

NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY

Annual Report

East of Hudson Nonpoint Source
Pollution Control Program

January 2013

*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 2012.

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 Wastewater-Related Nonpoint Source Pollution Management Programs

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. DEP completed the program in 2011, and no additional work was necessary in 2012. The video files, digital mapping data and summary report have been distributed to the Town of Carmel and Town of Lewisboro Engineering Departments for import and analysis.

2.2 Septic Program East of Hudson

In 2012, 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.

Putnam County continues to assess potential revisions to septic repair program and implement the maintenance component for septic systems that were repaired under their Septic Repair Program (SRP). The County continues to explore what type of program might be needed based on the requirements outlined in the NYSDEC MS4 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 what type of program would be most appropriate. The County continues to follow up on the homeowner maintenance agreements that were 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).

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.

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

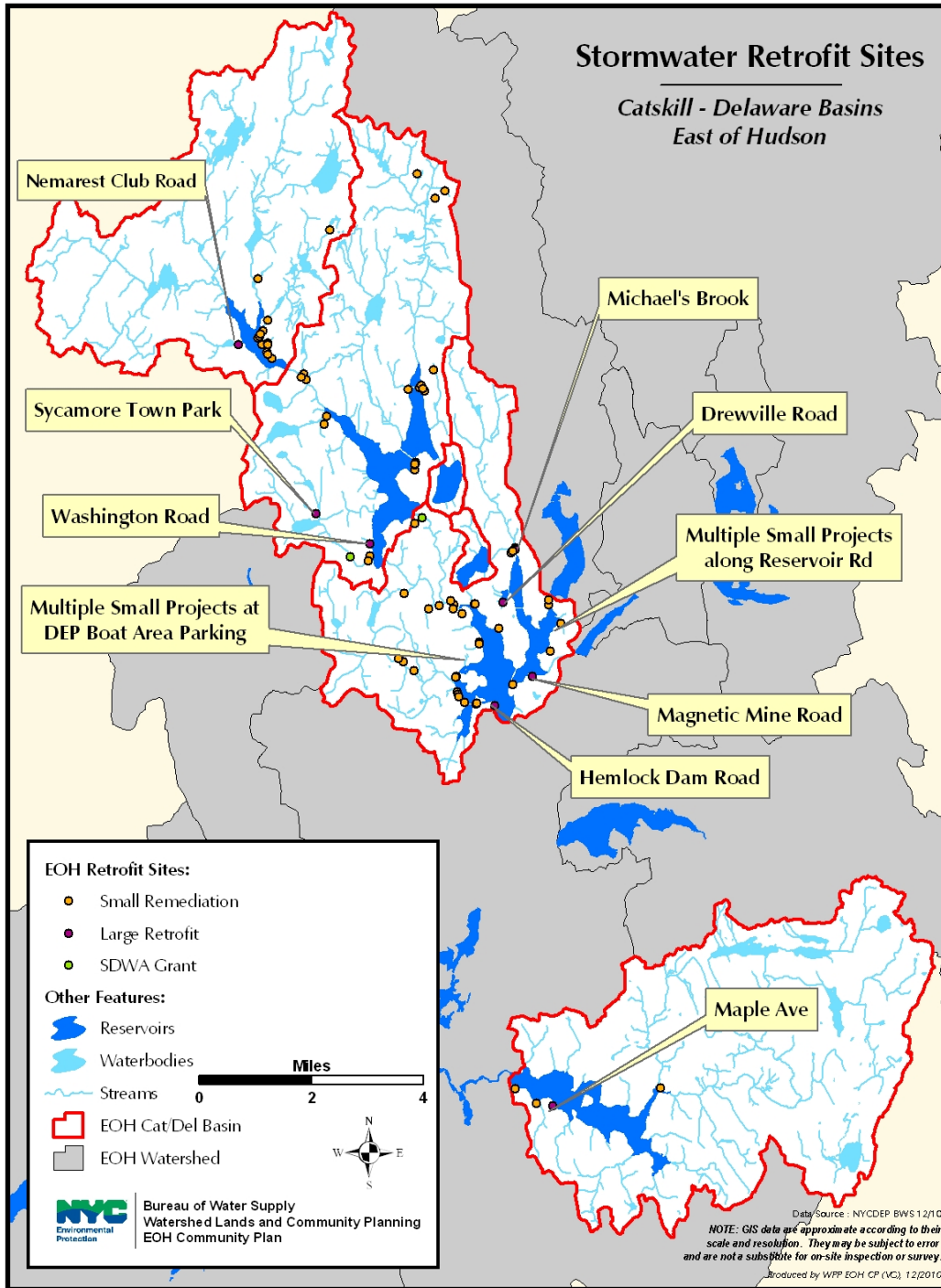


Figure 1. Stormwater Remediation and Retrofit Sites

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 until the first half of 2012. This project will be bid with the Drewville Road project.

Michael Brook, Town of Carmel, Putnam County: The contract to construct this stormwater project was registered in April 2012. Construction Notice to Proceed was issued in September 2012. Approximately half of the work has been completed. The swale on the South Side of Hughson Rd has been completed. Trout restrictions in the brook prevented completion of work and so work will resume in May 2013.

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 2012. The Town is requesting design modifications due to aesthetic reasons. DEP anticipates receipt of the SWPPP approval in the first half of 2013. This will be bid with the Maple Avenue project.

Remediation Projects on Privately-Owned Property:

Sycamore Park, Long Pond Road/Crane Road Town of Carmel, Putnam County: The contract to construct this stormwater project was registered in April 2012. Construction began in September 2012. The project culvert has been constructed and work on the bioretention system and parking lot is underway.

Nemarest Club, Town of Kent, Putnam County: The contract to construct this stormwater project was registered in April 2012. Construction began in September 2012. To date, the work on site includes construction of the temporary road, diversion and piping of stream flow, tree removal and utility protection.

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

The facility inspection and maintenance program was developed to ensure that previously constructed stormwater remediation facilities continue to function as designed. New facilities continue to be brought on line and are added to the routine inspection program. Maintenance during the first year of a facility's life is completed under the warranty in the facility's construction contract and under DEP's maintenance contract thereafter. Inspection and maintenance follow procedures identified in the Operation and Maintenance Guidelines contained in the maintenance contract; facility types not described in this document were incorporated into the facility maintenance contract with explicit maintenance instructions.

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

In November 2011, the majority of communities in Putnam, Westchester, and Dutchess Counties 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.

In early 2012, DEP held numerous discussions with the EOHWC to finalize the funding agreement to allow the transfer of both the \$4.5 million provided under the Croton Falls/Cross River Stormwater Retrofit Program as well as the additional funding required by the December 2010 Water Supply Permit (WSP). In 2012, DEP and the watershed communities reached final agreement on a contract that is consistent with the 2007 FAD and 2010 WSP. In the second half of 2012 DEP worked with EOHWC to ensure that various administrative submittals were completed to allow for contract registration. It is anticipated that the contract will be registered in the first half of 2013.

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 an earlier 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. The City's contracts for Croton Planning in both Westchester County and Putnam County have concluded.

Putnam County and Westchester County had 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.