

NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY

Annual Report

East of Hudson Nonpoint Source
Pollution Control Program

January 2012

*Prepared in accordance with Section 4.9 of the New York City Filtration
Avoidance Determination, July 2007*

This report discusses the status of the components of the East of Hudson Nonpoint
Source Pollution Control Program for 2011.

Prepared by the New York City Department of Environmental Protection

1.0 Introduction

The East of Hudson Nonpoint Source Pollution Control Program (Program) is a comprehensive effort to address nonpoint pollutant sources in the four East of Hudson (EOH) Catskill/Delaware (CAT/DEL) watersheds¹. The Program supplements DEP's existing regulatory efforts and nonpoint source management initiatives.

2.0 Wastewater-Related Nonpoint Source Pollution Management Programs

Nonpoint sources of wastewater may include exfiltration or other releases from defective sewer lines, failing septic systems and illicit connections to the stormwater collection system. The four target watersheds contain twelve wastewater treatment plant discharges and a system of sewer infrastructure within several sewer districts. Outside of the existing sewer districts, wastewater is treated by subsurface sewage disposal systems (SSDS).

2.1 Wastewater Infrastructure Mapping and Inspection Program

To locate and characterize the sanitary infrastructure in the four basins, DEP funded a program to video inspect and digitally map the sanitary infrastructure. The inspection program also assesses defects and identifies those that may result in exfiltration.

In 2011, DEP 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 report narrative includes the use of a standardized coding system to establish the salient criteria for the hydraulic performance of the sanitary system and includes repair, rehabilitation, and maintenance options for the sections that present the greatest potential for exfiltration. The digital data was provided in a specified format that will allow the preparation of maps depicting the sanitary sewer infrastructure and defect locations. DEP incorporated these items into the DEP central GIS library and provided digital versions, including access to the closed circuit television inspections to the appropriate municipalities.

2.2 Septic Program East of Hudson

In 2011, DEP continued to assist the Westchester County Health Department refine their comprehensive Septic System Management Program (SSMP) database and web-based SSMP database access tool. The database includes information on new septic applications, septic repairs/remediation, and pump out data as well as contractor licensing information.

In 2011, Putnam County evaluated their Septic Repair Program (SRP) to see to what extent modifications might be needed based on MS4 requirements outlined in the NYSDEC General Permit (GP-0-10-002) that became effective in May 2011. The MS4 permit requires that all municipalities "Develop, implement and enforce a program that ensures that on-site sanitary systems...are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated." While the repairs of failing septic systems will continue in Putnam County as required by the provisions of the MS4 permit, the County is evaluating if their goals are better achieved through development of a low-cost loan program rather than reimbursing the cost of repairs. County representatives indicated that they have held several discussions in 2011 with the New York State Environmental Facilities Corporation in an effort to develop a loan program. During the interim review, the County has not been actively reimbursing homeowners

¹ The east of Hudson Catskill and Delaware reservoirs include West Branch, Croton Falls, Cross River and Boyd Corners.

for the costs associated with repairs to their septic systems. The County reports that SRP staff continue to follow up on homeowner maintenance agreements previously signed by program participants.

3.0 Stormwater-Related Nonpoint Source Pollution Management Programs

3.1 Stormwater Retrofit and Remediation

In an effort to further reduce pollutant loading from stormwater runoff, the Program includes multiple nonpoint source reduction projects within the EOH CAT/DEL basins. These projects include large retrofit projects as well as remediation of smaller erosion sites (see Figure 1).

