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

EPA NPDES Permit Number: **NHR041011**

Annual Report Number & Reporting Period: **No. 2: April 07-April 08**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Troy Brown Title: Town Administrator

Telephone #: (603) 465-2780 Email: bos@hollis.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:

Printed Name: Troy Brown

Title: Town Administrator

Date: April 15, 2008

Part II. Self-Assessment

The Town of Hollis, New Hampshire has completed the required self-assessment and has determined that the community is in general compliance with the MS4 permit requirements. During Permit Year Five, the Town of Hollis was able to sustain the local storm water management initiative. The program was impacted by the retirement of two key founders: Cath Hallsworth, the former program director, and Arthur LeBlanc, the former Superintendent of Public Works. As a result, the program experienced a transition period as new personnel were hired and assigned to manage storm water duties formerly administered by Ms. Hallsworth and Mr. LeBlanc. This transition has been completed and the Town has re-established a regular meeting schedule for the Hollis Storm Water Committee as a means to promote effective storm water management in town. The following is a general summary of our efforts during Permit Year Five.

Public Education: The Town of Hollis continues to provide a variety of written resource materials to educate and inform the public of the need to improve local storm water management. These educational materials have been posted at the Town Hall and the public library. The Town also utilizes the public access channel to broadcast informational videos. Recent topics included storm water pollution and control, wildlife habitat protection and shoreland protection. In addition, a section of the municipal website has been designed and dedicated to the distribution of information describing local storm water management activities. This resource also provides tips and suggestions outlining how local residents can support these efforts. The town continues to provide municipal staff with periodic training and updates as new employees are hired and as new issues are identified. In addition, municipal staff continues to provide information and conduct outreach sessions targeting local residents during local community events such as Old Home Days and the Strawberry Festival.

The Town of Hollis has joined a collaborative effort sponsored by the Nashua Regional Planning Council to promote the development of a Storm Water curriculum for use by the local schools. As part of this effort eight communities have agree to fund this project. This approach will enable these communities to pool their resources and develop a more viable educational tool that can be implemented at a regional level.

Public Participation: The Town of Hollis Storm Water Committee sponsored three public meetings to discuss local storm water management activities during Permit Year Five. Each of these meetings was announced and posted in accordance to the New Hampshire open meeting requirements. The public is invited to attend these meetings. The Town of Hollis is continuing to explore ways to make the municipal website more user friendly

while also posting information notices at public facilities as a means to keep the general public informed of local storm water activities and where interested parties can make inquiries.

The Hollis Storm Water Committee, in conjunction with the Hollis Conservation Commission, the Hollis Brookline High School Green Club, community organizations (including the Rotary Interact and Cub Scouts) and other volunteers, organized and participated in an Earth Day Roadside Cleanup. Approximately eighty volunteers collected litter from Town roads. Glass, plastic and aluminum were sorted from the trash. Several pickup truckloads were taken to the transfer station for recycling and disposal.

Illicit Discharge Detection & Elimination: Personnel changes and a series of departmental re-organizations slowed local efforts to locate and identify illicit discharges during Permit Year Five. The reorganization and staff training has been completed. As a result, the Town of Hollis plans to resume inspecting the permit area for illicit discharges during the spring of 2008. The purpose of this effort will be to locate and identify any outfalls or illicit discharges draining into water bodies located in this area. No illicit discharges or outfalls have been detected to date. In the event that an illicit discharge is discovered, the Town of Hollis will attempt to visually trace the illicit discharge to its source. If this is not possible, then the Town would consider local land uses and use visual and olfactory observations in order to establish a sampling protocol to characterize the discharge. The information gained from this effort would be used to better identify potential sources and focus the municipal investigation. In cases, where it was not possible to visually trace a pipe or discharge back to the source, the Town would introduce non-toxic dye into the suspected source of the illicit discharge as a means to confirm the source of the discharge. A second option would be to initiate a smoke test as a means to identify the source of the discharge. Another option would be to block the illicit discharge and monitor the area for a backup. Once the source had been identified, the Town would order the elimination of the illicit discharge. Dry weather sampling and analysis will commence upon discovery of an illicit discharge.

Four members of the Storm Water Committee attended Illicit Discharge training sponsored by the Nashua River Watershed Association in April 2008. This training reviewed the regulatory definition of illicit discharges, common practices for locating and identifying illicit discharges, and sampling procedures used to evaluate discharges from illicit discharges. The information gathered during this training has been shared with the appropriate municipal staff.

