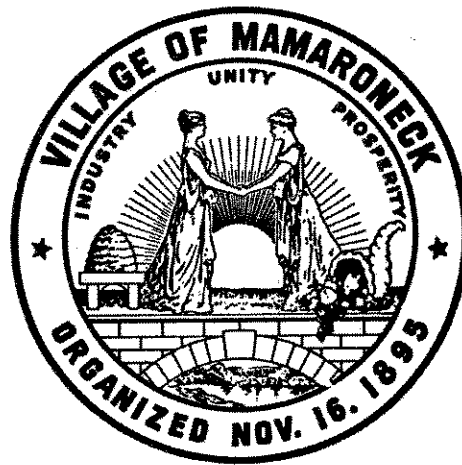


**VILLAGE OF MAMARONECK
STORM WATER MANAGEMENT PROGRAM
ANNUAL REPORT
MARCH 2005– MARCH 2006**



MS4 Name:	Village of Mamaroneck
MS4 County:	Westchester
NYSDEC Region:	3
MS4 SPDES No:	NYR20A233
Prepared by:	Robert A. Yamuder, Assistant Village Manager
Revised:	May 31, 2006

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Stormwater Management Program Annual Report
Six Minimum Measures Section
 March 10, 2005 – March 9, 2006

Municipality Name: Village of Mamaroneck

SPDES Number: NYR20A233

MINIMUM MEASURE 1: Public Education and Outreach on Stormwater Impacts

A. Narrative Overview: To date, the public education program informs individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil and household hazardous wastes. Some of the strategies being employed by this plan include distribution of brochures, sponsoring speaking engagements before community groups, implementing education programs targeted at school age children, creation of a Village Storm Water Website and conducting community-based projects such as storm drain stenciling.

B. Implementation of Best Management Practices		C. Activities Planned for Upcoming Year	
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.
	YES NO		
TECHNIQUES			
Plan and conduct an ongoing public education and outreach program (required)	X	The Village has accomplished the following: - Completed video entitled "How you can help clean-up L. I. Sound correcting improper Sewer Hook-ups" which airs regularly on local cable channels. FULLY IMPLEMENTED - Compiled information on stormwater webpage. Stormwater website linked to	- Continue to participate in local events. - Continue updating content on stormwater webpage.

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TECHNIQUES	YES NO		
Plan and conduct an ongoing public education and outreach program (required)	X	LISWIC. FULLY IMPLEMENTED - Selected brochures to reproduce and distribute. FULLY IMPLEMENTED - Village newsletter included information for residents on reducing stormwater pollution. FULLY IMPLEMENTED - Storm drain markers "No Dumping." FULLY IMPLEMENTED - Additional stormwater information was added to the library. FULLY IMPLEMENTED - Village hosting Historic Harbor Festival with environmental components/booths. FULLY IMPLEMENTED - Posters and environmental brochures displayed including information on non-point source pollution. FULLY IMPLEMENTED - Collected and reviewed posters FULLY IMPLEMENTED	- Continual update of material for distribution. - Continual update of material for distribution. - Maintain catch basin grate labels with "No Dumping" drain markers. - Continue to maintain and upgrade library. - The Village will be hosting the annual Historic Harbor Festival in June, 2007 including updated environmental tent. (2006 festival cancelled due to conflict with U.S. Open. - Continue maintaining and updated educational display, including distribution material described above. - Updated posters are displayed at festivals and new educational display case in the Village.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year
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	YES NO		
TECHNIQUES			
Plan and conduct an ongoing public education and outreach program (required)	X	- Stormwater hot-line cross-referenced with village website. FULLY IMPLEMENTED - Training educators being researched. FULLY IMPLEMENTED	- Continue posting Hot-Line on Village website and updating message. - Continue the training of educators.
Village Staff Presentations to Public	X	Village Staff regularly gives presentations to local schools and public gathering places (i.e. Mamaroneck High School Apple Program Students) - FULLY IMPLEMENTED	Village jointly funded professional water quality testing kit for student volunteers.

