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Municipality/Organization: Town of Milford

EPA NPDES Permit Number: NHR041019

MaDEP Transmittal Number: W-

Annual Report Number & Reporting Period: No. 8: April 2010-April 2011

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: William F. Ruoff Title: Director of Public Works

Telephone #: (603) 673-1662 Email: \_\_\_\_\_

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: Guy Scaife

Title: Town Administrator

Date: April 30, 2011

## **Part II. Self-Assessment**

During the reporting period from April 2010 to April 2011, Milford continued to work towards the objectives of the program. The Stormwater Team and subgroups continued to meet. The Conservation Coordinator expanded responsibilities to include assisting the Department of Public Works with oversight. The Coordinator's title was also expanded to include "Stormwater Coordinator". Meetings between the Director of Public Works and the Conservation/Stormwater Coordinator were scheduled weekly. The topics of all meetings were documented and copies of notes/minutes are located at the Public Works Facility.

A Source Water Plan has been prepared with assistance from Granite State Rural Water Association. This plan incorporates stormwater management for the protection of drinking water supplies.

The Milford Water Utilities Group continued to assist the Local Rivers Advisory Group with regular surface water sampling efforts.

The Milford Public Works Department continued the storm drain stenciling program, placing the "DUMP NO WASTE DRAINS TO RIVER" stencils, replacing faded storm drain stencils, and expanding the coverage area to include all structures which drain to a surface water. The Town continues its program of working with car washing event managers to assure compliance with best management practices. The Town had developed a brochure which continues to be distributed to all businesses that sell car-washing soap, highlighting safe-washing practices, and is distributed to all entities who sign up to hold a car wash in Town. Other Public Outreach includes a Car-Washing PowerPoint presentation that runs on local public television. Press releases and articles have been published in local and regional newspapers. Code Enforcement inspects all car-washing events to make sure they are in compliance with the new policy. There was significant outreach to the community as a whole and through the School District through both the school Buildings and Grounds Department and the SAU's office.

Milford completed identification of all known outfalls within the MS4 area in 2007. Visual re-inspections and re-categorization of discharges were performed as part of the Illicit Discharge and Detection Evaluation Program during 2010, resulting in a lower number of EPA--defined 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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
1	Document/Continue Existing Programs	DPW/William Ruoff	Review existing public education programs/prepare written documentation about existing programs	Milford had representation at the Local Rivers Advisory Group (as planned). The Planning and Building Departments continued to work together to coordinate the Stormwater Management Application, Permit and Checklist to effectively educate and guide Building Permit applicants through the Stormwater Permit process. In addition, a Stormwater Construction Brochure continues to be attached to all approved Building Permits. The Town continues to add documentation to the notebook containing outlined programs and tracks activities through its municipal software. New brochures were developed which cover stormwater issues for both the general public and the proper use of rain gardens as treatment devices.	Continue working on completing the compilation of the notebook containing outlined programs. Continue to include Stormwater Construction Brochures to all approved Building Permits. Look for opportunity to improve current procedures.
Revised					
2	Coordinate Public Educators	Stormwater Management Team	Organize Town employees, etc. to develop materials for distribution regarding stormwater	The Team continued to distribute stormwater educational materials/information. Formal school programs established in previous permit years were continued.	Continue distribution of stormwater educational materials/information.
Revised					
3	Coordinate Information and Program Distribution Within the School Network	Stormwater Management Team	Contact 90% of schools within the Town	The fourth, seventh and tenth grade teachers have continued to include the five-lesson plans in their agenda for reaching all fourth, seventh and tenth graders in Milford. More than 400 students were involved.	Continue to incorporate lessons into the regular fourth, seventh and tenth grade yearly plan, that may include an event day for the fourth grade classes.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
Revised	<i>Fourth, seventh, and tenth grade teachers have agreed to incorporate a regular program into the yearly plan.</i>				

