P 5/28/08

Municipality/Organization:	**Town of Northbridge**
EPA NPDES Permit Number:	**MAR041144**
MaDEP Transmittal Number:	**W-040823**

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:	Richard R. Sasseville	Title:	Director of Public Works
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Mailing Address:	Northbridge DPW, P.O. Box 88, Whitinsville, MA 01588-0088		

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: Theodore D. Kozak

Title: Town Manager

Date: 5/27/08

Part II. Self-Assessment

The following are highlights of the major accomplishments during the prior twelve-month period:

Waste motor oil recycling: During calendar year 2007, the Town's Recycling Committee collected 1,250 gallons of used motor oil, which was sent for recycling. Additionally, 55 gallons of used antifreeze, 2-55 gallon drums of used oil filters, 2 cubic yards of used paint products, approximately 732 feet of fluorescent tubes, various mercury bearing wastes, batteries containing heavy metals and more than 10,600 pounds of electronic components were also collected and disposed of in environmentally responsible fashion.

Winter road sand reduction: The Winter of 2007-08 was marked by an extreme shortage of road salt. Because our supplier could not meet our need for salt, we had to resort to the use of a sand-salt mix. Our goal had been to eliminated the use of sand for treating Town roads during the winter but we were unable to do so this year. Approximately 1,450 tons of sand was used during the winter of 2007-08. The total amount used in 2002-2003 was 2,231.12 tons compared to 1,045.80 tons during the winter of 2003-04. During winter 2004-2005, 2,065 tons of sand was used on Town roads. During winter 2005-2006, 1,432 tons of sand was used on Town roads. Approximately 100 tons of sand was used during winter 2006-07. We continue to pursue the goal of completely eliminating the use of winter sand, however, difficulty in getting reliable deliveries of road salt set us back this year. As we begin cleaning catch basins this spring we are finding an increase in the amount of accumulated sand which is the expected result.

Public Education and Outreach: This element of the program has primarily made use of cable TV notices posted on the Town's local access channel. Notices have provided tips on lawn care including use of fertilizers and other lawn products, car washing, proper disposal of pets' wastes, proper disposal of motor oils and solvents, maintenance of storm drains and detention basins and similar environmentally responsible practices. These cable notices run continuously throughout the year and are seasonally adjusted for the time of year. In addition, the Town has partnered with the Blackstone River Watershed Association to post links to the association's educational information. The following publications are available:

A Homeowner's Guide to Protecting Water Quality in the Blackstone River Watershed
A Small Farm Owner's Guide to Protecting Water Quality in the Blackstone River Watershed
A Horse Owner's Guide to Protecting Water Quality in the Blackstone River Watershed

Household Hazardous Waste Collection Event: A successful collection event was conducted on September 8, 2007.

Approximately 40 car load of hazardous wastes were collected. These included insecticides, herbicides, paints, thinners and solvents. Participation this years was significantly less that the first event held in 2005. Bases on our experience, we hope to conduct additional events on a bi-annual basis.

Public Involvement and Participation: Cable TV notices have been posted soliciting volunteer involvement in various activities with limited response. Fortunately, the local watershed association conducted a volunteer clean up along portions of the Mumford River, which resulted in the removal of approximately 3 dump truck loads of refuse.

Illicit Discharge Detection and Elimination: Due to budget reductions this fiscal year, we were unable to complete our GPS survey of undocumented outfalls and drainage structures that was begun in 2006. We had used summer temporary employees for this purpose last year but did not have funding this year. No reports were received and no evidence of illicit discharges was observed. Periodic checks along stretches of the Blackstone and Mumford Rivers revealed no signs of discharges.

