

MAY 11 2009

Municipality/Organization: GREENLAND, NH

EPA NPDES Permit Number:

MaDEP Transmittal Number: W-

Annual Report Number

& Reporting Period: No. 6: March 2008-March 2009

MAY - 1 2009

P

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Karen Anderson

Title: Town Administrator

Telephone #: 603-431-7111

Email: kanderson@greenland-nh.com

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Karen M. Anderson

Printed Name: Karen M. Anderson

Title: Town Administrator

Date: April 29, 2008

Part II. Self-Assessment

The Town of Greenland recognizes the importance of the MS-4 Permit and is working hard to be in compliance on all aspects. Substantial progress is being made on all requirements. Greenland is a small town without a public works department, so education has been a key focus for our transfer station attendants and management personnel. Management personnel attend meetings in the Seacoast Stormwater Coalition on a monthly basis and assisted with the development of a best management practices manual as well as training courses for key personnel. The public has become involved in the process and helped with the submission of funding requests for this purpose. A committee is currently being formed to assist in the public outreach program in preparation for the new permit requirements. Education for the residents has continued through various programs, ongoing pet waste education and school programs.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
GN1-001 Revised	Participation in Household Hazardous Waste Collection programs <i>Continue participation and improve notifications about HHW Collection dates</i>	Karen Anderson, Town Administrator Karen Anderson, Town Administrator	Number of residents participating Increase in number of residents participating	Collection was held in May & September of 2008 in cooperation with the City of Portsmouth. Advertising and participation expanded. Collection containers have been added at Transfer Station for mercury products. COMPLETED	Continue to utilize town website, newsletter and media to advertise collection and prepare flyers to be distributed at transfer station, noting date and time and importance of proper disposal of hazardous waste. Add options for convenient disposal at Transfer Station for used oil.
GN1-002 Revised	Distribution of stormwater information at transfer station and community picnic. <i>Distribution of stormwater educational information to the members of town land use boards and code enforcement officials</i>	Town Administrator Karen Anderson Town Administrator	Distribution of 1300 flyers Distribution of 1300 flyers; children's activities at community picnic with Enviroscap.	Flyer was developed and distributed at Transfer Station, at Community Picnic event and posted on the town website. Enviroscap was used for demonstrations during community day with 125+ residents and children participating. 1700 flyers were distributed, 285 coloring books were distributed to children. 650 dog waste bags with informative material were distributed to dog owners when registering their dogs in April, 2008. COMPLETED	Increased locations for updated information to be distributed. Information will be continue to be distributed to all dog owners when the register their dogs in April with the Town Clerk.
GN1-003 Revised	Section in Town Annual Report	Karen Anderson Town Administrator	Publication of page in town report Information was included in Town Administrator's and Health Officer's report.	Information regarding stenciling project and importance of stormwater management was published in annual town report. COMPLETED	Information will continue to be published, with more emphasis placed on the actions residents can take.

GN1-004	Participate in stormwater video prepared by RPC if requested.	Planning Board Chairman	Participation as requested.	Video was prepared through grant to Seacoast Stormwater Coalition. <i>COMPLETED</i>	Town does not have capability to broadcast on independent cable channel. Notice of broadcast dates of nearby city can be posted on Greenland website.
Revised	<i>Advertise showings of completed video.</i>				
GN1-005	Include stormwater section on town website when developed.	Karen Anderson Town Administrator		Information is posted on website. <i>COMPLETED</i>	Continue to update information and make efforts to draw residents attention to it.
Revised	<i>Update stormwater section on town website</i>		Annual update of information		

1a. Additions

GN1-006	Prepare information on stormwater management activities for local newspapers, focusing on residential activities such as car washing and fertilization of lawns.	Karen Anderson Town Administrator	Press releases published	Information was published requesting volunteers to assist with marking storm drains in local newspapers and conservation organization newsletter. Press releases were published thanking volunteers for their assistance. Newspaper articles ran about the pet waste disposal campaign. <i>COMPLETED</i>	Ongoing efforts to keep the media supplied with material that will remind residents of safe practices. As a result of the ice storm and the changed drainage pattern in many areas from storm debris, information has been publicized for residents to clear debris and maintain natural drainage patterns so that driveway runoff will channel and filter correctly before reaching any water body.

2. Public Involvement and Participation

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 –
GN2-001	Storm drain stenciling	Karen Anderson Town Administrator	Marking of storm drains	100% completion of project. Laminated markers were adhered to the curb or grate of all catch basins noting	Monitor markers to see if they are all still present and retaining colors/text.

Revised	Storm drain marking				if the outfall drained to the bay or wetlands. <i>COMPLETED</i>	
GN2-002	Public Meeting to discuss program	Board of Selectmen	Holding meeting annually.		Stormwater Management is highlighted during the annual public hearing for budget and annual town meeting. Topic was discussed at several Board of Selectmen's meetings, with the focus on the Pet Waste campaign in 2008. <i>COMPLETED</i>	A new committee will be assisting in getting information out to businesses and students.
Revised						

2a. Additions

GN2-003	Signage at park locations for dog waste reminders.	Town Administrator			Five signs and two pet waste stations have been installed at recreation fields and residential areas for public use. <i>COMPLETED</i>	Maintenance of the signs and education about the dangers of improperly disposing of pet waste will be ongoing.

