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Municipality/Organization: Somersworth, NH

EPA NPDES Permit Number: NHR041034

Annual Report Number

& Reporting Period: No. 9: April 1, 2011 – March 31, 2012

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Thomas H. Willis, Jr., PE **Title:** Dir. of Public Works and Utilities

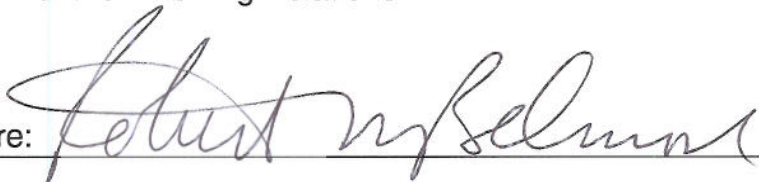
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Certification:

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: Bob Belmore

Title: City Manager

Date: April 27, 2012

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10 (until new general permit is issued)
1	Complete & show movie "There is No Away"	Tom Willis/Scott Smith Public Wk Dir/Finance Dir.	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 Government Access -Cable Channel 22. It was shown several times during the reporting period.	- Continue showing on Government Access - Cable Channel 22 from time to time. - 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.	Tom Willis Public Works Dir	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 as time permits. This facilitates a cost-effective approach to sharing information/resources in fulfilling our Outreach/ Education and Staff Training components of our SWPPP.	Continue attending, participating, and gathering.
Revised	(Our SWPPP schedules this BMP for years 2 - 5).				

3	Articles in newsletter/website.	Brianne St. Pierre Public Works Beth Nault City Managers Ex. Secretary	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 as opportunities permit.
4	Classroom education on Stormwater.	Tom Willis, Public Works	Approximate Number of students seeing the presentation ~100 over one event.	The Enviroscope Model was used once at the Middle School, April 2011, during the City wide Earth Day cleanup. Give tours of DPW to third grade class from local school; showing equipment and maintenance efforts.	Continue outreach to schools. See Additions in 1A, below. Make a presentation as situations permit.
5	Pet Waste Management	Tom Willis, Public Works	Number of dog licenses.	Educational flyer on pet waste is distributed to the Public through the City Clerk's office. Installed 6 Pet Waste Stations the summer of 2008. These have been maintained ever since with weekly cleanings and stocking the bags.	Continue to distribute flyers on pet waste through the City Clerk's office with emphasis during dog licensing period.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).		Per the City Clerk we license approximately 1,300 dogs. Refer to the Pet Waste Report for more information		
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
Revised	(Our SWPPP schedules this BMP for years 2 - 5).				

1a. Additions

	Low-Impact Development Regulations	Dave Sharples, Planning Director	Number of People Contacted.	In February 2012, the Somersworth Planning Board adopted Low Impact Development (LID) as part of its Site Plan Development regulations. These are one of the most progressive development regulations in New Hampshire as it pertains to the management of stormwater on development sites.	See Below.
	The regulations include the following: limits on generating stormwater runoff; accounting for soil types; requiring groundwater recharge where suitable; consider and implement best available treatment technologies with due consideration for stormwater flow rates and flow volumes; promoting low impact designs considerations such as: disconnecting impervious areas, minimizing impervious areas, preserving natural buffers, vegetation and animal habitat areas, strategically locating stormwater practices to maximize treatment and infiltration; preparing natural implementation of an operation and maintenance plan. The City has been conducting outreach to developers and those contemplating land development. Planning director has made several presentations to area organizations since the regulations were adopted.				

2. Public Involvement and Participation

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 (until a new general permit is issued)
6	Community cleanups	Tom Willis, PE Public Works Director	Number of participants = 200.	- Approx. 200 +/- participants in our April 30, 2011 “spirit up” day in which volunteers picked up trash in the Downtown area and all over the City.	- City Wide Clean up day is an annual event, scheduled for May 5, 2012 - Continue using volunteer organizations for community cleanup as opportunities become available.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
7	Storm Drain stenciling	Department of Public Works	295 catch basins were stenciled in 2009	This year public works crews pointed out the location of stormdrains with painted arrows for maintenance purposes.	Seek volunteers to renew stencils as resources permit.
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. Meetings Attended: August 2011 (2 hrs) October 2011 (2 hrs) February 23, 2012 (2 hrs)	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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10 (until a new general permit is issued)
8	Sewer System Map	Tom Willis, Public Works Dir	100% Complete	Sewer System Map is done. We have obtained as-built plans from developers as work was installed. There was little activity in City during reporting period	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.	Public Works / Shawn McLean, Gen Foreman	Number removed	No illicit discharges were eliminated in 2011. Collection system manager remains vigilant for evidence of illicit connections.	We are working with a consultant to identify evidence of illicit connections within a proposed improvement work area in the downtown.
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.	Perform refresher to staff and others as situations arise
10	Information Management System	Public Works/ Brie St. Pierre	Number of outfalls screened - none	"VueWorks" Asset Management software has been maintained and is operational. We've made progress with water, sewer, and drainage assets. In Summer 2011, summer interns from Univ. of NH transited cross country sanitary and storm sewers and located manholes and outfalls for inclusion in GIS data base. Several hundred data points were obtained. Most were updates with greater precision.	Implement update of VUEWorks asset management information system released in 2012.
Revised	(Our SWPPP schedules this BMP for year 5).				