Construction Site Stormwater Runoff Control: There are approximately 12 active projects in the Town. Particular emphasis has been given to insure that the various projects are aggressively complying with the erosion control provisions of their project approvals. Frequent site visits are conducted by the Planning Department, DPW and Town consultants, particularly during and following storm events to insure that all erosion control and stormwater measures are in place. When problems have been identified contact has been made with appropriate project management to relate deficiencies and seek corrections. The Planning Board utilizes outside consultants to perform periodic inspections and document compliance with requirements. We are requiring compliance with the "General Construction Permit" and require that developers submit a copy of their Notice of Intent required under the General Permit. Additionally, we are requiring them to submit an erosion control operations and maintenance plan prior to start of work on the project.

Post Construction Stormwater Management in New Development and Redevelopment: A local Stormwater Management by-law, developed by the Northbridge Planning Board was adopted by the Town at the spring annual town meeting on May 6, 2008. This by-law establishes a local Stormwater Authority. The Stormwater Authority is now finalizing implementing regulations which will implement the program. This has been a multi-year effort which is now rapidly approaching completion.

The Planning office is presently soliciting Scope of Work from consultants for a Best Development Practices Guidebook. The Best Development Practices Guidebook will be a set of guidelines for developers, designers and project reviewers intended to improve the quality of development. The Guidebook will describe the required and preferred design & construction practices relating to stormwater management, erosion & sediment control, landscape design, and site planning

Pollution Prevention and Good Housekeeping in Municipal Operations: Efforts at applying "good housekeeping" standards at DPW continue following a massive cleanup in the Winter of 2005. Plans for design and construction of a new Public Works facility has been delayed for many years due to funding limitations and higher priorities. A proposed site for a new facility has been identified and the May 2008 spring town meeting appropriated funding to develop a project scope and construction programs for the new facility. This is the long awaited first step toward construction of a new facility.

General Comments and Observations: This program requires a significant level of effort for the Town. No additional resources have been provided to meet the requirements of the program. Reliance on volunteers, both individual and in the form of existing and new committees is a major component of the effort. There is a level of technical expertise required to review program requirements and analyze data. Some communities have chosen to contract for that expertise, in tight financial circumstances it is beyond the resources of many localities. Within existing constraints, the Town is fully committed to meeting the terms of the NPDES permit and implementing the Stormwater Management Plan.

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 5 (Reliance on non-municipal partners indicated, if any)	
1-1	Business/industry contacts	DPW	Number of contacts	Slow start with no formal contact s made	
Revised					
1-2	Community Organizations	DPW	Number of contacts	No progress due to lack of volunteers for this effort	
Revised					
1-3	School contact	DPW	Number of student contacts	High school environmental group has been performing water testing and stream monitoring.	
Revised					
1-4	Storm drain stenciling	DPW	Number of drains stenciled	It is felt that this effort is not needed. There has been no evidence of dumping in storm drains during recent times.	
Revised					
1-5	Household hazardous waste collection	DPW/Recycling Committee	Number of pounds collected	Collection event was conducted September 2007.	
Revised					

1a. Additions

1-6	Pollution Prevention Tips on Cable TV	DPW	Number of notices per year: Notices run continuously. Approximately 10 notices rotate.	DPW has posted pollution prevention tips on local cable channel. Various tips, seasonally appropriate are run on cable year round.	

