

Municipality/Organization: Town of Derry, NH

EPA NPDES Permit Number: NHR041005

MaDEP Transmittal Number: W-

**Annual Report Number
& Reporting Period:** No. 11: April 1, 2013-March 31, 2014

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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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: Michael A Fowler P.E.

Title: Director of Public Works

Date: April 23, 2014

Part II. Self-Assessment

General

The Town of Derry (The Town), through the Department of Public Works (DPW), has made progress both in 1) improving the quality of storm water run-off within the Town under the NPDES Phase II MS4 Storm Water Program, and 2) improving the water quality of its surface water bodies. The Town continues to implement, encourage, and require the use of Best Management Practices established at the onset of the program, as well as new or revised BMPs throughout the term of the permit. The Town continues to receive support from the residents of Derry since the inception of the program as well as from prospective developers interested in incorporating recommendations from Derry's adopted Stormwater Ordinance. Its principles are being followed and incorporated into projects managed by town, commercial, and private entities. There remains sincere interest and enthusiasm by diverse groups of people in Derry including lake and watershed groups, academia, and residents, to maintain and improve the environmental health of the Town including the waterways and the quality of the storm water that enters them, and teaching others about the importance of eliminating non-point source pollution and the value of overall pollution prevention.

All goals identified in the last permit continue to be met and when feasible, improved upon as of this reporting period.

Due to the extension of the permit renewal by USEPA, all measurable goals and planned activities are subject to change based on the contents and requirements of the new MS4GP. The Town of Derry continues to experience level or reduced funding in its budgets across all departments due to the current state of the economy and is currently in budget review for the next fiscal year. The Town expects similar impacts on DPW's ability to conduct all planned activities and reach all measurable goals in a timely manner. In addition, the Town does not foresee being able to conduct the majority of the proposed requirements or meet any of the deadlines included in USEPA's Draft 2013 MS4 permit.

Catch Basin Cleaning and Street Sweeping

In the 2013 construction season, 750 catch basins were cleaned. The catch basin cleaning program is set up to schedule higher priority catch basins on a more frequent cleaning schedule. There are approximately 150 basins that are cleaned on an annual basis, while the remaining 600 are selected among the remaining basins that pick up little debris and require cleaning on a less frequent basis. The Town has budgeted to clean an additional 750 catch basins during the next reporting period.

Street sweeping of the urban areas of town begins in March each year and continues through the fall. Street sweeping for 2014 commenced in March. Approximately 40 miles of roads within the urban compact and nearby roads with closed drainage systems are cleaned each spring. From spring through fall, approximately 6 miles of main roads (urban and/or higher traffic count) are cleaned on a weekly basis.

Drain Stenciling

Catch basin stenciling program is still a popular activity for various groups. In prior years, the Town has provided stencils and paint to the Beaver Lake Improvement Association (BLIA) and local Boy Scout and Girl Scout Troops. The Town's Public Works Department continued to provide the stencils

for any group interested in participating in these activities. The Town's stencils have wording stating "No Dumping, Drains to Lake" or "No Dumping, Drains to Wetland".

In 2013, volunteers from the FEMA Corps division of AmeriCorps NCCC (National Civilian Community Corps) stencilled approximately 20 storm drains to remind folks that water or anything else that goes into a storm drain will end up in the lake. The 5-member AmeriCorps team consisted of a group of young college graduates looking to serve their country, gain work skills and pay off college loans. They came from all over the country to spend the first 3 months of a 10-month service stint in New Hampshire.

Public Outreach and Participation

The Town continues to use events such as BLIA meetings and Town-wide Derry Fest, as a means of outreach to the public. Through partnership and open communication with organizations such as BLIA, Conservation Commission, and Recreation Department, the Town was able to distribute information on stormwater pollution prevention BMPs, household hazardous waste, pet waste management, and pharmaceutical disposal and take back initiatives.

