Municipality/Organization:	**Shrewsbury, Massachusetts**
EPA NPDES Permit Number:	**MAR041158**
MaDEP Transmittal Number:	**W-036325**
Annual Report Number & Reporting Period:	**No. 2: March 05-Mar 06**

6b, pv

APR 28 2006

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Jack Perreault Title: Town Engineer

Telephone #: (508) 841-8502 Email: jperreau@th.ci.shrewsbury.ma.us

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: Daniel J. Morgardo

Title: Town Manager

Date: April 26, 2006

Part II. Self-Assessment

The Town has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

Current State of the Phase II Program in Shrewsbury:

The Town currently budgets $5,000 per year for the Phase II Program. This cost does not include money used for catch basin cleaning and street sweeping, which is currently budgeted separately with the Town Highway Department. Occasionally funds have been made available for the Phase II Program from other sources within town budget areas as well.

Current budget constraints are expected to have an impact on the Town's ability to complete the required GIS Storm Water Outfall Map. In the past the Town has rented GPS equipment for outfall mapping, and we have located approximately 57 outfalls at Lake Quinsigamond and Flint Pond. Lake Quinsigamond and Flint Pond are both TMDL designated water bodies. The Town hopes to purchase a GPS unit as soon as funding is available to assist in completing the required outfall map.

Last year we noted that budget constraints would impact the Town's ability to create and enforce a bylaw required for BMP's #5, 8, 9, and 13 as described in the Town's Notice of Intent for Discharges from Small MS4s. The Town continues to move forward with the bylaw creation and decided that the Sewer Commission will have jurisdiction of the regulations when in place.

During permit year three the Town constructed groundwater recharge basins at the existing Floral Street Elementary Public School. Funding for the project was acquired by grant application provided by the Intel Assabet Watershed Fund. The project recharges building roof runoff that historically discharged into a nearby perennial stream. The recharge basins provide an estimated average annual groundwater recharge of 1.31 million gallons per year, and will help increase the base flow of the nearby stream.

For residential subdivision projects submitted to the town Planning Board and Conservation Commission, we started requiring groundwater recharge for each lot reviewed where soil conditions are suitable. A typical example would be a drywell to recharge roof runoff from a single family home. This helps control post-construction storm water runoff, provides a broader recharge area, and often provides recharge volumes above and beyond what is required by the Massachusetts Stormwater Management Policy.

Part II. Self-Assessment (continued)

In years past, the Town had not allowed the use of hydrodynamic storm water separator units for public drainage projects due to maintenance concerns. After meeting with manufacturers and reviewing maintenance guidelines, the Town this permit year started approving the usage of those storm water BMP's for public projects and private projects that will become public, such as subdivision roadways. The Town continues its policy to encourage the use of innovative storm water BMP's for private projects as well.

For permit year four the Town will focus on three major components of the Phase II program - the creation of a bylaw, illicit connections detection and elimination, and the GIS mapping of storm water outfalls.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
01	Pamphlet Mailings	Engineering & Others	# Pamphlets Mailed		Pamphlet Mailings, location(s) to be determined
Revised					
Revised					
Revised					
Revised					
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
03	Catch Basin Stenciling	Engineering Dept.	# Catch Basins Stenciled	40 Crystal Cap markers were installed near Lake Quinsigamond, Flint Pond, and Jordan Pond.	Additional markers to be installed near Lake Quinsigamond.
Revised					
04	Water Monitoring & Sampling	Health Dept.	Sample Data	Samples for E Coli and Total Coliform bacteria were taken on a weekly basis during the bathing season in Lake Quinsigamond.	Same as Permit Year 3.
Revised					
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
05	Local Ordinance	Engineering Dept.	Town Warrant Article	Research of available information for the creation of a Town Bylaw. The Town has decided that the Sewer Commission will have bylaw jurisdiction.	Continue Town Bylaw development.
Revised					
06	Storm Sewer Map	Engineering Dept.	GIS Map	GIS Map currently under production for entire town.	Continue GIS mapping.
Revised					
07				Highway Department continued to monitor drainage utilities during annual maintenance.	Training as needed.
Revised	Public Employee Education	Engineering Dept.	Training implemented prior to Phase II program		
07	Public Employee Education	Engineering Dept.	Training Sessions		Training as needed.
Revised					
Revised					
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
05	Local Ordinance	Engineering Dept.	Town Warrant Article	Research of available information for the creation of a Town Bylaw.	Continue Town Bylaw development.
Revised					
08	Mass. Stormwater Policy	Engineering Dept.	# Projects Reviewed	9 Projects submitted to the Conservation and/or Planning Board.	Continue reviewing projects to comply with Mass. Stormwater Management Policy.
Revised					
09	Site Plan Reviews	Engineering Dept.	# Projects Reviewed	Research of available information for the creation of a Town Bylaw.	Continue Town Bylaw development.
Revised					
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
05	Local Ordinance	Engineering Dept.	Town Warrant Article	Research of available information for the creation of a Town Bylaw.	Continue Town Bylaw development.
Revised					
08	Mass. Stormwater Policy	Engineering Dept.	# Projects reviewed	9 projects submitted to the Conservation Commission and/or Planning Board.	Continue reviewing projects to comply with Mass. Stormwater Management Policy.
Revised					
Revised					
Revised					
Revised					
Revised					

5a. Additions

08	Groundwater Recharge System	Engineering Dept.	Groundwater Infiltration Volume	The Town installed a groundwater recharge system on public school property with an estimated average storm water recharge of 1.31 million gallons per year.	

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
10	Catch Basin Cleaning	Highway Dept.	Catch Basins Cleaned	Catch Basins were cleaned.	Continue catch basin cleaning.
Revised					
11	Highway and Light Dept. Garage	Engineering Dept.	# Inspections	Two inspections were done at the Light Dept., Highway Dept., and Water/Sewer Dept. garage facilities.	Continue inspections.
Revised					
12	Street Sweeping	Highway Dept.	Streets Swept	All municipal streets were swept.	Continue street sweeping.
Revised					
Revised					
Revised					
Revised					

6a. Additions

Part IV. Summary of Information Collected and Analyzed

Water samples were tested weekly during the bathing season at Sunset Beach for E. Coli and Total Coliform Levels. The Town Health Department has reported that no violations of the water quality standards for bathing beaches were detected at Sunset Beach during 2005. Additional testing was performed during the summer of 2005 due to the release of wastewater into Lake Quinsigamond by the City of Worcester on July 20th, 2005.