



Sudbury, Assabet and Concord
Wild and Scenic River
Stewardship Council
15 State Street
Boston, MA 02109
info@sudbury-assabet-concord.org

617-223-5225 phone
617-223-5164 fax

July 24, 2009

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

Re: EOOEA No. 14197, Birch Road Well Field Redevelopment and Water Treatment Plant

Dear Secretary Bowles,

Thank you for the opportunity to comment on this Draft Environmental Impact Report for the Birch Road Well Field Redevelopment and Water Treatment Plant in Framingham. This project is of interest to the River Stewardship Council because of its potential impacts to the federally designated Sudbury Wild and Scenic River.

Twenty-nine miles of the Sudbury, Assabet and Concord Rivers have been nationally recognized by Congress as Wild and Scenic Rivers due to their "outstandingly remarkable resource values," including scenery, history, literature, recreation and ecology. The River Stewardship Council (RSC) was created by Congress as part of the designation and is comprised of representatives from each of the shoreline communities and from regional nonprofit organizations, state and federal agencies. The RSC has been empowered to work with the National Park Service to promote the long-term protection of the rivers and these resources. The NPS is responsible for administering the Wild and Scenic Rivers Act, and in particular, Section 7 of the Act, which protects the outstanding resource values from any direct and adverse impacts caused by water resource projects that have federal permits and/or federal financial support. The RSC is asking that the NPS review the federal assistance and permits to the project under the Section 7 standard.

Water quality, adequate flow and ecological sustainability are high priority issues for the RSC, as described in the Sudbury, Assabet and Concord River Conservation Plan, because they are essential to the long-term protection of the River and its resources. Maintaining flow not only supports aquatic habitat, but it also supports better water quality. It is with this perspective that these comments are offered.



member organizations

*Bedford, Billerica, Concord, Framingham, Framingham
Organization for the Assabet River, Concord
Commonwealth of Massachusetts, Massachusetts*

sudbury-assabet-concord.org

1. The DEIR does not even mention the Wild and Scenic River in its discussion of the Sudbury River. The significance of the River and its resources cannot be understated and must be recognized in any evaluation of the Well Field. The Oxbow, which is very close to the Birch Road Well Field and touches its Zone II, is a special feature of the River with historical significance of its own. Thoreau wrote about paddling on the Oxbow in his journals. The integrity of the Oxbow must be maintained.

The River Stewardship Council recently completed a Sudbury River Boater's Trail (available on our website at www.sudbury-assabet-concord.org), highlighting many of the special resources on the Sudbury River downstream of this project site. They include the Great Meadows National Wildlife Refuge, a spectacular natural area that provides important habitat for waterfowl and migratory birds. An evaluation of the impacts of water withdrawals on these resources, especially the wetland habitats downstream, should be examined.

2. The Concord Basin is considered a medium-stressed basin by the Commonwealth of Massachusetts. This designation and the current low flow conditions (as exhibited at Fruit Street in Hopkinton when the River ran dry in 1999) are warning signs to water extraction managers that the River's water resources are not in balance. The additional withdrawal of 4.3 MGD would have potentially significant impacts to the River's flow and sustainability of the functions and values of the watershed. This potential withdrawal should not be considered in isolation but must be evaluated in light of the proposed upstream wells in Hopkinton and Ashland. The cumulative impact on the River could be devastating.

Ever increasing water withdrawals, particularly without return flows, cannot continue. The Commonwealth is responsible for determining sustainable water use levels within the Basin through a sustainable safe yield analysis. Although such an analysis is essential to understand the full impacts of the project, one was not included in the DEIR. Serious analysis and management decisions will need to be made to ensure that the Concord Basin does not become more stressed, only to face the same challenges of the Ipswich watershed.

3. The DEIR states that any impacts occurring during times of summer low flow could be mitigated through a pumping schedule implemented by the Water Management Act. This "solution" is unworkable, however, because it does not take into consideration groundwater travel time, which could be as long as half a year from the wellhead to the River. Discontinuing pumping on low flow days would have *no* immediate impact on the River. As a result of the lengthy groundwater travel time, in order to implement a meaningful pumping scheme to address potential low flow conditions in the later summer, by the end of each winter one would have to undertake the impossible task of predicting the upcoming spring and summer rainfall amounts. Unless the wells were turned off for six months of the year, this project could not reasonably rely on pumping schedules to ensure protection of flow to the River.