The summer 2013 Stream Teams focused on several stream reaches that flow directly into Beaver Lake. The stream teams are made up of Pinkerton Academy Students working on service-learning projects. Stream Teams were out collecting data in the streams and tributaries leading into Beaver Lake. The Pinkerton Academy Students, many of whom hope to pursue secondary education in environmental science or biology, are using their free time this summer to learn about water ecology, by collecting data that tracks the quality of water that flows into Beaver Lake. However, all of the tributaries that are included in the Beaver Lake Watershed will affect the water quality of Beaver Lake, so it is important that all of the streams are in good condition in order to maintain a productive ecosystem in Beaver Lake. In 2013, the teams tested eleven different reaches, including 8 reaches from previous years, so as to build upon data collected in previous years. The Stream Teams tested reaches in Manter Brook, Jenney-Dickey Brook, Partridge Brook, Cat-O-Brook and Cat O'Brook Tributary. Overall, the stream reaches tested were fair or good and demonstrated good macro-invertebrate scores. Almost all of the reaches scored a 'Good' rating according to the NHRSA ranking system. The NHRSA ranking system incorporates many aspects of testing stream health including erosion indicators, biological indicators, and chemical and physical indicators such as temperature, stream flow, etc.

The Town continues to sponsor Derry Clean-Up Week during the week of Earth Day and has had broad participation from the public and various groups in this program including the Beaver Lake Improvement Association (BLIA) and local Boy and Girl Scout troops. The Beaver Lake Watershed Partnership (BLWP) continues to work diligently within Derry as well as Auburn and Chester to improve water quality within the Beaver Lake Watershed. Many of the Partnership's goals parallel the goals set for the Town of Derry in our MS4GP. The Town Environmental Engineer is currently assisting the BLIA president with related articles for the BLIA e-newsletter such as protecting water quality through the use of non-phosphorus fertilizer, hiring knowledgeable landscapers, and proper management of yard waste.

The town is available for tours of the Town Hall for students and youth groups (cub scouts, girl scouts). When available or requested the Director of Public Works and/or Environmental Engineer will give short presentations on the Town's environmental responsibility and provides age appropriate handouts to participants. Historically, these tours and presentations has resulted in groups contacting us in order to participate in storm drain stenciling, and to brain storm on other volunteer opportunities. Town representatives also conduct outreach to children with presentations at area schools on

recycling and water pollution.

Derry remains active in the Manchester Regional Stormwater Coalition with participation in quarterly meetings and attendance by NHDES representatives. USEPA representatives have attended these meetings in previous years. Although EPA continues to be invited to these meetings, EPA has not attended a meeting in a few years. The meetings include discussion of ongoing stormwater issues, sharing of experiences, presentations by outside environmental and regulatory agency speakers, and site visits to tour stormwater projects. Attendance at these meetings has grown to include communities from the Nashua and Concord regions.

The Town is involved in two household hazardous waste (HHW) collection events per year co-sponsored with the Town of Londonderry. Derry conducts active outreach with public notice and stormwater handouts to Derry residents at our Transfer Station and other town venues. Aggressive outreach and advertising continues to generate a respectable participation by Derry residents and volume of HHW collected. The Town's next event is scheduled for May 3, 2014. In February 2014, the town mailed to 174 water supply customers in the Autumn Woods, Rand-Shepard-Hill, Willow Bend, and Woodland Community Water systems the announcement of the upcoming Household Hazardous Waste Collection Event.

In 2013, the Department of Justice, through local law enforcement, continued with an annual pharmaceutical take-back day. The Town Departments, including the Derry Police Department, Public Works, Health Department, along with the Community Alliance for Teen Safety (CATS) conduct public outreach on the proper disposal of pharmaceuticals, not only in the interest of reducing the likelihood of prescription drug abuse, but in the interest of protecting groundwater and surface water by eliminating disposal practices such as the flushing of medications into septic systems or throwing out with household garbage. Additional outreach included posting of information on the Town's website, display of literature at the Town kiosks, and public notices in the local newspaper (Nutfield News). The next Pharmaceutical Take Back Day is scheduled for April 26, 2014.

During this reporting period, the Town produced a new cable television segment called *DPW & NH Salt Reduction Initiative Winter 2014 (February 2014)*. This program complements two (2) cable television segments existing programs: *Protecting Our Water with the Department of Public Works (August 2011)* which focuses on how residents can reduce non-point stormwater pollution and take advantage of household hazardous waste events; and *Reducing Road Salt Use, Protecting NH Waters (October 2011)* which included personnel from Derry Public Works, NHDES, and UNH Technology Transfer (T2) Center and focused on how home owners and commercial entities can reduce the amount of deicing materials through implementation of Best Management Practices. These programs air on Derry Local Cable Access stations C17 and D23.

