



## Town of Salem, New Hampshire Engineering Department

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Robert E. Puff Jr. PE, Director

James S. Brown, Senior Engineer

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April 29, 2011

Glenda Velez  
United States Environmental Protection Agency  
5 Post Office Square – OEP06-01  
Boston, Massachusetts 02109-3912

Re: National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)  
Annual Report for Town of Salem, NH (Permit Year 8)  
**Permit Number: NHR041031**

Ms. Velez:

Pursuant to the requirements of EPA's "National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems" issued May 1, 2003; the Town of Salem, NH is pleased to submit the enclosed Annual Report for Permit Year 8.

If you have any questions regarding this report, please feel free to contact Richard Russell, Director of Public Works, at (603) 890-2154 or me at (603) 890-2033.

Very truly yours,

Robert E. Puff, Jr. P.E.  
Director of Engineering  
Town of Salem, NH

enclosures

cc: Keith Hickey, Town Manager (w/out enclosure)  
Richard Russell, Director of Public Works, Town of Salem, NH  
Jaurice A. Ogle, P.E., Project Manager, Weston & Sampson

**Municipality/Organization:** Town of Salem, New Hampshire

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**EPA NPDES Permit Number:** NHR041031

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**Annual Report Number  
& Reporting Period:** Year 8: April 1, 2010 – March 31, 2011

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## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2011)

### Part I. General Information

Contact Person: Richard Russell Title: Director of Public Works

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Telephone #: (603) 890-2154 Email: RRussell@ci.salem.nh.us


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Mailing Address: Public Works, 21 Cross Street, Salem, New Hampshire 03079

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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: 

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Printed Name: Keith R. Hickey

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Title: Town Manager

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Date: 

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

The Town of Salem has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

See Part III for status of BMPs.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Permit Year 9 (if applicable)</b>
1-1	Maintain Existing Watershed Signs at Canobie Lake	Dept. of Public Works	Maintain signs throughout permit term	New watershed signs were put up around Canobie Lake during the 7 <sup>th</sup> permit year. These signs were maintained during Year 8.	Continue to maintain watershed signs around Canobie Lake.
1-2	Broadcast Informational Stormwater Video on Local Television	Engineering Department	Broadcast video annually beginning with Permit Year 2	A stormwater video was broadcast on local television during Permit Year 8 and aired 70 times on various dates between March 12, 2010 and September 16, 2010.	Continue to broadcast stormwater videos on the local cable access channel.
1-3	Develop Stormwater Brochure Brochure Available for Distribution	Engineering Department	Develop brochure by May 1, 2005 Make brochure available at Town Hall and DPW by May 1, 2006 and distribute to students annually in Permit Years 3 through 5	Copies of the EPA pamphlet/fact sheet “Protecting Water Quality from Urban Runoff” are available at the Town Hall front desk and at the DPW.	Continue to make copies of the EPA pamphlet/fact sheet “Protecting Water Quality from Urban Runoff” available at Town Hall and the DPW.
1-4	Stormwater Information added to Engineering Department’s website Maintain/update information on Engineering Dept. Website	Engineering Department	Stormwater information added to Engineering Department website by May 1, 2005 Update/maintain website during Permit Years 3 through 5	<b>BMP Completed.</b> The Town continued to maintain/update links to stormwater resources on the Town’s website.	<b>BMP Completed.</b> Continue to maintain/update links to stormwater resources on the Town’s website.
1-5	Identify locations for 3 kiosks with stormwater bulletins Design Kiosks Install Kiosks Maintain Kiosks	Dept. of Public Works Engineering Dept. Dept. of Public Works Dept. of Public Works	Identify location for kiosks by May 1, 2004 Complete design of kiosks by May 1, 2005 Install kiosks by May 1, 2006 Maintain/update kiosks during Permit Years 4 through 5	<b>BMP Completed.</b> <b>BMP Completed.</b> <b>BMP Completed.</b> Two kiosks were maintained at Canobie Lake and Hedgehog Pond during Permit Year 8. Copies of the EPA pamphlet/fact sheet “Protecting Water Quality from Urban Runoff” are available at each kiosk.	<b>BMP Completed.</b> <b>BMP Completed.</b> <b>BMP Completed.</b> Continue to maintain kiosks at Canobie Lake and Hedgehog Pond and update kiosks with new stormwater information.
1-6	Approach Private Beaches and Mall at Rockingham Park about Installing Informational Kiosks Coordinate Kiosk Installation if Approved	Dept. of Public Works Dept. of Public Works	Approach private beach by May 1, 2006 Kiosk installed within one permit year upon receiving approval	The Salem Fire Dept. pursued funding to build additional kiosks at private beaches and Rockingham Park. However, the Fire Dept. was unable to secure the grant they were pursuing.	Continue to explore funding opportunities for building additional kiosks.

