



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR

KERRY HEALEY
LIEUTENANT GOVERNOR

STEPHEN R. PRITCHARD
SECRETARY

Tel. (617) 626-1000
Fax. (617) 626-1181
<http://www.mass.gov/envir>

July 28, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT REVIEW /
PHASE III COMPREHENSIVE WATER RESOURCES MANAGEMENT PLAN

PROJECT NAME : Comprehensive Water Resources
Management Plan
PROJECT MUNICIPALITY : Wilmington
PROJECT WATERSHED : Ipswich River
EOEA NUMBER : 8844
PROJECT PROPONENT : Wilmington
DATE NOTICED IN MONITOR : **June 21, 2006**

As Secretary of Environmental Affairs, I hereby determine that the Supplemental Final EIR/Phase III (SFEIR) document, submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

On a statewide level, I remain concerned about the need to balance water budgets in each watershed across the Commonwealth. We must protect the water sources we have, use water more efficiently, identify and protect the additional sources we'll need to meet reasonable future demands, and balance our water budgets within our watersheds to protect environmental resources. Existing local water withdrawals from Wilmington and other communities are causing severe stresses on the ecosystem of the Ipswich River basin. Restoring the water balance in the Ipswich River basin will require a combination of reducing the amount of wastewater exported out of the basin for treatment, improved stormwater management and groundwater recharge, and supplementing or replacing existing water supplies. As part of this effort, the Ipswich River basin communities will need to work together, to develop a comprehensive long-term plan to securing water while protecting the environment.

Overview

The Town of Wilmington has developed a Comprehensive Wastewater Management Plan/Environmental Impact Report (CWMP/EIR) to address the short-term and long-term issues relating to the Town's wastewater treatment and disposal needs, and drinking water supply needs. The goal of the CWMP/EIR is to examine the full range of Wilmington's water supply, wastewater management, and stormwater management needs, and identify environmentally sustainable alternatives that respond to the community's needs, meet water quality and public health standards, and restore and protect the Ipswich River and associated watershed resources. The result is a comprehensive plan outlining how the Town of Wilmington will meet its water supply needs and treat and dispose of its sanitary sewage for the next 20 years.

The Town of Wilmington was asked to identify and analyze one or more comprehensive approaches to address Wilmington's long-term water supply needs and long-term wastewater needs in a manner consistent with state policies and regulations and consistent with the goal of restoring, maintaining, and enhancing recharge to groundwater and base flow to the Ipswich River. Specifically, the Town of Wilmington was required to provide information and analysis on a number of water management issues including:

- Wastewater disposal methods that do not result in the transfer of water out of the Ipswich River basin; a detailed evaluation of alternative water supply sources to meet the Town's public water supply needs;
- A wastewater management proposal that maximizes the use of on-site subsurface wastewater disposal systems and near-site and subregional wastewater treatment facilities that adequately evaluates the potential impacts of proposed new sewers to secondary growth, water supply demand, increased impervious surface area and stormwater management, and stream flow and water balance in the Ipswich River basin; and
- A commitment to the full range of effective local water conservation measures that reduce demand on water supplies to the maximum practicable extent.

The Town of Wilmington's CWRMP seeks to balance sewer discharges, water withdrawal pump rates from local streamside wells, and water purchased from MWRA during critical low stream flow periods. The Source Management component of the Town of Wilmington's CWRMP calls for the construction of a water supply connection to the Massachusetts Water Resources Authority (MWRA) to purchase approximately 2.5 million gallons per day (mgd) of MWRA water supplies to replace the loss of supply from the Maple Meadow Brook Aquifer (MMBA) water supply wells, and to ensure an adequate supply of water to the Town while reducing the stress placed on the Ipswich River by the Town's existing withdrawals during seasonal low flow periods (May thru September). The Town's Plan includes the proposed rehabilitation of the Brown's Crossing Wellfield and the Salem Street Well to provide an in-basin water supply source (approximately 1.2 mgd) to supplement the MWRA purchase to meet Wilmington's estimated future water supply needs.

The Sewer Mitigation component of the Town of Wilmington's CWRMP is comprised of MWRA water imports, stormwater infiltration/recharge from the Town's Stormwater By-Law, elimination of infiltration and inflow (I/I), and water conservation.

According to the information provided in the SEIR, the Sewer Mitigation and Source Management components of Wilmington's CWRMP are based on a series of projections and assumptions. The Town has committed to reviewing these projections and assumptions prior to the construction of each Phase of sewer expansion and each time the Town's Water Management Act Permit is renewed.