MINIMUM MEASURE 2: Public Involvement/Participation

A. Narrative Overview: To date, the Public has been included in developing, implementing, and reviewing storm water management program, and the public participation process will reach out and engage all economic and ethnic groups. The Village formed a Water Quality Committee which participates in this process. In addition to their current input to the Mayor and the Board of Trustees concerning water quality issues and the development of this SWMP, the Committee: organizes and arranges citizen volunteers to assist in educating other individuals about the program; assist in program coordination with other pre-existing programs; and takes the lead role in organizing community volunteer efforts. A stormwater contact person has been “Fully Implemented” and public comments on the NOI and Annual Report were solicited at public meetings.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	
	YES	NO	
TECHNIQUES			
Public notice and access to documents and information (required)	X	Members of the public were noticed as required that the NOI was prepared and available for public review and comment. FULLY IMPLEMENTED	Members of the public will continue to be noticed as required that the Stormwater Management Plan and annual reports have been prepared and are available for public review and comment.
Public presentation and comments received on SWMP and annual report (required)	X	A public presentation and hearing was held on NOI as required. FULLY IMPLEMENTED	A public presentation and hearing was held on the SWMP and Annual Report. Comments were received and were incorporated in this report.
Public involvement/participation program (required)	X	The Mayor’s Water Quality Committee and the Committee for the Environment engage public input at monthly meetings. FULLY IMPLEMENTED	Continue monthly meetings.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year
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	YES NO		
TECHNIQUES			
Storm Drain Marking	X	Continue to elicit volunteers to help maintain marked Village catch basins with “No Dumping” drain markers. FULLY IMPLEMENTED	Continue to maintain markers on catch basins.
Community Bulletin Board	X	Installed new Community Bulletin Board in high pedestrian traffic location to provide public with updated Stormwater information. FULLY IMPLEMENTED	Maintain and update Community Bulletin Board.

MINIMUM MEASURE 3: Illicit Discharge Detection and Elimination

A. Narrative Overview: The Village plan to detect and address illicit discharges includes the following four components:

- 1) Procedures for locating priority areas likely to have illicit discharges;
- 2) Procedures for tracing the source of an illicit discharge;
- 3) Procedures for removing the source of the discharge; and
- 4) Procedures for program evaluation and assessment.

To date, the Village adopted new local law point of sale legislation prohibiting illicit discharges which enabled the Village to “Fully Implement” this goal through vigorous enforcement of same.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.
	YES	NO	
ACTIVITIES			
Outfall mapping (required)	X		The Village is compiling data. SMSI contract underway for system mapping.
Illicit discharges prohibited (required)	X		Illicit discharges prohibited by local ordinance. FULLY IMPLEMENTED
Public, employees, businesses informed of hazards from illicit discharges (required)	X		Brochure on illegal hook ups distributed to residents & businesses. Employee hazardous materials training conducted. FULLY IMPLEMENTED
Illicit discharges identified (required)	X		Removal of I/I connections completed as required by Westchester County. DOH tests water quality to identify hotspots.
System mapping	X		System mapping in place.
			- Future illicit discharges (Hot-spots) discovered, will be handled to the fullest extent of the law. See Appendix “B” re: I&I - Update system maps as needed. See Appendix “F” re: SMSI

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year	
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	YES	NO		
ACTIVITIES				
Area-wide use of septic systems	X	Village identifying areas where septic systems are in use.	Village to map and address areas identified and research remedies.	
Dye test boats in harbor	X	Village using existing ordinances to dye test boats in harbor.	Continue activity.	
Slip-Lining Sewers (Phases I, II and III)	X	Village <u>fully implemented</u> three (3) slip-lining contracts totaling approximately 12,000 LF of sanitary sewer in an effort to reduce overflows into storm drains. FULLY IMPLEMENTED	Village to contract out additional slip-lining contracts next year with \$110,000 Grant from Congresswoman Nita Lowey's Office (See Appendix "B").	
Slip-lining Sewers (Phase IV)	X	Village contracted Phase IV of additional slip-lining contract using \$110,000 Grant from Congresswoman Nita Lowey's Office. See Appendix "B".	Village to complete Phase IV slip-lining contract this reporting period.	
CMOM		Village finalized draft of CMOM audit report. FULLY IMPLEMENTED	Village implementing recommendations in CMOM report.	
Siphon Sewer Replacement	X	Design completed for construction of new gravity sanitary sewer to replace dilapidated sanitary siphon sewer that traverses the Sheldrake River at two locations. Potential sanitary sewer leaks into the river will be mitigated.	Construction contract awarded. Complete construction of new gravity sanitary sewer this reporting period.	

MINIMUM MEASURE 4: Construction Site Stormwater Runoff Control

A. Narrative Overview:

The Village will develop and implement an Ordinance to provide for control of pollutant runoff on construction sites with a land disturbance greater than one (1) acre. The ordinance will incorporate Construction Site Erosion and Sediment Control BMP's and will be accompanied by the development of a BMP Manual for use in the Village. The implementation of this measure will include three key aspects:

- 1) Adoption of a Local Ordinance meeting the requirements of the Phase II Final Rule
- 2) Inclusion of the requirements of the ordinance in the Site Plan Review Process
- 3) Enforcement of the Ordinance through Building Department Inspections and the issuance of fines/penalties for violation

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year	
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.	
	YES NO			
REQUIREMENTS				
Require erosion and sedimentation controls through an ordinance or other regulatory mechanism (required)	X	Village continues to update/research Surface Water, Erosion and Sediment Control ordinance.	Draft amendments to the Surface Water, Erosion and Sediment Control Laws deemed necessary.	
Provide opportunity for public comment on construction plans (required)	X	Planning Board , Zoning Board, HCZM and Building Department review & public hearings required for site plan review and wetlands permits. FULLY IMPLEMENTED	Continue this activity	
Require construction site plan review (required)	X	Site Plan review required. FULLY IMPLEMENTED	Continue this activity and enforce accordingly.	

