TOWN OF FRAMINGHAM
DEPARTMENT OF PUBLIC WORKS
ENGINEERING & TRANSPORTATION DIVISION

"Dedicated to Excellence in Public Service"

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April 18, 2008

Ms. Ann Herrick
US EPA, Region 01 / Office of Ecosystem Protection
1 Congress St, Suite 1100
(CIP)
Boston, MA 02114-2023

Re: NPDES PII Small MS4 General Permit Annual Report (Year 5)

Dear Ms. Herrick,

Attached, please find the NPDES PII Small MS4 General Permit Year 5 Annual Report for the Town of Framingham. This is submitted to meet this year's reporting requirement for the NPDES Phase II Municipal Separate Storm Sewer System General Permit (Permit No. MA R041116). In addition, to meet the permit requirements, I am also sending a copy to Mr. Frederick Civian of the Massachusetts Department of Environmental Protection.

If you have any questions, feel free to contact me at 508-532-6020 or krw@framinghamma.gov.

Yours very truly,

Katherine R. Weeks, P.E.
Senior Stormwater & Environmental Engineer

KRW/lmp

cc: Julian Suso, Town Manager
Frederick Civian, MA DEP
Peter Sellers, Director, Department of Public Works
William Sedewitz, Director of Engineering and Transportation, Department of Public Works
Tom Holder, Deputy Director, Department of Public Works
Nancy Bryant, SuAsCo

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Municipality/Organization: Town of Framingham

EPA NPDES Permit Number: MA R041116

MaDEP Transmittal Number: **W-041299**

Annual Report Number & Reporting Period: **No. 5: March '07 – March '08**

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5/1/08

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Julian Suso Title: Town Manager

Telephone #: 508-532-5400 Email: Julian.Suso@Framinghamma.gov

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: Julian M Suso

Printed Name: Julian Suso

Title: Town Manager

Date: 4/15/08

Part II. Self-Assessment

The Town of Framingham has completed the required self-assessment for Permit Year Five and finds that our municipality is in compliance in general with the permit conditions. The Illicit Discharge Detection and Elimination (IDDE) by-law was delayed again, but has been formally approved by the participating agencies that will have authority in implementing the bylaw. This by-law is on the slate of warrant articles to be presented at the Spring Town Meeting in April/May 2008.

Since Spring 2007, the Town has made progress in developing a comprehensive Stormwater Master Plan (SWMP) for each of 22 sub-basins identified in the preliminary plan cited in the Year 4 report. The first installment of this comprehensive plan is in the process of being completed (expected draft date is April 2008). It addresses issues and requirements of the two sub-basins with the most difficult problems and therefore the highest priority for implementing improvements, namely the Beaver Dam Brook and Farm Pond Sub-Basins. The plan looks at the hydrology of the watershed in these sub-basins, the infrastructure, and potential solutions for problems of flooding, capacity, water quality, and recharge. The Framingham drainage system in these two sub-basins consists of approximately 2,100 drainage structures and 34 miles of drain pipe. The structures consist of approximately 520 manholes, 1,430 catch basins, 80 outfalls, and other miscellaneous drainage nodes.

Once this SWMP is complete, our plan is to determine which solutions are viable and meet as many of the NPDES Phase II goals as possible and then fund the implementation of the solutions. We will also address the needs of the five remaining high-priority sub-basins of Angelica Brook, Jacobs Brook, Lokerville, Cochituate Brook, and Sucker Brook as a second installment to the Stormwater Master Plan.

