

THE COMMONWEALTH OF MASSACHUSETTS

WATER RESOURCES COMMISSION

100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for September 20, 2007

Minutes approved March 13, 2008

Members in Attendance:

Kathleen Baskin
Marilyn Contreas
Designee, Executive Office of Energy and Environmental Affairs
Designee, Department of Housing and Community Development

Jonathan Yeo Designee, Department of Conservation and Recreation Duane LeVangie Designee, Department of Environmental Protection Designee, Department of Agricultural Resources Mary Griffin Commissioner, Department of Fish and Game

Scott Horsley Public Member Bob Zimmerman Public Member

Others in Attendance:

Michele Drury **DCR** Linda Hutchins **DCR** Bruce Hansen **DCR** Sara Cohen DCR Erin Graham **DCR** Paul Lyons **DCR** Marilyn McCrory **DCR** Anne Monnelly **DCR** Bill Pula **DCR** Cliff Read **DCR** Dave Small **DCR**

Todd Richards DFG, Division of Fisheries and Wildlife Ken Simmons DFG, Division of Fisheries and Wildlife

Eileen Simonson WSCAC

Jennifer Pederson Massachusetts Water Works Association

Peter Weiskel USGS

Agenda Item #1: Executive Director's Report

Baskin thanked DCR for its generous hospitality in hosting the meeting at the Quabbin Reservoir Visitor's Center and thanked the Department of Fish and Game for hosting the scheduled tour of the state fish hatchery.

Hansen provided an update on the hydrologic conditions for August 2007. He noted that precipitation in August was well below normal, following a below-normal July. The absence of rainfall throughout the entire state has resulted in very dry soil conditions. As a result of the lack

of rainfall, he expected the other hydrologic indicators, such as groundwater levels, to drop off too. The National Drought Monitor shows much of the state is abnormally dry or in a moderate drought.

Agenda Item #2: Discussion: Interbasin Transfer Offset Policy

Drury distributed a slight revision of the policy, to which a one-sentence policy statement was added. She invited comments on the policy before the next commission meeting. Graham added that the current version of the policy reflects changes made as a result of comments from staff, commission members and the working group. She then reviewed the changes, highlighting significant additions.

Yeo requested clarification on the last paragraph, an addition which states that "Preference will be given to projects that benefit aquifer recharge..." Graham responded that this change was made in response to a suggestion at the last commission meeting that approaches be ranked in order of preference. Drury added that proponents who propose offsets should be encouraged to benefit the area from which water will be withdrawn. She added that because each project will require different solutions, staff will consider offsets on a case-by-case basis. Drury confirmed that the offsets policy would mostly apply to small developments or single buildings. Graham added that she had researched the cost breakpoint that would result in a proponent choosing offsets versus pursuing an interbasin transfer. Drury added that Graham's research indicates that it sometimes may be less costly for a proponent to prepare an EIR or apply for a determination of insignificance than it would be to implement offsets.

Baskin noted that the policy provides the opportunity to "road test" the use of offsets under an official policy, and can be modified, as needed, based on actual cases. Simonson voiced approval for the new sentence in the policy statement, adding that it reflects the law. However, to avoid any potential confusion, she suggested adding language to indicate that "increased" includes "new." Horsley asked when stormwater recharge is part of an offset program. Drury replied that it is difficult to quantify stormwater recharge. Horsley suggested looking to MassDEP's new stormwater policy, which outlines some methods that will help quantify stormwater recharge. Baskin noted that the offset must avoid or minimize a transfer; thus stormwater could be considered an offset if, after it crosses a town and watershed boundary, it can be disconnected from the storm drain system, captured, and recharged within the donor basin. Drury added that staff would be open to any project, as long as the offset is quantifiable and takes care of the problem that must be addressed under the Interbasin Transfer Act. Drury also noted that this offset policy addresses interbasin transfers only, and is different from the broader-based offsets that are being considered by MassDEP as part of the Water Management Act.

Drury said that a vote on the policy would be requested at the October WRC meeting.

Agenda Item #3: Vote on the Minutes of May 2007

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

V A motion was made by Yeo with a second by Contreas to approve the meeting minutes for

o May 2007.

T E

The vote to approve was unanimous of those present.

