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Municipality/Organization: **Somersworth, NH**

EPA NPDES Permit Number: **NHR041034**

Annual Report Number
& Reporting Period: **No. 4: March 2006 - March 2007**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: **David Foster** Title: **City Engineer**

Telephone #: **603-692-9524** Email: **dfoster@somersworth.com**

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: John Jackman

Printed Name: John Jackman

Title: Public Works Director

Date: 5/1/07

Part II. Self-Assessment

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

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1	Complete & show movie "There is No Away"	Engineering/ David Foster	Number of showings	- The City continues to show "There is No Away" and "After the Storm: A Citizen's Video Guide to Understanding Stormwater" on our Cable TV station. - Somersworth Middle School showed the movie "There is No Away" to about 150 students.	- Continue showing on Cable TV station. - Continue outreach to schools to use the movie in their curriculum.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
2	Develop educational resources.	Engineering/ David Foster	Variety/number of handouts.	SWPPP Principal Contact continues to look for useful resources to enhance our program. We continue our participation in the Seacoast Stormwater Coalition. This facilitates a cost-effective approach to sharing information/resources in fulfilling our Outreach/Education and Staff Training components of our SWPPP. Handing out "After the Storm" pamphlets at City Clerk's office.	Continue attending, participating, and gathering.

Revised	(Our SWPPP schedules this BMP for years 2 - 5).				
3	Articles in newsletter/website.	Engineering/ David Foster	Number of articles.	Newsletter is now distributed twice per year and space is limited. To date, the articles were excerpts from our SWPPP. We've added the full SWPPP to our website. We're looking into further revisions to our website to add a Stormwater section.	Seek alternatives to articles in the Newsletter. The City's website is being revised, so we plan to expand our Stormwater coverage here.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
4	Classroom education on Stormwater.	Engineering/ David Foster	Number of students.	This continues to be part of the Middle School curriculum.	Continue outreach to schools. See Additions in 1A, below.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
5	Pet Waste Management	Engineering/ David Foster	Number of dog licenses.	Educational flyer has been finalized for distribution to the Public through the City Clerk's office. We deployed one pet waste station in our downtown area.	Distribute flyers through the City Clerk's office. See Additions in 1A, below.
Revised	(Our SWPPP schedules this BMP for years 2 - 5).				

1a. Additions

	Pet Waste and Water Quality Project	Recreation/Maureen Call & Engineering/ David Foster	This builds on BMP #'s 4, 5, & 7. Success will be measured per those BMP's.		***See Below. We received notification on 4/6/07 that our proposal will be funded.***
	E. coli is listed as a source of impairment in the Salmon Falls River. Therefore, in March, 2007 we submitted a grant proposal to NH Dept of Environmental Services with three Project Goals: Pet Awareness and Education; Storm Drain Stenciling as part of Pet Waste Program; and Pet Waste Stations. Using our Storm Drain Map, we identified all neighborhoods that drain directly into the Salmon Falls River. We propose to stencil 450 catch basins in a 1.0 square mile area of the most densely populated area of Somersworth. This represents 9.5% of the area, but 26.4% of our catch basins. Stenciling will be done by the TRENDS (Teens Reaching Exciting New Dimensions) summer recreation program. Flyers/educational material will be distributed at several public buildings. We plan to purchase an enviroscape - a molded plastic model of a watershed, complete with various land-uses, including residential, transportation, agricultural, construction, recreation, and forestry. It's a tool to demonstrate how water pollution can result from a variety of activities, and how the pollution can impact our water resources. It will be utilized with Recreation's after-school program and will also be made available for use by all Public and Private schools in Somersworth. We also propose 4 new Pet Waste Stations: Noble Pines Park, Millennium Park, Memorial Drive, and near a swimming area along the River.				

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6	Community cleanups	Engineering/ David Foster	Number of participants.	- Approx. 50 participants in our **2006 Downtown Enhancement Day** picked up trash in the Downtown area and along 300' of the River. - Approx. 25 TRENDS (Teens Reaching Exciting New Dimensions) volunteers also performed cleanup on our trail system around Stackpole Pond. - Approx. 100 Somersworth High School Seniors performed cleanup at City Parks: trash, sweeping, etc. - Approx. 220 volunteers from a variety of entities performed cleanup along 2000' of sewer easement that is also along the River.	- Downtown Enhancement Day is an annual event. - Continue using volunteer organizations for community cleanup.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
7	Storm Drain stenciling	Engineering/ David Foster	Number of participants.	No stenciling this year.	See Additions in 1A, above.
Revised	(Our SWPPP schedules this BMP for years 1 and 4).				

