

Municipality/Organization: Town of North Reading, MA
EPA NPDES Permit Number: MAR041215
MassDEP Transmittal Number: W-041239
**Annual Report Number
& Reporting Period:** Year 13: April 1, 2015 – March 31, 2016

**NPDES Small MS4 General Permit
Annual Report
(Due: May 1, 2016)**

Part I. General Information

Contact Person: Michael P. Soraghan, P.E. **Title:** Town Engineer
Telephone #: 978-357-5226 **Email:** msoraghan@northreadingma.gov
Mailing Address: Town of North Reading, 235 North Street, North Reading, MA 01864

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 P. Gilleberto

Printed Name: Michael P. Gilleberto

Title: Town Administrator

Date: 4/30/2016

Part II. Self-Assessment

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

The Town reviewed its Permit Year 10 (2013) GPS survey of its stormwater system. As a result of this review, field verification of all outfalls identified in the survey is planned for Permit Year 14 (2017).

The Town continued a program to clean and conduct CCTV inspection of drain structures, pipes and culverts located under roadways scheduled for paving projects. This year the Town completed CCTV inspection of over 2,000-feet of drain pipe and culverts. Several sections were targeted for potential upgrades as budget allows.

The Town is continuing its efforts to reduce sediments by conducting street sweeping on all streets, cleaning out all catchbasins and hiring a vector service to clean out all stormceptors each year.

The Town held a successful Hazardous Waste Day on September 12, 2015. A Special Waste Collection and paper shredding event Day was held on June 6, 2015. This included propane tanks, tires, and car batterers as well as rigid plastic disposal. Curbside metal collection was also held on May 16, 2015. Stormwater brochures and Pet waste "Scoop it" rack cards provided through the Greenscapes Program continue to be available at Town Hall.

The Town is continuing research into the installation of sanitary sewer in key areas of the Town. A Draft Environmental Impact Report, prepared by Wright-Pierce and dated February 2016, presenting water and wastewater management alternatives has been published in the Environmental Monitor for review and comment on March 23, 2016.

The Town, along with Martins Pond Association volunteers has now installed and continues to maintain ten (10) residential rain gardens. The North Reading Garden Club and the Friends of the North Reading Council on Aging designed and installed a rain garden to collect roof runoff from the Third Meeting House. They also held events throughout the year educating the public through library displays, in schools, and demonstrations at the North Reading Fishing Derby.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 14
1A	Two meetings with Town	DPW/ M. Soraghan	Hold a meeting on stormwater in Town	Held several public meetings with the Town that including pubic involvement from Martins Pond Association.	Continue to hold meetings with the Town that includes public involvement from Martins Pond Association.
Revised					
1B	Develop plan for public education	DPW/ M. Soraghan	Identify and develop public education programs.	Coordinated with Martins Pond Association to install Library and Town Hall displays and displays at public events.	Continue to coordinate with existing Town agencies and non-profit groups.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 14
2A	Two meetings with Town	DPW/ M. Soraghan	Number of meetings held.	Held several meetings with Town that including pubic involvement from Wastewater Planning Advisory Committee and Martins Pond Association.	Continue meetings with Town that include pubic involvement from Wastewater Planning Advisory Committee and Martins Pond Association.
Revised					
2B	Public Participation Plan	DPW/ M. Soraghan	Number of programs developed.	The Town along with Martins Pond Assoc. volunteers, installed 5 rain gardens and held informative public demonstrations about stormwater at the Apple Festival and Lowell National Historic Park	Continue to coordinate with existing Town agencies/groups including the Martins Pond Association Reading/North reading Stream Team, and the Ipswich River Watershed Association to implement current grant projects.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 14
3A	Illicit Connection Identification	DPW/ M. Soraghan	# of dry weather outfalls assessed.	In permit year 7 screening occurred at 24 outfalls.	Measureable goals for 2003 permit have been met.
Revised					
3B	Illicit Source Identification	DPW/ M. Soraghan	# of illicit sources investigated.	In permit year 7 screening occurred at 24 outfalls.	Measureable goals for 2003 permit have been met.
Revised					
3C	Ordinance development to prohibit non-storm water flows	DPW/ M. Soraghan	Bylaw/Ordinance adopted by Town.	Storm Water Management Bylaw was approved and became effective in Permit Year 4.	Measureable goals for 2003 permit have been met.
Revised					
3D	Storm Water map development	DPW& Planning M. Soraghan	Map completed showing outfalls.	Completed mapping of storm water system that included outfalls, drainage piping, catch basins, and manholes in Permit Year 3. Conducted windshield survey Permit Year 9 in order to update drainage map for any new construction or redevelopment since previous mapping was completed. Completed GPS survey of drain system in Year 10. Includes opening and inspection of all structures.	Measureable goals for 2003 permit have been met.. The Town plans to field verify the 436 outfalls previously mapped. Initial screening of outfalls will also be conducted.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 14
4A	Ordinance development for waste control	DPW/ M. Soraghan	Recommend ordinance/ bylaw language at Town Meeting.	Storm Water Management Bylaw was approved and became effective in Permit Year 4.	Measureable goals for 2003 permit have been met.
Revised					
4B	Formalize site plan review procedures	DPW/ M. Soraghan	Site plan review procedures document complete.	Storm Water Management Bylaw was approved and became effective in Permit Year 4. Rules and Regulations adopted in Permit Year 8.	Measureable goals for 2003 permit have been met.
Revised					
4C	Revised ordinance to address storm water pollution	DPW/ M. Soraghan	Recommend ordinance/bylaw language at Town Meeting.	Storm Water Management Bylaw was approved and became effective in Permit Year 4.	Measureable goals for 2003 permit have been met.
Revised					
4D	BMP Manual	DPW/ M. Soraghan	Handbook completed and adopted by Town.	The Town of North Reading's BMP Manual was reviewed and finalized in Permit Year 3. Manual is referenced in Rules and Regulations adopted in Permit Year 8.	Measureable goals for 2003 permit have been met.
Revised					
4E	Formalize Inspection Procedures	DPW/ M. Soraghan	Standard operating procedures on inspection complete.	Storm Water Management Bylaw was approved and became effective in Permit Year 4. Rules and Regulations adopted in Year 8 include inspection requirements.	Measureable goals for 2003 permit have been met.
Revised					

