

**Municipality/Organization: Town of Westborough**

**EPA NPDES Permit Number: MAR041173**

**MA DEP Transmittal Number: W130394**

**Annual Report No & Report Period: No. 4 March 06-March 07**

**NPDES PII Small MS4 General Permit**

**Annual Report**

**Part I. General Information:**

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**Certification:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_



Printed Name: George Barrette

Title: Board of Selectmen

Date: April 30, 2007

*A true copy, attest  
Mouay J. Aydriga  
Town Clerk*

## **1.0 INTRODUCTION AND BACKGROUND:**

In 1990, The United States Environmental Protection Agency (EPA) began implementing a storm water management program under the National Pollutant Discharge Elimination System (NPDES). This program, know as Phase I of the NPDES storm water program, was intended to reduce pollution in storm water discharges for large urban areas with population of 100,000 or greater.

On December 1999, the Phase II Rule of the NPDES storm water program was published to address Municipal Separate Storm Sewer Systems (MS4s) within urban areas of populations less than 100,000 that were not addressed under the Phase I program. Objectives of the Phase II rule is for the MS4s to develop, implement and enforce a storm water program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

On May 1, 2003, the EPA issued the General Permit for Storm Water Discharges from MS4s. The general permit requires that the storm water program for each MS4 submit an annual evaluation. The following report contains information regarding the activities on the storm water program for the previous calendar year. The report contains the information required in the general permit as follows: (a) Self- Assessment Review of Compliance with the Permit Conditions; (b) Assessment of the Appropriateness of the selected BMPs; (c) Assessment of the Program towards Achieving the Measurable Goals; (d) Summary of the Results of Any Information that has been Collected and Analyzed; (e) Discussion of Activities for the Next Reporting Cycle; (f) Discussion of any Changes in Identified BMPs or Measurable Goal; and (g) Reference any Reliance on another Entity for Achieving any Measurable Goal.

The Town of Westborough filed the NPDES Phase II Storm Water Management Plan in March 2003. The Town submitted the Annual Report for year one on May 4, 2004, year two on April 25 2005, and year three on April 27, 2006.

## **2.0 SELF-ASSESSMENT REVIEW OF COMPLIANCE WITH THE PERMIT CONDITIONS:**

### **Part I.B.2.e.**

Prior reports indicated the letter had not been sent by U.S. Fish and Wildlife Service. The Town obtained a letter from the U.S. Fish and Wildlife Service on May 12, 2005. A copy of this letter is in Appendix 1. No further correspondence from U.S. Fish and Wildlife Services is necessary.

### **Part I.B.2.g**

The Town was notified in a letter received on May 12, 2005, dated March 26, 2003 from Mass Historic Commission that “the proposed project is unlikely to affect significant historic or archaeological resources. If implementation of the plan should entail new construction or demolition, MHC requests the opportunity to review project plans in

order to assess the likelihood that historic properties may be located within project impact areas". A copy of this letter is in Appendix 2. No further correspondence from Mass Historic Commission appears necessary.

**Part II.B.1.a.**

Approximately sixty five storm drains were stenciled in April 2005, and approximately 150 storm drains were stenciled in May 2006. These were located on roadways which discharge to the Assabet River. Additionally another 100 are scheduled for stenciling in May 2007. A copy of this press release is in Appendix 7.

**3.0 ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMPS:**

The Best Management Practices (BMPs) selected for the storm water program appear to be appropriate. With new staff, the town has attempted to catch up to the original schedule of BMPs. It is planned to finalize them in year-5 of the program, provided staff time and constraints allow. We believe that we are still ahead of schedule on mapping our storm water system.

