

Municipality/Organization: Rowley

EPA NPDES Permit Number: MAR041218

MADEP Transmittal Number: W- 03572

**Annual Report Number
& Reporting Period:** March 2011– March 2012 9 – YEAR8

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Brent Baeslack Title: Conservation Agent

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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: Brent Baeslack

Title: Conservation Agent

Date: 04/10/12

Part II. Self-Assessment

The Town of Rowley has continued to make progress in our Storm Water Management goals for Year Nine. Representing the Town I have been attending numerous workshops on the new requirements for the next issuance of the MS4 General Permit. I have attended the following workshops:

- Coastal Erosion Control Workshop April 6, 2011;
- MS4 LID EPA Clinic Horsley & Whitten May 12, 2011;
- MACC Update on Federal Stormwater Permits in MA & Erosion and Sediment Control, beyond hay bales and silt fence

Additionally, the Town has been actively enforcing the storm water management and erosion control bylaw. The Conservation Commission has reviewed and permitted three projects under this bylaw within the reporting period. This is a comprehensive bylaw which seeks to reduce and eliminate erosion control and sedimentation from land disturbance activities that effect 20,000 square feet of soil disturbance. The Town has a map and database of the stormwater outfalls in the two Urbanized Areas. The Town contracted with the Merrimack Valley Planning Commission (MVPC) for this project, and it was completed in the summer of 2008. MVPC worked with the Town's conservation agent and highway surveyor creating the database and the map. The database shows the location, the discharge, the size and condition of the outfall. The Rowley Board of Health has continued enforcing a regulation put into place last year, "Prohibiting Illicit Connections and Discharges to the Municipal Separate Storm System (MS4)". During this year, the Board of Selectmen and Town Meeting continued to support the funding of the Greenscapes program, a coalition of the Ipswich River Watershed Association, Eight Towns and A Bay, and the Salem Sound Coastalwatch. Greenscapes provides public education materials and outreach to the Town's residents. The Boy Scouts completed a Community Service project that stenciled storm drains and distributed door hangers on residences to raise awareness of stormwater impacts.

Brent Baeslack
Conservation Agent
April 10, 2012

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 Years 1, 2, 3 4, 5, 6, 7, 8, & 9 (Reliance on non-municipal partners indicated, if any)
1 Revised	Homeowners	Sel/ConCom	Pamphlets/local TV	Goal achieved. The Town continued its participation in the Greenscapes program. Year nine marked the fifth year of participation. Greenscapes provided reference guides for property owners, a website, and public seminars.
2 Revised	Targeting Education	Sel/ConCom/ Board of Health	Workshops/meetings	Goal achieved. The town's stream monitoring program was formalized under the supervision of the Board of Health. The Board of Health holds regular stream monitoring walks and training sessions.
3	New Development	Sel/ConCom	Participation in project approval	Goal achieved. All new development must follow required stormwater management regulations. ConCom, Planning Board and Highway all work as checks and balances on this process.
4 Revised	Existing Development	Sel/ConCom	Mailings/Meetings	Goal achieved, through Greenscapes participation. Pamphlet distributed to residents and business via Town Hall, library and other public sites, the media and at businesses

