



October 23, 2009

Secretary Ian A. Bowles  
Executive Office of Energy and Environmental Affairs  
Attn: Anne Canaday, MEPA Office  
100 Cambridge Street, Suite 900  
Boston, Massachusetts 02114

Subject: EOEEA #14197, Framingham Birch Road Wellfield Redevelopment and Water Treatment Plant FEIR and NPC

Dear Secretary Bowles:

The Department of Conservation and Recreation (DCR) has reviewed the Final Environmental Impact Report (FEIR) and Notice of Project Change (NPC) for the Birch Road Wellfield Redevelopment and Water Treatment Plant that was submitted by the Town of Framingham Department of Public Works September 15, 2009. In keeping with our mission to protect, promote and enhance the common wealth of natural, cultural and recreational resources, DCR provides the following comments and recommendations concerning potential recreational and environmental impacts the proposed project may have on the adjacent DCR-managed Lake Cochituate. In addition, DCR submits comments related to potential impacts of the proposed project to the Sudbury River.

DCR believes that the FEIR and NPC have not addressed critical requirements of the Secretary's DEIR Certificate. Specifically, DCR has not seen how the Town developed and provided the additional data regarding potential impacts to Lake Cochituate, Cochituate Brook, and the Sudbury River, as required by the DEIR MEPA certificate. DCR maintains that a thorough evaluation of the environmental impacts to water resources from this project remains a critical and necessary requirement before the Project moves forward.

Framingham proposes to monitor impacts during the first three years of operation. DCR does not believe it is prudent to move forward with this project without the proponent first providing a thorough evaluation of the potential impacts to all the critical environmental resources identified in DCR's comment letter on the DEIR. Absent the critical data concerning potential impacts to these resources, and in particular to Lake Cochituate State Park, DCR requests preparation of a Supplemental FEIR.

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### **Groundwater Withdrawals and Model**

The DEIR Certificate directed that the FEIR should include revised ground water modeling, since the pumping test observations were affected by the re-circulation of water from the pumping test discharged to Lake Cochituate. Additionally, the FEIR should have included an assessment of drawdown impacts on Lake Cochituate and the Sudbury River. The Town was further directed to revise and use this revised groundwater model to analyze potential impacts to surface water resources. However, despite direction provided by the DEIR certificate, Framingham did not revise its ground water model, and left DCR with the impression that a ground water model would not be useful to characterize impacts to water resources. DCR respectfully disagrees.

DCR respectfully maintains that the ground water modeling advocated in its previous comment letter would be an appropriate tool for quantifying impacts to water resources and other water supplies in the project vicinity. Moreover, the model could be utilized as an important tool to evaluate the time delay of pumping alterations on water resource impacts and include an explanation of any changes made to the ground water model to reflect the Proponent's alteration of ground water recharge rates. Because Framingham did not revise its ground water model, neither the public, nor DCR has gained a clearer understanding of how the Town's project will affect Lake Cochituate, Cochituate Brook, and the Sudbury River.

### **Water Budget Model**

The DEIR Certificate noted that Birch Road wells and/or the pumping test data were not used in the modeling of the water budget and that the FEIR should re-run the model with data. The town did not present a revised water budget model based on Birch Road pumping test data, as directed by the Secretary's certificate on the DEIR.

### **Impacts to Lake Cochituate and the Sudbury River**

Despite public concern raised in the comment letters, Framingham has not offered any additional quantitative assessment on impacts to nearby municipal pumping wells, wetlands, wastewater treatment plant 7Q10 flow requirements, or the Wild and Scenic River values downstream of the proposed wells. No supporting analysis of impacts to the exposure of contaminated sediments associated with the Natick Army Lab was presented. Instead, the Town seeks to monitor the impacts and adjust operations later.

Framingham also states that the proposed operations plan will protect flows in the Sudbury River during the first three years of well use by using a combination of calendar and streamflow thresholds. However, the FEIR does not demonstrate how the proposed plan is protective of the aquatic environment, nor does it address potential impacts to Lake Cochituate. Similarly, the Town did not fully explain the rationale for its selection of trigger dates and proposed withdrawal reductions<sup>1</sup>. Consequently, DCR remains concerned about the time delay of pumping impacts to both Sudbury River flows and Lake Cochituate levels. DCR believes that the FEIR should have evaluated how the proposed withdrawals would affect flows remaining in the river and compared these to flow needs for aquatic habitat and downstream wastewater assimilation.

Similarly, Framingham did not address rapid fluctuations in Sudbury River flows at the Saxonville gage and how these would be addressed in their well management plan. Some of the fluctuations may be caused by MWRA releases from the Sudbury Reservoir (ultimately needed to assure water quality to the MWRA water system), which are beyond Framingham's control. However, DCR believes that Framingham should have addressed how it will operate the wells in response to this established condition.<sup>2</sup>

The DEIR Certificate raised and provided clear direction on how the Town should address in this FEIR certain concerns regarding the Town's analysis and associated impacts on surrounding resources, including Lake Cochituate and the Sudbury Reservoir. DCR has reviewed the FEIR and has reached the conclusion that it does not explain how all impacts from pumping can be handled in permitting under the WMA and those impacts can be mitigated by increasing the use of MWRA water during dry periods.