The following are summaries of major achievements in year-4:

- The town is currently reviewing stormwater and illicit discharge bylaws for adoption at the fall 2007 or Annual (Spring) 2008 Town Meeting. Construction inspections of stormwater management on construction sites are currently in effect, and we will be formalizing it with the creation of the bylaw. A copy of these draft bylaws are in Appendix 8.
- The Conservation Agent is making an effort to alert the commercial properties of their obligation to continue maintenance of detention basins and cleaning of catch basins, along with any other general BMP maintenance. The Agent is personally visiting each commercial property to assess their compliance with his recommendations to maintenance. A copy of this letter is in Appendix 5 and a copy of the checklist is in Appendix 6.
- Stormwater stenciling is ongoing though the town of Westborough. We have several volunteer groups which participate in the stenciling in the spring time. Approximately 150 basins were stenciled in May 2006, with an additional 100 scheduled for May 2007. A copy of this press release is in Appendix 7.
- Regarding the discharge into Water Quality Impaired Waters and Waters with Approved Total Maximum Daily Load Allocations, the following may be summarized:
  - The design team has been selected to upgrade the Westborough Wastewater Treatment Plant and preliminary design including pilot treatment tests is in progress. The upgrade is being designed to achieve

the new EPA limits of 0.1 ppm phosphorous in the summer and 0.75 ppm in the winter. Funding for the construction of this upgrade will be requested at the May 12, 2007 Annual Town Meeting.

- Westborough is participating in a sediment study of the Assabet River as one of the Assabet River Consortium members. The study is being performed by the Army Corps who has hired CDM. CDM is performing modeling on the river exploring various dam removal options including partial removals. The study is expected to be complete by the end of 2007. The goal of the study is to evaluate whether dam removal will help drop Phosphorous TMDL and whether it is cost effective to do so.
  - The Town of Westborough distributed flyers to residents addressing the reduction of fertilizer use in neighborhoods and businesses.
  - The Town of Westborough has stepped up its efforts to clean catch basins from debris and sediment build up. The goal is to clean all basins each year. In conjunction with the catch basin cleaning the Town performs street sweeping on a regular basis to aid in pollution prevention to the waters of Westborough.
- Regarding the Medium Stressed Basin; the engineering department, through the Building Permit review process, is now requiring drywells to recharge 1" of roof runoff for any new construction and where possible, residential additions.
  - The Town plans to hire an intern this summer (funds permitting) to help with locating and mapping the detention basins around town.
  - The DPW is working with the Middle School to implement an extra Stormwater lesson in the 6<sup>th</sup> grade curriculum. A copy of this lesson is in Appendix 3.

#### **4.0 SUMMARY OF MINIMUM CONTROL MEASURES:**

Attached is a copy of our implementation schedule as included with our NOI as modified to reflect our progress in year four and the planned activities in year five. The Board of Selectmen decided not to have a committee oversee the program, but to utilize current staff in lieu thereof.

**TABLE 1  
TOWN OF WESTBOROUGH, MASSACHUSETTS  
NPDES PHASE II  
STORM WATER MANAGEMENT PLAN  
BEST MANAGEMENT PRACTICES (BMPS)**

**PUBLIC EDUCATION AND OUTREACH**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL PERMIT YEAR 4</b>	<b>PLANNED ACTIVITIES PERMIT YEAR 5</b>
5.1.1	Homeowners	Mail educational flyer with stormwater survey	SuAsCo Council and DPW	Flyer distribution. Compile and evaluate survey results	Completed	
5.1.2	Students	Teach stormwater lessons to fifth grader students	SuAsCo Council and DPW	Prepare and implement lesson	Lesson to be implemented to 6 <sup>th</sup> graders in May 2007	
5.1.3	Businesses	Mail educational flyer with stormwater survey	SuAsCo Council and DPW	Flyer distribution Logo Display	Logo Displayed in Town Center for Labor Day Week (2006). Information provided at booth during Town Meeting.	Flyer will be mailed to all businesses in May 2007. Provide logo to applicable businesses for display.
5.1.4	General Public	Hold a stormwater media campaign  Show a stormwater video on a local cable station	SuAsCo Council and DPW  SuAsCo Council and DPW	4 press releases  Develop and air stormwater video	Aired advertisements for the stormwater program on Public Access TV station during the months of March and April 2007. Posted Stormwater Press Releases on the town website.	Completed  Develop and air stormwater video

