



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

---

**Meeting Minutes for March 13, 2008**

*Minutes approved October 16, 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
Duane LeVangie	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
Bob Zimmerman	Public Member

**Others in Attendance:**

Michele Drury	DCR	Roger Frymire	Citizen, Cambridge, MA
Bruce Hansen	DCR	Peter Tassi	Town of Reading
Erin Graham	DCR	Leo R. Potter	Foxborough Water/Sewer Superintendent
Frank Hartig	DCR	William Euerle	Foxborough Board of Water & Sewer
Marilyn McCrory	DCR	Jon Beekman	SEA Consultants
Todd Richards	DFG	Jennifer Pederson	Massachusetts Water Works Assn.
Vandana Rao	EOEEA	Rep. Jay Barrows	House of Representatives
Jack Buckley	DFW	Paul Lauenstein	Neponset River Watershed Assn.
Peter Weiskel	USGS	Eileen Simonson	WSCAC
		Lee Azinheira	Mansfield DPW

---

Baskin introduced Representative Jay Barrows, representing the communities of Foxborough, Mansfield, and Norton. Rep. Barrows commented that the vote before the Water Resources Commission on Foxborough's request for determination of applicability under the Interbasin Transfer Act is an important decision for the three towns. He added that the towns have been working diligently for the past 15 months to identify data needed to develop a regional sewer plan. He commended Drury for her help in outlining the numbers needed by the commission for its review. He explained that each community had invested one and one-half million dollars in Comprehensive Wastewater Management Plans. These plans conclude that it would be difficult for each community to dispose of sewage locally. He noted that the towns have identified a recharge site close to the Mansfield wastewater treatment plant and that this site has been

approved by the three boards of selectmen. He noted that the proposed regional plan will reduce costs by approximately \$20 million and will involve a regional authority with shared responsibility and ownership among the three towns. He added that the plan will serve areas with critical needs for sewerage and requested a favorable vote from the Water Resources Commission on the request for a determination that the Interbasin Transfer Act does not apply to Foxborough's plan as proposed.

Baskin called attention to a letter of support from Rep. Barrows and other legislators.

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

Baskin reported that commission staff had coordinated with MassDEP in updating and revising the Water Conservation Questionnaire, which is distributed to public water suppliers who are applying for Water Management Act permits. She outlined the contents of the questionnaire and distributed a summary of major changes to the questionnaire.

Baskin noted that EEA's Office of Technical Assistance is offering two day-long water conservation workshops for industry on April 18 and April 29.

Hansen provided an update on the hydrologic conditions for February 2008. He noted that February 2008 will probably be the wettest February on record in Massachusetts, with precipitation at 273 percent of normal.

Baskin added that the Drought Management Task Force is scheduled to meet the week of March 17.

**Agenda Item #2: Vote on the Minutes of September 2007**

Baskin invited a motion to approve the meeting minutes for September 2007.

<b>V</b>	A motion was made by Yeo with a second by Kennedy to approve the meeting minutes for
<b>O</b>	September 2007.
<b>T</b>	
<b>E</b>	The vote to approve was unanimous of those present, with two abstentions.

**Agenda Item #3: Vote on Foxborough's Request for Determination of Applicability under the Interbasin Transfer Act**

Drury reviewed the background on the project and distributed a letter of support from the town of Mansfield. The project involves a proposed interbasin transfer of approximately 27,000 gallons per day of wastewater from Foxborough (Neponset River Basin) to the Mansfield wastewater treatment plant in Norton (Taunton River Basin) through newly sewerage areas in the Neponset River Basin. She summarized the town's request to offset the potential transfer of wastewater from the Neponset River Basin with a pending transfer of 119,000 gpd of wastewater from the Taunton back to the Neponset through an on-site discharge of wastewater at the new Patriot's Place development. The transfer to be used as an offset is not subject to the Interbasin Transfer Act. This transfer will more than offset the 27,000 gpd that would leave the Neponset. She noted that through the offsets, there will be no increase in the current rate of interbasin transfer, and therefore, staff requests that the commission find that the Interbasin Transfer Act

does not apply to the project as proposed. She summarized the conditions that staff recommends to ensure that the offsets occur.

Extensive discussion and debate followed on whether the option of on-site discharge of wastewater had been properly evaluated in the towns' planning.

Zimmerman asked why the developer of the newly sewered areas would not pay for an on-site wastewater treatment facility with local discharge. Drury responded that the town had explored the option of keeping all water local. Euerle responded that other options were technically feasible, but the \$20 million in potential savings favored the development of a regional sewer authority. The proposed approach eliminates the need to bring wastewater, through a nine-mile force main, from the Mansfield wastewater treatment plant back into Foxborough for disposal. He clarified that the three towns would be responsible for constructing the expansion of the wastewater treatment facility in Norton. He added that the town of Foxborough has the option, with the New England Patriots, to build a treatment facility in Foxborough, but the infrastructure costs to pump wastewater to such a facility make this option less economical.