2a. Additions

	Coordinate with Seacoast Stormwater Coalition for appropriate and feasible education and outreach.		Number of meetings and/or coordinated efforts with the Seacoast Stormwater Coalition.	The City has designated a representative. The Coalition meets quarterly throughout the year. The Coalition coordinated an application for grant money to create a Manual for standard operating procedures for IDDE and good housekeeping. The Manual was approved by the State and produced in November 2006. The Manual can be found on line at www.des.state.nh.us, under popular topics choose Storm Water, then Latest News, and scroll down to paragraph 2.	On-going meetings and attendance. Conduct training using the manual

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
8	Sewer System Map	Engineering/ David Foster	% Complete	Sewer System Map is done.	Update the map on a continuous basis as new infrastructure is added to the system.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
9	Remove known illicit connections.	Engineering/ David Foster	Number removed	We removed a nine-unit apartment at 99 Green street from our storm sewer system.	Secure grant funding to continue searching for and removing illicit discharges.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).		Create standard operating procedures for the detection of non-stormwater discharges.	Developed SOPs for detection and elimination via the Seacoast Stormwater Coalition grant project. City obtained grant money through Seacoast Stormwater Coalition to develop SOPs. A Manual was created and approved by the State and produced in November 2006. The Manual can be found on line at www.des.state.nh.us, under popular topics choose Storm Water, then Latest News, and scroll down to paragraph 2.	Subsequent training using these SOPs will be held May through October 2007.
10	Information Management System	Public Works/John Jackman	Number of outfalls screened	"VueWorks" Asset Management software has been installed and is operational. We've made progress with water, sewer, and drainage assets.	Staff has begun using work orders for many tasks, including drainage system assets.
Revised	(Our SWPPP schedules this BMP for year 5).				
11	Review City Ordinances	Engineering/ David Foster	Number of changes/additions	- In September 2006 City Council passed an Interim Growth Moratorium Ordinance. The Planning Board formed a committee to begin re-writing Zoning, Subdivision, and Site Plan Ordinances. Ordinances pertaining to Stormwater regulations will be part of this revision. My request to form a Stormwater Committee is under review.	- Complete review of ordinances pertaining to Stormwater. - Formalize a Stormwater team.

Revised	(Our SWPPP schedules this BMP for years 2 & 3).				
	Develop Guidelines and Standard Operating Procedures Manual	Engineering/ David Foster		The Seacoast Stormwater Coalition completed this task. It can be found on line at www.des.state.nh.us, under popular topics choose Storm Water, then Latest News, and scroll down to paragraph 2.	This year we propose to follow up this initiative with development of materials and curriculum and begin staff training on Illicit Discharge Detection and Elimination.

3a. Additions

	Staff Training	Engineering/ David Foster			Use the Guidelines & SOP's (above) to develop course materials and curriculum and begin staff training on Illicit Discharge Detection and Elimination. This is a joint effort with other communities in the Seacoast Stormwater Coalition.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
11	Review City Ordinances	Engineering/ David Foster	Number of changes/additions	- In September 2006 City Council passed an Interim Growth Moratorium Ordinance. The Planning Board formed a committee to begin re-writing Zoning, Subdivision, and Site Plan Ordinances. The Stormwater regulations will be part of this revision. - My request to form a Stormwater Committee is under review.	- Complete revision of Stormwater Ordinances. - Formalize a Stormwater team.
Revised	(Our SWPPP schedules this BMP for years 1 & 2).				
12	Employee training	Public Works/John Jackman	Number trained	One person attended training through the UNH Technology Transfer Center.	Send new personnel as necessary.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
13	Begin inspection program	Public Works/John Jackman	Number of inspections	- Continue inspecting our own work. - Our Consultant inspects all new projects that go through the Planning Board process.	Continue current procedures. Improve documentation procedures.
Revised	(Our SWPPP schedules this BMP in year 3).				
14	Maximum compliance	Public Works/John Jackman	Number of inspections	We inspected a number of sites, but we need to improve documentation procedures.	With Consultant inspection and staff training we are moving closer to full compliance. Improve documentation procedures.
Revised	(Our SWPPP schedules this BMP for year 5).				