Training and Environmental Organizational Team Meetings

One or more Public Works Employees (including the Environmental Engineer, Superintendent of Operations, and Crew Chiefs) participate throughout the year in various conferences, training opportunities, or live streaming webcasts related to Stormwater, pollution prevention, and waste management including the following:

- MS4GP meetings with NHDES (4/10/13, 5/15/13, 7/17/13)
- NHDES Drinking Water Source Protection Workshop, Concord, NH (5/1/13)
- Business and Industry Association/NH Dept. of Environmental Services (BIA/DES) 2013 New Hampshire Waste Management Seminar,

Manchester, NH (11/20/13)

- Upper Merrimack River Watershed Meeting w/Southern NH Planning Commission/USEPA/NHDES/Corp of Engineers (5/23/13)
- Regional Stormwater Team Meetings (4/2/13, 8/8/13, 10/16/13, 2/11/14) – Held jointly with Manchester, Londonderry, Goffstown, Auburn, Bedford, Plaistow, Nashua, Merrimack, Pembroke, Hooksett, and Amherst
- Potable Water Workgroup, with NHDES and other municipalities (4/3/13)
- Household Hazardous Waste Coordinators meeting (3/24/14)

The Town is already scheduled to give a presentation on Salt Reduction Initiative at the NHDES Drinking Water Workshop on April 30, 2014.

SALT REDUCTION PROGRAM

The Town of Derry hosted the meeting location for and participated in the Salt Reduction Workgroup Meetings. These meetings are attended by representatives from Derry, Londonderry, Windham, Salem, NHDES, NHDOT, UNH T2 Center, USEPA, Rockingham Planning Commission, Jeffrey H. Taylor & Associates and occasionally the Conservation Law Foundation. During this reporting period, the Town has been involved in the following activities or events:

Salt Reduction Work Group Meetings:

- Salt Reduction Workgroup Meetings – 5/28/13 (DOT Demo of salt brine application equipment)

Training Hosted: The Town of Derry provided the training facility for the following training sessions. New employees with Derry Highway Department and any new Derry plowing contractors are required to participate in the training.

- *Green SnowPro Certification: Salt Reduction for Parking Lots & Roads* by UNH-T2 – 6/4/13, 6/11/13

Salt Reduction Equipment and BMPs

The Town Council approved funding for money in FY14 for two new diesel F550 trucks equipped with front and wing plows, stainless steel dump spreader, groundspeed control, and a 140-gallon brine tank and pre-wetting system. The matching funds have been approved by Federal Highway Administration with administration of the funds by NHDOT in August 2013. However, FHWA was delayed pending approval of a partial exemption from the Federal Government's Buy American policy. A FHWA Buy America Waiver Notification was issued December 1, 2013. NHDOT gave Derry approval to solicit bids on January 14, 2014 which commenced in March. Approval of the award of contracts for the new equipment was granted in March. The Town hopes to receive the two new snow removal trucks with all BMP equipment installed by the start of the next winter season.

During the 2013-2014 winter season, the Town conducted a trial with a new deicing mixture utilizing ICE B'GONE MAGIC. This is a 50% distilled condensed solids from vodka and rum mixed with 50% magnesium chloride. Approximately 500 tons of salt was sprayed with 4000 gallons of Ice B'Gone Magic. Salt sprayed with Ice B'Gone Magic reportedly allows salt to work to -35° F with the intention of using less salt. It is also biodegradable and less corrosive than salt which should extend the life of equipment. The observed results were not notably different than untreated salt.

