



DEPARTMENT OF PUBLIC WORKS,
Michael Fowler, P.E., Director
Thomas A. Carrier, Deputy Director

PW12-192

VIA EMAIL: stormwater.reports@epa.gov

April 26, 2012

Glenda Velez
USEPA
5 Post Office Square – OEP06-01
Boston, MA 02109-3912

Jeffrey G. Andrews, PE
NHDES
Wastewater Engineering Bureau
P.O. Box 95, 29 Hazen Drive
Concord, NH 03302-0095

**RE: NPDES Small MS4 General Permit Number NHR041005
Year 9 Annual Report**

Dear Ms. Velez,

Enclosed please find the Town of Derry's NPDES Small MS4 General Permit Year 7 Annual Report for period of April 1, 2011 through March 31, 2012.

If you have any questions, please contact Craig Durrett or me at (603) 432-6144

Very truly yours,

Michael A. Fowler, P.E.
Director of Public Works

Cc/att: Craig Durrett, Derry Public Works

/csd

Municipality/Organization: Town of Derry, NH

EPA NPDES Permit Number: NHR041005

MaDEP Transmittal Number: W-

Annual Report Number

& Reporting Period: No. 8: April 1, 2011-March 31, 2012

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Michael A. Fowler P.E.


Title: Director of Public Works

Telephone #: (603) 432-6144

Email: mikefowler@ci.derry.nh.us

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:  4/16/12

Printed Name: Michael A Fowler P.E.

Title: Director of Public Works

Date: April 16, 2012

Part II. Self-Assessment

General

The Department of Public Works (DPW) is continually making progress on the NPDES Phase II Storm Water Program with the Town of Derry well on its way to improving the quality of its storm water run-off. The Town of Derry 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 improve the storm water quality in the water ways and teach others about the importance of eliminating non-point source pollution and overall pollution prevention.

All goals identified in the last permit continue to be met and improved upon as of this reporting period. The Town formed a Source Water Protection Advisory Committee to prepare a Source Water Protection Plan which incorporates stormwater pollution prevention best management practices as a measure to protect the Town's drinking water supplies. The Plan was adopted by the Derry Planning Board and incorporated into the Town master Plan.

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 significant cuts in budgets across all departments due to the current state of the economy. This will have a significant impact on DPW's ability to conduct all planned activities, reach all measurable goals in a timely manner, or be able to meet all additional requirements of a new permit.

Catch Basin Cleaning and Street Sweeping

In the 2011 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. Basins that pick up little debris are cleaned less often. The Town had 750 catchbasins identified for cleaning based on regularly scheduled 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. Sweeping has already commenced in 2012.

Drain Stenciling

Catch basin stenciling program is still a popular activity for various groups. The Town's Public Works Department continued to provide the stencils for any group interested in participating in these activities.

In 2011, the Beaver Lake Improvement Association (BLIA) worked with the local Boy Scout Troop to help them earn a merit badge by stenciling storm drains around Beaver Lake. This group stenciled approximately 25 catch basins along Beaver Lake Ave, North Shore Road, Orchard Drive, and Worthley Road with "No Dumping, Drains to Lake" or "No Dumping, Drains to Wetland". The Town has loaned our storm drain stencils and provided

paint to the BLIA and local Girl Scout troops in prior years.

Also in 2011, the Town Environmental Engineer gave stormwater pollution prevention presentations to students from the Special Education - Alternative Comprehensive Training (SpEd-ACT) Program at Pinkerton Academy. The students visited the Town Hall in 2 shifts and each shift took turns stenciling catch basins in the Town Hall parking lot. The students were also provided with educational handouts and worksheets to take home and work on in class and with their parents.

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, Recreation Department, the town was able to distribute information on stormwater pollution prevention BMPs, household hazardous waste, pharmaceutical disposal and take back initiatives, and pet waste management.

The Town continues to sponsor Derry Clean Up day 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 Partnerships goals parallel the goals set for the Town of Derry in our MS4GP, benefiting the Town. The Town Environmental Engineer gave a presentation to Beaver Lake area residents at the BLIA annual summer cookout. The presentation focused on shoreland protection and protecting surface water quality through implementation of BMPs for lawn care.