**1a. Additions**

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## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
4 Revised	Create Task Committee <i>(Revised to Stormwater Team Year 1)</i>	DPW/William Ruoff	Establish team/ document meeting minutes	Stormwater Team and subgroup meetings have continued; documented by minutes and action item lists. A Stormwater Coordinator was named.	Stormwater Team meetings or subgroup meeting will continue. Minutes will continue to be documented.
5 Revised	Conduct Public Meeting/Acquire Public Input	DPW/William Ruoff	Public Meeting to be held	Hearings were held on revisions to the Zoning Ordinance to strengthen buffer protections to further ensure natural stormwater treatment. The revised ordinances were approved at the Town Meeting on March 8, 2011.	Public input will continue to be sought related to the Land Use Regulations.
6	Establish Stormwater Information Display at Major Town Events	Stormwater Team	Stormwater information display at Town event	A bulletin board was created for display at major Town events. The Community Development Department had a booth at the Souhegan Valley Expo on October 21, 2010 in which they had a Stormwater Display Board and stormwater handouts were available. The Stormwater Display Board was up for the Deliberative Session, with a turnout of 100 residents on February 5, 2011. The bulletin board was also displayed at Voting Day on March 8, 2011, the Climate Change Summit on October 5, 2010, and the Southern New Hampshire Trails and Outdoor Expo on April 9, 2011.	A bulletin board or outreach displays will continue to be evaluated for display at major Town events such as the Deliberative Session in February and Voting Day in March.
Revised	<i>Displays will be provided at “appropriate Town events”</i>				

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
7	Storm Drain Stenciling/Community Clean-Up Day	DPW/William Ruoff	50% of storm drain stenciled/one clean-up day per year	100% of the storm drains outletting to a body of water were stenciled. Milford participated in the Regional Hazardous Waste Collection Day. Milford also sponsored a special Town-wide clean-up day on April 27 through April 28, 2010. DPW completes a roadside pickup task. Milford hosted a Hazardous Waste Collection Day on May 8, 2010 in Milford. Four other days were held in Nashua that was open to Milford residents. Mayflower, Tucker Brook and Rail Trail were cleaned in both the spring and fall by the land stewards. Additionally, the Boy Scouts had a cleanup day for the Souhegan River below Kaley Park.	Storm drain stenciling will continue in June through September. Community clean-up days will continue. The Town-wide pickup is scheduled for Spring/Summer 2011. Trails will be cleaned by land stewards. A Hazardous Waste Collection Day is scheduled for May 7, 2011.
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
8 Revised	Map Outfalls and Receiving Waters	DPW/William Ruoff	Produce a map showing outfalls and receiving waters	The Town invested in having aerial images of the community taken and planimetrics developed in 2010. The planimetrics data has been finalized and converted into GIS format. Prior ground visit data was reviewed against new information, resulting in a lower number of EPA-defined outfalls.	The maps will continue to be carefully reviewed to ensure that all pertinent outfall locations have been mapped and updated as appropriate. The Town will begin the process of ground-checking the new planimetrics data in 2011. The Town will also begin populating the new datasets, focusing on the urbanized area along the Souhegan River.
9 Revised	Evaluate Need for a Stormwater Ordinance	Stormwater Team	Prepare Storm Sewer (Storm Water) Ordinance for adoption	After the required Public Hearing Process, the Stormwater Regulations were adopted on April 9, 2007, with an effective date of June 4, 2007, utilizing the assistance of a consultant and legal counsel. Enforcement Response Procedures were developed and are utilized as appropriate.	This document will continue to be utilized and evaluated for areas requiring modifications.
10 Revised	Train Town Employees in Illicit Discharge Detection <i>(Modified in Year 1 to NOT utilize volunteers)</i>	DPW/William Ruoff	Complete training document/conduct illicit discharge detection training	The Town purchased training videos in 2011. Town employees attended a training session put on by the Department of Public Works including a video and lecture/question and answer session. Reported incidents have been documented by the Illicit Discharge Reporting Form and followed up by appropriate Town personnel.	Employees will continue to be provided with the latest available documentation related to characteristics of an illicit discharge. The training lectures and videos will continue to be presented at training days to be scheduled throughout the year.
11 Revised	Dry Weather Screening of Outfalls	DPW/William Ruoff	Develop dry weather screening forms and document findings	Dry weather rescreening of outfalls was performed utilizing a visual inspection system during Year 8.	Continue to revisit outfalls and conduct repeat dry weather screening. Prioritize areas with historic issues.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
12	Develop System of Identifying Illicit Discharges/Initiate Program to Eliminate Them	DPW/William Ruoff	Develop plan for elimination of illicit discharges, begin program to eliminate, and eliminate identified illicit discharges	A consultant provided general stormwater training to one team of Town personnel in Permit Year 5. The training addressed all aspects of Stormwater Pollution Prevention and identification of abnormal circumstances which may require supervisory follow-up. System is established for illicit discharge follow-up.	Continue to refine the illicit discharge detection program. Acquire appropriate tools for use by the team responsible for detection and continue training.
Revised	<i>Completion date revised proposed to be extended until December 2007.</i>				
13	Identify Magnitude of Effort to Coordinate Mapping Stormwater Discharge System	DPW/William Ruoff	Highlight areas of Town requiring outfall mapping effort. Once outfall areas have been identified, continue to identify "other areas" requiring mapping.	New planimetrics data has been finalized and converted to GIS format.	The Town will begin to expand the stormwater mapping data beyond outfalls.
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
14 Revised	Document Existing Programs and Expand Them As Required	Stormwater Team	Review of existing procedures and regulations	New Development Regulations were adopted February 24, 2009. The Town's Master Plan is also under review. Zoning amendments protecting buffers were approved at the Town meeting on March 8, 2011.	Continue to incorporate appropriate information into Town documents. Continue preconstruction meetings and construction monitoring of development projects. Continue technical review of stormwater plans for development activities.