Cable Television Shows (airing on Local Cable Access stations C17 and D23)

- **DPW: NH Salt Reduction Initiative – Winter 2014** – (Filmed in February 2014 on site at the Town’s salt storage facility and around town) A presentation by Derry’s Highway Department Superintendent of Operations and the Environmental Coordinator explaining Derry’s Salt Reduction Initiative, best management practices implemented by the Town, effects of salt on the environment, the State’s Green SnoPro Program, and tips for both homeowners and business owners on more efficient deicing practices and protecting the environment.
- **Reducing Road Salt Use, Protecting NH Waters** - A public service announcement (PSA) video has been collaboratively produced by Derry and Londonderry, in partnership with NHDES and the T² Center. The show was filmed in Derry by Derry’s Cable Television Department.

Other Programs

Potable Water Work Group Meeting:

Derry has been asked to participate in a Potable Water Workgroup with NHDES and other municipalities. The first meeting was on April 3, 2013 and followed up through various group correspondence.

Pervious Pavement

The installation of pervious pavement associated with a parking lot expansion at the Overlook Medical Office Park was completed 2012. A delay in installation was inadvertently reported in previous reports due to confusion with another similar project. The approval to install the pervious pavement was contingent upon a stormwater management design that was based on an absence of pervious pavement in case the pervious pavement should fail due to factors associated with climate or inadequate maintenance issues. Observations made during random drive-by inspections indicate limited efficiency during moderate rains likely due to lack of maintenance.

The Route 28 Widening Project included the installation of approximately 5600 feet of pervious pavement sidewalk (2800 feet on each side of the road) in summer 2012 and has been experienced 2 winters. The Town only plows the sidewalk during the winter without any deicing.

The new Triangle Credit Union installed pervious pavement in its parking spaces during the 2013 construction season.

Illicit Discharges and Stormwater Violations: Investigations and Response

During this reporting period, the Town responded to a stormwater issue associated with extensive erosion from a private unpaved road. During heavy rains, the road would erode and deposit large quantities of sand and silt into the main road and storm drainage system which eventually flowed into a lake. The property owner would regrade his road after each storm event which would wash out again during the next rain event. After repeated attempts to work with the property owner to rectify the problem, the Town requested assistance and guidance from NHDES Land Resource Management Bureau. Enforcement by NHDES is pending with support from the Town.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
1.1	Document & Continue Existing Programs	Public Works	Review public education programs that are already in place that may be utilized as mechanisms to distribute storm water information. Prepare written documentation that summarizes existing programs in place that may be used in conjunction with the Phase II storm water program.	Goals Met: The Town of Derry continued to distribute information through kiosks located at the Municipal Center, Transfer Station, and Derry public buildings throughout town. The Town website is updated as needed in regard to environmental protection, pollution prevention, recycling of universal wastes, and storm water programs. The Town distributed and posted information on proper disposal of pharmaceuticals and personal care products in conjunction with the fifth annual pharmaceutical take-back day and provided outreach material to Derry PD and EMS and the Community Alliance for Teen Safety.	The Town intends to continue distributing information through the venues that it has established. We will continue to improve and expand the Town's website to further highlight environmental programs including storm water management, household hazardous waste, recycling, and PPCP disposal. A Fifth Pharmaceutical Take-Back Day is scheduled for Saturday April 26, 2014.
Revised					
1.2	Coordinate Public Educators	Public Works	Organize Town employees, educators, volunteers, etc. to work together to develop materials to be distributed to the public and school systems regarding Phase II storm water.	Goals Met: The Town has had the opportunity to reach many of the same students through existing volunteer organizations that have worked closely with the town on the stenciling program. In previous years, Pinkerton Academy Biology Faculty were involved in the Beaver Lake Water Shed Partnership and had students in their biology courses conducting assessment of segments of streams that are tributaries to Beaver Lake. Students obtained real life experience in environmental science while performing a valuable service to the community. As in previous years, the Students for Environmental Action (SEA) at Pinkerton Academy participated in a clean-up day last April and cleaned up several miles of roadway throughout Derry. The Town provided the equipment and supplies and participated in meetings and field training.	The Town intends to continue to work closely with the School Department to incorporate storm water education as well as other environmental programs into the regular curriculum. We will also continue to support efforts by volunteers as well as paid interns to speak at local youth organizations and schools.
Revised					