The town often gives tours of the Town Hall to students and youth groups (cub scouts, girl scouts). During these tours the Director of Public Works and/or Environmental Engineer gives short presentations on the town environmental responsibility and distributes age appropriate literature to participants. 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 on recycling and water pollution at area schools. In March 2012, the Town Environmental Engineer spoke with a local Cub Scout troop and their families about recycling, stormwater pollution, and the upcoming household hazardous waste collection event.

Derry remains active in the Manchester area inter-community storm water group with participation in monthly to quarterly meetings and attendance by NHDES and USEPA representatives. 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. This year included a visit to Manchester's Woodgate Court Drainage Project, a presentation by NHDES Jay Aube on changes to NH Shoreland Protection Program, and additional attendance by other communities including Nashua and Amherst.

The Town is involved in two household hazardous waste (HHW) collection events per year cosponsored with the Town of Londonderry with limited funding from NHDES. Derry conducts an 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 even though the Town returned to its regular 3-hour collection time for the scheduled May 2011 event held in Derry. The Town's next event

is scheduled for May 19, 2012.

In 2011, the Department of Justice, through local law enforcement, continued with an annual pharmaceutical take-back day. The Town Departments, including Public Works and the Derry Police Department (DPD) along with the Community Alliance for Teen Safety (CATS) conducted 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 reducing disposal practices that could result in impacts to groundwater and surface water. Additional outreach included posting of information on the Town's website and having literature available at the Town kiosks. The next Pharmaceutical Take Back Day is scheduled for April 28, 2012.

During the reporting period, the Town produced two (2) cable television segments which air on Derry Local Cable Access C17. The first was 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. It has aired 53 times since it was produced. The second is 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. It has aired sixty (60) times on C17 since November 2011.

In April, the town has scheduled a mailing to 405 water supply customers in the Rand-Shepard-Hill and Woodland Community Water systems. The mailing focuses on protecting drinking water through best management practices for the homeowner and will include outreach material such as "The Dos and DON'Ts for maintaining clean Drinking Water", "Best Management Practices for Groundwater Protection", and the announcement for Derry's May 19, 2012 Household Hazardous Waste Collection Event.

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 training opportunities or live streaming webcasts related to stormwater pollution prevention, waste management including the following:

- 2011 Northeast Regional Cyanobacteria Workshop, Sponsored by NEIWPCC Boxborough, MA (4/14/11)
- NHDES Drinking Water Source Protection Workshop, Concord, NH (5/10/11)
- Small MS4 Stormwater General Permits & LID Training Clinics for Municipal Officials in New England, USEPA/NHDES (5/12/11)
- Business and Industry Association/NH Dept. of Environmental Services (BIA/DES) 2011 Waste Management Seminar, Manchester, NH (5/17/11)
- USEPA Construction General Permit Webcast, (5/24/11)
- Brownfields Advisory Committee Meeting (6/2/11)
- Woodgate Court Drainage Project Tour (Stormwater Team) by City of Manchester (9/20/11)
- Upper Merrimack River Watershed Meeting w/Southern NH Planning Commission/USEPA/NHDES/Corp of Engineers (11/10/11 & 3/14/11)
- New England Water Law and Policy Conference, American Groundwater Trust, Marlborough, MA (12/7/11)
- Regional Stormwater Team Meetings (9/20/11, 12/13/11, 2/14/12) – Held jointly with Manchester, Londonderry, Goffstown, Auburn, Bedford, Plaistow, and Amherst)

SALT REDUCTION PROGRAM

The Town of Derry hosted the location 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 and Grant Meeting – April 26, 2011
- Salt Reduction Land Use Workshop: The Role of Land Use Regulations – June 22, 2011
- Salt Reduction Workgroup Meeting – September 13, 2011
- Salt Reduction Workgroup Meeting – October 17, 2011

Training: The Town of Derry provided the training facility for the following training sessions and had at least 12 Derry Highway personnel attend.