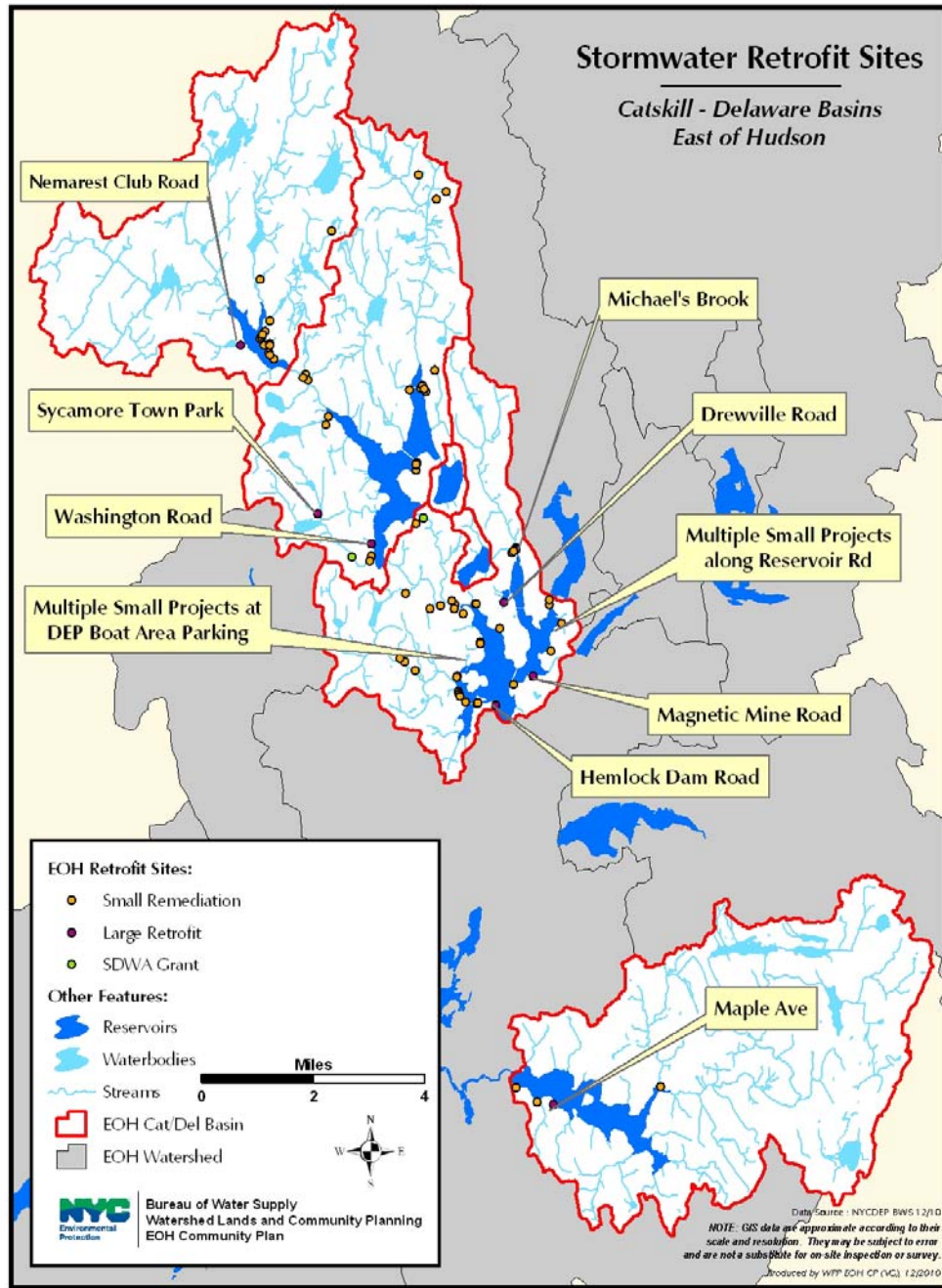


Figure 1. Stormwater Remediation and Retrofit Sites

3.1.1 Stormwater Retrofit Projects

DEP completed all project work for the reconstruction of both Hemlock Dam Road and Magnetic Mine Road in the first half of 2010.

3.1.2 Stormwater Remediation Projects

Remediation Projects on City-Owned Property:

Maple Ave, Town of Bedford, Westchester County: The designs are 100% complete. Due to changes in design, at the request of the Town, the SWPPP was not approved as anticipated in 2011. DEP anticipates receipt of the SWPPP approval in the first half of 2012.

Michael Brook, Town of Carmel, Putnam County: The designs are 100% complete. The Bid Opening took place on October 4, 2011 and was successful. The lowest bidder was selected and a pre-award meeting was held on November 30, 2011.

Drewville Road, Town of Carmel, Putnam County: Due to changes in design, at the request of the Town, the SWPPP was not approved as anticipated in 2011. DEP anticipates receipt of the SWPPP approval in the first half of 2012.