1.3	Coordinate information and Program Distribution within School Network	Public Works	Prepare brochures or fact sheets to be distributed to the public by direct mailings. Provide information on the Town's website. Begin developing curriculum to be used to educate students about storm water issues. Contact 50% of the schools located within the Town.	Goals Met: Direct mailings of Notices of the Household Hazardous Waste Collection events and Stormwater Pollution Prevention are regularly included with "Drinking Water Consumer Confidence Reports". In February 2014, the Town sent a direct mailing to 174 community water system customers the notification of the May 2014 HHW event. The Public Works Department continues to distribute informational brochures and fact sheets at the annual "Town Fair" Derryfest and to participants at the Household Hazardous Waste Collection event. The Town contacts public schools including Pinkerton Academy through their biology department.	The Town will continue to work with the public schools and Pinkerton Academy to distribute information.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
2.1	Create Task Committee	Public Works	Task committee is established. The task committee will be responsible for organizing volunteers, etc., to assist the Town with the implementation requirements for the Phase II Storm Water Program. Document meeting minutes.	Discontinued in previous years. See annual report for 2004-2005. Redundant due to other groups already established.	N/A
Revised	<i>The Town of Derry has determined that a task committee is not necessary to achieve the goals set forth in the Storm Water Management Plan. Therefore, this BMP has been eliminated from the plan.</i>				
2.2	Conduct Public Meeting/Acquire Public Input	Public Works & Town Administration	Public Meeting. Phase II Storm Water Program information to be presented. Document meeting minutes.	Goals Met: All actions were completed in the previous reporting periods as follows: Public meeting held on the Storm Water Ordinance and Stormwater System Design Regulations. The Public Works Department continues to encourage public input into the Storm Water Program. The Town is in contact with the Beaver Lake Improvement Association (BLIA) on a routine basis and has provided input on newsletter articles.	The Public Works Department will continue to strive to educate the public in storm water. Specific public meetings are not scheduled. Instead public input is solicited through public event displays and working through non-government organizations.
Revised					
2.3	Establish Storm Water Information Display at Major Town Events	Public Works	Phase II Storm Water information display at one town event per year.	Goals Met: This task was completed with a display set up at Derryfest and public meetings.	Displays will again be set up at Derryfest events this year. Youth Groups have also expressed interest in helping with these events for public education as community service projects.
Revised					

2.4	Storm Drain Stenciling/Community Clean-up Day	Public Works	50% of storm drains stenciled using volunteers or school students. Community clean-up day held once a year using volunteers and/or students.	Goals Met: In 2013, volunteers from the FEMA Corps division of AmeriCorps NCCC (National Civilian Community Corps) stencilled approximately 20 storm drains, to remind folks that water or anything else that goes into a storm drain will end up in the lake. The 5-member AmeriCorps team consisted of a group of young college graduates looking to serve their country, gain work skills and pay off college loans. They came from all over the country to spend the first 3 months of a 10-month service stint in New Hampshire. Storm Drain stenciling is periodically conducted by various groups including Boy Scouts, Girl Scouts, and Beaver Lake Improvement Association (BLIA). Numerous groups participate each year in Derry Cleanup Day. Additional interest in these activities is voiced regularly.	The storm drain stenciling program will be an ongoing program as the paint will wear off and need to be touched up or as roads are repaved.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
3.1	Map Outfalls and Receiving Waters	Public Works & IT Department	Produce a map showing outfalls and receiving waters	Goals Met: The Town of Derry has completed mapping the outfalls and receiving waters. Follow-up inspection during dry weather conditions continued with remapping, repairs, and stream cleaning projects.	The Town of Derry will strive to keep the database up to date by adding any new storm water collection systems to the base map. Revisions and corrections to the data base will be made as errors or old infrastructure previously missed are discovered. Additional inspections will occur during the next reporting period as permitted and resources allow to confirm flow directions and construction.
3.2	Evaluate Need for Storm Sewer Ordinance; Develop if Necessary	Public Works, through a consultant.	Complete review of existing local regulations and ordinances to determine what mechanisms are already in place. Prepare a Storm Sewer Ordinance for adoption by the Town.	Goals Met: The Derry Town Council adopted the stand-alone Storm Water Ordinance and Stormwater System Design Regulations during a previous reporting period.	Continue to implement and enforce the Storm Water Ordinance and Stormwater System Design Regulations if required. Prepare revisions if necessary.
Revised					