The Town is also participating in a 319 Grant to the Town of Ashland for water quality improvements at Waushakum Pond, a portion of which lies in the Beaver Dam Brook Sub-basin. This grant will result in improved drainage to the pond in both Ashland and Framingham, using BMPs such as pervious pavement and tree filters, to be implemented in Summer 2008.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5	Planned Activities – Permit Year 6 and beyond
5-4	Construction site run-off controls.	Framingham DPW/Con Comm	Review, implement, inspect and enforce construction site runoff controls.	Construction site runoff controls are regulated in the Town's Subdivision regulations and Zoning by-laws and are implemented as part of the normal planning review process. DPW Inspectors routinely monitor the implementation of controls at construction sites. Warrant articles for the Spring 2008 Town Meeting include changes to the Zoning Bylaw to specifically refer to the Mass DEP's recently promulgated Stormwater Standards (January 2, 2008). The bylaw and regulations specifically state that these standards apply not only to the areas under the jurisdiction of the Wetland Protection Act but also to any subdivision of 2 or more units, to development of land over one acre, and to all commercial and industrial development that is required to come before the Planning Board. All projects that come before the Planning Board under the Subdivision Regulations are now required to meet the Mass DEP promulgated standards, which go above and beyond the NPDES Phase II requirements under this permit cycle, by requiring Low Impact Development (LID) measures unless they are proven to be infeasible.	To be determined for the next 5-year permit based on EPA requirements to be published.
Revised					

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6 and beyond
4-5	Implement Drainage Master Plan.	Framingham DPW/Con Comm	Implement the plan over remaining years of permit.	The Beaver Dam Brook/Farm Pond study is substantially complete, with a report on analysis of alternatives for drainage improvements. The final stormwater master plan for these sub-basins is expected to be complete in April 2008. See the Part IV summary for more information.	To be determined for the next 5-year permit based on EPA requirements to be published.
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6 and beyond
5-6	Evaluate CB Cleaning	Framingham DPW	Implement the Plan.	The street sweeping and catch basin cleaning plan has been approved and is in force. Collections are made and problem CBs are designated for either inspection or more frequent cleaning.	To be determined for the next 5-year permit based on EPA requirements to be published.
Revised	*Log collections from CB cleaning*		*Collection, sampling, and disposal of CB cleaning*		

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6 and beyond
				DEP has not released the TMDL report and targets for the Sudbury River.	Once the TMDL report is released by DEP, develop plans to obtain the goals.

7b. WLA Assessment

Not applicable

Part IV. Summary of Information Collected and Analyzed

As part of the SWMP described in Part II of this report, 834 drainage structures, including 435 manholes and 346 of a total of 1300 catch basins, and 53 outfalls in the Beaver Dam Brook and Farm Pond sub-basins were inspected in Spring, Summer, and Fall 2007. They were characterized as to their drainage capacity, including rim and invert elevations; drainage structure size; construction materials; and condition (good, fair and poor). Most structures are in at least fair condition; only 5 are in poor condition. About 30% of the structures have moderate or excessive sedimentation; these structures were identified for special attention to cleaning this year. This information will be entered into our computerized drainage system as part of a database that will be used for asset management.

The Beaver Dam Brook sub-basin was analyzed for its historical and current infrastructure and hydraulic capacity. The hydrology of the sub-basin's watershed was also analyzed. In addition, an initial sampling for water quality was conducted. The sub-basin was historically a swamp known for being a source of malaria outbreaks in the 1890s. Since then, it has been developed; fill was brought in and industrial and residential development significantly increased the percentage of impervious surface. The brook now floods regularly on an average of once per year. Metals, ammonia (nutrient indicator), and petroleum hydrocarbons were either not detected or detected at low levels, but concentrations of coliform bacteria were high in about one-third of the sampling locations in both wet and dry weather sampling. It was observed that the high concentrations of bacteria are in locations where there is a higher volume of sedimentation, and it is hypothesized that the water quality may be improved if the structures and pipes are cleaned more frequently. Although capacity of the infrastructure and the water quality issues can be addressed over time, the overarching issue is the high percentage of impervious surface. Above and beyond capacity improvements and implementation of best management practices (BMPs), drainage improvements in this sub-basin will require a multi-year plan of reduction of impervious surfaces.

The Farm Pond sub-basin was also analyzed for its historical and current infrastructure and hydraulic capacity. There are fewer and less critical drainage and flooding issues in this sub-basin. Catch basins, manholes, and pipes are generally in good condition. Water quality is better in this sub-basin, with high concentrations of coliform bacteria detected mostly in the wet weather sampling, again in structures where higher rates of sedimentation were observed. A few drainage improvements have been recommended for this sub-basin.

The Town has begun to maintain a list of identified and potential illicit discharges. The few cases where the discharge included non-stormwater or non-groundwater discharge have been processed and resolved.