Agenda Item #4: Update: Index Streamflows and Stressed Basins

Hutchins reported on the status of the work on establishing index streamflows. She reminded the commission that index streamflows are an attempt to characterize near-natural streamflows in Massachusetts and show what an unimpacted stream in Massachusetts should look like. The document will consist of a catalog of statistics that describes natural streamflows in Massachusetts. The document is based on work by David Armstrong of USGS in characterizing flows from 23 index gauges. USGS is nearing completion of a new index gauge report that will include 66 gauges for southern New England. Hutchins said this new information will be incorporated into the next draft.

The next steps are to complete the document, obtain comment from the public, review comments with the Task Force, and return to the Water Resources Commission for review and approval.

Hutchins also provided an update on reclassification of basin stress. She reminded the commission that basin stress classification was last completed in December 2001 and was based on three low-flow statistics. The reclassification effort depends on completion of the index streamflows report. The USGS "sustainable yield estimator" tool will be used to reclassify basin stress. This tool allows an evaluation of the impacts of withdrawals and return flows on natural flows. Hutchins also noted that GIS will be used to divide the state into smaller drainage areas of approximately 10-square miles. She added that she will be working with a Task Force to develop measures of stress, including both flow alteration and water quality. The work is being done on a very aggressive schedule to coincide with MassDEP's Water Management Act permit renewal schedule. Expected improvements include better resolution than that provided in the 2001 report, completion of many areas that had previously been classified as unassessed, and better statistics; in addition, the effort will not be limited by gauge locations. The end product will be a USGS Scientific Information Report.

Hutchins added that Mr. Armstrong is also working on a pilot study of streamflow and aquatic habitat in three basins. The study attempts to correlate fish community data with streamflow alteration, water quality, and the Urban Index. The goal is to incorporate biological criteria into the stressed basins classification. Results of the pilot study are expected in October 2007. If the work shows promising results, additional funding would be needed to apply the study statewide. Baskin said she saw this as an evolving effort, where the stressed basins classification can be fine-tuned as more information becomes available.

Horsley suggested inviting The Nature Conservancy to present its work on a similar, but basin-specific study of the Taunton River. Richards added that the two studies address similar issues at different scales.

Horsley asked if the new stress classification work would help to better define what "near natural" means, in the context of index gauges. Hutchins responded that the task force picked the

best gauges available, noting that small flow alterations exist throughout the state. Weiskel added that the gauges had been ranked according to potential flow alteration and that gauges representing the least-altered conditions were selected. In addition, he said, the gauge network had been expanded to include several new gauges at unaltered sites, though the record for these is short.

Pederson asked how basin stress classification would affect Water Management Act permit renewals. LeVangie responded that permits would be updated with the basin classifications at the five-year renewal periods. Hutchins added that, by itself, an index streamflow has no regulatory effect. She noted that the statistics may be used as a basis for comparison in the stressed basins work. LeVangie added that MassDEP's permitting policy provides guidance on using streamflow triggers to implement water-use restrictions, and that MassDEP is interested in reviewing the index streamflow statistics to see how they can be useful.

Agenda Item #5: Presentation: Fisheries of the Quabbin

Baskin said she hoped the next two presentations would help enlighten the commission about the basins that serve as donor basins to the Massachusetts Water Resources Authority water supply system.

Richards provided a detailed presentation on the Quabbin Reservoir fisheries, describing the fish resources, fisheries management, and fisheries research. He described the characteristics that make the Quabbin fisheries a unique resource. These include its large size and great depth; diverse, multistory fishery; the availability of public access; and the near-wilderness experience the reservoir affords. He also provided an overview of the hatcheries managed by the Division of Fisheries and Wildlife, including the McLaughlin hatchery, which is responsible for one-half of the commonwealth's production from hatcheries.

Agenda Item #6: Presentation: DCR Division of Watershed Management

Pula provided a presentation on the Quabbin, Wachusett, and Sudbury reservoirs and water supply system and the Ware River Watershed. He reviewed the operating rules for releasing water to the Swift River from the Quabbin Reservoir. He also described habitat improvements to the Swift River to improve the trout fishery. Wildlife highlights of the Quabbin Reservoir include the largest loon population in the commonwealth and a nesting population of bald eagles. He also described research, forestry management, planning and land protection, and water quality monitoring activities; interpretive services; responsibilities of rangers; and watershed maintenance.

Commission members and others were invited to participate in tours of the Quabbin Reservoir and McLaughlin Fish Hatchery.

Meeting adjourned

Attachments distributed:

- Current Water Conditions in Massachusetts, September 20, 2007
- Draft WRC Offsets Policy Regarding Proposed Interbasin Transfers (with minor revisions)
- Index Streamflows and Stressed Basins Update, September 20, 2007.