## 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 – Permit Year 9 (if applicable)
2-1	Comply with State Public Notification Guidelines	Planning Board and other Town Departments	Post notices on all applicable meetings	The Town continued to comply with the required state meeting notification guidelines.	Continued compliance with the required state meeting notification guidelines.
2-2	Publicize and Maintain Public Complaint Hotline and DPW Website	Dept. of Public Works	Maintain hotline and continue to respond to complaints from website	During Permit Year 8, the Town continued to maintain a hotline on their website to respond to public work order requests. The Town logs and tracks all work order requests.	Continue to maintain a hotline on the Town website to respond to public work order requests. Continue to log and track all work order requests.
2-3	Hold Annual Household Hazardous Waste Day	Dept. of Public Works	Household hazardous waste collection day held each year. Amount of household hazardous waste collected.	The Annual Household Hazardous Waste Collection Day was held on Saturday, September 11 <sup>th</sup> , 2010.  Hazardous household waste consisting of corrosive liquids, batteries, flammable aerosols and liquids, solid and liquid pesticides, mercury devices, latex and oil based paint, and propane were collected.	The Annual Household Hazardous Waste Collection Day is scheduled for Saturday, September 10 <sup>th</sup> , 2011.
2-4	Continue Mandatory Recycling Program	Dept. of Public Works	Continue existing recycling program throughout permit term.	The recycling program was maintained throughout Permit Year 8.  Approximately 2,029 tons of recyclables were collected in 2010.	Continue existing recycling program.
2-5	Schedule Annual Town Roadside Litter Clean-up Day	Dept. of Public Works	Schedule clean-up day annually. Amount of roadside litter collected and properly disposed	The Town held their Annual Roadside Litter Clean-up from April 6 <sup>th</sup> through April 13 <sup>th</sup> , 2011. The clean-up covered 44 roadways, which amounted to 99.17 lane miles of roadway. Approximately 5 tons of trash was collected town-wide.	Continue to hold Annual Roadside Litter Clean-up event in March or April of 2012.

### 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 – Permit Year 9 (if applicable)
3-1	Continue inspection of new/updated sewer connections	Dept. of Public Works	Continue inspection of all new/updated sewer connections. Number of sewer connections inspected.	The Town inspected 42 new/updated sewer connections during Permit Year 8.	Continue inspection of new/updated sewer connections.
3-2	Identify Priority Areas	Dept. of Public Works	Priority Areas identified by May 1, 2004	<b>BMP Completed.</b>	<b>BMP Completed.</b>
3-3	Map Outfalls/Receiving Waters	Dept. of Public Works	Map completed by May 1, 2007	The Town-wide mapping of outfalls, drain manholes, and catch basins in GIS is complete. This work was completed as part of the Town's Stormwater Inventory and Assessment Project.	The Town will continue to keep their GIS drainage mapping up-to-date, mapping new drainage structures in GIS as a result of new construction.
3-4	Complete Dry Weather Screening of Outfalls	Dept. of Public Works	One round of outfall screening completed by end of permit term	Dry weather screening of outfalls was completed as part of the Stormwater Inventory and Assessment Project. Screening was conducted in conjunction with GIS mapping of outfalls. Samples were collected at four locations where dry weather flow was observed.	<b>BMP Completed.</b> Under the new permit, the Town plans to complete additional dry weather screening of outfalls, which includes revisiting those outfalls where the dry weather criteria may not have been met on the day of inspection.
3-5	Stormwater Ordinance	Dept. of Public Works	Draft stormwater ordinance/amendment language by May 1, 2007	The Town's existing municipal code prohibits illicit discharges to the storm drain system and outlines procedures and penalties for violations.	Under the new permit expected later this year, the Town will amend their existing regulations as needed to meet the requirements of the new permit.
3-6	Develop and Implement System for Elimination of Illicit Discharges	Dept. of Public Works	Based on prioritized results in BMP#3-4, determine procedures to identify and remove illicit connections to drain; maintain records.	The Town developed a draft written protocol for identifying and removing illicit connections as part of their Stormwater Inventory and Assessment Project.	Under the new permit, the Town plans to finalize the written protocol they developed for identifying and removing illicit connections.