**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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
15	Document and Enhance Procedures for the MS4 System	DPW/William Ruoff	Complete review of MS4 maintenance procedures	Ongoing review of MS4 maintenance procedures. Code Enforcement is tracking post-development stormwater inspections through the MUNIS software system.	Continue refinement of the maintenance procedures.
Revised					
16	Incorporate Best Management Practices Into the Town Master Plan	William Ruoff/Applicable Town Departments	Update of Town Master Plan	The Master Plan is a working document in Milford in which chapters are updated on a rotating basis and added as necessary. In March 2008, the Board updated the Facilities Chapter including wording supporting Stormwater BMPs. The Planning Board intends to continue to update the Traffic and Transportation of the Master Plan this year which will include Stormwater. The Planning Board revised the open space ordinance which incorporates stormwater provisions. The Town continues to work on creating an Economic Development Policy which will also include stormwater.	Continue work on additional sections of the Master Plan.
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
17 Revised	Document and Enhance Employee Training Procedures	DPW/William Ruoff	Complete review of training programs	Annual training events are considered annually. All highway personnel are routinely scheduled to attend T <sup>2</sup> training at least one time per year. Program topics included LID, drainage and stormwater management. Senior transfer station employees attend NHDES training related to transfer station issues as offered. Concepts are brought back to “other” employees. Training videos were obtained by the Town and employees are viewing the videos. Training sessions were held during the spring of 2011.	Document existing training programs; continue support of training events. Training sessions will be held during the spring of 2012 and throughout the year for new employees as required.
18 Revised	Evaluate the Use of Pesticides, Sand, and Salt	DPW/William Ruoff	Complete review of existing procedures	Pesticide use within the community has been determined to be limited. Sand and salt evaluations are constantly under evaluation. Herbicides are only used in the sidewalk by a licensed application company. The Public Works Winter Maintenance Manual gives application rates; amount used varies by storm; purchased salt allows for measurable quantities.	Evaluation of the pesticides, sand, and salt usage was completed. Usage will continue to be carefully monitored.

