

**Municipality/Organization:** Town of North Reading, MA  
**EPA NPDES Permit Number:** MAR041215  
**MassDEP Transmittal Number:** W-041239  
**Annual Report Number  
& Reporting Period:** Year 9: April 11 – March 12

5/1/12

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## **NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2012)**

### **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:** 

**Printed Name:** Greg Balukonis

**Title:** Town Administrator

**Date:**

## **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 has revised the Stormwater Management Rules and Regulations and passed them at Town Meeting in Year 8. The Town is continuing research into the installation of sanitary sewer in key areas of the Town. Several Town meetings have been held to review the findings of the Comprehensive Wastewater Management Plan, developed by Weston and Sampson, and community input on the possible installation of sanitary sewer in the town.

The Town, along with the Martins Pond Association volunteers has installed five rain gardens throughout the Town. The Martins Pond Association held events throughout the year educating the public through library displays, in schools, demonstrations at the Apple Festival, and at the Lowell National Historic Park.

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

The Town cleaned debris out of 20 outfalls, replaced 4 manholes and 4 catchbasin and 200' of drain pipe to these outfalls.

Recently, the Town completed a windshield survey of all drainage structures and added an additional 300 drain manholes and 300 catchbasins previously unmapped. A new GIS layer has been created and will be used to locate and describe all the BMP's in the Skug River basin, such as pervious pavement, detention ponds, rain gardens, and stormceptors.

The Town held two successful Hazardous Waste Days, the first on Jun 4, 2011 for propane tanks, tires, car batteries, and mercury thermometers, the second on September 17, 2011 for household chemicals and light bulbs.

### 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 9<br>(Reliance on non-municipal partners indicated, if any)              | Planned Activities Permit Year 10                                                                       |
|----------|-----------------------------------|-------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1A       | Two meetings with Town            | DPW/<br>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/<br>M. Soraghan           | Identify and develop public education programs. | Coordinated with Martins Pond Association to install Library 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 9<br>(Reliance on non-municipal partners indicated, if any)                                                                                                    | Planned Activities Permit Year 10                                                                                                                                                                                    |
|---------------|---------------------------|-------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2A<br>Revised | Two meeting with Town     | DPW/<br>M. Soraghan           | Number of meetings held.      | Held several meetings with Town that including public involvement from Wastewater Planning Advisory Committee and Martins Pond Association.                                                      | Continue meetings with Town that include public involvement from Wastewater Planning Advisory Committee and Martins Pond Association.                                                                                |
| 2B<br>Revised | Public Participation Plan | DPW/<br>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. |

### 3. Illicit Discharge Detection and Elimination

| BMP ID #      | BMP Description                                         | Responsible Dept./Person Name           | Measurable Goal(s)                  | Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)                                                                                                                                                                                                                                                | Planned Activities Permit Year 10               |
|---------------|---------------------------------------------------------|-----------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 3A<br>Revised | Illicit Connection Identification                       | DPW/<br>M. Soraghan                     | # of dry weather outfalls assessed. | In permit year 7 screening occurred at 24 outfalls.                                                                                                                                                                                                                                                                                       | Measurable goals for 2003 permit have been met. |
| 3B<br>Revised | Illicit Source Identification                           | DPW/<br>M. Soraghan                     | # of illicit sources investigated.  | In permit year 7 screening occurred at 24 outfalls.                                                                                                                                                                                                                                                                                       | Measurable goals for 2003 permit have been met. |
| 3C<br>Revised | Ordinance development to prohibit non-storm water flows | DPW/<br>M. Soraghan                     | Bylaw/Ordinance adopted by Town.    | Storm Water Management Bylaw was approved and became effective in Permit Year 4.                                                                                                                                                                                                                                                          | Measurable goals for 2003 permit have been met. |
| 3D<br>Revised | Storm Water map development                             | DPW & Planning<br>M. Soraghan/S. Murphy | 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 this year to update drainage map for any new construction or redevelopment since previous mapping was completed. Nearly 300 catchbasins and 300 manholes were added to the map. | Measurable goals for 2003 permit have been met. |

#### 4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description                                    | Responsible Dept./Person Name | Measurable Goal(s)                                    | Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)                                                                  | Planned Activities Permit Year 10                |
|----------|----------------------------------------------------|-------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 4A       | Ordinance development for waste control            | DPW/<br>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/<br>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/<br>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/<br>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/<br>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 9 (Reliance on non-municipal partners indicated, if any)                                                                              | Planned Activities Permit Year 10                |
|---------------|-------------------------------------------------------|-------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 5A<br>Revised | Procedures for long term O& M                         | DPW/<br>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. |
| 5B<br>Revised | Site plan review procedures for water quality impacts | DPW/<br>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. |
| 5C<br>Revised | BMP Handbook                                          | DPW/<br>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. |
| 5D<br>Revised | Revise ordinance to address storm water pollution     | DPW/<br>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. |

## 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 9<br>(Reliance on non-municipal partners indicated, if any)                                                                                                                                                                                                                | Planned Activities Permit Year 10               |
|----------|----------------------------------|-------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 6A       | Employee Training                | DPW/<br>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.                                                                                                                                                                    | Measurable goals for 2003 permit have been met. |
| Revised  |                                  |                               |                                           |                                                                                                                                                                                                                                                                                                              |                                                 |
| 6B       | Prioritized Street Sweeping      | DPW/<br>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.                                                                                                                                                                       | Measurable goals for 2003 permit have been met. |
| Revised  |                                  |                               |                                           |                                                                                                                                                                                                                                                                                                              |                                                 |
| 6C       | Spill Response and Prevention    | DPW/<br>M. Soraghan           | Develop procedures.                       | At Storm Water Management Workshop discussed proper spill response and prevention BMP's in Permit Year 2.                                                                                                                                                                                                    | Measurable goals for 2003 permit have been met. |
| Revised  |                                  |                               |                                           |                                                                                                                                                                                                                                                                                                              |                                                 |
| 6D       | Prioritized Catch Basin Cleaning | DPW/<br>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. | Measurable goals for 2003 permit have been met. |
| Revised  |                                  |                               |                                           |                                                                                                                                                                                                                                                                                                              |                                                 |

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

During development of the Stormwater Management Rules and Regulations fees have been put in place to offset the cost of administration processing and engineering review of stormwater applications. These fees include an Application Fee (\$500), Review Fee (depending on the complexity of the project) and an Inspection Fee (also depending on the complexity of the project). The Review and Inspection fee will be determined by the Town Engineer. In addition, in-house meetings with departments that deal with development to discuss the upcoming permit and the possibility of establishing a storm water utility have been held.