

NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY

Kensico Water Quality Control Program
Semi-Annual Report

July 2012

*Prepared in accordance with Section 4.10 of the New York City Filtration
Avoidance Determination, July 2007*

This report discusses the status of the components of the Kensico Water Quality Control Program during the first half of 2012.

Prepared by the New York City Department of Environmental Protection

1.0 Introduction to Kensico Watershed Programs

Kensico Reservoir, located in Westchester County, is the terminal reservoir for the City's Catskill/Delaware water supply system. Because it provides the last impoundment of Catskill/Delaware water prior to entering the City's distribution system, DEP has prioritized watershed protection in the Kensico watershed.

1.1 Stormwater Management and Erosion Abatement Facilities

1.1.1 BMP Construction, Operation, and Maintenance

DEP has constructed 45 stormwater management and erosion abatement facilities throughout the watershed to reduce pollutant loads conveyed to the reservoir by stormwater. During the reporting period, the facilities were routinely inspected and maintained as needed in accordance with the Operation and Maintenance Guidelines. Maintenance generally consists of such items as grass mowing, vegetation removal, tree removal, and sediment and debris removal. All BMPs are performing as designed.

1.1.2 Spill Containment Facilities

DEP installed, and now maintains, spill containment facilities in and around Kensico Reservoir. The facilities improve spill response and recovery, thereby minimizing water quality impacts in the event of a spill. No spills were reported during the reporting period.

1.1.3 Turbidity Curtains

DEP continues to monitor the extended primary curtain and the back-up turbidity curtain, designed to direct flows from Malcolm and Young Brooks further out to the body of the reservoir and to provide enhanced protection for water entering the Catskill Upper Effluent Chamber. DEP's diving contractor performed inspections of the both turbidity curtains in May 2012. Based on these inspections, no repair work was required and the turbidity curtains appear to be functioning as intended.

1.2 Kensico Action Plan

During the reporting period, DEP continued progress on the implementation of the four stormwater treatment facilities plans proposed in the Kensico Action Plan. Work at the N1 site was completed. The contractor completed installation of in-stream structures at the Whippoorwill restoration site. Final inspection of the Whippoorwill site by the design engineer is scheduled for the second half of 2012. Site clearing has taken place at the N7 and N12 sites. DEP and the contractor continued to review administrative submittals and geotechnical data and revise project work plans as necessary.

1.3 Westlake Sewer

1.3.1 Sanitary Sewer Remote Monitoring System

DEP proposed a sanitary sewer remote monitoring system for the West Lake Sewer Trunk Line, the purpose of which will be to provide real-time detection of problem events such as leaks, system breaks, overflows, and blockages. DEP issued the Notice of Award to WCDEF in November 2011 and the Order to Commence Work in January 2012. The project will use Smart Cover technology to monitor up to 25 manholes in the West Lake System and installation is anticipated to be complete by July 2012.

1.3.2 Sewer Line Visual Inspection

DEP conducts an annual visual inspection of the trunk line to assess the condition of exposed infrastructure, including manholes, for irregularities. The annual full inspection was performed in May 2012. Routine partial inspections will continue to be conducted throughout the year in association with ongoing maintenance of Kensico stormwater best management practices in the vicinity of the line. No defects or abnormalities were noted.

1.4 Video Inspection of Sanitary Sewers

DEP completed the project to inspect portions of the sanitary sewer system located within the Kensico watershed in 2011.

1.5 Septic Repair Program

DEP initiated the Kensico Septic System Rehabilitation Reimbursement Program to reduce potential water quality impacts that can occur through failing septic systems. During the reporting period, construction was completed at seven project sites.

1.6 Turbidity Reduction/Shoreline Stabilization

The Catskill Upper Effluent Chamber (CATUEC) is situated along the shore of a cove in the southwest section of Kensico Reservoir. DEP is assessing the feasibility and need for a shoreline stabilization project based on the future use and location of CATUEC. The project, if constructed, would be located south of CATUEC and would mitigate the erosion and possible resuspension of near-shore materials near CATUEC during wind events. During the reporting period, DEP worked to secure the permits required to mitigate the potential impact to wetlands of a shoreline project. DEP secured the DEC Water Quality Certification Permit in November 2011 and the USACOE Individual Permit in June 2012. This approval completes the permitting requirements for the project.

1.7 Route 120

In February 2011, the New York State Department of Transportation began a project to resurface I-684 and construct stormwater treatment basins in the I-684 median from just south of the new Lake Street overpass in New York northward to the bridge over Tamarack Swamp in Connecticut. All of the project items listed above have been completed.

1.8 Westchester County Airport

The Westchester County Airport is located east of Kensico Reservoir in close proximity to Rye Lake. Because of the closeness to the reservoir, DEP continues to review any activities that are being proposed at the airport. There was no activity to report during the reporting period.