

Municipality/Organization: Town of Milford

APR 28 2014

EPA NPDES Permit Number: NHR041019

MaDEP Transmittal Number: W-

P

Annual Report Number

& Reporting Period: No. 11: April 2013-April 2014

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Fred Elkind

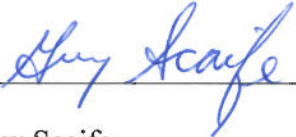
Title: Stormwater Coordinator

Telephone #: 603-249-0628

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 25, 2014

Part II. Self-Assessment

During the reporting period from April 2013 to April 2014, Milford continued to work towards the objectives of the program. The Stormwater Committee and subgroups continued to meet. The Stormwater Coordinator continued responsibilities including assisting the Department of Public Works with oversight and implementation. Meetings between the Director of Public Works and the Stormwater Coordinator were scheduled as needed--usually, several times weekly. The Stormwater Coordinator participated in Regional Stormwater Coalition activities.

The Milford Water Utilities Group continued to assist the Local Rivers Advisory Group with regular surface water sampling efforts and continues to document rainfall events.

The Milford Public Works Department planned the continuation of the storm drain stenciling program, placing "DUMP NO WASTE DRAINS TO RIVER" stencils, replacing faded storm drain stenciling, and expanding the coverage area to include additional 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 developed a brochure highlighting safe washing practices which continues to be distributed to all businesses that sell car-washing soap, and is distributed to all entities who sign up to hold a car wash in Town. Other Public Outreach includes a car-wash and informational slides that run on local public television. Press releases and articles have been published in local and regional newspapers. Educational stormwater videos have been run on public access television. Code Enforcement or other members of the Stormwater Committee inspects car-washing events to make sure they are in compliance with the new policy. There was significant outreach to the community through the School District through the SAU's office.

Milford completed identification of known outfalls within the MS4 area in 2007. Visual re-inspections and re-categorization of discharges were performed during 2010 as part of the Illicit Discharge and Detection Evaluation Program, resulting in a lower number of EPA-defined outfalls. Current-year efforts included a more detailed GIS mapping that further refines the identification of outfalls. Structures incorporated into the GIS data base were field verified. During the 2013/2014 permit period, a vacuum street sweeper was leased-purchased and placed in operation. This unit allows a more effective and efficient operation of the street sweeping program allowing additional area coverage at a greater frequency.

During 2013 the video inspection and assessment of the storm drain system was initiated. Approximately 10,000 feet of storm drains were evaluated and cataloged. This led to a maintenance cleaning of more than 8,000 feet of storm drains.