As described in the SFEIR, the Town's stormwater management plan will provide a minimum of 2.5 mgd of stormwater recharge to the Ipswich River basin. According to the proponent, the in-stream flow restored by the Town's purchase of MWRA water, use of the Brown's Crossing Wellfield and the Salem Street Well, and stormwater management plan is to be retained in the Ipswich River, where it is critically needed to support healthy aquatic ecosystems and other in-stream functions and values, including recreation and pollution dilution.

The Secretary's Certificate on the FEIR, issued in October 15, 2004, required the proponent to prepare a Supplemental Environmental Impact Report (SFEIR) to address a number of significant issues of statewide policy pertaining to water conservation, water supply, sewer expansion, and stormwater management so that they can be considered in the evaluation of the most feasible options and a presentation of the Final Recommended Plan. Specifically, the proponent was asked to provide additional information to adequately address the following issues:

- A detailed commitment to the full range of effective local water conservation measures that reduce demand on water supplies to the maximum practicable extent.
- A reevaluation of the Town's sewer expansion plan and the need to extend new sewer to include new additional residential land areas surrounding Wilmington's remaining public water supply resource areas, and
- A commitment that the relief offered by out-of-basin sources will be offset by reducing allowable local withdrawals, to ensure that the Ipswich River ecosystem truly benefits from the project.

Water Resources Conservation

Water conservation efforts in the Town of Wilmington and other Ipswich Basin communities are likely to have significant beneficial impacts to streamflows in the Ipswich River. I note that the conservation measures required by DEP for all water suppliers located in the Ipswich River Basin have been contested by the Town of Wilmington as part of the Town's appeal of DEP's May 2003 modifications to the Town of Wilmington's Water Management Act permit. As a result, the Town has elected to not include in the SFEIR a detailed description of the Town's proposed conservation measures or a commitment to their implementation until the Administration Magistrate has issued his decision. In their comments, DEP anticipates that the Administration Magistrate's decision for the Town of Wilmington's appeal, will be similar to that of other decisions rendered for other municipal appeals in the Ipswich River Basin communities, and will result in Wilmington's adoption of water conservation measures that are compliant with DEP's April 2004 policy.

As Secretary of the Environmental affairs, I have an independent obligation under MEPA and its implementing regulations to ensure that a proposed project has taken all feasible steps to avoid, minimize, and mitigate damage to the environment.

I find that water conservation serves as a fundamental component of the Source Management component of the Town's CWRMP, and to many of the permits that may be required for this project. I am therefore requiring the proponent to provide a copy of the final water conservation plan for this project to the MEPA Office for the project file. The proponent's water conservation plan should include a detailed description of the Town's voluntary and mandatory water restriction and conservation measures that have been approved, and those measures that have been funded and implemented to date, the proponent's commitments to program funding, outdoor water use restrictions, and water use rates. I strongly encourage the proponent to work closely with DEP in the final design of the water conservation plan and to identify opportunities for incorporating a number of additional tools to improve water conservation, including: the use of a water bank, enactment of a bylaw regulating automatic sprinklers and/or clearing of land for grass lawns, and promotion of the use of cisterns for outdoor watering.

Sewer Expansion

As described in the SFEIR, the Town has revised its sewer expansion plan in response to comments received on the FEIR, and has eliminated the previously proposed sewerage under Phase IV from the CWRMP. As currently proposed, a reserve sewer allotment, equivalent to the total wastewater flows of 200 single-family houses, will replace the proposed Phase IV sewer area. This reserve sewer allotment, to be administered by Wilmington's Board of Water and Sewer Commissioners and the Board of Health, may be applied to office, commercial, industrial, and municipal developments, as well as residential developments, and may be used in any of the Phase sewer areas (Phase I-III). The reserve sewer allotment should be considered as a total wastewater flow amount (gpd) so as to adjust for reductions in the reserve allotment from sewerage non-residential developments. According to the DEP, the elimination of the Phase IV sewer area and the incorporation of a reserve sewer allotment represents a reduction of approximately 92,000 gpd of wastewater to be exported from the Ipswich River Basin.

The Town has also proposed to adopt a Sewer District By-Law establishing a permit review process, also administered by Wilmington's Board of Water and Sewer Commissioners and the Board of Health, for any development proposals not located within the Town's Sewer District and Implementation Plan map and requesting a sewer extension/connection to the municipal sewer system. Project proponents will need to satisfactorily demonstrate to Wilmington officials and DEP that the need for sewer exists, and that no other viable wastewater treatment and disposal options exist.