3.3	Train Volunteers in Illicit Discharge Identification	Public Works	Complete a training document. Complete volunteer training for illicit discharge identification. This must include information related to the hazards associated with illegal discharges and improper waste disposal.	Goals Met: The Town uses the illicit discharge report form to be used by Town employees and volunteers if/when illicit discharges are suspected or identified. Any reports that are made to the Code Enforcement Office or Public Works Department are investigated.	The Town will meet with BLJA for refresher training on illicit discharge identification. Continue to train and work with the BLJA stream and lake monitoring volunteers on illicit discharge detection.
Revised					
3.4	Dry Weather Screening of Outfalls	Public Works	Utilize trained volunteers and/or students to complete dry-weather screening of outfalls. Complete dry-weather screening forms for inspection. Document findings of screening. Identify outfalls requiring further follow-up.	Goals Met: Limited dry weather screening of outfall continued through 2012 as catch basins were cleaned or maintenance was conducted. No specific illicit discharges were identified during the screening.	Limited dry weather screening of outfalls will continue, dependent upon availability of funding and other budget constraints. In addition, volunteers working with the Beaver Lake Watershed Partnership are encouraged to become involved in this process.
Revised					
3.5	Develop System of Identifying Illicit Discharges and Initiate Program to Eliminate Them	Public Works	Complete Plan outlining system for eliminating illicit discharges. Initiate elimination program. Eliminate the majority of identified illicit discharges.	Goals Met: The Town of Derry utilizes an illicit discharge form to note any potential illicit discharges discovered during catch basin cleaning. Any reports from the public are placed on work orders and investigated by the Environmental Engineer, Supt. of Operations, or the Code Enforcement Officer. The Town also relies on the public as the eyes and ears for possible violations and to report them so that the Town can respond.	Continue with existing program and practices of identifying and investigating illicit discharges. Step up enforcement if necessary.
Revised					
3.6	Identify Magnitude of Effort to Continue Mapping Storm Sewer System.	Public Works	Complete a review of the storm sewer system mapping in Town. Prepare an assessment of the effort required to continue this mapping.	Goals Met: All new additions to the Public Storm Sewer system are added to the Town's Geographic Information System. Occasionally, data gaps were identified within catchments.	Continue updates as available. Due to continued budget constraints and reductions through the next year, plans to conduct catchment mapping and delineation over the next year may once again be postponed. Mapping will be conducted as time and budget allows. If feasible, the Town will begin more detailed mapping during the 2014 construction season.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
4.1	Document Existing Programs and Expand Them as Required	Public Works	Complete Review of Existing Local regulations pertaining to construction site runoff control. Complete written summary of existing requirements. This may require additional assessment of potential water quality impacts. Complete necessary additions to existing documents/ordinances for establishing water quality benchmarks, site inspection procedures, etc. Ordinance revisions will be accompanied by appropriate public notice and comment opportunities. The regulations will ultimately address areas of concern noted above.	Goals Met: The Town is routinely checking to verify that a) an NOI has been filed with EPA for all sites over one acre in disturbance, b) an Alteration of Terrain permit has been filed with NHDES. We continue to use a Construction Site Run-off Control Inspection form when inspecting sites through our engineering division to ensure the SWPPP for a construction site is being adhered to. During the reporting period, there were 4 reported ongoing construction projects requiring 5 CGPs. Phase I of the Town's Rockingham Road Sewer Expansion project is completed with Phase II expected to begin during the next reporting period.	Continue to be vigilant in the enforcement of construction site erosion control, ensuring SWPPP are present on site and adhered to, continue random cross-checking of CGP NOIs filed against projects in town.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
5.1	Document and Enhance Procedures for MS4 Storm Sewer System	Public Works	Complete review of existing MS4 maintenance procedures. Complete formal procedures manual for conducting MS4 maintenance, including record keeping forms, BMPs related to development, etc. Regulations and ordinances will be expanded, as appropriate, to incorporate measures to address the areas of concern noted above.	Goals Met: The Town continues to keep records of the locations and number of catch basins cleaned. The crosschecks the EPA's eNOI database to ensure that NOIs and NOTs have been filed. Most site plan reviews include a review by the Environmental Engineer which includes a focus on construction stormwater management and groundwater protection. The Town routinely encourages new development to consider BMPs that go beyond the minimum regulatory requirements.	Continue keeping records on areas cleaned. Upon completion, the Town will develop a schedule based on historical amounts of debris removed from specific catch basins.
Revised					
5.2	Incorporate Best Management Practices into Town Master Plan	Public Works & Planning Department	Complete update of Town's Master Plan to include Best Management Practices.	Goals Met: State and nationally recognized BMPs are included by reference in the Town's storm water ordinance and Storm Water System Design Regulations. The Town developed and began implementing a Salt Reduction Plan which was approved by USEPA, FHWA, and NHDES. The Plan incorporates winter road maintenance and snow removal BMPs, including calibration of salt spreaders and conducting snow removal based on winter severity conditions and forecasts. The Town prepared and adopted a Source Water Protection Plan in January 2012 which was incorporated into the Master Plan.	Follow BMPs in Town activities and projects. Make copies of BMPs available to public. Update BMPs as revisions occur.
Revised	<i>The updates to the Town's Master Plan were delayed until 2008-2009 time period. Instead, BMPs will be Incorporated into the draft Storm Water Ordinance currently being revised.</i>		Incorporate BMPs into Storm Water Ordinance and Storm water System Design Regulations.		