- *Green SnowPro Certification: Salt Reduction for Parking Lots & Roads* - November 15, 2011
- *Winter Maintenance: Salt Reduction for Parking Lots and Private Roads* – April 26, 2011, August 25, 2011, October 27, 2011

Salt Reduction Equipment and BMPs

The Town Council approved funding for money in FY12 for a new snow removal truck to be equipped with groundspeed control, prewetting brine system, and bottom scraper. The Town is expected to approve funding for two (2) additional identical trucks for FY13. The matching funds have been approved by Federal Highway Administration with administration of the funds by NHDOT. At this time the Town is waiting for FHWA to approve the public bids the Town received and hopes to purchase the first trucks before the next winter season.

Cable Television Show

- **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 and has aired 60 times since November 2011.

In The News: The Town was featured in several publications on Salt Reduction including the following:

- Environmental News, NHDES Newsletter, November-December 2011, Page 3 – *Innovative Training: Reduce Road Salt. Become a Green SnowPro*
- UNH T2, University of New Hampshire Technology Transfer Center Newsletter, Fall 2011 Volume 26, No.3 Page 1 – *Become a Certified Green SnowPro*

Pervious Pavement

During the last reporting period, the town gave conditional approval for the installation of pervious pavement associated with a parking lot

expansion at the Overlook Medical Office Park. Approval is based on a stormwater management design based on an absence of pervious pavement in case it should fail due to factors associated with climate or maintenance issues. This would have been the first pervious pavement installation in Derry; however construction has not started yet.

Construction on the Route 28 Widening Project started in March 2012. As part of the project, approximately 5600 feet of pervious pavement sidewalk (2800 feet on each side of the road) will be installed.

Illicit Discharges and Stormwater Violations: Investigations and Response

The Town responded to a couple illicit discharges during the reporting period.

1. Watts Junkyard – On going – The owner failed to file Alteration of Terrain and Construction eNOI, failed to implement BMPs (silt fence, etc), failed to update their MSGP permit. The Town continued to address stormwater issues. USEPA, as a direct regulatory oversight agency, was notified regarding the violations. The Town is still actively seeking assistance from USEPA in this matter.
2. Pond Road/Beaver Lake Abutter – Responded to complaints of encroachment and filling of lakeshore, ground alteration, reduction of pervious area, and beach replenishment without permits or implementation of BMPs in violation of wetland and shoreland regulations. The Town worked with NHDES to enforce applicable regulations.
3. Field Road/Lawn care contractor - Complaint regarding a lawn care company working at several abutting lakefront properties for blowing of yard waste directly into the lake, use of excessive fertilizer within protected shoreland buffer, and plans for beach replenishment without applicable permits.
4. Oil Spill-Rt.28/Windham Depot Rd – Derry DPW, Fire Department (DFD), and Police Department (DPD) responded to trail of oil along Rt. 28 and Windham Depot. The spill was the result of an unsecured, partially filled 275-gallon heating oil tank being illegally transported in the back of a pickup truck. Oil spilled out the open orifices of the tank as the tank was transported. DFD responded with speedy-dry until NHDES and a HazMat Contractor arrived.
5. Pinard Waste Hydraulic Fluid Leak – DFD responded to a hydraulic fluid spill approximately 200 yards long. Responsible Party and DFD responded with absorbent. Responsible Party arranged for street sweeper for final cleanup.
6. Miscellaneous releases – Three additional roadway releases occurred due to broken hydraulic (waste hauling), steering fluid (school bus) lines and an unknown source. The Town assisted the responsible parties with response of absorbent pads near drains, placement of speedy-dry or sand, and street sweeping following cleanup.

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 9 (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.	<p>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.</p> <p>The Town distributed and posted information on proper disposal of pharmaceuticals and personal care products in conjunction with the second annual pharmaceutical take-back day and provided outreach material to Derry PD and EMS and the Community Alliance for Teen Safety.</p>	<p>The Town intends to continue distributing information through the venues that it has established.</p> <p>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.</p>
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.	<p>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. Pinkerton Academy Biology Faculty remain 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. Once again, the teams were led this year in the field by the same college intern as in 2010. 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.</p> <p>Also this year, the Special Education-Alternate Comprehensive Training (SpEd-ACT) Program from Pinkerton Academy were given a field presentation and participated in storm drain stenciling. The Town provided the program with additional educational materials for use later in the classroom and at home.</p>	<p>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. A third Pharmaceutical Take-Back Day is scheduled for Saturday April 29, 2012.</p>
Revised					