#### 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 – Permit Year 9 (if applicable)
4-1	Continue to Implement Land Use Control Regulations which Require Erosion and Sediment Control at Construction Sites	Engineering Department	Continue to enforce regulations throughout permit term. Number of proposed development plans reviewed each year.	The Town's Land Use Control regulations which require sediment and erosion control at construction sites were enforced during Permit Year 8.  In 2010, proposed subdivision and site development plans were submitted for review a total of 115 times. Both initial plan reviews and review of subsequent plan revisions are tracked and included in this total.	Continue to implement Land Use Control Regulations which require erosion and sediment control at construction sites.
4-2	Maintain Procedures for Site and Subdivision Plan Review	Engineering Department	Continue to enforce regulations throughout permit term. Number of site and subdivision plans reviewed each year.	The Town has procedures in place for certain departments and/or boards to perform site and subdivision plan reviews. Water quality impacts are assessed as part of these reviews. There procedures were enforced during Permit Year 8.  In 2010, proposed subdivision and site development plans were submitted for review a total of 115 times. Both initial plan reviews and review of subsequent plan revisions are tracked and included in this total.	Continue to maintain procedures for site and subdivision plan review.
4-3	Maintain Procedure for Collecting and Responding to Public Comments	Dept. of Public Works	Maintain hotline and continue to respond to complaints from website.	The Town maintained the hotline and continued to respond to public work order requests received via the Town website. All work order requests were logged and tracked.	Continue to maintain the hotline and respond to public work order requests received via the Town website. Continue to log and track all work order requests.
4-4	Maintain Construction Site Inspections for Erosion Control	Engineering Department	Maintain existing procedure throughout permit term. All construction sites inspected each Permit Year.	In accordance with their Land Use Control Regulations, the Town follows the required procedures for inspection of construction sites, which includes enforcing the use of erosion control measures. The Town completed inspections as required for all construction sites in 2010/2011.	Continue to maintain construction site inspections for erosion control.
4-5	Amend Land Use Control Regulations to include Construction Material Management	Engineering Department	Draft Amendment to regulations by May 1, 2005. Implement upon approval.	<b>BMP Completed.</b>	<b>BMP Completed.</b>

## 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 – Permit Year 9 (if applicable)
5-1	Maintain Land Use Control Regulations which Require Post-Construction Runoff Control for Construction Sites	Dept. of Public Works, Engineering Dept. & Planning Board	Continue to enforce regulations throughout permit term. Number of proposed development plans reviewed each year.	The Town's existing Land Use Control Regulations establish criteria for stormwater runoff in new developments. The Town continued to follow their existing policies during Permit Year 8. In 2010, proposed subdivision and site development plans were submitted for review a total of 115 times. Both initial plan reviews and review of subsequent plan revisions are tracked and included in this total.	Continue to maintain Land Use Control Regulations which require post-construction runoff control for construction sites.
5-2	Amend Land Use Control Regulations to Require Developers to Submit O&M Plans for Private Structural BMPs	Dept. of Public Works, Engineering Dept. & Planning Board	Draft Amendment to regulations by May 1, 2005. Implement upon approval.	The Town developed and reviewed a draft amendment to their existing Land Use Control Regulations, which would require developers to submit operation & maintenance plans for the long-term stormwater runoff control. This language was taken from the NH Stormwater Manual. O&M notes for individual BMPs were added to plan sets and O&M Manuals are required by the NHDES as part of the Alteration of Terrain Rules.	Under the new permit expected later this year, the Town will amend their existing regulations as needed to meet the requirements of the new permit.
5-3	Land Use Control Regulations Recommend a Structural BMP Manual for Use by Developers	Dept. of Public Works, Engineering Dept. & Planning Board	Maintain reference to BMP Manual throughout Permit Term.	The Town's Land Use Control regulations reference the "Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire" for use by developers. The reference to this Structural BMP Manual was maintained throughout Permit Year 8.	Maintain reference to Structural BMP Manual.



## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 8</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 9 (if applicable)</b>
6-1	Continue Street Sweeping and Residual Disposal Practices	Dept. of Public Works	Sweep all streets in Town at least once per year	All streets were swept at least once, with some streets swept twice. All residuals were disposed of at the Shannon Road landfill where they were monitored and tested.	Continue existing street sweeping and residual disposal practices.
6-2	Continue Catch Basin Cleaning and Residual Disposal Practices	Dept. of Public Works	Clean 33% of catch basins in Town each year. All CBs inspected and/or cleaned on a three rotating schedule.	The Town has 4,234 catch basins and all of these catch basins were cleaned over the past year. All residuals were disposed of at the Shannon Road landfill where they were monitored and tested.	Continue existing catch basin and residual disposal practices.
6-3	Continue Salting and Snow Removal Practices	Dept. of Public Works	Continue existing practices throughout Permit Term	Over the past few years, the Town has been trying to secure state approval and funding of their “Scope and Plan” for Salt Mitigation, which includes construction of a sand/salt storage shed and the purchase of new equipment. (Currently, three of the fifteen salt trucks that the Town has are equipped with ground control spreaders.) The Town has had various meetings with the state, and right now the project is still on hold, and it is seems unlikely that the Town will receive funding for this project in the near future.	The Town will continue to follow up with the state until a final decision has been made regarding securing state funding of the “Scope and Plan” for Salt Mitigation, which includes construction of a sand/salt storage shed. However, at this time, it seems unlikely that the Town will be able to secure the necessary funding from the state in the near future.
6-4	Continue Vehicle Maintenance Practices	Dept. of Public Works	Continue existing practices throughout Permit Term	Municipal vehicle maintenance is performed within the DPW garage. Practices include reducing the amount of solvents/chemicals used through recycle/reuse, using alternative products whenever possible, and having absorbing compounds available for employee use in the event of a spill.	Continue to follow existing vehicle maintenance practices.

6-5	Continue Vehicle Washing Practices	Dept. of Public Works	Continue existing practices throughout Permit Term	<p>Municipal DPW vehicles are currently washed over a leaching basin. The vehicles are washed with water only or biodegradable soap.</p> <p>The Town has still been trying to secure state approval and funding of their "Scope and Plan" to construct a new truck wash down area. They have had various meetings with the state, and right now the project is still on hold, and it is seems unlikely that the Town will receive funding for the project in the near future.</p>	<p>The Town will continue to follow up with the state until a final decision has been made regarding securing state funding of the "Scope and Plan" to construct a new truck wash down area. However, at this time, it seems unlikely that the Town will secure funding for this project in the near future.</p>
6-6	Continue Maintenance Activities at Parks & Open Space	Dept. of Public Works	Continue existing practices throughout Permit Term	<p>The Town uses organic fertilizers and does not employ the use of any pesticides.</p>	<p>Continue to use organic fertilizers when performing maintenance activities within parks and open space.</p>
6-7	Continue Hazardous Waste Storage and Employee Training	Dept. of Public Works	Continue existing practices throughout Permit Term	<p>The Town's practices include proper storage of hazardous materials, and the Fire Department has a spill prevention and response plan. The Town had one of their employees attend a hazardous materials management class during Permit Year 8.</p>	<p>Continue to follow the Town's existing practices including proper storage of hazardous materials, and implementation of the spill prevention and response plan at the Fire Dept.</p>
6-8	Develop/Implement Employee Education Program	Dept. of Public Works	4 hours of stormwater related training during permit term for each appropriate employee	<p>Approximately five town employees attended a one-day stormwater training class during Permit Year 8. This training was completed at the University of New Hampshire's Technology Transfer Center as part of the Roads Scholars Program. In addition, two employees attended a separate one day seminar on erosion control.</p>	<p>The Town will continue to explore opportunities to provide stormwater related training to their employees.</p>

**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 – Permit Year 9 (if applicable)
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

**7a. Additions**


**7b. WLA Assessment**

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