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year	
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.	
	YES	NO		
REQUIREMENTS				
Require overall construction site waste management (required)	X	Regulated by Section 186 Article 2 of the Village Code. FULLY IMPLEMENTED	Continue this activity and enforce accordingly.	
Site inspections and enforcement (required)	X	Erosion control inspections required on all construction sites. FULLY IMPLEMENTED	Continue this activity and enforce accordingly.	
Education and training of construction site operators (required)	X	Brochures, posters and fact sheets collected and reviewed. Announcements for contractor training programs distributed to contractors. FULLY IMPLEMENTED	Educational display created in the building department on the uses of BMP's. Fact sheet created and attached to building permit applications.	
Wetlands Law	X	HCZM reviews applications. FULLY IMPLEMENTED	Continue this activity.	
Wetland Restoration in Columbus Park	X	Wetland restoration completed on banks of Sheldrake River in Columbus Park to mitigate erosion.	Maintain native specie plantings on stream banks.	
Erosion Control and Salt Marsh Restoration of West Basin	X	Erosion control and salt marsh restoration project designed and funded with \$500,000 of County funds in West Basin of Mamaroneck Harbor. See Appendix "E".	Complete construction of erosion control and salt marsh restoration this reporting period.	

MINIMUM MEASURE 5: Post-Construction Stormwater Management

A. Narrative Overview:

If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMP's chosen: be appropriate for the local community; minimize water quality impacts, and attempt to maintain pre-development runoff conditions. The process will include both Structural and Non-Structural BMP's to ensure that development projects include the best long-term storm water runoff measures possible.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	
	YES	NO	
REQUIREMENTS			
Assess existing conditions throughout the MS4 and identify appropriate management practices to reduce pollutant discharge to the maximum extent practicable (required)	X	For new development/redevelopment projects subject to Village review/comment, the Village has performed assessments/evaluations of stormwater conditions and any needed controls. FULLY IMPLEMENTED	Continue this activity and enforce accordingly.
Regulate post-construction runoff from development through an ordinance or other regulatory mechanism (required)	X	Use of NYS Stormwater Management Design Manual as a guidance tool. Planning board provides guidance to applicants relative to compliance with the specific requirements of Phase II. FULLY IMPLEMENTED	Continue these activities and enforce accordingly.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.
	YES NO		
REQUIREMENTS			
Develop management practice inspection and maintenance program (required)	X	Performance bonds and inspections required for the installation of stormwater management structures. FULLY IMPLEMENTED	Combination of structural and non-structural BMP'S fully integrated in development approval process.

MINIMUM MEASURE 6: Pollution Prevention/Good Housekeeping

A. Narrative Overview: This program will include maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from the storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas, and waste transfer stations; and procedures for properly disposing of waste removed from the storm sewers.

B. Implementation of Best Management Practices		C. Activities Planned for Upcoming Year	
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.
	YES	NO	
REQUIREMENTS			
Prevent discharge of pollutants from municipal operations (required)	X	Being accomplished by the Village through ongoing practices, including: • 100% of the Village waste oil at its facilities is picked up for recycling. • Road sweeping is regularly performed on 46 miles of Village roads. • 3,000 Village catch basins are cleaned on a regular cycle or as-needed. • DPW personnel provided litter pickup/cleaning after 100% of major events. FULLY IMPLEMENTED	• Continue this activity. • Continue this activity. • Continue this activity. • Continue this activity.
Follow DEC NPS Management Practices Catalog, or equivalent	X	• Use of Westchester County BMP Manual for Stormwater Management. FULLY IMPLEMENTED	• Continue use of this manual.