During Permit Year Three, the Town of Hollis drafted a local regulation to enhance its ability to investigate and eliminate any illicit discharges found in the community. In February 2008, the Hollis Storm Water Committee

actively resumed the review of this document with the goal of promoting the adoption of this regulation during 2008. This action has been designated a priority action for 2008 by the Hollis Storm Water Committee. Pending the adoption of a local regulation the Town of Hollis will utilize the authority granted by the State of New Hampshire health regulations governing the installation and use of septic systems to investigate illicit discharges detected in town. Based on the rural nature of the community, it is anticipated that any illicit discharge detected in town is most likely to be related to improper septic discharges, floor drains, sump pumps or the re-direction of springs and surface water. The Town of Hollis will continue to investigate and resolve all illicit discharges discovered during this effort.

The Hollis Storm Water Committee also reviewed the water quality status of the local rivers, streams and ponds to identify water bodies that have been designated by the New Hampshire Department of Environmental Services or the U.S. Environmental Protection Agency as impaired. Basically, all local water bodies have been designated by DES and EPA has having been impacted by the deposition of atmospheric mercury. The water bodies that have been impacted by mercury deposition are now covered by the New England Regional Mercury Total Maximum Daily Limit that has been developed on a regional basis to address impacts created by the atmospheric release of mercury from sources located outside of Hollis. Five local water bodies were found to have diminished water quality. Local impaired water bodies include: the Nashua River, Silver Lake, Flint Pond, Pennichuck Brook and Muddy Brook. Only the Nashua River and Flint Pond are located within the Hollis permit area. A review of the existing state and federal databases determined that a Total Maximum Daily Limit (TMDL's) has not been established for the contaminants of concern noted in any of these water bodies in Hollis. The Town of Hollis has informed local land use review officials of the status of these water bodies and advised local officials to promote measures that will aid in the maintenance or improvement of local water quality. The community is also exploring options for using this information to support local outreach efforts and seek greater resident participation in local environmental management.

Construction Site Runoff Control: Historically, the Town of Hollis has used the site plan review process and several municipal zoning ordinances to require the implementation of enhanced land use planning provisions that promoted environmental stewardship and aquifer protection. The Town routinely requires developers to initiate engineering controls and construction management practices to treat storm water and protect the quality of the local aquifer. The Town of Hollis uses municipal regulations in conjunction with the State of New Hampshire Site Specific Permit and Erosion Control permitting requirements to promote effective erosion control and storm water management at local construction sites.

The Town of Hollis drafted a storm water management ordinance during Permit Year Two. This document has undergone extensive local review and discussion. Based on local input, it has been decided that the community would prefer to modify existing zoning and site plan review regulations to incorporate stronger storm water management standards into these documents instead of creating a single storm water management ordinance. As part of this process, new storm water management standards have been proposed for incorporation into the Town of Hollis Subdivision Regulations. These modifications are currently being reviewed by the Hollis Storm Water Committee. The Committee is seeking to incorporate these new standards into a larger review and revision effort planned for the Subdivision regulations during 2008.

In the interim, pending the adoption of the proposed regulatory amendments, the Town of Hollis will continue to adopt a variety of storm water treatment requirements during the local site plan review process as authorized by the existing regulations. This has been the past practice of the town and will continue. The following are examples of storm water management practices that the Town of Hollis has routinely adopted during the site plan review process:

- The existing zoning regulations have established limits on the amount of impervious surface that may be constructed in the various planning districts based on potential site use and the environmental sensitivity of the general area.
- The Town often seeks to maximize the infiltration of clean surface run-off as a means to recharge the local aquifer.
- All applicants are required to prepare Erosion Control and Drainage Management plans for their projects. These plans must specify preventive measures to be implemented to protect local resource areas and to prevent re-location of sediment.
- The Town periodically inspects local construction sites to ensure that the Erosion Control and Drainage Management plans are being effectively implemented. Where necessary, the Town initiates enforcement action to ensure that all deficiencies are corrected.

These practices will continue.

When the Town of Hollis originally developed its storm water implementation schedule it had proposed to develop a fee schedule to support the inspection and maintenance of drainage systems located within the MS4 permit coverage area. This task was scheduled to be completed during Permit Year 3. This task was postponed and re-evaluated during Permit Year 4. At that time, the Town of Hollis decided not to adopt a fee

to specially support the inspection of drainage systems. Instead developers are required to fund a series of independent and comprehensive inspections of local construction projects where a variety of design and management practices including storm water management and erosion control are monitored on behalf of the Town. The process continues to be implemented by the Town.

Post Construction Runoff Control: Since 2001, the Town of Hollis utilized the municipal zoning ordinance to incorporate a series of enhanced land use planning provisions that promoted environmental stewardship and aquifer protection into local site design. These standards established a number of local standards which required developers to design all construction projects with enhanced storm water treatment which provided pollutant attenuation, mitigated peak volumes and promoted infiltration of treated surface run-off. The Town of Hollis has used these regulations in conjunction with the State of New Hampshire Site Specific Permit and Erosion Control permitting requirements to promote effective long-term erosion control and storm water management at local construction sites.

