



Massachusetts Water Resources Authority



City of Cambridge



City of Somerville

JOINT PUBLIC NOTICE

Alewife Brook Combined Sewer Overflows Progress Update

This notice is required by the Massachusetts Department of Environmental Protection (DEP) as an annual update on the progress of Combined Sewer Overflow (CSO) control measures that are underway to improve the water quality of Alewife Brook. You are also receiving this notice if your property lies in the extended 100-year floodplain of Alewife Brook as established and currently in effect by the Federal Emergency Management Agency (FEMA).

The water quality of Alewife Brook is often impaired due to bacteria and other pollutants from a number of sources, including cross connections between sanitary sewers and storm drains, urban stormwater runoff, and CSOs. During both wet and dry weather, the water quality of Alewife Brook can be impaired and fail to meet state bacteria standards for fishing and swimming.

Portions of Cambridge and Somerville are served by combined stormwater and sanitary sewer systems common in older cities. Seven CSO outfalls along Alewife Brook can release an untreated mix of stormwater and sanitary flow during large storms when stormwater can overwhelm the capacity of the combined sewers. These discharges relieve the sewer system, preventing sewage backups into homes, businesses and streets, but they also impair water quality.

As part of the Boston Harbor Case (D. Mass. C.A. No. 85-0489-RGS), Massachusetts Water Resources Authority (MWRA) is required to undertake certain corrective actions to reduce or eliminate CSO discharges along Boston Harbor, the Mystic, Charles and Neponset Rivers and Alewife Brook. MWRA, in cooperation with the cities of Cambridge and Somerville, is currently designing and constructing several CSO projects that, when completed, will significantly reduce CSO discharges to the Alewife Brook.

The CSO control plan for Alewife Brook comprises five component projects mandated by the Federal District Court. The projects are described in the table on page 2. Together, these projects are predicted to reduce average annual CSO volume to Alewife Brook by 85% (from 50 million gallons to 7.3 million gallons) and reduce the frequency of discharge from 63 times a year to seven times a year on average. The projects will also eliminate CSO discharges at two outfalls, CAM004 and CAM400, and build on past work by MWRA and the communities that resulted in the closing of several outfalls.

Work already completed by MWRA, Cambridge and Somerville has reduced the number of CSO events and the total volume discharged to the brook. Somerville completed sewer separation work and closed several of its CSO outfalls in the 1980's and 1990's. In addition, MWRA estimates that average annual CSO discharge to Alewife Brook has been reduced by 48% since 1997, primarily as a result of the work Cambridge has completed to-date to implement MWRA's long-term control plan, as well as recent improvements by MWRA to upgrade pumping capacity at its Alewife Brook Pump Station.

Cambridge recently completed construction of two of the five Alewife Brook CSO projects – Interceptor Connection Relief and Floatables Control at CAM002 and CAM401B and Floatables Control at CAM001 (completed October 2010) and CAM400 Manhole Separation and related CSO regulator elimination (completed March 2011). The work occurred along Alewife Brook Parkway near the intersection with Massachusetts Avenue and in the Whittemore Avenue area. Completion of these projects is a major milestone in the efforts to move the Alewife Brook CSO control plan forward.

Cambridge also completed the construction bid package for the CAM004 Stormwater Outfall and Wetland Basin in 2010 and plans to commence construction this spring. The wetland basin will attenuate the stormwater flows that will be removed from the combined sewer system and provide a level of water quality treatment prior to draining the stormwater to the Little River and Alewife Brook. The wetland will also contribute to the ecological and recreational goals of DCR's Master Plan for the Alewife Reservation.