USGS is currently working on a model of flows in the upper Sudbury River that takes into account cumulative water withdrawals and returns. This model is probably the best available to

begin to answer the questions of impacts of the proposed withdrawal on the river system. The proponents should be required to work with USGS on expanding their model to include this withdrawal.

4. Much of the analysis presented in the DEIR is inappropriate. For example, monthly mean average flows in the Sudbury River alone cannot be used to determine impacts of the withdrawal; the critical parameter for evaluating impacts to the river and its resources is low flows. If the well withdrawal would impact 12% of the flow in the Sudbury River during average flow conditions, what would the impact be during 7Q10 low flow? In dry years, how often was the River in 7Q10 conditions, and how many more days would the River be at 7Q10 conditions with this withdrawal? Modeling should be used to determine impacts on the River during times of low flow. The extent of impact downstream should also be determined.
5. Very little, if any, of the 4.3 MGD slated for withdrawal from the groundwater would be returned to the ground and would remain in the watershed. All of the wastewater would be collected as part of MWRA's system then transported to Boston Harbor for discharge. This would exacerbate the already stressed water resources of the Concord Basin and would trigger a review under the Interbasin Transfer Act (ITBA).

The DEIR states that the withdrawal /discharge does not require review under the ITBA because a combination of the withdrawals from the Birch Road Well Field and the Winter Street pump station (the latter taking water directly from the Sudbury River) are grandfathered . It seems a great stretch to conclude that the reactivation of both the Birch Road Well Field from the 1970s and the Winter Street pump station capacity from the 1930s circumvents the IBTA and therefore are not subject to any review. Conditions present today, following decades of intense development that have highly stressed local water resources, do not begin to resemble those of 1930 or 1970. It is inconceivable that the intent of the IBTA was to grandfather systems from almost 80 years ago. Otherwise, the very purposes of that Act would be eviscerated.

Additionally, the IBTA only allows grandfathering of those systems that were designed and built before passage of the Act. In this case, although the withdrawals occurred decades ago but continued for many years, the "system" was never completed because construction of a water treatment plant is now a necessary component to providing drinking water under the Safe Drinking Water Act.

The proponents of the project must comply with the IBTA by undertaking an analysis of their proposed interbasin transfer, which then must be reviewed by the Water Resources Commission.

6. The economic justification for pursuing this project is not completely analyzed. The economic analysis within the DEIR shows that when the Birch Road wells come on line, they will actually be more expensive (\$2,555/MG) than what the Town is currently paying for MWRA water

(\$2,514/MG). Because of an anticipated 14% increase in MWRA rates in the next 15 years (\$3,415/MG), the proponents estimate an overall cost savings to the Town of \$50 million over 20 years. This analysis does not appear to incorporate an analysis of future costs to the town for delivering this water and a corresponding increase in town water rates. There is no discussion of future costs for operation and maintenance of the Birch Road well water although every indication is that the price of energy will continue to increase, as will the costs of treatment. A full analysis of present and future costs as a result of this project should be presented to the public before any decision is made to go forward.

7. The DEIR presents information about the wastewater issues facing the Town, particularly inflow and infiltration (I/I) within the sewage collection system. The argument is made that some of the money saved by reactivating these wells will be used for control of I/I. Paragraph number 6, above, argues that more analysis of costs needs to be done, and this would help to determine how much money will be available for these wastewater projects. Additionally, the proponents need to consider the impacts of additional waste flowing through the wastewater system (estimated at 59,000 gallons per day from the new water treatment plant) to determine if this additional flow will exacerbate the I/I problems and cause more overflows to the combined sewer outfalls.

For the above reasons, this project deserves significant additional analysis. The project should present no appreciable negative impact to the Sudbury River or the larger Concord Basin. This DEIR should not be accepted as a FEIR with these significant outstanding issues left unanswered. An FEIR should be required to allow for a complete review of project impacts before this project moves forward.

Thank you for the opportunity to comment.

Sincerely,



Susan J. Crane, Chair
Sudbury, Assabet and Concord Wild and Scenic River
Stewardship Council

CC:

Peter Sellers, Framingham Department of Public Works

Sen. Edward Kennedy, US Congress

Sen. John Kerry, US Congress

Rep. Edward Markey, US Congress

Rep. Niki Tsongas, US Congress

Sen. Karen E. Spilka, MA Legislature

Rep. Pam Richardson, MA Legislature

Rep. Tom Sannicandro, MA Legislature

Jackie LeClair, Drinking Water Programs, EPA Region 1