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Municipality/Organization: Town of Medfield, MA

EPA NPDES Permit Number: MAR041131

MaDEP Transmittal Number: W-221109

Annual Report Number
& Reporting Period: No. 5: April 1, 2007 – March 31, 2008

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: **Ken Feeney** Title: **Department of Public Works**

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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: Michael J. Sullivan

Printed Name: **Michael Sullivan**

Title: **Town Administrator**

Date: **April 14, 2007**

Part II. Self-Assessment

In general, the Town of Medfield's stormwater management activities for the fifth year of the General Permit (April 1, 2007 through March 31, 2008) were in conformance with the Notice of Intent (Massachusetts DEP form BRP WM 08A) and schedule submitted in July 2003. The Town has developed a Stormwater Management Plan with program priorities for 2003-2008 including:

1. Achieving regulatory compliance, particularly EPA and DEP Phase II NPDES permit requirements;
2. Incorporating storm water protection measures into municipal activities;
3. Focusing activities on target pollution reduction (e.g. Section 303.d. waters and protecting the Town's water supply);
4. Ensuring that the Program is current and innovative; and
5. Providing Program administration.

The Water Quality Stewardship element of the program focused on the protection of the local water supply and addressing the State's Section 303.d waters located within the Town. To this end, staff will continue to develop and improve the Program activities to reduce storm water pollution to the maximum extent practicable and eliminate prohibited non-storm water discharges, while facilitating understanding and involvement in storm water management by various Town departments. Program priorities will also focus on increased efforts to reduce target pollutants and restore local water bodies.

The Town is committed to working with local watershed associations to advance their goals and objectives. To this end, the Town of Medfield has been very active with information transfer and attending workshops sponsored by both the Charles River Watershed Association and the Neponset River Watershed Association. Another high priority of staff will be to keep abreast of the latest technology and approaches to achieve storm water management (such as the sustainable design technologies presented at the CRWA conference held on March 13, 2008). Program activities also strive to encourage environmental stewardship and continue to build on partnerships with other agencies, neighboring towns, and the community for active participation in accomplishing the Program mission.

During Permit Year Five, the Town worked to map the connectivity of the storm drain system. They accomplished 100% mapping of outfall pipes and approximately 75% of the system connectivity. The Town also continued to work on public outreach and participation, including a second round of stenciling the Town's catch basins.

In 2007, the Town's Conservation Commission began an extensive pond cleaning and de-nitrification program that included Danielson, Cemetery and Meeting House Ponds. The local Department of Public Works also undertook extensive utility camera investigation (for illegal connections and damaged pipe) and also planned for the implementation of an extensive Infiltration/Inflow (I/I) program to reduce flows to the Medfield Wastewater Treatment Plant in 2008. The proposed I/I activities were reported to EPA and DEP on February 5, 2008 as part of the compliance requirements of NPDES Permit No. MA0100978. It is anticipated that the work will be completed using monies from the Massachusetts Clean Water State Revolving Fund (SRF) Program.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

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 5
1	Partnership with local Watershed Associations	Con. Comm., DPW, BOH	Regular Meeting Attendance	Correspondence with the Charles River and Neponset River Watershed Associations	Continued updating, seek alternative funding opportunities (such as grants and SRF monies).
Revised					
2	Develop Brochures	DPW	Quarterly Mailings	Town funding was appropriated for herbicide and pesticide awareness mailings	Prepare and issue mailings
Revised					
3	WEB Site Public Service Postings	IT Dept., DPW	WEB Site Publication & Maintenance	Association information transfer and data publication of data, local WEB updates	Association information transfer and data publication of data, local WEB updates
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

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 5
4	Water Quality Testing	DPW	2 Rounds of Water Quality Sampling of Priority Water Bodies	Completed outfall pipe mapping and an estimated 75% of the storm system connectivity. Continued to stencil catch basins.	Continue to stencil catch basins and complete connectivity mapping. Dry weather and wet weather field screening of outfalls after mapping.
Revised					
5	Community Cleanup Days	DPW	Annually	Conducted in Spring 2007	Scheduled for Spring 2008
Revised					
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

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 5
6	Catch Basin/Outfall and Receiving Water Mapping	DPW	GIS Mapping	Completed outfall pipe mapping and an estimated 75% of the storm system connectivity. Continued to stencil catch basins.	Continue to stencil catch basins and complete connectivity mapping. Dry weather and wet weather field screening of outfalls after mapping.
Revised					
4	Water Quality Testing	DPW	Testing of Priority Water Bodies	Screening to be performed after completion of outfall and catch basin mapping	Dry weather and wet weather field screening of outfalls after mapping
Revised					
7	Regulatory Review	DPW, Planning Board, BOH, Con. Comm.	Regulatory Revisions and Action	Finalized consolidated regulations and investigate areas for revisions	Investigate areas for revisions, such as sustainable deign and implementing new DEP stormwater standards
Revised					
8	Permit Enforcement	DPW, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements.	Ongoing to comply with local bylaws, state and federal requirements.
Revised					
9	Misconnection/Illegal Dumping and Correction	DPW, BOH	Connectivity Mapping, Bylaw Enforcement and Fines	Undertook a detailed camera investigation of primary utilities in the Charles River Watershed.	Implementation of an extensive I/I improvement program with SRF monies.
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