3. Illicit Discharge Detection and Elimination

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 –
GN3-001	Maintain map of stormwater sewers	Robert Cushman, Building Inspector	Annual update of maps	Maps were updated as each subdivision or drainage change was made. <i>COMPLETED</i> A GPS unit was purchased for more accurate locations of drainage system components.	Continue to update maps and improve accuracy with the requirement that developers provide map changes in a digital format.
Revised					
GN3-002	Review municipal ordinances for means of prohibiting illicit discharges of pollutants to stormwater system	Karen Anderson Town Administrator	Approved ordinances	100% complete, required ordinances are adopted. <i>COMPLETED</i>	Refine ordinances and expand beyond minimum requirements. Continue participation with the Seacoast Stormwater Coalition to stay up to date on regulations and best management practices.
Revised	<i>Thoroughly review and reorganize ordinances.</i>	<i>Karen Anderson and Wallace Berg, Health Officer</i>			Ordinances are being compared to model ordinances that are being put together by the State and a complete reorganization of the ordinances is taking place it consolidate the ordinances into one section to provide a comprehensive stormwater guide.
Revised					

3a. Additions

GN3-003	Screen outfalls for illicit connections	Health Officer, Town Administrator	Screen all outfalls by Fall 2007	Complete screening outfalls with GPS effort by Fall 2007.	Contract with Rockingham Planning Commission for GPS work as part of Master Plan.
				ONGOING – One discharge discovered and corrective actions being taken.	

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Permit Year 5
GN4-001	Review municipal land use ordinances for existing control mechanisms; recommend additional measures if warranted.	Building Inspector, Town Administrator	List of ordinances present and list of what may be needed.	Ordinances are in place for run-off control. <i>COMPLETED</i>	Research ordinances in place in other MS 4 communities for improvements that could be made to Greenland's.
Revised					
Revised					

4a. Additions

GN4-004	Establish confidential reporting procedure for residents to report non-compliant activities	Town Administrator, Building Inspector, Health Officer	Establish before publication of 2007 town report	Use of email link for violations established rather than telephone hot line. health@greenland-nh.com No complaints were received during permit year.	Establish action plan on complaints.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities --
GN5-001	Review of municipal land use ordinances for existing control mechanisms; recommend additional measures if warranted.	Karen Anderson Town Administrator Robert Cushman, Building Inspector	Inspected new development sites for compliance and determined that Greenland's ordinances were effective.	<i>COMPLETED – ONGOING INSPECTIONS</i> Commercial development installed pervious pavement for parking lot on voluntary basis and effectiveness is being monitored.	Inspections post-development will continue to insure that required drainage culverts are being properly maintained and silt is not getting into system. Road shoulders will be inspected for evidence of erosion.
Revised					

5a. Additions

--	--	--	--	--	--

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
GN6-001 Revised	Clean Catch basins and storm drains annually	Karen Anderson Town Administrator	Catch basins are clean and operating correctly. Cleaning is scheduled and funded.	Catch basin cleaning is contracted annually and was completed in April, 2009. All catch basins were cleaned, material was disposed of on town gravel area, away from any water body.	Greenland will contract for same level of service in 2010.
GN6-002 Revised	Employee Training Program	Karen Anderson, Town Administrator	Insure adequate training for employees.	The Town of Greenland has two employees involved with stormwater management, the Town Administrator and Building Inspector. Both attend trainings to completely understand the requirements.	Town Administrator will continue attending monthly meetings with the Seacoast Stormwater Coalition, working on a BMP manual and keep up to date on information from the EPA. Materials will be collected and organized to provide reference documents for residents and builders. The Building Inspector will continue to attend meetings to be able to detect violations and insure compliance with existing regulations. The Health Officer has become very involved with the reorganization of all water related ordinances and will be attending an IDDE training with the Administrator in June.

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) << if applicable >>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
	N/A				
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	\$5,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	90%
Stormwater management committee established	(y/n)	No
Stream teams established or supported (Funding provided for three test sites)	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes, 100%
Household Hazardous Waste Collection Days		
▪ days sponsored	(#) 2	2
▪ community participation	(%) 38	2.8%
▪ material collected – Data not available at this time – collection held on May 10 th .	(tons or gal)	unknown
School curricula implemented –	(y/n)	Y

Legal/Regulatory

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

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	25
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	100%
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	15
Illicit discharges identified		1
Illicit connections removed	(#) (est. gpd)	None
% of population on sewer	(%)	0%
% of population on septic systems	(%)	100%

Construction

Number of construction starts (>1-acre)	(#)	23
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	None
Fines collected	(# and \$)	None
Complaints/concerns received from public	(#)	0

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 – Major flooding occurrence in May, 2006	(gpy)	unknown

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	179
Storm drain cleaned	(LF or mi.)	None
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Undetermined
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Sandpit for recycling
Cost of screenings disposal	(\$)	0
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	0

Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	0
Qty. of sand/debris collected by sweeping	(lbs. or tons)	N/A
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	N/A
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	N/A
Vacuum street sweepers specified in contracts	(y/n)	N/A

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	75%
▪ Herbicides	(lbs. or %)	80%
▪ Pesticides	(lbs. or %)	N/A

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	75% varies depending on weather conditions 25%
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	Not determined
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	No