The Town's Stormwater Regulations update was initiated and should be completed early in the 2014/2015 permit year.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
1	Document/Continue Existing Programs.	DPW/Rick Riendeau	Review existing public education programs/ prepare written documentation about existing programs.	Milford had representation at the Local River Advisory Group (as planned) as a representative from Milford was appointed by the Commissioner of DES. 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 applicable approved Building Permits. The Town continues to add documentation to the notebook file containing outlined programs, and tracks activities through its municipal software. Brochures were developed / distributed which cover the proper use of rain gardens as treatment devices and stormwater issues for the general public.	Continue working on the compilation of the notebook file containing outlined programs. Continue to include Stormwater Construction Brochures to all approved Building Permits. Look for opportunities to improve current procedures.
Revised					
2	Coordinate Public Educators.	Stormwater Committee	Organize Town employees, educators, etc. to develop for distribution materials regarding stormwater.	The Team continued to distribute stormwater educational materials/information. Formal school programs established in previous permit years were expanded by adding a “Stormwater Day”. A stormwater day was	Continue distribution of stormwater educational materials/information. Stormwater educational resources are being researched with the intent to provide additional resources to the schools and the Town library.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
Revised				planned for 4th graders at the Heron Pond School. This involved meetings with the teachers from the Heron Pond School to plan age appropriate curriculums.	
3	Coordinate Information and Program Distribution Within the School Network.	Stormwater Committee	Contact 90% of schools within the Town Reach, including grades 4 and 7 students and 10 th grade biology students – a total of approximately 500 students.	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. Approximately 500 students are involved. A Stormwater Day was planned for the Heron Pond School but was cancelled due to poor weather conditions. Scheduling conflicts did not allow rescheduling.	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. Efforts are underway to establish a continuing stormwater special focus program for the 4 th grade which may overcome obstacles associated with a single stormwater event. An age appropriate book will be used to aid the curriculum and it is hopeful that an associated exercise will also be performed.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
4	Create Task Committee.	DPW/Rick Riendeau	Establish team/document meeting minutes.	The Stormwater Team was renamed “Stormwater Committee” and has been expanded to also include the Community Development Director, the School Department, the Fire Department and the Stormwater Coordinator.	Stormwater Committee meetings will continue. Minutes will continue to be documented.
Revised	(Revised to Stormwater Committee Year 11)				
5	Conduct Public Meeting/Acquire Public Input.	Planning/ William Parker	Hold Public Meeting.	The Stormwater Ordinance is being reviewed.	Public input will continue to be sought related to the Land Use Regulations. As the Stormwater Ordinance is revised, public input will also be sought through the public meeting process which guides the Planning Board, Board of Selectmen, and Water and Sewer Commission.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
6	Establish Stormwater Information Display at Major Town Events.	Stormwater Committee	Exhibit 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 17, 2013 in which they had a Stormwater Display Board and stormwater handouts. The bulletin board was also displayed at the Pumpkin Festival and Hazardous Waste Collection Day. Also noteworthy is the approximately 20,000 slide showings on local access television. In addition to the slide showings, EPA's video "Reduce Runoff: Slow it Down, Spread it Out, Soak it In" was shown approximately 100 times.	A bulletin board or outreach displays will continue to be evaluated, updated and readied for display at major Town events such as Voting Day in March. The Board will be on display again at the Souhegan Valley Expo.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
7	Establish Storm Drain Stenciling/Community Cleanup Day	DPW/Rick Riendeau	Trash was collected from public roadways throughout the year. DPW conducted a Town-wide brush pickup on and roadside debris is removed via street sweeping.	Nearly 100% of the storm drains outletting to a body of water have been stenciled. Milford participated in the Regional Hazardous Waste Collection Day and DPW conducted the roadside trash pickup. Milford hosted a Hazardous Waste Collection Day on May 4, 2013. Five other days were held in Nashua that were open to Milford residents. Mayflower, Tucker Brook and Rail Trail, Rotch Wildlife Preserve, and trails within Mile Slip Rown Forest were cleaned in both the spring and fall by the land stewards.	Storm drain stenciling will continue as needs are identified. Community Cleanup Days will continue. The Town-wide brush pickup is scheduled for April 29 & 30, 2014. Trails will continue to be cleaned and maintained by land stewards. A Hazardous Waste Collection Day is scheduled for May 3, 2014 in Milford as well as 5 other dates within Nashua. Members of the Stormwater Committee are working with other Town groups to organize a Town-wide road side cleanup scheduled for the first week in May.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
8	Map Outfalls and Receiving Waters.	DPW/Rick Riendeau and GIS Coordinator	Produce a map showing outfalls and receiving waters.	The Town invested in aerial images of the community and planimetrics developed in 2010 which were updated in 2013. 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. As part of the continuing storm drain evaluation program, accuracy of the GIS continues to be assessed and improved.	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 continue populating the new datasets, focusing on the urbanized area along the Souhegan River and additional portions of the stormwater system as funding allows during 2014. A stormwater asset management program is being established.
Revised					
9	Evaluate Need for a Stormwater Ordinance.	Stormwater Committee	Prepare Storm Sewer (Stormwater) Ordinance for adoption.	After the required Public Hearing Process, the Stormwater Regulations were adopted with the assistance of a consultant and legal counsel on April 9, 2007 with an effective date of June 4, 2007. Enforcement Response Procedures were developed and are used as appropriate. Additional permitting guidance was produced during 2011. The Ordinance is being reviewed and redrafted.	This document will continue to be used and evaluated for areas requiring modifications. The updated Ordinance will be publicly reviewed and re-adopted during the spring/summer of 2014.
Revised					