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
6.1 Revised	Document and Enhance Employee Training Procedures	Public Works	Complete review of existing training programs. Complete formal employee training manual.	Goals Met: DPW continues to have employees trained and provide employees with informational literature. Lessons learned and training received is transferred to other employees through on the job training and dialogue with employees. The Town continues to host salt reduction training sessions and GreenPro certification for winter snow removal and deicing operations. Training is given by UNH Technology Transfer Center for the public works plow truck operators and Town contracted plow truck drivers. In addition, numerous commercial and private plow truck operators have taken the training.	Training and/or refreshers on SWPPPs, housekeeping, spill response, salt reduction, and erosion control will be conducted periodically as needed.
6.2 Revised	Evaluate the Use of Pesticides, Sand and Salt	Public Works	Complete review of existing procedures. Complete formal procedures manual for handling and use of pesticides, sand, and salt.	Goals Met: Pesticides and herbicide are applied only by licensed applicators for any substantial projects. Fertilizer application on recreational fields is contracted to licensed commercial applicators who are required to use only low phosphorus, slow-release nitrogen fertilizer. The Town is involved in the regional Salt Reduction Workgroup with USEPA, NHDES, NHDOT, FHWA, and UNH-T2. Meetings include development of Salt Reduction Plans, sector allocation, and evaluation of BMPs. The Town developed an evolving Salt Reduction Plan which was approved by USEPA, FHWA, and NHDES.	Continue with existing practices, participation in Salt Reduction Committee, and providing Town facilities for regional training initiatives. Conduct outreach to public. The Town will continue to look at better technology to reduce the salt and sand usage.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
Revised	Implement BMPs for reduction of chloride and phosphorus input into impaired surface waters	Public Works	Develop Salt Reduction Plan and implement BMPs, collect useful data to complement state's data. Meet TMDL for chloride in the Beaver Brook Watershed	The town has continued its involvement in Salt Reduction workgroup meetings with NHDES and other stakeholders, and hosted meetings and training sessions at the Derry Town Hall. As part of our own evaluation, the town initiated a data sharing of chloride monitoring with NHDES. The town continues to realize a net reduction in the 5-year and 10-year running average over the last 5 years through 2014. The allocation per year will be based on the reported Weather Severity Index (WSI). However, the severity of the 2013-2014 winter season resulted in a significant increase in quantity of salt used during the most recent season. Comparable increases were realized state-wide. The WSI for the 2013-2014 season is not available at this time. The Town Council and NHDOT approved Round 3 funding for two (2) additional trucks with relevant salt reduction accessories for FY14. The final approval and bid solicitation was delayed until March 2014 due to the Federal By America program restrictions. A waiver was issued by FHWA in December 2013. The Town anticipates delivery of the new trucks by the start of the next winter season. Receipt of the new trucks will bring the total up to five (5) new snow removal trucks equipped with groundspeed control, with pre-wetting brine systems.	The Town will continue to include chloride reduction education in its outreach efforts and evaluate the purchase of new technology for reduced volumes of deicing chemicals applied within the Town. The Town will continue to host Salt Reduction Workgroup meetings and Salt Applicator Certification Training workshops. The next Workgroup meeting is scheduled for June 17, 2014. The Town hopes to apply for additional funding to set up its own brine storage equipment prior to the next winter season.