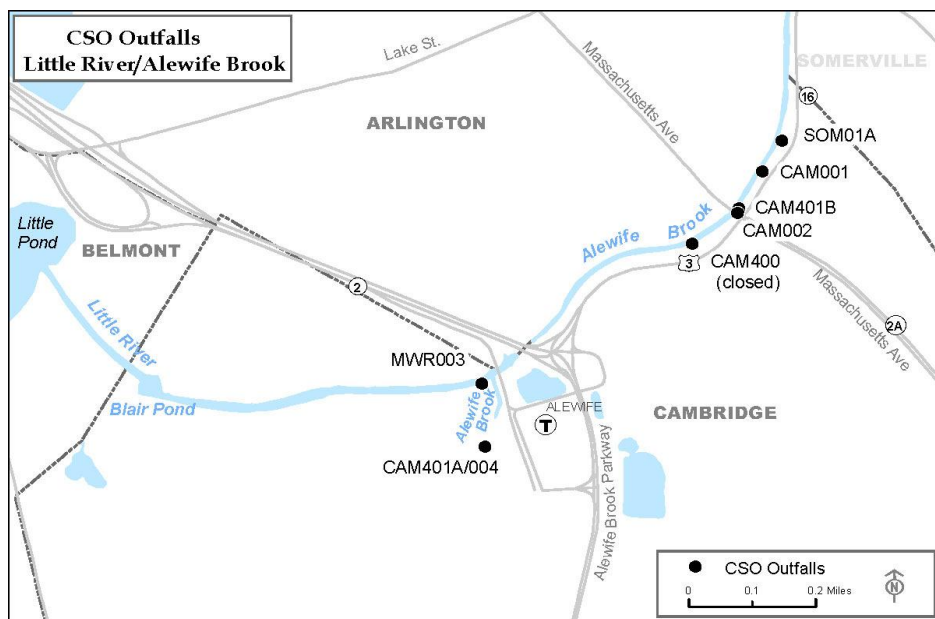
Project	Benefit	Implementation Status	Scheduled Completion
CAM004 Stormwater Outfall and Wetland Basin	Conveys separated stormwater flows to wetland system for treatment and flow attenuation.	Cambridge plans to commence construction in Spring 2011.	2013
CAM004 Sewer Separation	Removes stormwater from the sewer system; eliminate CSO at Outfall CAM004.	Cambridge completed early work along Fresh Pond Parkway in 2000-02. Later contracts are in design.	2015
CAM400 Manhole Separation	Removes stormwater from the sewer system; eliminate CSO at Outfall CAM400.	Cambridge completed construction of this project in March 2011.	2011
Interceptor Connection Relief and Floatables Control	Upgrades connections between Cambridge and MWRA systems to provide greater capacity; provides floatables control.	Cambridge completed construction of this project in October 2010.	2010
MWR003 Control Gate and Rindge Ave. Siphon Relief	Optimizes hydraulic conveyance; minimizes overflows while controlling system flooding in large storms; provides floatables control.	MWRA plans to commence design of this project in 2012.	2015
TOTAL PLAN	Reduce CSO discharges and close certain outfalls.		

In 2010, Cambridge also resumed design work for the planned sewer separation in neighborhoods upstream of Outfall CAM004. Removing stormwater from the sewer system will reduce the hydraulic burden on MWRA's interceptors during wet weather, will lower CSO discharges, will allow Cambridge to eliminate CSO discharges at Outfall CAM004, and will improve water quality in the Little River and Alewife Brook.

MWRA will manage design and construction of the last Alewife Brook CSO project. It involves improvements to MWRA's sole CSO outfall to Alewife Brook (Outfall MWR003, located behind the Alewife Station), as well as improvements to the City of Somerville Tannery Brook Conduit connection to MWRA's system and Somerville's related CSO outfall (Outfall SOM01A).

Construction of all five projects is scheduled to be complete by December 2015. Together, the projects are predicted to reduce average annual CSO volume to Alewife Brook by 85% and bring CSO discharges into compliance with Class B ("fishable/swimmable") water quality standards 98% of the time.

It is important to understand that floodwaters in all cases can present health risks, and proper precautions are necessary to minimize these risks during flooding events. Public health officials recommend avoiding contact with the brook during rainstorms and for 48 hours afterwards, as there may be increased health risks due to bacteria or other pollutants. DEP has developed guidance for homeowners for responding to flooding or sewer backups, which can be found at <http://www.mass.gov/dep/water/laws/flooding.htm>.



For more information on CSOs and the CSO control program, contact MWRA at (617) 660-7971 or visit MWRA's, Cambridge's and Somerville's websites: www.mwra.com, www.cambridgema.gov/theworks.aspx www.ci.somerville.ma.us.

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