B. Implementation of Best Management Practices			C. Activities Planned for Upcoming Year	
Type in the management practices selected in your NOI and any additional ones that you worked on.	Any done in the past year?	If YES, describe what measurable goals that were achieved and other accomplishments. If NO, and the item was checked off on your NOI, describe why the task was not accomplished and, if still a measurable goal, list in column C.	Describe SWMP activities that are planned for the next year and changes to selected management practices/measurable goals.	
	YES NO			
REQUIREMENTS (required)				
Conduct employee pollution prevention training (required)	X	Employees trained in hazardous spill response, attended workshops and seminars on pollution prevention. FULLY IMPLEMENTED	Continue this activity.	
Cigarette butt receptacles added throughout Village	X	20 Cigarette butt receptacles installed to remove floatables entering catch basins. FULLY IMPLEMENTED	Maintain as necessary.	
Installation of floatable debris boom	X	Floatable debris boom installed. FULLY IMPLEMENTED	Continue to maintain debris boom.	
Upgrade drainage on capital infrastructure projects.	X	Fenimore Road Improvement Project, Mamaroneck Avenue Streetscape Phase I, II and III and Washingtonville Street Improvements include drainage improvements. FULLY IMPLEMENTED	Improve drainage facilities on capital infrastructure projects where possible.	
Build new salt shed	X	The Village successfully designed and constructed a new DPW, fully enclosed, large capacity salt shed to replace outdated, open-stall salt shed in an effort to keep salt deposits from entering nearby waterways. FULLY IMPLEMENTED	Continue to maintain new salt shed	

VII. Monitoring and Modeling Results

Not applicable.

VIII. Summary of Funding and Use of Grant Money

The Village received \$110,000 grant from Congresswoman Nita Lowey's office to continue the slip-lining of sanitary sewers in the Village. The Grant was a "Number 1" priority on the Village's "Request of Federal Funding for Local Projects" with the Congresswoman's office which enabled the Village to progress Minimum Measure #4-Illicit Discharge Detection and Elimination.

The Village received \$50,000 to assist in the upgrading of the Local Waterfront Revitalization Plan (LWRP) and to assist in the installation of two (2) sedimentation control tanks in local rivers at two (2) Village outfalls. Contract to be implemented this reporting period.

The Village of Mamaroneck maintains regular contact with local, state and federal elected officials pursuant to obtaining grants/funds for water quality improvement projects.

APPENDIX “A”

Stormwater Utility District – 10 out of the 12 municipalities participating in LISWIC are actively involved in process of creating a Stormwater Utility District (SUD). Last reporting period, the 10 participating municipalities, including Scarsdale as lead agency, agreed to retain the consulting engineering firm Malcolm Pirnie after an extensive RFP and interview process. Malcolm Pirnie was selected to compile a full report on the feasibility and procedures towards the creation of a Stormwater Utility District. Work is currently underway for the compilation of data in this effort.

LISWIC Intermunicipal Agreement and Resolutions of Support For the Creation of a Stormwater Utility District (SUD) previously submitted.

APPENDIX “B”

Inflow and Infiltration (I&I) Grant

The Village of Mamaroneck was successfully awarded \$110,000 from Congresswoman Nita Lowey’s Office to defray a portion of the funds needed to reline the aging sewer system network within the Village. As of the last reporting period, the Village awarded four (4) separate sewer and manhole relining contracts in an effort to reduce and/or eliminate inflow and infiltration which ultimately has a positive impact on the Stormwater System outletting into the local waterways.

Additional for the 2006-2007 reporting period, the Village is working closely with Westchester County on further reducing Inflow and Infiltration by agreeing to have Westchester County contract for smoke testing the sewer system in the Orienta section, among other areas, of the Village, where illicit sewer connections are suspected to be most prevalent. Once identified, the Village has agreed to correct any illicit connections found and to reline any portions of sewer pipe found to be in a state of disrepair as evidenced by sewer videotaping.

APPENDIX "C"

Sediment Control Device Installation and LWRP Updating

The Village of Mamaroneck was successfully awarded a \$50,000 grant from the New York State Department of State (DOS) for the design and installation of two (2) sediment control devices along two rivers traversing the Village. The subject grant also entails the updating of the Village's Local Waterfront Revitalization Plan (LWRP). Contracts were signed and returned to DOS for processing and work is scheduled to begin this year.

APPENDIX “D”

National Fish and Wildlife Foundation Grant

During reporting period 2005-2006, the Village of Mamaroneck reapplied for a \$100,000 grant for the creation of an educational waterfront program designed to provide children with access to the waterfront and educate them on pollution issues. The grant also entails the hiring of a group of seasonal students (Mamaroneck Mariners) to help clean waterways and to perform quality testing and experiments.

APPENDIX “E”

Erosion Control and Salt Marsh Restoration

For the 2006-2007 reporting period, the Village will benefit from a \$500,000 erosion control and salt marsh restoration project being designed and constructed by Westchester County. The subject project is located in the West Basin of Mamaroneck Harbor and entails planting of native plants, shoreline restoration, pathway installation and future maintenance by the Village.

APPENDIX “F”

Sanitary and Stormwater Utility Mapping Grant (SMSI)

The Village of Mamaroneck has jointly agreed with the Town of Mamaroneck, Village of Port Chester, Village of Pelham, Village of Rye Brook and City of Rye to apply for a New York State Department of State Grant to digitally map sanitary and stormwater utilities in the lower Long Island Sound Shore communities in Westchester County.