1.3	Coordinate information and Program Distribution within School Network	Public Works	<p>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.</p>	<p>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". 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 Environmental Engineer and made presentations to youth groups including Cub Scouts and Girl Scouts, and elementary school students or stormwater and drinking water protection, and recycling.</p>	<p>A direct mailing to 405 community water system customers is scheduled for April 2012. The mailing will include information on pollution prevention and protection of groundwater as well as the notification of HHW events. The Town will continue to work with the public schools and Pinkerton Academy to distribute information.</p>
Revised					

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 – 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 period 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. As part of the Master Plan Update, several public meetings were held through the Our Town, Our Future Derry Community Profile initiative which solicited public input on issues that included a Natural Resources component. During this period, the Town established a Source Water Protection Advisory Committee to develop a Source Water Protection Plan (SWPP). The Committee was made up of Public Work/Environmental Engineer, Planning Department, Water Department, and Conservation Commission. The SWPP was completed and adopted by the Derry Planning Board.	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.
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 Revised	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.	<p>Goals Met: Storm Drain stenciling is periodically conducted by various groups including Boy Scouts and Beaver Lake Improvement Association (BLIA). Numerous groups participate each year in Derry Cleanup Day. Additional interest in these activities are voiced regularly. During this reporting period, the Town provided stencils and paint to the BLIA, who stenciled 25 basins along the west and north sides of Beaver Lake. The Special Education-Alternate Comprehensive Training (SpEd-ACT) Program from Pinkerton Academy were given a field presentation and participated in storm drain stenciling around the Town Hall. The Town provided the program with additional educational materials for use later in the classroom and at home</p>	The Stenciling program will be an ongoing program as the paint will wear off and need to be touched up or as roads are repaved.
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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 – Next Permit Year
3.1 Revised	Map Outfalls and Receiving Waters	Public Works & IT Department	Produce a map showing outfalls and receiving waters	<p>Goals Met: The Town of Derry has completed mapping the entire storm water collection system including the outfalls. Follow-up inspection during dry weather conditions continued with remapping and stream cleaning projects.</p>	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 to confirm flow directions and construction.
3.2 Revised	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.	<p>Goals Met: The Derry Town Council adopted the stand-alone Storm Water Ordinance and Stormwater System Design Regulations during a previous reporting period.</p>	Continue to implement and enforce the Storm Water Ordinance and Stormwater System Design Regulations. Prepare revisions if necessary.
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.	<p>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</p>	Update the Town's website with information on identifying and reporting illicit discharges. Continue to train and work with the BLIA stream and lake monitoring volunteers on illicit discharge detection.

Revised				<p>Department are investigated. The students and intern with the Beaver Lake Stream Teams were trained on IDDE</p> <p>Goals Met: Dry weather screening of outfall continued through 2011 as catchbasins were cleaned or maintenance was conducted. No specific illicit discharges were identified during the screening.</p>	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.
3.4	Dry Weather Screening of Outfalls	Public Works	<p>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.</p>	<p>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 to that the Town can respond</p>	Continue with existing program and practices of identifying and investigating illicit discharges. Step up enforcement if necessary.
Revised				<p>Goals Met: All new additions to the Public Storm Sewer system are added to the Town's Geographic Information System.</p>	Continue updates as required. 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.
3.5	Develop System of Identifying Illicit Discharges and Initiate Program to Eliminate Them	Public Works	<p>Complete Plan outlining system for eliminating illicit discharges. Initiate elimination program. Eliminate the majority of identified illicit discharges.</p>	<p>Goals Met: Complete a review of the storm sewer system mapping in Town. Prepare an assessment of the effort required to continue this mapping.</p>	
Revised					
3.6	Identify Magnitude of Effort to Continue Mapping Storm Sewer System.	Public Works			
Revised					