Remediation Projects on Privately-Owned Property:

Sycamore Park, Long Pond Road/Crane Road Town of Carmel, Putnam County: DEP resolved the remaining issues with species and habitat. The designs are 100% complete. The Bid Opening took place on October 4, 2011 and was successful. The lowest bidder was selected and a pre-award meeting was held on November 30, 2011.

Nemarest Club, Town of Kent, Putnam County: DEP secured the signed access agreement from the Nemarest Club owner. The designs are 100% complete. The Bid Opening took place on October 4, 2011 and was successful. The lowest bidder was selected and a pre-award meeting was held on November 30, 2011.

3.1.3 Stormwater Remediation Small Projects

The Small Stormwater Remediation Projects Program was completed in 2009. The sites are now maintained under the Facility Inspection and Maintenance Program.

3.2 Facility Inspection and Maintenance

DEP maintains the stormwater management and erosion abatement facilities in the EOH Cat/Del watersheds. New facilities continue to be added to this contract for inspection and required maintenance. Inspection and maintenance follows procedures identified in the Operation and Maintenance Guidelines (DEP, 2000 revised in 2003). DEP entered into a new three-year maintenance contract in August 2011.

3.3 Stormwater Infrastructure Mapping and Inspection Program

DEP completed the mapping and video inspection program in 2009 and the data has been added to DEP's GIS system.

3.4 Stormwater Infrastructure Capacity Evaluation

DEP completed the Stormwater Infrastructure Capacity Evaluation in 2010.

3.5 Stormwater Prioritization Assessment - DEP Properties

DEP completed the prioritization report in March 2009.

3.6 Funding Program - Croton Falls/Cross River

The December 2010 Water Supply Permit (WSP) directed DEP to make available the \$4.5 million dollars allocated to the Croton Falls/Cross River Stormwater Retrofit Program along with \$15.5 million in additional stormwater retrofit funding. During 2011, DEP held numerous discussions with NYSDEC and the EOH watershed communities in order to develop a funding agreement to allow the transfer of both the \$4.5 million provided under the Croton Falls/Cross River Program as well as the additional funding required by the WSP. In June 2011, DEP and the watershed communities reached general agreement on a framework that is consistent with the 2007 FAD and 2010 WSP. A detailed funding agreement was developed in anticipation of a non-for-profit local development corporation consisting of the EOH communities in Putnam, Westchester, and Dutchess County.

In November, the majority of communities in Putnam, Westchester and Dutchess County established the EOH Watershed Corporation (EOHWC). The mission of the EOHWC is to implement a regional retrofit program in the EOH watershed. The EOHWC subsequently elected officers and adopted by-laws. The EOHWC Executive Committee is currently interviewing individuals to serve as administrator for the retrofit effort. It is anticipated that the Board of the EOHWC will authorize the signing of the funding agreement in the first half of 2012.

4.0 Other Activities

Croton Watershed Strategy

The primary goal of the Croton Watershed Strategy project was to develop an integrated watershed management plan for the Croton System which would allow DEP to optimize management efforts and focus limited resources on critical areas to achieve maximum water quality benefit. The results were compiled in a series of documents and released in March 2003 as a FAD Deliverable.

The Croton Watershed Strategy results have been used as guidance in several DEP management programs and SEQRA reviews of new development projects. The Croton Watershed Strategy was also used in response to a request from Putnam County to assist in prioritizing a phased approach for their Septic Repair Program.

Croton Planning

Pursuant to Paragraph 138 of the 1997 MOA, the City, Westchester County and Putnam County agreed that a cooperative comprehensive approach to watershed planning in the Croton System would serve to identify significant sources of pollution in the Croton Watershed, recommend measures to improve water quality, and protect the character of Croton Watershed communities. Both Westchester and Putnam Counties requested that such planning efforts be undertaken in their respective counties. DEP committed to provide \$1 million to both Westchester County and Putnam County for the total costs and expenses of conducting such a study.

Putnam County and Westchester County sought to complete Croton Planning under the same timeframe in order to enable the public comment periods to be coordinated and simultaneous. Putnam County and Westchester County prepared draft plans several years ago. Since municipal leadership changed in many communities since the initial drafts were released, it was indicated that revisions to the document would have been needed before a formal adoption of a plan could be done by the current municipal leaders.