Baskin clarified the three options available: (1) the plan as proposed, which is to transfer 27,000 gpd of wastewater out of basin to a regional wastewater treatment plant; (2) to move this amount to the regional facility and then move it back into town for disposal; and (3) to use the Patriot's Place treatment plant, which involves significant infrastructure costs to get the wastewater to Patriot's Place and dispose of it in a new leaching field.

Zimmerman asked about sewer betterment fees. Potter responded that the town had not considered satellite treatment facilities because of the operational and management challenges. Zimmerman disagreed, saying that centrally managed, decentralized wastewater treatment programs exist in Massachusetts and that these facilities can treat wastewater to higher standards.

Yeo asked where the town's water supply sources were located. Drury replied that the majority were located within the Taunton Basin, and that the amount originating in the Taunton Basin is not jurisdictional under the Interbasin Transfer Act. Yeo asked about the overall balance of water and wastewater within town. Potter responded that about one-third of the town's water comes from the Neponset River Basin and two-thirds comes from the Taunton River Basin, while all wastewater, about 0.5 mgd, with the exception of a small portion that goes to the Gillette Stadium treatment facility, is discharged to the Taunton Basin. Drury added that the town had tried, in its Comprehensive Wastewater Management Plan, to keep all water local, but had difficulty identifying areas where a groundwater discharge permit would be feasible. She also noted again that the proposal more than offsets the amount being transferred.

Simonson asked why the areas to be sewered could not stay on septic systems. Potter responded that this was due to small lot sizes, septic system failures, poor soils, and high groundwater tables. Simonson expressed concern that sewerage these areas might spur new development. Drury responded that Foxborough has committed to forming a sewer district that would limit the amount of area that can be sewered. Simonson recommended that there be a very clear restriction on how far the sewer district can extend in terms of parcel numbers and size. Simonson also expressed concern about the ability of the Mansfield treatment facility in Norton to meet water

quality standards with additional flows. Drury responded that the facility can no longer discharge to a surface water body, the Three Mile River, and is looking for groundwater discharge sites for any additional flow. Simonson requested confirmation that approval of the project as proposed would include the contingency that the proponent find an appropriate site for groundwater discharge within the Taunton River Basin, and Drury confirmed this contingency is included. Baskin reiterated that the amount of transfer to the Neponset River Basin is about four times greater than the amount being transferred out of the Neponset Basin by the sewerage project and added that the “excess” offset amount would not remain on the table.

Azinheira commented that all three communities have looked at alternative disposal sites and the economics of upgrading the existing treatment plant, and have concluded that the plan as proposed is the best option.

Zimmerman responded that the state has the planning capability to identify groundwater discharge sites across the state and to earmark \$50 million per year to acquire and protect those areas. If the state does not take this step, he said, eastern Massachusetts, over the next 20 years, will be in a situation where it is running out of potable water, while, at the same time, it is throwing water away through surface water discharges of wastewater. He added that the situation in Foxborough will be repeated many times, as all the centralized wastewater treatment plants that were built with federal funding over the past 30 years are reaching their design limits. He stated that the commission needs to advocate to the governor and EEA for identifying those groundwater discharge sites. He said the commission also must develop a plan for abandoning the standard engineering approach, which puts the commonwealth in a situation where communities will run out of water.

Barrows responded that all three communities have established boundaries for the sewer districts. Moreover he said that Brockton made a \$5 million investment in piloting a desalination plant on the Taunton River, which will return water to the Taunton Basin. Barrows stated that if the communities can identify appropriate groundwater discharge sites near the plant to accommodate the additional flows, and groundwater discharge could be a possibility. He concluded by saying the communities are trying to do what they can to balance economic and environmental concerns.

Zimmerman responded that it makes no sense to him to invest \$5 million in a desalination plant, when that investment could be directed to the local disposal option, which would ensure sustainability regardless of growth, reestablish flow in our rivers, and enhance water quality.

Yeo responded that he did not disagree with Zimmerman on the issue of desalination, but pointed out that the Comprehensive Wastewater Management Plan does not reflect the standard engineering approach; the towns are looking at options for local discharge within the Taunton Basin; and the balance of water and wastewater in the town is good.

Baskin invited a motion on the staff recommendation.