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 -- Next Permit Year
4.1	Document Existing Programs and Expand Them as Required	Public Works	<p>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.</p>	<p>Goals Met: The Town is routinely checking to verify that an NOI has been submitted to the EPA for all sites over one acre in disturbance. 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. Due to the economy, the number of construction starts has decreased over the last two years. The Town has responded to one significant land alteration activity which failed to file an eNOI with USEPA or obtain an Alteration of Terrain permit from NHDES.</p>	<p>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.</p>
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 9 (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.	<p>Goals Met: The Town continues to keep records of the locations and number of catch basins cleaned using its Geographic Information System. The crosschecks the EPA's eNOI database to ensure that NOIs and NOTs have been filed. All site plan review include a review by the Environmental Engineer which includes a focus on construction and post-construction stormwater management.</p>	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	<p>Complete update of Town's Master Plan to include Best Management Practices.</p> <p>Incorporate BMPs into Storm Water Ordinance and Storm water System Design Regulations.</p>	<p>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.</p>	Follow BMPs in Town activities and projects. Make copies of BMPs available to public. Update BMPs as revisions occur.
Revised	<p><i>The updates to the Town's Master Plan is delayed until 2008-2009 time period. Instead, BMPs will be incorporated into the draft Storm Water Ordinance currently being revised.</i></p>				

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 – 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.	<p>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 continued to host several salt reduction training sessions and GreenPro certification for winter snow removal and deicing operations. Training was given by UNH Technology Transfer Center for the public works and contracted plow truck drivers.</p>	Training and 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 manual for handling and use of pesticides, sand, and salt.	<p>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 and are required to use only low phosphorus, slow-release nitrogen fertilizer. The Town is involved in the regional Salt Reduction Committee with EPA, DES, DOT, 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.</p>	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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
		Public Works		The state has developed a chloride TMDL for Beaver Brook. The town	The town will restart its random stream testing of conductivity with periodic

<p>Revised</p>	<p>Implement BMPs for reduction of chloride and phosphorus input into impaired surface waters</p>	<p>Develop Salt Reduction Plan and implement BMPs, collect useful data to complement state's data. Meet TMDL for chloride in the Beaver Brook Watershed</p>	<p>has continued its involvement in Salt Reduction workgroup meetings with NHDES and other stakeholders, hosting 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 realized a 13% reduction in salt use in 2010-2011 winter compared to the running average. The State attempted to develop a draft TMDL for phosphorus in Hood Pond based on one sample collected in the mid-1990s. The concern raised by phosphorus loading in for possible cyanobacteria algal blooms. The Town provided comments on the draft TMDL. No further action by the state has occurred. The Town Council approved funding for money in FY12 for a new snow removal truck to be equipped with groundspeed control, prewetting brine system, and bottom scraper. The Town is expected to approve funding for two (2) additional identical trucks for FY13. The matching funds have been approved by Federal Highway Administration with administration of the funds by NHDOT. At this time the Town is waiting for FHWA to approve the public bids the Town received and hopes to purchase the first trucks before the next winter season.</p>	<p>chloride analysis. The Town will continue to include chloride use education in its outreach efforts and evaluate the purchase of new technology for applying reduced volumes of deicing chemicals. The Town will begin periodic phosphorus testing of Hood Pond and associated tributaries. The Town will continue to host Salt Reduction meetings and Salt Applicator Certification Training workshops. The next is scheduled for April 25, 2012 at the Derry Town Hall. Pending final approval bids and allocation of funds by FHWA, the Town anticipates purchasing the new prewetting/brine application snow plow trucks before the next winter season.</p>
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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)	15 Tons
School curricula implemented	(y/n)	Yes

Legal/Regulatory

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

▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control	X			X
▪ Post-Development Stormwater Management	X			X

Mapping and Illicit Discharges

Outfall mapping complete		(%)	100%
Estimated or actual number of outfalls	(*Includes road crossings)	(#)	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>*Specific to stormwater, erosion, or sediment control on sites > 1-acre</i>)	(#)	5*

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 (<i>*estimated</i>)	(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)	(times/yr)	1/year
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	35/year
Qty. of sand/debris collected by sweeping	(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)	(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 2011-2012 winter season was unusually mild compared to the typical historic winter weather conditions.)	(1900 Tons)	97%*
	% NaCl	
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	3%*
	% Sand	
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes (12)
Automatic or Zero-velocity spreaders used	(y/n)	Yes (2)
Estimated net reduction in typical year salt application	(lbs. or %)	13%*
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	NA*
*New storage and loading facility completed		