**PUBLIC PARTICIPATION AND INVOLVEMENT**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL PERMIT YEAR 4</b>	<b>PLANNED ACTIVITIES PERMIT YEAR 5</b>
5.2.1	Homeowners	Circulate stormwater traveling display	SuAsCo Council and DPW	Develop display Feature at 3 locations	Display featured at Town Hall, Library and Town Meeting.	Continue to display
5.2.2	Students	Poster contest for fifth graders  Photo contest for high school students	SuAsCo Council and DPW  SuAsCo Council and DPW	Hold poster contest  Hold photo contest, judge and display entries	Stormwater Poster Contest distributed to Middle School. Photo contest not completed.	Stormwater poster contest to be held for all 6 <sup>th</sup> graders; winners' posters to be displayed. Hold photo contest.
5.2.3	General Public	Hold a local stormwater summit  Hold a watershed-wide stormwater summit	SuAsCo Council and DPW  SuAsCo Council and DPW	Advertise and hold summit  Advertise and hold summit	Completed  Not Completed	  Hold Summit
5.2.3(new)	General Public	Catch Basin Stenciling	SuAsCo Council, Westborough Community Land Trust and DPW	Catch Basin Stenciling	Approximately 150 Catch Basins Stenciled in May 2006	Approximately 100 Storm drain markers to be affixed along town center in May 2007. Continue every year to mark more storm drains.

**ILLCIT DISCHARGE DETECTION AND ELIMINATION**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL(S) PERMIT YEAR 4</b>	<b>PLANNED ACTIVITIES PERMIT YEAR 5</b>
5.3.1	Stormwater system mapping	<p>Map outfalls</p> <p>Map pipes manholes and catch basins</p> <p>Map structural BMPS (i.e. detention basins, water quality inlets, etc)</p>	<p>DPW</p> <p>DPW</p> <p>DPW</p>	<p>Prioritize outfalls. Percentage of total outfalls mapped per year</p> <p>Prioritize areas. Percentage of total system</p> <p>Percentage of total structures</p>	<p>GPS location of known outfalls complete</p> <p>No action taken due to time constraints.</p> <p>No action taken due to time constraints</p>	<p>Complete GPS location of outfalls as they become available</p> <p>Complete location of structures. Complete mapping of system.</p> <p>Complete GPS locations and map 100% of structures</p>
5.3.2	Regulatory Mechanism	<p>Develop a bylaw prohibiting non storm water discharges into storm sewer system</p> <p>Develop enforcement procedures for non storm water discharges including illegal dumping</p>	<p>DPW and/or Board of Health</p> <p>DPW and/or Board of Health</p>	<p>Formation of a technical committee and annual review of program. Development of a bylaw</p> <p>Development of enforcement procedures</p>	<p>Developed goals and drafted bylaw</p> <p>No action taken due to time constraints</p>	<p>Finalize Bylaw</p> <p>Developed goals and drafted procedures</p>

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 4	PLANNED ACTIVITIES PERMIT YEAR 5
5.3.3	Illicit Discharge Detection and Elimination Plan	<p>Identify areas likely to have illicit discharges</p> <p>Develop and implement a plan to detect and address illicit discharges</p> <p>Implement illicit discharge detection and elimination inspection</p>	<p>DPW</p> <p>DPW</p> <p>DPW</p>	<p>Develop record keeping. Prioritize outfalls. Percentage of outfalls inspected</p> <p>Plan Completion</p> <p>Identify and train inspection agents. Begin inspections</p>	<p>No action taken due to time constraints</p> <p>Suspect outfalls have no illicit discharges found to date.</p> <p>Identified Inspector</p>	<p>Continue to inspect outfalls</p> <p>Develop goals for plan to eliminate discharge found when they are found</p> <p>Begin inspections in accordance with illicit discharge detection and elimination plan (previous BMP)</p>
5.3.4	Post removal evaluation and reporting	Implement a program to evaluate and report on conditions after illicit connections have been removed	DPW	Annual Report	No illicit discharges found to date.	Continue searching for illicit connections.