The Town of Hollis drafted a storm water management regulation during permit year two. The original goal was to create a single standard that outlined local storm water management design specifications and construction requirements. After much discussion, it has been decided that standard and recommendations originally proposed in the storm water management regulation should instead be incorporated into the existing municipal site plan, subdivision and zoning regulations. The revision of these regulations is currently in progress. Where appropriate these new provisions will be supplemented by the adoption of a local health regulation, which enhances the ability of the Town to address and resolve nuisances created by failing or inadequate drainage systems.

Pending the adoption of the regulatory modifications, the Town of Hollis will continue to adopt a variety of storm water treatment requirements during the local site plan review process as authorized by the existing regulations. This has been the historic practice of the town and will continue. The following are examples of storm water management practices that the Town of Hollis has consistently adopted during the site plan review process:

- The existing zoning regulations have established limits on the amount of impervious surface that may be constructed in the various planning districts based on the potential site use and environmental sensitivity of the general area.
- The Town often seeks to maximize the infiltration of clean surface run-off as a means to recharge the

local aquifer.

- The Town routinely requires the development of drainage designs that provide pollutant attenuation, volume and flow mitigation.
- All applicants are required to prepare Erosion Control and Drainage Management plans for their projects. These plans must specify preventive measures to be implemented to protect local resource areas and to prevent re-location of sediment.
- The Town often requires the submittal of a drainage maintenance plan for commercial sites.
- The Town periodically inspects local construction sites to ensure that the drainage system is installed as originally proposed. Where necessary, the Town initiates enforcement action to ensure that all deficiencies are corrected.

These practices will continue.

Municipal Good Housekeeping: The Town of Hollis conducts an annual Town wide drainage maintenance and street sweeping program. This program continued during Permit Year Four. The community continued to monitor storm water treatment practices at local facilities. These activities have reduced the environmental impact of municipal operations while also serving to protect local water quality.

In addition, the Town of Hollis also provides a number of disposal programs for local residents. Historically, the Town of Hollis has participated in the Nashua Regional Household Hazardous Waste Collection program. This program sponsors seven collection events where local residents can safely dispose of a range of chemical waste commonly found in the home. Residents can also bring waste oil, antifreeze, automotive batteries, and ashes to the Hollis Transfer Station for safe disposal. These efforts help to safeguard local water quality by providing residents with several options to safely disposal of hazardous materials. This approach helps to alleviate the risk that these materials will be discarded in such a manner that could threaten local water quality.

Four members of the Hollis Storm Water Committee attended a Storm Water training session sponsored by the Nashua River Watershed Association which reviewed Good Management Practices that should be implemented at the local Highway Garage and by the municipal Department of Public Works. The information gathered during this training has been shared with the appropriate municipal staff.

Additional information: The Town of Hollis continues to collaborate with the Nashua Regional Planning

Commission and the New Hampshire Department of Transportation on regional storm water management concerns. This group, The Nashua Region Storm Water Coalition, meets on a periodic basis to share information and to investigate opportunities to where the communities can work together to support regional storm water management efforts. Recently, the group heard a presentation on innovative sediment and erosion control measures.

In March, the EPA awarded Hollis $162,850 in grants to install advanced pollution control equipment on 25 school buses. In addition, the entire fleet of buses that serve the SAU 41 school district will be fueled with a 20% blend of biodiesel. These buses, contracted through the school district, are privately owned and operated. Jeff Babel, the Public Works Director, informed school officials of the grant opportunity and encouraged the administration to apply.