2. Public Involvement and Participation

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)	
2-1	Volunteer stream cleanup	DPW/Conservation Commission	Number of participants	Local watershed association conducted event in spring 2008..	
Revised					
2-2	Volunteer stream monitoring	DPW/Conservation Commission	Number of volunteer hours	Cable TV solicitation for volunteers have been run without response. No direct organizational contact made to date	
Revised			partnership with BRWA		
2-3	Stormwater video	DPW/Conservation/ Cable TV	Complete Jan 2005	The video "After the Storm" has been shown on local cable tv several times.	
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 5 (Reliance on non-municipal partners indicated, if any)	
3-1	Storm sewer map	DPW	Completion by Dec 03	A GIS based map of the stormwater system has been prepared using available maps/plans and drawings. Approximately 80% of system	
Revised					
3-2	Map updates	DPW	Complete 2006	Portable GPS equipment has been procured.	
Revised					
3-3	Stormwater by-law	Planning/DPW	Complete Jan 06	Stormwater regulations are currently in final draft.	
Revised			Completed May 08		
3-4	Non-storm discharges	DPW	Complete Jan 06	I	
Revised	*Illicit connection by-law*	DPW	Completed June 06		
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 5 (Reliance on non-municipal partners indicated, if any)	
4-1	Sedimentation & Erosion Control Guide	Building/Planning Depts.	Completion Spring 2008	Existing Erosion Control Zoning By-Law to be reviewed and amended. Copies of similar documents from other municipalities have been obtained and are under review.	Continue development of local guidebook leading to completion and implementation by planned date.
Revised			Adoption & Compliance		
4-2	Erosion Control By-law	Building/Planning Depts.	Update -Spring 2008	Existing by-law has been reviewed and identified for update and revision.	Prepare by-law revisions and updates for Town Meeting action. Seek technical assistance from regional planning commission.
Revised			Adoption & Compliance		
4-3	Inspection & Enforcement	Building/Planning Depts.	Number of inspections	Most project sites are inspected on a weekly basis or more often as conditions warrant. Inspections done by Planning Dept., Building Dept, consultant, Conservation Commission.	Continue site inspections, documenting conditions and directing corrective actions as needed.
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 5 (Reliance on non-municipal partners indicated, if any)	
5-1	Develop Guidebook	Building/Planning Depts/ConCom/DPW/BoH.	Completion & Enforcement	Hiring of consultant to develop the guidebook is underway. Scope of work being prepared	
Revised					
5-2	By-law Revisions	Building/Planning Depts.	Adoption	Stormwater Management bylaw has been adopted by Town Meeting	
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 5 (Reliance on non-municipal partners indicated, if any)	
6-1	Employee Education	DPW	Number of man-hours of training	Development of standard operating procedures begun.	
Revised					
6-2	SPCCP Update	DPW	Completion July 2005	Funding not provided to complete update.	
Revised			Completion Jul 2008		
6-3	Motor oil recycling	DPW	Number of gallons	All used motor oil from Department activities has been recycled. Has been added to oil collected by the Recycling Committee	
Revised			Approx 110 Gal		
6-4	Reduce winter sand use	DPW	Average tons per storm	Due to supplier difficulties road salt was in short supply. Winter sand was added to mix this winter.	
Revised					
6-5	Construct vehicle wash facility	DPW/Town Meeting	Complete Nov 2007	Funding for preliminary study approved at spring 2008 town meeting.	
Revised			Complete 2010.		
Revised					

6a. Additions

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
7-1	Stream monitoring	DPW/Conservation/BoH	Completion date: Two times per year	No volunteers have come forward.	
Revised					
7-2	Locate MS4 discharges	DPW	Completion date:: January 1, 2004	Summer 2006 located approximately 200 additional drainage structures	This effort will be included in 3-2 above.
Revised			July 2006		
7-3	Survey agricultural activities	DPW/Conservation	Completion date: September 15, 2004	Contact made with 8 agricultural property owners. No replies to date.	Will provide follow up information on improving agricultural activity impact on stormwater.
Revised			July 1, 2005		
7-4	Septic system survey	DPW/Board of Health	Completion Date: September 15, 2004	Lack of funding	Lack of funding
Revised			Unknown		
Revised					

7a. Additions

7b. WLA Assessment

No data available at this time.

Part IV. Summary of Information Collected and Analyzed

The town has completed a GIS based map of the stormwater collection system. Development of the map made use of existing record drawings and other documentation. It is estimated that approximately 80 percent of the system is covered by the new map. GIS locating equipment has been procured that will be used to locate undocumented stormwater collection system components. Particular emphasis will be placed on identifying outfalls not heretofore documented. It is anticipated that the Town will be completed in quadrants over the next two to three years and the system map will be updated periodically as information is gathered. At this point we need to obtain additional training on use of the GIS equipment and on how to update the maps.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	No	
Annual program budget/expenditures	No fixed amount.	