**CONSTRUCTION SITE RUNOFF CONTROL**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL(S) PERMIT YEAR 4</b>	<b>PLANNED ACTIVITIES PERMIT YEAR 5</b>
5.4.1	Regulatory Mechanism	Develop and implement a bylaw regulating erosion and sediment control for construction sites utilizing appropriate BMPs	DPW and Planning Department	Formation of a technical committee and annual review of program. Development of a bylaw	Developed goals and drafted bylaw	Finalize bylaw
5.4.2	Site Plan Review Procedures	Implement pre-construction review of storm water control plan for proposed construction site	DPW and Planning Department	Identify and train staff Review each project	Identified and trained staff	Plan Review
5.4.3	Site Inspection and Enforcement Procedures	Conduct construction site inspections	DPW	Identify and train staff. Review each project	Identified staff	Implement Inspection
		Develop a procedure for handling reports of non-compliance	DPW	Development of procedure	No action taken due to time constraints	Draft and implement Procedure

**POST-CONSTRUCTION RUNOFF CONTROL**

<b>ID</b>	<b>BMP CATEGORY IN NOTICE OF INTENT (NOI)</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL(S) PERMIT YEAR 4</b>	<b>PLANNED ACTIVITIES PERMIT YEAR 5</b>
5.5.1	Regulatory Mechanism	Develop and implement a bylaw regulating controls for post construction runoff utilizing appropriate BMPs	DPW and Planning Department	Formation of a technical committee and annual review of program. Development of a bylaw	Drafted bylaw	Finalize bylaw
5.5.2	Plan Review of BMP Designs	Implement preconstruction review of BMPs for conformance with regulations	DPW and Planning Department	Identify and train staff. Review each project	Identified staff	Implement Review
5.5.3	Site Inspection/Enforcement Procedures	During construction, inspect for assurance that BMPs are compliant	DPW	Identify and train staff. Inspect each project.	Identified and trained staff	Implement Inspection
5.5.4	Operation and Maintenance Procedures for Structural BMPs	Develop operation and maintenance procedures for structural BMPs	DPW	Development of procedure	Drafted Procedure	Finalize Procedure

**POLLUTION PREVENTION/GOOD HOUSEKEEPING**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL(S) PERMIT YEAR 4</b>	<b>PLANNED ACTIVITIES PERMIT YEAR 5</b>
5.6.1	Employee training Program	Implement employee training	DPW	Develop goals. Develop program. Annually conduct training	Establish illicit discharge, stormwater runoff, and good housekeeping as goals for training.	Perform training and continue developing training program
5.6.2	Stormwater System Operation and Maintenance	Enhance the existing storm sewer system and catch basin cleaning	DPW	Implement schedule. Strengthen record tracking. Clean all catch basins twice per year	Maintain record keeping procedures.	Continue to maintain record keeping procedures.
		Structural BMP inspection and maintenance program	DPW	Develop and implement record keeping. Annually inspect and clean all BMPs once per year.	100% of catch basins cleaned at least once/yr. Problematic basins cleaned twice/yr.	Continue to implement program. Clean more basins twice/yr.
5.6.3	Parks and Open Space	Develop and implement a management program for fertilizer and pesticide application	Parks Department	Annually summarize applications	Implement Management Program and revise as necessary. (See Appendix 14)	Continue to implement program

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5.6.4	Municipal Vehicle Maintenance and Repair	Review maintenance and repair programs for municipal vehicles	DPW	Review every two years	Evaluated operations and made improvements	Continue to evaluate operations and make improvements
5.6.5	Municipal Roads	Enhance street sweeping operations	DPW	Strengthen record tracking system. Evaluate increasing frequency in urban areas. If applicable, increase frequency.	Evaluated record keeping and modified as necessary. All streets swept in spring and fall and downtown area swept every other week.	Continue to evaluate and strengthen record keeping.