1a. Additions

1.5	Develop stormwater website	ConCom	Add section to town website on stormwater by April 06	This goal has been achieved by a link to the Greenscapes website, as well as other relevant websites from the Town's website has been set up. The Conservation Commission page on the Town's website contains the links, as well as other pertinent information, such a copy of the Town's Stormwater Bylaw.
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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 Years 1, 2, 3, 4, 5, 6, 7, 8, & 9 (Reliance on non-municipal partners indicated, if any)
5.1 Revised	Activities/public participation – Stream clean-up & monitoring	ConCom changed to Board of Health	Organize stream clean up day/ develop monitoring program	Goal achieved. The Board of Health is running the stream monitoring program. Volunteers receive training and monitoring sessions throughout the year.
5.2 Revised	Activities/public participation – Volunteer monitoring	ConCom changed to Board of Health	Establish volunteer watershed teams	Local residents and volunteers are working with the Board of Health and Parker River Clean Water Association.
5.3 Revised	Activities/public Participation Storm Drain Stenciling	Highway ConCom	Identify storm drainage systems Stencil storm drains	Goal achieved. The storm drains have been identified and most of the drains in the applicable areas have been stenciled by Boy Scout Community Service Project.
5.4 Revised	Adopt a Stream Program – Adopt a stream	ConCom changed to Board of Health	Recruit Volunteers	The Board of Health is working with volunteers on the streaming monitoring program.
6.1	Involvement/public opinion – Watershed Organization	ConCom changed to Board of Health	Establish watershed organization from stream monitoring group	Goal met. Board of Health is formally overseeing the stream team monitoring program.
6.2	Involvement/public opinion	ConCom changed to Board of Health	Organize to encourage public participate	Goal met. Stream teams meet under the Board of Health supervision.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Years 1, 2, 3, 4, 5, 6, 7, 8, & 9 (Reliance on non-municipal partners indicated, if any)
7 Revised	Develop Storm Water System Map	Highway	Complete sub-basin drainage maps	Goal met. The Board of Selectmen contracted with Merrimack Valley Planning Commission to prepare a stormwater system map. Map was completed in the summer of 2008.
8 Revised	Develop storm water bylaw to prevent illicit discharges	Selectmen/ConCom	Draft bylaw	Goal met. The November 5, 2007 Special Town Meeting adopted the Stormwater Management and Erosion Control Bylaw. The state Attorney General approved it on November 20, 2007.
9 Revised	Develop & implement plan to detect & address non storm water discharges	Board of Health	Complete plan and distribute to volunteer groups	Goal met. The Board of Health adopted a Regulation Prohibiting Illicit Discharges to the Municipal Separate Storm Sewer System on January 7, 2008. The regulation went into effect on February 1, 2008.
10. Revised	Educate public employees, businesses, public, etc. on illegal discharge & improper disposal of waste	Highway	Workshops, flyers and posters	Goal met. The Town continues to use Greenscapes to educate the public on the illegal discharge and improper disposal of waste. Additionally, door hangers and flyers developed by the Conservation Commission are used to accomplish this goal.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Years 1, 2, 3, 4, 5, 6, 7, 8, & 9
12 Revised	Develop Bylaw requiring erosion & sediment controls	ConCom	Adopt bylaw	(Reliance on non-municipal partners indicated, if any) Goal met. The Town adopted a Stormwater Management and Erosion Control Bylaw on November 5, 2007. Additionally, the Town already has an earth removal bylaw, which addresses soil transport & volume disturbance.
13 Revised	Requirements for construction site waste control	Planning, Health & ConCom	Prepare guidelines for site operators	Goal met. The Town's Stormwater Management and Erosion Control Bylaw addresses this goal. All three departments require waste to be managed through permit requirements. The ConCom Agent generally reviews special permits and site plans to ensure guidelines are met. Health Department issues dumpster permits.
14 Revised	Procedures for site inspection and enforcement	ConCom Planning	Implement site inspections and enforcement	Stormwater bylaw addresses this goal. Provides regulations & enforcement capabilities Conservation Department preforms site inspections.
15. Revised	Site Plan Review Procedure	Planning	Participation in review and approval process for new sites	Goal met. A comprehensive site plan review currently takes place. Stormwater runoff considerations are part of that review process. Planning Board will memorialize current practice in a written procedure. Conservation Dept. comments on site plan applications.
16. Revised	Identify BMPs for specific construction sites	ConCom Planning	Prepare checklist for site review process	Goal met. Stormwater Bylaw and site plan reviews require evaluations of specific BMPs for the site. Further review of projects occurs with technical consultants.
17. Revised	Public Input Procedures	Selectmen	Engage watershed organizations in project planning	Goal met. Through the Town's continued participation in Greenscapes and the local stream monitoring program, this goal has been met.
18	Construction site operator training	Highway	Workshop/Flyer	Highway Department implements best management practices and uses the stormwater management and erosion control bylaw in its practices

19.	Preservation of natural vegetation	ConCom	Identify sensitive areas in planning/review process	Goal met. ConCom reviews all plans and offers recommendations, and, in some cases town's Wetlands Bylaw may apply, if not within jurisdiction of the state Wetlands Protection Act. Vegetated buffers are incorporated in development projects where appropriate.
20.	Good housekeeping	ConCom	Perform site inspection	ConCom Agent, Building Inspector and Health Agent conduct site inspections. ConCom Agent as cited BMP #13, is the department head responsible for the enforcement and implementation of the stormwater bylaw. Specific requirement of permit.
21.	Spill Prevention	Fire Dept.	Identify designated materials storage sites	Goal met. Fire Chief has a list of entities that store hazardous materials in Town. The Town is a member of the Northern Essex Regional Emergency Planning Committee, which enables the Town to receive updated information on hazardous materials in the area.

