the effects of flow alteration, land use and percent of impervious cover, dams and impoundments, water quality, and natural basin characteristics on different measures of fish communities, such as the percentage of fluvial specialists and species richness. He pointed out that above 15% imperviousness or above 40% in

the amount of flow alterations, the fish community is significantly altered, making it difficult to detect the response of the fish community to imperviousness or flow alterations.

Questions and discussion addressed data sets used for imperviousness and the effects of imperviousness. In response to a question from Zimmerman, Armstrong cited a New York study that showed that groundwater discharge can provide some resiliency to fish communities even in areas that exceed 15% impervious cover. Simonson observed that Armstrong's presentation suggests that changes in flow may not restore fish communities. However, she added, there are efforts that can be accomplished locally, such as groundwater recharge and discharge of wastewater to the ground, that may help in such restoration. She suggested that policy should focus on where the dollars can be best spent in restoring fish communities. Haas added that there may be different goals in different areas; for example, the goal may be to restore fluvial specialists in some streams but not in others.

Armstrong concluded by outlining plans for further study. Waldron stated that the USGS would make the slides available to the commission once the data have been reviewed in accordance with USGS's peer review process.

Baskin invited commission members to reflect on Armstrong's presentation and consider how impacts layer upon each other to affect populations, or what types of policies should be developed. She noted that the results of the pilot study support the 200-foot buffer in the Riverfront Protection Act. Tisa added that this work also helps to target land protection priorities. Baskin invited input on the scope of work for Phase Two of the study.

Announcements

Pelczarski announced the formation of a new flood task force. Zimmerman expressed hope that the task force would consider natural storage rather than channelization as the preferred mitigation alternative.

Meeting adjourned

Attachments distributed or referenced:

- Current Water Conditions in Massachusetts, April 10, 2008
- Handouts for MassDEP presentation: Wastewater Management Program: Proposed Regulation Changes to the Groundwater Discharge Program and the Reclaimed Water Program
- Table: Most Similar Index Gage for Active USGS Gages in Massachusetts (selected by USGS Sustainable Yield Estimator)
- Revised Table 2-1: Summary of Index Gages and Drainage Area Characteristics (4/9/2008).
- CD with *2008 Index Streamflows for Massachusetts*.
- Coles, J.F., Cuffney, T.F., McMahon, Gerard, and Beaulieu, K.M. 2004, The effects of urbanization on the biological, physical, and chemical characteristics of coastal New England streams: U.S. Geological Survey Professional Paper 1695, 47 p. (cited by David Armstrong).