10	Train Town Employees in Illicit Discharge Detection (IDD).	DPW/Rick Riendeau	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. The training program remains available in the event that new-hires or staff with changing responsibilities need a review. Reported incidents have been documented by the Illicit Discharge Reporting Form and followed up by appropriate Town personnel. The IDD program has been documented as a SOP in the Town's stormwater management program.	Employees will continue to be provided with the latest available documentation related to characteristics of an illicit discharge. The training lectures and videos will be available to staff as necessary.
Revised	<i>(Modified in Year 1 to NOT utilize volunteers)</i>				
11	Develop Dry Weather Screening of Outfalls.	DPW/Rick Riendeau	Develop dry weather screening forms and document findings.	Dry weather rescreening of outfalls was performed utilizing a visual inspection system during Year 9.	Continue to revisit outfalls and conduct repeat dry weather screening. Prioritize areas with historic issues. This program is subject to refinement based upon the revised MS4 Permit, when issued.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
12	Develop System of Identifying Illicit Discharges/Initiate Program to Eliminate Them.	Fire Department, DPW/Rick Riendeau, Assistant Health Officer/ Fred Elkind	Develop plan for elimination of illicit discharges. Begin program to identify and eliminate identified illicit discharges.	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. The procedure was documented as a SOP.	Continue to refine the illicit discharge detection program. Acquire appropriate tools for use by the team responsible for detection and continue training, as needed. Await the revised MS4 permit for further guidance.
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/Rick Riendeau / Fred Elkind	Highlight areas of Town requiring outfall mapping effort. Once outfall areas have been identified, continue to requiring mapping.	New planimetrics data has been finalized and converted to GIS format. A GIS stormwater plan has been developed.	The Town will refine the data, fill in gaps, and begin to expand the stormwater mapping data beyond outfalls. 2014 efforts will include engineering review of catch basins and storm drains and expansion of the video data gathering effort. A stormwater asset management program is being established.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
14	Document Existing Programs and Expand Them As Required.	Stormwater Committee	Review existing procedures and regulations.	New Development Regulations were adopted February 24, 2009. Zoning amendments protecting buffers were approved at the Town Meeting on March 8, 2011. A new zoning district which incorporates stormwater management was approved at the 2012 Town Meeting.	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.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
15 Revised	Document and Enhance Procedures for the MS4 System.	DPW/Rick Riendeau	Complete review of MS4 maintenance procedures.	There has been ongoing review of MS4 maintenance procedures. Code Enforcement is tracking post-development stormwater inspections through the MUNIS software system. Begin cataloging and assessing stormwater assets. A contractor was selected to provide inspection and evaluation of the stormwater system and more than 9,000 feet were evaluated.	Continue refinement of the maintenance procedures. A significant portion of the stormwater system was cleaned and evaluated by TV camera during 2013. This program will be expanded during 2014/2015. The inspection and evaluation contract will be continued with a goal of adding more than 15,000 feet to the data base.
16	Incorporate Best Management Practices Into the Town Master Plan.	Applicable Town Departments/ William Parker	Update 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	The Town will continue to work on economic policies as part of the Master Planning process. These policies will incorporate stormwater