Local Sources

The SFEIR includes a more detailed discussion of the proposed use of local water supply sources (Salem Street and Browns Crossing well-fields) and their combined ability to provide local source water during the critical low streamflow Summer Target period (May-September), and the non-critical streamflow Winter Target period (October – April). Under the Plan's Summer Target scenario, Wilmington will monitor streamflow in the Ipswich River from May thru September using the South Middleton gauge, and employ a Minimum Streamflow Threshold (MST) of 18.7 cubic feet per second (cfs) to activate its maximum purchase of MWRA water (approximately 2.5 mgd) and reduce its local water supply source withdrawal rates to approximately 1.2 mgd. During the Winter Target period (October-April), the Town will operate its local water supply sources at a higher average daily rate (approximately 2.2 mgd) and minimize the purchase of MWRA water to approximately 1.0 mgd.

Many commenters have expressed concern with the project's potential impacts to Martins Brook and Lubbers Brook, tributary streams to the Ipswich River, resulting from the increased pumping and withdrawals from Wilmington's local source wells (Salem Street and Browns Crossing well-fields) as proposed in the CWRMP. According to the comments received from the Ipswich Watershed Association, the League of Women Voters of Wilmington and others, these headwater tributary streams experience critical low flow conditions sooner and more frequently than critical low flow conditions that may be identified in the Ipswich River at the South Middleton gage. The South Middleton gage is located approximately eight miles downstream of these tributary streams. The Town's proposed use of the South Middleton gauge to monitor MST in the Ipswich River during critical low streamflow periods may not detect critical low flow conditions in the headwaters of the Ipswich River in a timely manner. A number of commenters have reported that the streamflow in Lubber Brook was eliminated for a period of time in 2005 due to municipal withdrawals at streamside wells. Numerous comments have been received requesting regular monitoring of the Martins Brook Aquifer area, and the use of permanent streamflow gages, to be installed upstream of the existing South Middleton gage, to help monitor the impacts of the Town's CWRMP on headwater tributary streams to the Ipswich River.

I ask that DEP and the Water Resources Commission include this issue in their respective Water Management Act and InterBasin Transfer Act permit review processes for this project, and any proposed periodic updates of the Source Management and Sewer Mitigation components of Wilmington's CRWMP.

Stormwater Management

The SFEIR contains a more detailed discussion of the benefits associated with the groundwater recharge of existing and future stormwater run-off and the proponent's proposed stormwater management program. According to the proponent, the stormwater management program has been designed to mitigate the loss of water from the preferred sewer alternative and balance Wilmington's water budget in the Ipswich River Basin. As described in the SFEIR, the proposed stormwater management program is now estimated to provide approximately 2.5 mgd of groundwater recharge to the Ipswich River Basin by 2025.

As discussed in the SFEIR, immediately upon completion of the MEPA review process for the CWRMP, the Town of Wilmington proposes to complete the process to draft, adopt and implement a bylaw for stormwater infiltration that will require new development (excluding individual homes) and renovation/expansion to recapture 150% and 100% of stormwater runoff, respectively. Stormwater recharge serves as a fundamental component of the proponent's proposed sewer mitigation plan. I am also requiring the proponent to provide a copy of the final Stormwater infiltration By-Law for this project to the MEPA Office for the project file. As described in the SFEIR, the Wilmington Planning Board and Building Inspector's Office will maintain records, including engineering calculations for the infiltration systems installed under the stormwater infiltration By-Law, to monitor the actual verses proposed infiltration benefits.

Conclusion

Numerous state agencies, environmental advocacy groups and interested parties have invested a substantial amount of time reviewing this project. The proponent and the state permitting agencies should carefully consider the comments received on the SFEIR.

I note that DEP has indicated that the SFEIR has adequately addressed DEP's comments on the FEIR, and that WRC has indicated that technical issues raised in WRC's comment letter can be addressed during the IBTA permitting process. I am requiring the Town of Wilmington to work closely with DEP and WRC to satisfactorily address the comments received on the SFEIR pertaining to water conservation, stormwater management, streamflow monitoring, and water auditing during the permitting process. The permitting agencies should forward a copy of their final Section 61 Findings to the MEPA Office for completion of the project file.

July 28, 2006
DATE


Stephen R. Pritchard, Secretary

Comments received:

07/18/06	Massachusetts Water Resources Authority (MWRA)
07/20/06	Suzanne M. Sullivan
07/20/06	Water Resources Commission (WRC)
07/21/06	Water Supply Citizens Advisory Commission, MWRA
07/21/06	League of Women Voters of Wilmington
07/21/06	Massachusetts Department of Environmental Protection (DEP) – NERO
07/21/06	Ipswich River Watershed Association (IRWA)

SFEIR 8844
SRP/NCZ/ncz