<b>V O T E</b>	<p>A motion was made by Rich with a second by LeBeaux to accept the Staff Recommendation of March 13, 2008, that the project, as proposed by Foxborough, will not result in an increase over the present rate of Interbasin Transfer, due to offsets, and, therefore, the Interbasin Transfer Act will not apply to this proposal.</p> <p>The vote to approve was eight in favor and one (Zimmerman) opposed.</p>
----------------------------	---

Baskin acknowledged Zimmerman's point about the need to develop criteria for land acquisition and said that the commission should further discuss this point and provide guidance to the Secretary of Energy and Environmental Affairs. Zimmerman responded that the commonwealth is running out of time to make such acquisitions, and it is critical, over the next three to four years, to acquire properties, especially in the I-495 region, for onsite, decentralized wastewater treatment and disposal.

**Agenda Item #4: Vote on Reading's Local Water Resources Management Plan**

Drury reviewed the history of Reading's request to obtain all of its water from the Massachusetts Water Resources Authority. She said that, as a condition of approval of this request, the Water Resources Commission required the town to update its Local Water Resources Management Plan to reflect the change in the town's water supply sources. Drury stated that the updated plan addresses all the issues outlined in the Interbasin Transfer Act performance standards. Drury recommended that the commission approve the updated Local Water Resources Management Plan.

Lauenstein asked how effective Reading's extensive water conservation program had been. Tassi responded that the town's rebate program had been very successful and was recently expanded to include free retrofit devices for all residents and public works projects and education in the public schools, targeting Grade Three. McCrory added that the Reading conservation program is being evaluated as part of the Ipswich River Targeted Watersheds Grant program managed by the Department of Conservation and Recreation and staff would provide a report to the commission at a future meeting on results of the evaluation.

Baskin invited a motion to accept Reading's plan.

<b>V O T E</b>	<p>A motion was made by Tisa with a second by Contreas to approve Reading's update of its Water Resources Management Plan.</p> <p>The vote to approve was unanimous of those present.</p>
----------------------------	---

**Agenda Item #5: Presentation: Target Fish Populations**

Baskin introduced Richards by saying that the Division of Fisheries and Wildlife, with some funding from EEA, has been working on an important assessment of fish populations for more than two and a half years.

Richards provided an update on the assessment of target fish communities that had begun in 1999 as a pilot and was expanded statewide in 2006. He said the goal of the project was to define

fish communities appropriate for a natural river in southern New England, noting that rivers should have river fish communities.

He reviewed the methodology, which involved categorizing fish species in the commonwealth into three habitat use categories: fluvial specialists, which require flowing water throughout their life cycle; fluvial dependents, which need flowing water at some time in their life cycle; and macrohabitat generalists, which do not require flowing water. The methodology also involved identifying potential reference rivers based on physical characteristics and describing the fish communities for those reference rivers. Researchers used a method described by the Northeast Instream Habitat Program to select rivers that met the criteria for reference rivers. He said the goal is to determine target fish communities for 19 of the commonwealth's watersheds. He pointed to major gaps in the Connecticut River, Merrimack River, and coastal basins. To deal with these gaps, researchers have categorized the fish communities into western, central, and eastern regional target fish communities, and will apply this regional methodology in those basins until site-specific analyses that would better describe the fish communities can be done.

He described the results of fish community assessments of eleven watersheds and how existing conditions compare to the targets. He noted that species scarcity and absence of fish species indicate a lack of appropriate ecological conditions to sustain target fish communities. He also reviewed the criteria used for prioritizing restoration. These include proportions of the categories of fish species, as an indicator of water quantity and physical habitat, and pollution tolerance, as an indicator of water quality.

LeVangie asked if the analysis described by Richards was done for streams with index gages. Richards responded that the work done to date is at the watershed scale and is not a site-by-site analysis. Weiskel added that USGS is working with the Division of Fisheries and Wildlife to look at factors that control fish community composition across the state at smaller scales. USGS will use the calibrated watershed models that are available. He outlined the indicators used to tease out, at the scale of the subbasin, what the Division of Fisheries and Wildlife is doing at a larger scale.

Tisa pointed out that the information from the target fish communities study can be used by the Water Resources Commission to identify and refine the stressed basins delineations. He added that the next step would be using the index of biological integrity methodology to obtain more detail that will help in specific restoration projects at the subbasin level.

Meeting adjourned

Attachments distributed:

- Current Water Conditions in Massachusetts, March 13, 2008
- Water Conservation Questionnaire for Public Water Suppliers, revised March 11, 2008.
- Summary of Revisions to the Water Conservation Questionnaire
- Letter dated Feb. 28, 2008, from town of Mansfield Dept. of Public Works to Water Resources Commission on Foxborough's Request for Determination of Applicability and Offsets of Potential Wastewater Interbasin Transfer
- Map supporting Foxborough's Request for Determination of Applicability
- Presentation handouts: Target Fish Communities and the MA Water Policy