Revised		<p>Board updated the Facilities Chapter including wording supporting Stormwater BMPs. The Planning Board updated the Traffic and Transportation of the Master Plan during June, 2012. The Planning Board revised the open space ordinance which incorporated stormwater provisions during 2011. The Town continues to develop an Economic Development Policy through the work of the Economic Development Advisory Committee (EDAC). The goal of EDAC is to develop and recommend an economic development policy in accordance with the goals of the Milford Board of Selectmen and Milford Master Plan which will include stormwater management practices.</p>	management.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
17 Revised	Document and Enhance Employee Training Procedures.	DPW/Rick Riendeau	Complete review of training programs.	All highway personnel are routinely scheduled to attend T ² training at least one time per year. Program topics included LID, and drainage and stormwater management. Concepts are brought back to “other” employees. Training videos were obtained by the Town and employees are viewing the videos. Training videos have continued to be available for new employees and for updating existing employees. Fire Department personnel continue attend training for response to hazardous environmental releases.	Document existing training programs and continue support of training events. Training sessions will be held throughout the year for new employees as required. Additional training events are being scheduled for 2014.
18 Revised	Evaluate the Use of Pesticides, Sand, and Salt.	DPW/Rick Riendeau	Complete review of existing procedures.	There is no intentional pesticide use by the Town. 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 is ongoing. Usage will continue to be carefully monitored. There are no plans to utilize pesticides. Upgraded equipment and procedures are intended to minimize salt/sand usage. Facilities to allow wetted ice prevention chemicals are being planned.

6a. Former Additions

19	Perform Catch Basin Cleaning.	DPW/Rick Riendeau	Complete an annual catch basin cleaning event.	Catch basin cleaning event was completed.	Clean catch basins per schedule during 2014/2015. The effectiveness of the cleaning process will be increased by the use of the Town’s vacuum capabilities provided by the new street sweeping equipment.
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20	Perform Street Sweeping.	DPW/Rick Riendeau	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 during 2014/2015. A new vacuum-assisted street sweeper was leased-purchased during 2013 to increase the effectiveness of street sweeping.
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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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – 2014/2015
	Not Applicable				
Revised					
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
2011	22	1,004.34	2,500
2012	16	725	1,400
2013	21	1,067	2,500

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed – Coordinator named	(y/n)	Y
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.)	N/A
Household hazardous waste collection days* <ul style="list-style-type: none"> ■ days sponsored ■ community participation ■ material collected 	(#) (%) (tons or gal) (y/n)	6** N/A N/A Y
School curricula implemented (initiated)		

* Regional information maintained at the Nashua Regional Planning Commission.

** Includes 5 Hazardous Waste Collection Days open to Milford Residence; however, were hosted in Nashua.

*** Education Opportunities are made available to approximately 80% of the Milford households.

Legal/Regulatory

	In Place			Under Review	Drafted	Adopted
	Prior to Phase II					
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 <u>actual number of outfalls</u> (within urbanized area)	(#)	90 est.
System-wide mapping complete	(%)	In Progress
Mapping method(s)		
▪ Paper/Mylar	(%)	N/A
▪ CADD	(%)	N/A
▪ GIS	(%)	95%
Outfalls inspected/screened	(# or %)	Complete
Illicit discharges identified	(#)	N/A
Illicit connections removed	(#)	0
	(est. gpd)	0
% of population on sewer	(%)	30
% of population on septic systems	(%)	70

Construction

Number of construction starts (> 1 acre)	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	N/A
Site inspections completed	(# or %)	16
Tickets/stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	4
SWMP's reviewed		6
SWP's Issued		17

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.)	1x/yr.
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr.)	1x/yr.
Total number of structures cleaned	(#)	1100
Storm drain cleaned	(LF or mi.)	LF
Quantity of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Not calculated
Disposal or use of screenings (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 ¹
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1x/yr ¹

Quantity 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	(#)	Leased- Purchased
Vacuum street sweepers specified in contracts	(y/n)	N/A

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	70
	% CaCl ₂	Not used
	% MgCl ₂	Not used
	% CMA	Not used
	% Kac	Not used
	% KCl	Not used
	% Sand	30
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	N
Automatic or zero-velocity spreaders used (calibrated annually – checked regularly)	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	N/A
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	Y

¹ Weekly follow-up of street sweeping in downtown area.