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
16	Identification of BMP's.	Engineering/ David Foster	Number of BMP's	Observe the efforts of other municipalities through attendance at several stormwater seminars given in this region.	Continue observing other municipality's efforts and obtaining sample ordinances.
Revised	(Our SWPPP schedules this BMP for years 3 - 5).				
17	Post Construction Maintenance	Engineering/ David Foster	Number of facilities	At the Planning Board stage we require a Stormwater Management, Maintenance, & Inspection Plan to be submitted and approved. For the year 2005-06 we received SMMIP's for all projects.	-Continue with current practice. -Improve internal procedures to ensure compliance.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
Revised					

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
18	Vehicle washings	Public Works/John Jackman	Employees trained	Established new procedures for vehicle washings and trained Public Works staff on them.	Continue training as needed.
Revised	(Our SWPPP schedules this BMP for year 1)				
19	Street cleaning	Public Works/John Jackman	Man-hours	- 469 hours spent sweeping streets.	Continue street sweeping.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
20	Train employees	Public Works/John Jackman	Employees trained	Informal training provided as needed for various SWPPP activities, such as silt fence installation & vehicle washings. See Additions, below.	Move forward with other entities to develop more formal training program on Stormwater activities. See Additions, below.
Revised	Reduce the amount of nutrients and sediments entering receiving waters through education of municipal employees about spill prevention and control, vehicle washing, lawn activities, etc.		Create and publish a Manual for NH communities to standardize best management practices and procedures for IDDE, pollution prevention and good housekeeping. Train storm water managers and labor force against these standards.	Seacoast Coalition obtained state grant money to fund the development of BMPs and SOPs best suited NH communities in meeting the IDDE, pollution prevention and good housekeeping requirements. Procedures developed. Numerous meetings held b/w the Seacoast Coalition reps as well as workforce providing input to improve the Manual in application and practicality. The Manual was approved by the State and produced November 2006. The Manual can be found on line at www.des.state.nh.us, under popular topics choose Storm Water, then Latest News, and scroll down to paragraph 2.	Training to be conducted to meet these standard operating procedures: IDDE Workshop scheduled 5/1 and 24/2007. Pollution Prevention and Good Housekeeping training 7 sessions scheduled between May and October 2007.

21	Storm drain system cleaning	Public Works/John Jackman	Man-hours	- 324 hours spent cleaning Storm drain system.	Continue storm drain system cleaning.
Revised	(Our SWPPP schedules this BMP for years 1 – 5).				
22	Spill response & prevention	Public Works/John Jackman	Employees trained	Seacoast Coalition obtained state grant money to fund the development of BMPs and SOPs best suited NH communities in meeting the IDDE, pollution prevention and good housekeeping requirements. Procedures developed. Numerous meetings held b/w the Seacoast Coalition reps as well as workforce providing input to improve the Manual in application and practicality. The Manual was approved by the State and produced November 2006. The Manual can be found on line at www.des.state.nh.us, under popular topics choose Storm Water, then Latest News, and scroll down to paragraph 2.	See Additions, below. This is one of the SOP's under development by the Seacoast Stormwater Coalition.
Revised	(Our SWPPP schedules this BMP for years 3 & 4).				
Revised					

6a. Additions

	Develop Guidelines and Standard Operating Procedures Manual	Engineering/ David Foster		The Seacoast Stormwater Coalition completed this task. It can be found on line at www.des.state.nh.us, under popular topics choose Storm Water, then Latest News, and scroll down to paragraph 2.	- Next year we propose to follow up this initiative with development of materials and curriculum and begin staff training on Illicit Discharge Detection and Elimination.

	Household Hazardous Waste Day	Public Works/John Jackman	Number of households.	Though we've never reported this in our Annual Reports, we've held this event for years. The movie "Stormwater Runoff: There Is No Away" shows video footage of the one we held in 2003 (+-). This event was held on April 14, 2007. There were 131 Somersworth households that participated.	Continue holding this event.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5-M e.coli impairment for NHIMP60030406-02 due to Illicit Connections to storm drains				We have been and continue to investigate the storm drainage system for illicit discharges with the assistance of the NHDES. Once identified, the municipality has worked with the property owners to disconnect the discharge and where necessary re-plumb the sanitary sewer to accommodate the discharge.	We have been and continue to investigate the storm drainage system for illicit discharges with the assistance of the NHDES. Once identified, the municipality has worked with the property owners to disconnect the discharge and where necessary re-plumb the sanitary sewer to accommodate the discharge.
Revised					
4A-M Dissolved Oxygen impairment for NHRIV600030406-03 due to Municipal Point Source Discharges				A Point Source TMDL was approved by EPA in 1999. The joint Maine-New Hampshire TMDL has been implemented by the wastewater treatment facilities that discharge to the Salmon Falls River and the river is monitored on a regular basis to determine if water quality standards are being met.	A Point Source TMDL was approved by EPA in 1999. The joint Maine-New Hampshire TMDL has been implemented by the wastewater treatment facilities that discharge to the Salmon Falls River and the river is monitored on a regular basis to determine if water quality standards are being met.
Revised					
Revised					
Revised					
Revised					

Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	($)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
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	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

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

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	

Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	($)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	($)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

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

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	

Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	