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 5
7	Regulatory Review	DPW, Planning Board, BOH, Con. Comm.	Regulatory Revisions to Bylaws as Necessary	Finalized consolidated regulations of applicable stormwater and aquifer protection regulations	Investigate areas for revisions, such as sustainable deign and implementing new DEP stormwater standards
Revised					
8	Permit Enforcement	DPW, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements	Ongoing to comply with local bylaws, state and federal requirements
Revised					
10	Improved As-Built Review	DPW, Planning Board	Electronic As-Built Submittals on Town GIS System	Completed outfall pipe mapping and an estimated 75% of the storm system connectivity and continued local bylaw enforcement.	Complete GIS mapping and develop protocol for submitting as-builts electronically
Revised					
Revised					
Revised					

4a. Additions

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
7	Regulatory Review	DPW, Planning Board, BOH, Con. Comm.	Regulatory Revisions to Bylaws as Necessary	Finalized consolidated regulations of applicable stormwater and aquifer protection regulations	Investigate areas for revisions, such as sustainable deign and implementing new DEP stormwater standards
Revised					
8	Permit Enforcement	DPW, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements	Ongoing to comply with local bylaws, state and federal requirements
Revised					
Revised					
Revised					
Revised					

5a. Additions

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
11	Improved Street Sweepings	DPW	Semi-annual Collections	Semi-annual Collections	Semi-annual Collections
Revised					
12	Improved Catch Basin Cleanings	DPW	Semi-annual Collections	Semi-annual Collections	Semi-annual Collections
Revised					
13	Household Hazardous Waste Days	DPW	Annual Collections	Annual Collection	Annual Collection
Revised					
14	Drain Stenciling	DPW	Aquifer Protection Area	Conducted a second round of drain stenciling in 2007.	Conducting a third round of drain stenciling in 2009.
Revised					
Revised					

6a. Additions

18	Employee Training	DPW	Seminar Attendance	Attended several workshops, including CRWA sustainable and urban design seminar.	Identify appropriate training through local highway associations, CRWA and NRWA.

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 5
6	GIS Mapping	DPW	GIS Mapping of Priority Waters and Drainage Patterns	Completed outfall pipe mapping and an estimated 75% of the storm system connectivity. Continued to stencil catch basins.	Continue to stencil catch basins and complete connectivity mapping. Dry weather and wet weather field screening of outfalls after mapping.
Revised					
4	Water Quality Testing	DPW	Semi-Annual Water Quality Testing	Screening to be performed after completion of outfall and catch basin mapping	Dry weather and wet weather field screening of outfalls after mapping
Revised					
15	Stormwater Modeling	DPW	Needs Assessment for Category 5 Water Bodies	Completed outfall pipe mapping and an estimated 75% of the storm system connectivity. Continued to stencil catch basins.	Continue and complete storm sewer system mapping
Revised					
16	Misc. Structural BMPs as Needed	DPW	i.e. Construction Improvements	None to date (scheduled for Permit Year Five as needed)	Proposed I/I improvements to begin under the WWTP NPDES Permit and with SRF monies.
Revised					
17	Misc. Non-Structural BMPs as Needed	DPW	i.e. Bylaw Enforcement, Fees and Fines	None to date (scheduled for Permit Year Five as needed)	To be determined
Revised					

7a. Additions

19	Pond Cleaning and De-Nitrification	DPW and Con. Comm.	Reduction of Invasive Species and Improved Water Quality	$27,500 in hydroraking and chemical treatment of Danielson, Cemetery and Meeting House Ponds	$27,500 in hydroraking and chemical treatment of Kingsbury and Flynn's Ponds

7b. WLA Assessment

To date, the Town has focused on GIS mapping of the drainage system and priority receiving waters (i.e. the Charles River). Outfall pipes and catch basins have been 100% mapped and the connectivity of the system has been 75% mapped. The coming year will see a focus on the completion of the storm drain system connectivity mapping, and continued cleaning of selected ponds. Dry weather sampling shall be performed following the completion of the mapping program. WLA assessment will follow. Structural BMPs of the wastewater collection system will also be initiated with the implementation of I/I activities that will improve the functionality of the local WWTP that discharges into the Charles River under an existing NPDES permit. It is anticipated that the structural BMPs shall be paid for under the Massachusetts SRF Program.

Part IV. Summary of Information Collected and Analyzed

The Town has reviewed the local, state and federal bylaws relative to stormwater and aquifer protection, and appears to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. Minor revisions may be required for informing local project proponents of the Phase II one-acre NPDES requirement.

As a result of the information collected to date, the Town will be focusing significant effort on structural BMPs and implementation of I/I activities that will improve the functionality of the local WWTP that discharges into the Charles River under an existing NPDES permit. It is anticipated that the structural BMPs shall be paid for under the Massachusetts SRF Program.

Hydroraking and chemical de-nitrification of the Danielson, Cemetery and Meeting House Ponds will serve to improve the overall water quality and sustainability of these water resources. The local Conservation Commission is dedicated to setting aside $27,500 each year to continue with this effort. In 2008, it is anticipated that Kingsbury Pond and Flynn's Pond will be raked and treated.

The Town continues the process of mapping its storm drainage system and has completed a second round of stenciling catch basins. Field screening and sampling of outfalls for dry conditions will be initiated once the outfall locations have been determined. The immediate focus will be on the outfall pipes located the watershed areas of the Massachusetts Section 303d water bodies located in Town.

The Town has appropriated funds to provide notification regarding the potential impacts of herbicide and pesticide use on water bodies and will initiate updates to the public through water bill mailings and postings on the local WEB site. The Town will also work on alternatives to promote volunteerism.