Specifically, DCR does not see how the FEIR directly addresses how impacts to Lake Cochituate would be minimized or mitigated, especially during the first three years of well operation and monitoring. Framingham suggests that a lake level trigger for recreational needs

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<sup>1</sup> For instance, the table outlining the operational plan (FEIR, pg. 33) is difficult to interpret, especially because the numerical values for the various flow thresholds are not provided.

<sup>2</sup> Framingham also asserts that if withdrawals are suspended in response to extreme low flows, "operational constraints make it unlikely that withdrawals will recommence until flows in the river have rebounded significantly." (FEIR, pg. 33). Yet, the Town failed to quantify the "significant rebound" threshold, which would be useful in evaluating the impacts to this important resource.

at Lake Cochituate could be based upon the elevations of two levels of dam spillway, and proposes to identify an appropriate lake level trigger during the initial three years of well operation. The Town advances this proposal, despite DCR providing lake level data from 1992 to 2008 and informing Framingham of the lake level thresholds needed for recreation. DCR re-iterates that the thresholds for recreation are not the same as the spillway elevations.

In prior comments on this project, DCR noted that Lake Cochituate already experiencing low water levels that impact recreation, has identified issues that presently exist at Lake Cochituate, including boat passage at four openings, operation of beaches, the boat ramp, and invasive aquatic plants all without withdrawals from the Birch Road wells. As part of its FEIR review, DCR reviewed the historic lake level data (previously provided to Framingham) and discovered that in 12 out of 13 years, lake levels fell below the thresholds needed for recreation. The Birch Road wells will only exacerbate the existing conditions, and Framingham has not presented any additional analyses or mitigation with respect to these problems.

Even if the Birch Road wells caused an additional three inches of drawdown in Lake Cochituate, as calculated in the DEIR, such activity would exacerbate and prolong recovery of existing environmental and sensitive resource conditions surrounding the lake. The FEIR mitigation plan mentions only working with DCR on dredging two of the four boat passages. The boat passages have their own set of limiting factors, as some of the passages are concrete and could not be mitigated by dredging. In short, Framingham's proposal is not protective of recreational needs on Lake Cochituate. As the Town has the ability to evaluate readily available data to properly evaluate recreational impacts, DCR continues to request that the Town complete the evaluation of impacts on the recreational resources of Lake Cochituate.

### **Mitigation**

The mitigation proposal states that withdrawals would decrease by certain percentages in response to streamflow triggers. However, the proposal does not quantify the meaning of this conclusion. Specifically, DCR is unable to determine whether "approved withdrawal" should be construed to mean MassDEP's Safe Yield of the wells, or the Interbasin Transfer limit of 3.17 mgd. The Town should also provide hydrographs for the different scenarios presented in the table on Page 33, with the impacts of the pumping super-imposed over the existing flow. In addition, the remaining flow in the Sudbury River should be considered with respect to aquatic habitat needs.

DCR remains concerned that the FEIR has not adequately addressed how long it will take the Sudbury River or Lake Cochituate to respond to pumping reductions. Framingham uses the

pumping test recovery rates at the pumping wells to assert that the “lag time” (the time it would take between the actual withdrawals and the time their effects would be felt in the environment) would be “quite short.” However, recovery rates in the aquifer are not synonymous with lag time at the receptors. Framingham still needs to evaluate this issue, as directed by the Certificate on the DEIR.

Similarly, the FEIR does not appear to identify the Town’s commitment to follow up on its environmental impact analysis. While DCR recognizes that the FEIR references USGS stream gages and engaging stakeholders to review data after three years of initial operation and data collection, the Town has not specifically committed to USGS evaluations of the data collected during the initial three year operating/monitoring period, nor to long-term funding of stream gages. DCR urges the Town to provide more details regarding the proposed “numerical model” simulating the effects of various operational scenarios.

DCR further notes that the Town has not made it clear how it intends to fund an independent USGS analysis of the data at the end of the three-year monitoring program. Nor is there any commitment to decrease or cease use of the wells if the monitoring program determines that environmental harm has resulted or will result from their operation. Finally, there is no discussion of a baseline-monitoring period to characterize conditions existing prior to operation of the wells.

Based on the foregoing, DCR continues to advocate that the Town complete the appropriate environmental analyses and resolve those previously stated ambiguities concerning the proposed pumping regimen and the Interbasin Transfer Act limitations. This should hopefully provide some confidence that the well withdrawals would not cause significant impacts to environmental and recreational resources. In summary, the FEIR and NPC do not address the scope outlined in the DEIR Certificate for this project. Therefore DCR requests that a Supplemental FEIR be required to provide a thorough understanding of potential environmental impacts.

Thank you for taking these comments into consideration. Please contact Linda Hutchins, Hydrologist at (617) 626-1384 if you have any questions or require additional information.

Sincerely,

Richard K. Sullivan, Jr.  
Commissioner

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