				The Town worked with NHDES Watershed Bureau to review historical data and water quality of Hood Pond relative to the phosphorus TMDL. The results of meetings and comprehensive review indicate that a phosphorus TMDL for Hood Pond was not necessary and that it is a low priority water body. The Town hopes to begin random periodic phosphorus testing of Hood Pond and associated tributaries to ensure continued compliance and improved water quality.
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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)	Yes
Annual program budget/expenditures	(\$)	\$70,000 est.

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	20,000 est.
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y, ~2 miles
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	2
▪ community participation	(%)	(see comment)
▪ material collected	(tons or gal)	17 Tons
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				X
▪ Erosion & Sediment Control	X			X
▪ Post-Development Stormwater Management	X			X
Accompanying Regulation Status (indicate with "X")				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	1289*
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	100%
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	50%
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	
	(est. gpd)	
% of population on sewer	(%)	~50%
% of population on septic systems	(%)	~50%

Construction

Number of construction starts (>1-acre)	(#)	4
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public <i>on sites > 1-acre</i>	(#)	1
<i>(*Specific to stormwater, erosion, or sediment control)</i>		

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Once/4yrs
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Once/yr
Total number of structures cleaned	(#)	750 (this period)*
Storm drain cleaned	(LF or mi.)	unknown
Qty. of screenings/debris removed from storm sewer infrastructure	(tons)	500*
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Beneficial use
Cost of screenings disposal	(\$)	Unknown

Average frequency of street sweeping (non-commercial/non-arterial streets) (Streets w/ closed drainage systems only)	(times/yr)	1/year
Average frequency of street sweeping (commercial/arterial or other critical streets) (weekly April-Nov.)	(times/yr)	3.5/year
Qty. of sand/debris collected by sweeping (*estimated)	(tons)	750
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Beneficial use
Cost of sweepings disposal	(\$)	unknown
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	n
Mechanical street sweepers contracted out		

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
■ Fertilizers (Commercial application to recreational/athletic fields)	(lbs. or %)	Unknown
■ Herbicides (mandatory by NHDES-Commercial application on waste water lagoons embankment and drainage swales at closed landfill)	(lbs. or %)	Unknown
■ Pesticides	(lbs. or %)	Unknown

Anti-/De-Icing products and ratios (*Average for season based on total purchased. Actual ratios vary based on weather conditions. The 2013-2014 winter season was unusually severe compared to the typical historic winter weather conditions. These unusual conditions included several significant storms and extended periods of extremely cold temperatures below which typical deicing (i.e., salt) are effective. Approximately 500 tons of salt were treated with 4000 gallons of ICE B GONE MAGIC for use in lower temperatures.) (CaCl ₂ , CMA, Kac, and KCl were not used)	(5200 Tons) (4000 gal) (100 Tons)	% NaCl % MgCl ₂ % Sand	98%* 2%*
Pre-wetting techniques utilized — *Three (3) vehicles equipped for 2013-14, two (2) additional approved for purchase before next season		(y/n)	Yes
Manual control spreaders used		(y/n)	Yes (9)
Automatic or Zero-velocity spreaders used		(y/n)	Yes (5)
Estimated net reduction in typical year salt application * The agreed upon method of evaluating net reduction to comply with the TMDL is to compare salt usage by using the 5- and 10-year running averages. Due to severity of the past winter there was a considerable increase in salt application this past season compared to the unusually mild winter the year before. However salt usage continues to show a decrease in the 5- and 10-year running averages.		(lbs. or %)	NA %*
Salt pile(s) covered in storage shed(s)		(y/n)	Yes
Storage shed(s) in design or under construction	*New storage and loading facility completed in 2008	(y/n)	NA*