11	Review City Ordinances	Dave Sharples, City Planner &	Number of changes/additions	On April 4, 2011 the City Council passed ordinance 9-11 which permits access over wetlands for Timber Harvesting after the applicant has permission from the State Wetlands Bureau. On Feb 15, 2012, adopted Low-Impact Development Ordinance – See Section 1a above.	Complete review of ordinances pertaining to Stormwater. Formalize a Storm water team to monitor the effectiveness of the changes
Revised	(Our SWPPP schedules this BMP for years 2 & 3).				
	Develop Guidelines and Standard Operating Procedures Manual	Tom Willis, Public Works Dir.		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 perform staff training on Illicit Discharge Detection and Elimination as resources permit.

3a. Additions

	Stormwater Rule Enforcement	Tom Willis, Public Works Dir.	23 of 38 reports were received for 2011	In 2011 we continued to enforce the stormwater rules and regulations contained within our site plan and subdivision regulations. Specifically in Feb 2012 we sent out reminders letters to previously approved sites requesting their Stormwater Management reports for 2011.	This program will continue in 2012.

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 (until a new general permit is issued)
11	Review City Ordinances	Dave Sharples, City Planner & Tom Willis, Public Works Dir.	Number of changes/additions = one	On Feb 2, 2009 the City Council passed an updated wetlands ordinance titled the Riparian and Wetland Buffer District Ordinance. We see this as a significant step as it will serve to prevent silt and topsoil from entering water bodies and wetlands. Jan 2010 – Master Plan update to embrace sustainable development practices in the city. On February 15, 2012, adopted Low Impact Development Regulations (See Section 1a, above).	- Provide outreach to potential developers on the regulatory requirements
Revised	(Our SWPPP schedules this BMP for years 1 & 2).				
12	Employee training	Dave Sharples, City Planner & Public Works/Tom Willis, PE	Number trained = 0		Send new personnel as necessary.
Revised	(Our SWPPP schedules this BMP for years 1 - 5). Begin inspection program				
13	(Our SWPPP schedules this BMP in year 3).	Public Works/Tom Willis, PE	Number of sites inspected = 9	- Continue inspecting our own work. - CLD Engineering inspects many sites for the City during the year.	Continue current procedures. Improve documentation procedures.
Revised					

14	Maximum compliance	Tom Willis, PE Public Works Dir. – Shawn McLean, PW Foreman; CLD Engineers	Number of inspections = 25 Goodwin Community Health 4 CVS = 2 Idlehurst School = 3 O'Connell Medical = 2 Rymes Oil - 2 Barclay Square = 8 Radlow Est. = 2 Gerrish Commons - 2	We inspected a number of sites, but we need to improve documentation procedures. No. of inspections dropped off from previous year due to drop off in development activity; Additionally, City Engineer position was changed from full-time city employee to part-time contracted engineer. More monitoring of outside development was delegated to consultants that are required to be hired by city but funded by applicants.	With Consultant inspection and staff training we are moving closer to full compliance. Final reports are required from the consultant on all projects detailing daily reports & other construction quality standards.
Revised	(Our SWPPP schedules this BMP for year 5).				