Education, Involvement, and Training

Estimated number of residents reached by education program(s). *Primarily by Cable TV notices*	70%	
Stormwater management committee established	No	
Stream teams established or supported	None	
Shoreline clean-up participation or quantity of shoreline miles cleaned	None	
Household Hazardous Waste Collection Days		
▪ days sponsored	Collection event held in September 2007	Intent is to conduct such events biannually.
▪ community participation	200 families	
▪ material collected	N/A	
School curricula implemented	No	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control	X		To be revised	
▪ Post-Development Stormwater Management		x		
Accompanying Regulation Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination (included in bylaw)				x
▪ Erosion & Sediment Control	X	X		
▪ Post-Development Stormwater Management		X		

Mapping and Illicit Discharges

Outfall mapping complete	80%	
Estimated or actual number of outfalls *(Estimated)*	134	
System-Wide mapping complete	80%	
Mapping method(s)		
▪ Paper/Mylar		
▪ CADD		
▪ GIS. *Paper maps and record drawings used to develop stormwater map.*	80%	
Outfalls inspected/screened	None	
Illicit discharges identified	None	
Illicit connections removed	None	
% of population on sewer *(estimated)*	75%(9,900)	
% of population on septic systems *(estimated)*	25%(3,325)	

Construction

Number of construction starts (>1-acre)	12	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	90%	
Site inspections completed. *On the average all sites are inspected weekly.*	100%	
Tickets/Stop work orders issued	0	
Fines collected	0	
Complaints/concerns received from public	9	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control.	N/A	
Site inspections completed	N/A	
Estimated volume of stormwater recharged	N/A	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	1/yr	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	1/yr	
Total number of structures cleaned *(Approximate number)*	750	
Storm drain cleaned *(Not documented)*	N/A	
Qty. of screenings/debris removed from storm sewer infrastructure	150CY	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Stockpiled awaiting beneficial use decisions.	

Cost of screenings disposal	N/A	

Average frequency of street sweeping (non-commercial/non-arterial streets)	1/yr	
Average frequency of street sweeping (commercial/arterial or other critical streets)	3/yr	
Qty. of sand/debris collected by sweeping	N/A	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)		
Cost of sweepings disposal	N/A	

Anti-/De-Icing products and ratios. *During winter 2007-08 we resumed the use of sand due to a severe shortage of road salt. Our goal continues to be the elimination of winter sand.*	70% NaCl 5% $CaCl_2$ 25% Sand	
Pre-wetting techniques utilized. *Liquid $CaCl_2$ applied at spinner discharge of spreader*	Yes	
Manual control spreaders used	Yes	
Automatic or Zero-velocity spreaders used	No	
Estimated net reduction in typical year salt application	None	
Salt pile(s) covered in storage shed(s). *Mixed sand/salt in working pile uncovered*	Yes	
Storage shed(s) in design or under construction	No	
Estimated net reduction in typical year road sand application (5 year average)	95%	

TOWN OF NORTHBRIDGE

OFFICE OF THE TOWN MANAGER
TOWN HALL, 7 MAIN STREET
WHITINSVILLE, MASSACHUSETTS 01588
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Theodore D. Kozak
Town Manager

May 14, 2008

Ann Herrick - CIP
U.S. Environmental Protection Agency - Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Fred Civian
Massachusetts Department of Environmental Protection
One Winter Street - 5th Floor
Boston, MA 02108

RE: NPDES Phase II Annual Report, Permit Number MAR041144

Enclosed herewith please find one copy of our annual report of activities under the Stormwater Management Program.

Our point of contact for this report is the Director of Public Works, Mr. Richard R. Sasseville. He may be contacted by phone at 508-234-3581 or by email at rsasseville@northbridgemass.org.

Sincerely,

Theodore D. Kozak
Town Manager

Enclosure