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 14
5A	Procedures for long term O& M	DPW/ M. Soraghan	Adoption of procedures by Town.	Storm Water Management Bylaw was approved and became effective in Permit Year 4. Rules and Regulations have been adopted by the Town in Permit Year 8.	Measureable goals for 2003 permit have been met.
Revised					
5B	Site plan review procedures for water quality impacts	DPW/ M. Soraghan	Adopt procedures.	Storm Water Management Bylaw was approved and became effective in Permit Year 4. Rules and Regulations have been adopted by the Town in Permit Year 8.	Measureable goals for 2003 permit have been met.
Revised					
5C	BMP Handbook	DPW/ M. Soraghan	BMP Handbook	The Town of North Reading's BMP Manual was reviewed and finalized in Permit Year 3. Manual is referenced in Rules and Regulations adopted by the Town in Permit Year 8.	Measureable goals for 2003 permit have been met.
Revised					
5D	Revise ordinance to address storm water pollution	DPW/ M. Soraghan	Recommend ordinance/bylaw language at Town Meeting.	Storm Water Management Bylaw was approved and became effective in Permit Year 4.	Measureable goals for 2003 permit have been met.
Revised					

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 14
6A	Employee Training	DPW/ M. Soraghan	# of employees trained.	Conducted Storm Water Management workshop with Town departments including the DPW in Permit Year 2. Eighteen (18) employees were trained	Measureable goals for 2003 permit have been met.
Revised					
6B	Prioritized Street Sweeping	DPW/ M. Soraghan	Schedules and prioritized street sweeping	The Town purchased a mechanical sweeper in 2005 and has since increased street sweeping on a more frequent basis in prioritized areas.	Measureable goals for 2003 permit have been met.
Revised					
6C	Spill Response and Prevention	DPW/ M. Soraghan	Develop procedures.	At Storm Water Management Workshop discussed proper spill response and prevention BMP's in Permit Year 2.	Measureable goals for 2003 permit have been met.
Revised					
6D	Prioritized Catch Basin Cleaning	DPW/ M. Soraghan	Schedules and prioritizes cleaning.	Outlined recommendations in the Town's Storm Water Capital Improvement Program Report that includes modification to the Town's current catch basin cleaning program in Permit Year 3. Considered changes to the catch basin cleaning program based on prioritization and cleaning equipment recommendations.	Measureable goals for 2003 permit have been met.
Revised					

Part IV. Summary of Information Collected and Analyzed

A Town-wide survey of the drain system had been completed and installed on both the Director of Public Works and Town Engineer's computer. This GIS Survey involved opening and inspecting the interior of all structures located in the previous "windshield survey" and collecting data including the material and condition of each structure and connecting pipes. As part of the project the Town has initiated increased cleaning of 77 catchbasins and 34 manholes which were found to have high levels of sediment.

The Town has continued to fund a program to clean and CCTV drain structures in areas scheduled to be paved. CCTV inspection was completed on over 2000-feet of drain pipe. This continues to enable the Town to address any maintenance needs before paving.