These efforts will continue during permit year five.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2.1.A	Continue availability of brochures & pamphlets at Town Hall	Board of Selectmen	Provide pamphlets at Town Hall relating to Storm Water	Provided storm water pamphlets at Town Hall. Modified municipal storm water website to provide additional information to the public. The Town continued posting storm water displays and outreach materials at a variety of public events. The Town has joined a regional effort to develop a storm water curriculum to be implemented with area schools.	The Town will continue to expand and modify its outreach effort. News releases and public service announcements are planned for this year. Additional information will be post on the municipal website. The Town will continue to train and advise municipal staff on a periodic basis. The Town proposes to work with the local schools to introduce basic storm water information into the local curriculum.
Revised	*The Town of Hollis decided to not survey local residents regarding storm water management at this time. The Town will instead focus on expanding the existing outreach program with an informative mailer.*				
2.1.B	Training on storm water for all Town of Hollis Municipal Employees	Department of Public Works	Train Police and Fire Personnel on NPDES	Four storm water committee members attended a storm water training session sponsored by the Nashua River Watershed Association. The investigation of illicit discharges and the implementation of Good Management Practices at municipal public works facilities were reviewed during this program.	Continue providing storm water management training to municipal staff as a means to re-enforcement storm water awareness and promote the implementation of good housekeeping practices
2.1.C	Develop educational material for Hollis School District	Board of Selectmen	Prepare educational material for local schools describing effective storm water management.	Hollis joined other communities in the Nashua Region to share the cost and to develop a storm water curriculum for communities.	Hollis will continue to work with the Nashua Regional Planning Commission to develop educational material to be used by local school districts. Continue to provide updated brochures on storm water to the public.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2.1.A	Continue catch basin cleaning program in permit coverage area.	Department of Public Works	Continue routine inspection and cleaning program of catch basins located in permit area.	DPW sponsored a routine inspection and maintenance program for the drainage structures located in the permit area.	Continue routine maintenance program and expand maintenance efforts to include the entire town.
2.1.B	Continue street sweeping program in the permit coverage area.	Department of Public Works	Continue street sweeping program in the permit area.	The DPW continues to implement an annual street sweeping program.	Continue municipal street sweeping program.
2.1.C	Develop informational packets to be distributed to neighborhoods for adoption of storm water structure	Board of Selectmen	Produce packet for delivery to town residents	New Resident packet completed. The town is continuing to distribute this information.	Continue and expand local educational efforts to promote the adoption of local storm water structures.
2.1.D	Begin inspecting and cataloging of storm water structures located in the permit coverage area	Department of Public Works	Survey and document drainage structures located in permit area.	DPW has cataloged and mapped the drainage structures located in the permit area. DPW has also cataloged and mapped structures located outside the permit area.	All future drainage structures constructed in the permit area will be added to this database. Municipal staff will continue to maintain and expand this database in order to document all the structures located in town.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
				A regional TMDL for mercury impairment due to the deposition of atmospheric mercury has been adopted for basically all water bodies in Hollis and throughout New Hampshire. This is part of the New Hampshire Dept. of Environmental Services regional approach for managing impacts created by mercury emissions occurring outside of New Hampshire. There are no known local sources of mercury. The Town will continue to monitor for the development of new TMDL's. In addition, several water bodies have been identified as impaired but lack TMDL's. The Town plans to inform the public and development community of these findings and promote the use of enhance treatment measures for development occurring within these watersheds. This approach should help alleviate the risk of continued degradation of these water ways.	Will continue to monitor the status of the local impaired waterways.

7a. Additions

7b. WLA Assessment

Legal/Regulatory

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

Mapping and Illicit Discharges

Outfall mapping complete	100% in permit area	
Estimated or actual number of outfalls	17	
System-Wide mapping complete	90%	
Mapping method(s)		
▪ Paper/Mylar	75%	
▪ CADD	10%	
▪ GIS	90%	
Outfalls inspected/screened	0	
Illicit discharges identified	0	
Illicit connections removed	N/A	
% of population on sewer – Hollis is a town of well water and septic systems	(0%)	
% of population on septic systems	(100%)	

Construction

Number of construction starts (>1-acre)	8	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%	
Site inspections completed	100%	
Tickets/Stop work orders issued	2	
Fines collected	NONE	
Complaints/concerns received from public	N/A	

Post-Development Storm water Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction storm water control	75%	
Site inspections completed	75%	
Estimated volume of storm water recharged	N/A	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	1 / YR	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	1 / YR	
Total number of structures cleaned	344	
Storm drain cleaned	0 MI	
Qty. of screenings/debris removed from storm sewer infrastructure	300 cu yds	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	STUMP DUMP	
Cost of screenings disposal	None	

Average frequency of street sweeping (non-commercial/non-arterial streets)	1 / YR	
Average frequency of street sweeping (commercial/arterial or other critical streets)	1 / YR	
Qty. of sand/debris collected by sweeping	150 cu yds	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	STUMP DUMP	

Cost of sweepings disposal	N/A $14,000	
Vacuum street sweepers purchased/leased	NONE	
Vacuum street sweepers specified in contracts	2 sweepers; 1 dump truck contracted	

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

Anti-/De-Icing products and ratios	NaCl & Sand	NaCL-straight NaCL:Sand 1:1, 1:6
Pre-wetting techniques utilized	NO	
Manual control spreaders used	NO	
Automatic or Zero-velocity spreaders used	YES	
Estimated net reduction in typical year salt application	N/A	
Salt pile(s) covered in storage shed(s) – New salt shed completed in 2006	YES	
Storage shed(s) in design or under construction	New in 2006	