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 (until a new general permit is issued)
16	Identification of BMP's.	Dave Sharples, City Planner & Tom Willis, DPW Director	Number of BMP's	In February 2012, the City adopted changes to the Site Plan Regulations which requires Low Impact Development Practices be implemented including limits on generating stormwater runoff; accounting for soil types; requiring groundwater recharge where suitable; consider and implement best available treatment technologies; operation and maintenance plan	Implement the new regulations with a focus on identifying and promoting the use of various BMPs as they are designed and developed.
Revised	(Our SWPPP schedules this BMP for years 3 - 5).				
17	Post Construction Maintenance	Tom Willis, DPW Director	Number of facilities	At the Planning Board stage we require a Stormwater Management, Maintenance, & Inspection Plan to be submitted and approved. We have sent out letters to previously approved sites requesting their Stormwater Management reports for 2011.	-Continue with current practice. -Continue with yearly letters to insure inspections are being completed and BMPs are being installed.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).		23 of 38 reports were received for 2011.		
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10 (until a new general permit is issued)
18	Vehicle washings	Public Works/Tom Willis, PE	Employees trained and reviewed	Continued with previously established procedures for vehicle washings and trained Public Works staff on them.	Review training as needed.
Revised	(Our SWPPP schedules this BMP for year 1)				
19	Street cleaning	Public Works/Tom Willis, PE	400 Man-hours	: City has 130 lane miles of road to sweep. : The sweeping started on March 17 2011 and ended on November 11 2011 and the resumed March 9, 2012. : The sweeper went out and swept 75 times during the above time mentioned. : Filled its debris box 198 times : Picked up 800 cu yd's of debris off of city streets. with an estimated weight 600 tons	Continue street sweeping as in previous years.
Revised	(Our SWPPP schedules this BMP for years 1 - 5).				
20	Train employees	Public Works/Tom Willis, PE	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.	Continue opportunities to train public works personnel as needed on the implementation of BMPs and construction practices using the resources that have been developed during previous years.
21	Storm drain system cleaning	Public Works/Tom Willis, PE	228 Catch Basins were cleaned	The City contracted with Felix Septic, Inc to clean basins at a cost of \$6,750. They cleaned 228 basins in October - November 2011.	Continue storm drain system cleaning. We have funding for an outside consultant in year 9 in the amount of \$7,600 for the proposed budget FY12 – FY13. This will be voted on by June 2012 to continue with the existing cleaning program.
Revised	(Our SWPPP schedules this BMP for years 1 – 5).				
22	Spill response & prevention	Public Works/Tom Willis, PE	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				
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6a. Additions

	Develop Guidelines and Standard Operating Procedures Manual	Public Works/ Tom Willis and Shawn McLean		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.	IDDE training to Collection System and Highway Maintenance Staff as part of general training regimen
	Household Hazardous Waste Day	Public Works/Tom Willis, PE	Number of households.	This event was not funded in the FY10 to FY11 budget, but was funded for FY 2012. Joined the annual regional household hazardous waste collection with nine other area communities beginning this year.	Participate in the regional collection scheduled for May 5, 2012.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10 (until a new general permit is issued)
5-M e.coli impairment for NHIMP60030406-02 due to Illicit Connections to storm drains		Tom Willis, PE Public Works Dir./Shawn McLean; Gen. Foreman		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		Tom Willis, PE Public Works Dir.		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					

[illegible]

7a. Additions

[illegible]

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)	YES
Annual program budget/expenditures- Clean Catch Basins	(\$)	7,200
Sweeper Annual Payment (\$35,255) Sweeper Parts (\$3,700) Sweeper Labor (\$15,000); System Repairs (\$12,000)	\$64,670	
Household Hazardous Waste Collection Day	\$2,000	\$73,870

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	25%
Stormwater management committee established	(y/n)	NO
Stream teams established or supported	(# or y/n)	NO
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	No
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	none
▪ community participation	(%)	n/a
▪ material collected	(tons or gal)	n/a
School curricula implemented	(y/n)	YES

Legal/Regulatory

		In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination	Section 8A:Article 8:10				X
▪ Erosion & Sediment Control	Section 22A:11:17				X
▪ Post-Development Stormwater Management					X
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination	Section 8A:Article 8:10				X
▪ Erosion & Sediment Control	Section 22A:11:17				X
▪ Post-Development Stormwater Management	Section 22A:17				X

Mapping and Illicit Discharges

Outfall mapping complete	(%)	None this yr
Estimated or actual number of outfalls	(#)	Est 25
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	Yes
▪ GIS	(%)	Yes
Outfalls inspected/screened	(# or %)	None this yr

Illicit discharges identified	(#)	One
Illicit connections removed	(#)	None
% of population on sewer (~2500 parcels)	(est. gpd)	
% of population on septic systems (~750 parcels)	(%)	78%
	(%)	22%

Construction

Number of construction starts (>1-acre)	(#)	1
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	23
Tickets/Stop work orders issued	(# or %)	None
Fines collected	(# and \$)	None
Complaints/concerns received from public	(#)	None

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	20%
Estimated volume of stormwater recharged	(gpy)	Un-determined

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Once
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Once

Total number of structures cleaned	(#)	228
Storm drain cleaned	(LF or mi.)	50 lf
Qty. of screenings/debris removed from storm sewer infrastructure	cyds	20
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Used as fill
Cost of screenings disposal	(\$)	\$100

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	8 months/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	8 months/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	10 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	PW Facility
Cost of sweepings disposal	(\$)	\$500
Vacuum street sweepers purchased/leased	(#)	One in 2009
Vacuum street sweepers specified in contracts	(y/n)	No

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	None
▪ Herbicides	(lbs. or %)	Contracted Out
▪ Pesticides	(lbs. or %)	Contracted Out

Anti-/De-Icing products and ratios	% NaCl	85%
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	
	15%	
Pre-wetting techniques utilized	(y/n)	NO
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Yes
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	n/a