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 Years 1, 2, 3, 4, 5, 6, 7, 8, & 9 (Reliance on non-municipal partners indicated, if any)
24 Revised	Evaluate existing drainage structures	Highway	Inventory existing catch basins & other treatment facilities	Goal met. The stormwater map and stormwater outfall database for the urbanized areas provide the information on the existing catch basins and outfalls by MVPC.
25 Revised	Develop and implement strategies which include structural & non-structural management practices	Highway	Prepare Best Management Practices Checklist	Highway Department will prepare the BMP checklist.
26	Develop bylaw on post construction runoff from new development	ConCom	Adopt bylaw	Goal met. The Town's Stormwater Management and Erosion Control Bylaw 2007 addresses this goal.
27	Plan to implement BMP's in design	Planning	Participation in design of redevelopment projects	Highway Department currently works with Planning Board in stormwater runoff on redevelopment projects.
30 Revised	Establish Goals for Storm Water Runoff Quantity and Quality	ConCom	Incorporate standards in plan approval	Goal met. This criteria is implemented through the project review and site inspection required by the stormwater bylaw and Planning Board permit modeling.
31 Revised	Coordinate BMP with upstream and downstream municipalities	ConCom	Coordinate water quality goals with Georgetown and Ipswich	Goal met. ConCom Agent has engaged with the regional planning agency on coordinating BMPs consistent with EPA requirements. Through the Town's participation in the Parker River Clean Water Monitoring Program, we are making progress in this goal. PRCWA is working in Newbury and Georgetown.

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 Years 1, 2, 3, 4, 5, 6, 7, 8, & 9 (Reliance on non-municipal partners indicated, if any)
32 Revised	Inventory all municipal operations which may contribute to storm water runoff water quality	Highway	Prepare a list of municipal operations.	Highway Department has list. Highway Department will work with ConCom agent on making a computerized database.
34 Revised	Employee Training	Highway	Workshops/Posters	Highway Department supervisor has provided verbal instruction and training. Supervisor has provided re-training when necessary. Public outreach flyers are available.
36 Revised	Storage Facility Management	Fire Department	Inventory Stored Materials	Fire Chief has identified buildings containing stored materials. Fire Chief has a list of all materials stored in buildings on his list. He conducts an annual review, to reconcile the data he has with the businesses to confirm if they are still actively in business or have closed.
39 Revised	Spill Response Plan	Fire Department	Prepare plan and distribute to affected departments	Fire Chief has a spill response plans in place dealing with certain types of hazardous waste disasters. These include the manner in which the Town addresses the response to spills of hazardous materials. "Fire Chief will distribute it to the relevant Town departments. Chief is chairman of the Local Emergency Planning Commission, which oversees hazardous spills.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Legal/Regulatory

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

Mapping and Illicit Discharges

Outfall mapping complete	Urban 100%
Estimated or actual number of outfalls in the Urbanized Areas	61
System-Wide mapping complete	45%
Mapping method(s)	
▪ Paper/Mylar	(%)
▪ CADD	(%)
▪ GIS	100%
Outfalls inspected/screened	61
Illicit discharges identified	0
Illicit connections removed	0
% of population on sewer	0%
% of population on septic systems	100%

Construction

Number of construction starts (>1-acre) – for Year 9	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%
Site inspections completed	100%
Tickets/Stop work orders issued	0
Fines collected	0
Complaints/concerns received from public	0

Post-Development Stormwater Management

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

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	350
Qty. of screenings/debris removed from storm sewer infrastructure	75 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	compost
Cost of screenings disposal	\$5,060

Average frequency of street sweeping (non-commercial/non-arterial streets)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	1/yr
Qty. of sand/debris collected by sweeping	185 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	compost

Cost of sweepings disposal	\$0
Vacuum street sweepers purchased/leased	None
Vacuum street sweepers specified in contracts	Yes

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)	
▪ Fertilizers	N/A
▪ Herbicides	N/A
▪ Pesticides	N/A

Anti-/De-Icing products and ratios	50 % Sand Domestic
• Rock salt ASTM Specifications – 50%	
• Domestic	
• Foreign	
• Solar	
Pre-wetting techniques utilized	N
Manual control spreaders used	Y
Automatic or Zero-velocity spreaders used	N
Estimated net reduction in typical year salt application	100 tons
Salt pile(s) covered in storage shed(s)	Y
Storage shed(s) in design or under construction	N