

NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY

Kensico Water Quality Control Program
Semi-Annual Report

July 2013

*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 2013.

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 the reservoir provides the last impoundment of Catskill/Delaware water prior to entering the City's distribution system, DEP has prioritized watershed protection in the Kensico basin.

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. The facilities were routinely inspected and maintained as needed during the reporting period in accordance with the Operation and Maintenance Guidelines. Maintenance included 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 back-up turbidity curtain that are designed to direct flows from Malcolm and Young Brooks further out to the body of the reservoir and provide enhanced protection for water entering the Catskill Upper Effluent Chamber. DEP's diving contractor performed inspections of both turbidity curtains in May 2013. Based on these inspections, minimal 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 to implement the facilities plans proposed in the Kensico Action Plan. The N1 Drainage Improvement and Whipoorwill Stream Rehabilitation were completed in 2012. A summary of the current site status is as follows.

The N1 Drainage Improvement

Completed in 2012

Whipoorwill Stream Rehabilitation

Completed in 2012 with some additional planting completed in the first half of 2013.

N7 - Sub-Basin Pipeline System

Work at the N7 site included maintenance of the stormwater bypass, field sampling, geotechnical evaluation, and the start of the installation of the proposed pipeline system. To date, the majority of the pipeline/manhole system is in place. The preliminary work to install the water quality treatment unit has begun.

N12 – Extended Detention Basin

The geotechnical investigation in 2012 revealed the need for design changes to the proposed basin. During the reporting period, DEP worked to register the necessary change order to the construction contract. Following the registration of the change order, construction of the basin commenced in June 2013.

1.3 Westlake Sewer

1.3.1 Sanitary Sewer Remote Monitoring System

DEP proposed a sanitary sewer remote monitoring system for the trunk line in order to provide real-time detection of problem events such as leaks, system breaks, overflows, and blockages. The Smart Cover technology for remote monitoring of manholes in the Westlake system was completed in July 2012. There have been no issues or overflows to report. The remote monitoring units appear to be working well.

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 2013. 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. None of the inspected pipe sections demonstrated any significant defects or deterioration. During the reporting period no additional work was necessary.

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 one project site.

In May 2013, the NYS Environmental Facilities Corporation (EFC) mailed an annual reminder letter to eligible residents notifying them of the continuing availability of funding under the program. Based on responses to that mailing, EFC continues to update the database and sign interested participants into the program as appropriate.

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 will be constructing a shoreline stabilization project located south of CATUEC in order to mitigate the erosion and possible resuspension of near-shore materials near CATUEC during wind events. During the reporting period, DEP worked to assess potential changes to the shoreline resulting from Super Storm Sandy. DEP is currently in the process of arranging for the necessary resurveys of the shoreline.

1.7 Route 120

The New York State Department of Transportation completed the 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.

1.8 Westchester County Airport

The Westchester County Airport is located east of Kensico Reservoir in close proximity to Rye Lake. Because of the airport's closeness to the reservoir, DEP continues to review any activities that are being proposed there. No reportable activities occurred in the Rye Lake drainage basin during this period.