

**NEW YORK CITY**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**BUREAU OF WATER SUPPLY**

**Kensico Water Quality Control Program**  
**Semi-Annual Report**

**July 2011**

*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 2011.

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 basin to ensure the continued success of past efforts while providing for new source water protection initiatives that are specifically targeted toward stormwater and wastewater pollution sources.

### **1.1 Stormwater Management and Erosion Abatement Facilities**

#### **1.1.1 BMP Construction, Operation, and Maintenance**

DEP maintains the 45 stormwater management and erosion abatement facilities in the Kensico watershed. DEP is nearing the end of the current maintenance contract and will be entering into a new three-year contract in the second half of the year.

Routine inspections found that typical spring maintenance such as, grass mowing, vegetation removal, tree removal, sediment and debris removal were necessary and completed. None of the maintenance items appeared to compromise the effectiveness of the stormwater facilities.

#### **1.1.2 Spill Containment Facilities**

Routine maintenance was completed at nineteen of the spill boom sites. Twenty 50-foot booms were replaced and four 50-foot booms were repositioned. Seven sites had lanyards replaced.

#### **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 of the water entering the Catskill Upper Effluent Chamber. DEP's diving contractor performed an inspection of the primary and back-up turbidity curtains. Based on the inspection, work completed included bolt, washer and fabric repairs, anchor cables replacement, anchor block repositioning, and one anchor cable reconnection. The turbidity curtains appear to be functioning as intended.

### **1.2 Kensico Action Plan**

DEP continued progress on the implementation of the four project sites that were identified in the Kensico Action Plan. The Advise of Award was issued in April 2011 and the order to commence work was issued in June 2011. DEP held the preconstruction meeting in June 2011.

### **1.3 Westlake Sewer**

#### **1.3.1 Sanitary Sewer Remote Monitoring System**

DEP has proposed a sanitary sewer remote monitoring system for the Westlake Sewer Trunk Line, the purpose of which would be to provide real-time detection of problem events such as leaks, system breaks, overflows, and blockages, which in turn would facilitate a quick response to such problems. During the reporting period, DEP and the Westchester County Department of Environmental Facilities established a project scope of work and continued work on the intermunicipal agreement (IMA). The IMA contains language that requires WCDEF to provide the contracting services for installation, monitoring, and maintenance of

the system. The IMA has been reviewed by each DEP and Westchester County Technical Staff and has been forwarded for final review to their Legal Department. The IMA proposes to use Smart Cover technology to monitor up to 25 manholes in the Westlake System. It is anticipated that the work will be done in 2012.

### **1.3.2 Sewer Line Visual Inspection**

DEP conducts an annual visual inspection of the trunk line in order to assess the condition of exposed infrastructure, including manholes, for irregularities. The annual full inspection will be performed during the second half of 2011. Routine partial inspections have been 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 have been noted.

### **1.4 Video Inspection of Sanitary Sewers**

DEP has established an inspection program for targeted portions of the sanitary sewer system located within the Kensico basin. These selected areas, identified as possible areas of concern during the prior video inspection of sanitary infrastructure in the Kensico basin, will be inspected under the same contract as was entered into for the inspection and cleaning of the sanitary infrastructure contained within the EOH Cat/Del reservoir basins.

During the reporting period, DEP has received and accepted the Comprehensive Summary Report, which compiles the information obtained as part of the video inspection and digital mapping of the sanitary lines. The closed circuit television inspection reports will be forwarded to the responsible municipalities for review and investigation.

### **1.5 Septic Repair Program**

In April 2011, NYS EFC mailed an annual reminder letter to eligible residents notifying them of the availability of funding. Based on responses to that mailing, EFC continued to update the database and sign interested participants into the program.

### **1.6 Turbidity Reduction/Shoreline Stabilization**

DEP is preparing a shoreline stabilization project south of CATUEC in effort to mitigate the erosion and possible resuspension of near-shore materials near CATUEC during wind events. There are permits required to mitigate potential impact to wetlands before construction can commence. DEP is finalizing the necessary mitigation plan that will be submitted in order to obtain the necessary permits.

### **1.7 Route 120**

In February 2011, the New York State Department of Transportation started 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. DEP is monitoring the construction for proper implementation of erosion and sediment controls, and the project is anticipated to be complete by December 2011.