### 6a. Former Additions

19	Catch Basin Cleaning	DPW/William Ruoff	Complete an annual catch basin cleaning event	Catch basin cleaning event was completed.	Clean catch basins per schedule.
20	Street Sweeping	DPW/William Ruoff	Complete a weekly spring/summer sweeping event	Street sweeping was performed per schedule. Also, street sweeping occurs after special events.	Continue street sweeping per schedule.

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2011/2012
Revised	Not Applicable				
Revised					
Revised					
Revised					

7a. Additions


7b. WLA Assessment  
Not Applicable

**Part IV. Summary of Information Collected and Analyzed**

Year	Salt/Sand Usage Per Year		
	# of Storms	Salt (tons)	Sand (tons)
2003	6	366.81	855.79
2004	10	1,101.70	1,591.54
2005	15	1,312.82	2,357.65
2006	8	576.91	1,528.00
2007	11	460.73	1,116.71
2008	16	843.73	1,801.14
2009	13	749.73	1,464.50
2010	14	743.42	1,620.00
2011	22	1004.34	2,500.00

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

Stormwater management position created/staffed – Coordinator named	(y/n)	-
Annual program budget/expenditures	(\$)	Not Available (N/A)

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	40%
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y
Shoreline cleanup participation or quantity of shoreline miles cleaned	(y/n or mi.)	1 mi.
Household hazardous waste collection days* <ul style="list-style-type: none"> <li>▪ days sponsored</li> <li>▪ community participation</li> <li>▪ material collected</li> </ul>	(#) (%) (tons or gal) (y/n)	5 N/A N/A Y
School curricula implemented (initiated)		

\* Regional information maintained at the Nashua Regional Planning Commission

### 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
▪ Post-development stormwater management					X
Accompanying regulation status (indicate with "X")					
▪ Illicit discharge detection & elimination					X
▪ Erosion & sediment control					X
▪ Post-development stormwater management					X

### Mapping and Illicit Discharges

Outfall mapping complete		(%)			95
Estimated or actual number of outfalls (within urbanized area)		(#)			90
System-wide mapping complete		(%)			In Progress
Mapping method(s)					
▪ Paper/Mylar		(%)			N/A
▪ CADD		(%)			N/A
▪ GIS		(%)			N/A
Outfalls inspected/screened		(# or %)			N/A
Illicit discharges identified		(#)			N/A
Illicit connections removed		(#)			--
		(est. gpd)			
% of population on sewer		(%)			30
% of population on septic systems		(%)			70

**Construction**

Number of construction starts (> 1 acre)	(#)	1
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	47
Tickets/stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	7

**Post-Development Stormwater Management**

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	N/A
Estimated volume of stormwater recharged	(gpy)	N/A

**Operations and Maintenance**

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1 x/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1 x/yr
Total number of structures cleaned	(#)	1100
Storm drain cleaned	(LF or mi.)	Not calculated
Quantity of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Not calculated
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Recycled
Cost of screenings disposal	(\$)	N/A



Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1x/yr <sup>†</sup>
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1x/yr <sup>†</sup>
Qty. of sand/debris collected by sweeping	(lbs. or tons)	N/A
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Recycled
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	Owned
Vacuum street sweepers specified in contracts	(y/n)	Not applicable

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	1x/yr minimal on athletic fields per need
▪ Herbicides	(lbs. or %)	None used by Town – minimal used by Town subcontractor on sidewalk
▪ Pesticides	(lbs. or %)	100%

Anti-/De-Icing products and ratios		
% NaCl		29
% CaCl <sub>2</sub>		Not used
% MgCl <sub>2</sub>		Not used
% CMA		Not used
% Kac		Not used
% KCl		Not used
% Sand		71
(y/n)		Y
(y/n)		N
(y/n)		Y
(lbs. or %)		N/A
(y/n)		Y
(y/n)		Y

<sup>†</sup> Weekly follow-up of street sweeping in downtown area.