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Municipality/Organization: GREENLAND, NH

EPA NPDES Permit Number:

MaDEP Transmittal Number: W-

Annual Report Number  
& Reporting Period: No. 11: March 2014-March  
2015

## 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: 

Printed Name: Karen M. Anderson

Title: Town Administrator

Date: October 3, 2015

## **Part II. Self-Assessment**

**The Town of Greenland recognizes the importance of the MS-4 Permit and has been working hard to be in compliance with all aspects. Substantial progress has been made on all requirements. Greenland is a small town without a public works staff, but education has been a key focus for our transfer station attendants and management personnel. Management participates 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. Greenland was the lead agency in a grant from the NH Coastal Program to develop a BMP manual for the maintenance of recreational fields and green spaces in communities, with particular emphasis on the use of products with nitrogen. The public has become involved in the process and has been supportive of funding requests for this purpose. The Planning Board strengthened the existing stormwater ordinances during the past year. Education for the residents has continued through the catch basin program, ongoing pet waste education and school programs.**

**During 2014, substantial time was spent reviewing the proposed new regulations, new educational materials have been prepared, new storm water plans written and timelines established for implementation of several new programs. When the final regulations are released, the Town of Greenland will be ready to come into compliance with the new permit . Late 2015, the town received a grant from the Piscataqua regional Estuaries Program to review and adopt the Seacoast Model Stormwater Regulations, replacing our current regulations. Work is continuing on that process.**

### 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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
GN1-001	Participation in Household Hazardous Waste Collection programs	Karen Anderson, Town Administrator	Number of residents participating	Collection was held in May & September of 2014- in cooperation with the City of Portsmouth. Advertising and participation expanded. Collection containers have been added at Transfer Station for mercury products.	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. Maintain options for convenient disposal at Transfer Station for hazardous materials.
Revised	<i>Continue participation and Improve notifications about HHW Collection dates</i>	Karen Anderson, Town Administrator	Increase in number of residents participating	<i>COMPLETED</i>	
GN1-002	Distribution of stormwater information at transfer station and community picnic.	Town Administrator	Distribution of 1000 flyers	Flyer was developed and distributed at Transfer Station, at Community Picnic event and posted on the town website. Enviroscene 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.	Increased locations for pet waste disposal stations, education to increase to limit the amount of trash placed in the receptacles..
Revised	<i>Distribution of stormwater educational information to the members of town land use boards and code enforcement officials</i>	Karen Anderson Town Administrator	Distribution of 1300 flyers; children's activities at community picnic with Enviroscene.	<i>COMPLETED</i>	Information will be continue to be distributed to all dog owners when they register their dogs in April with the Town Clerk.
GN1-003	Section in Town Annual Report	Karen Anderson Town Administrator	Publication of page in town report	Information regarding stenciling project and importance of stormwater management was published in annual town report.	Information will continue to be published, with more emphasis placed on the actions residents can take.
Revised			Information was included in Town Administrator's and Health Officer's report.	<i>COMPLETED</i>	

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 11 (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	<i>Storm drain marking</i>			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 is assisting in getting information out to businesses and students. Newspaper was produced by Conservation Comm. And distributed to all households.
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 12 (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 to consolidate the ordinances into one section to provide a comprehensive stormwater guide. Planning Board is currently reviewing ordinances for further refinement.

#### 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. <i>COMPLETED</i>	Assistance was provided through EPA for the GPS work. No connections have been found for two years.
				<i>ONGOING</i> – One discharge discovered and corrective actions being taken. <i>COMPLETED</i>	

GN3-004	Screening and testing at outfalls	Town Administrator	Ongoing	Greenland has partnered with UNH for a comprehensive monitoring and testing for selected outfalls.	Test results have not indicated contaminants, although it was discovered that a resident was disposing of yard waste too close to an outfall and that has been corrected.
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#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
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>	Prepare educational brochure for contractors to clearly show their requirements.
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. <a href="mailto:health@greenland-nh.com">health@greenland-nh.com</a> No complaints were received during permit year.	Establish action plan on complaints. No complaints have been received this year.

**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 12 (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**

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## 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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
GN6-001	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 May, 2010. 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 2012. Culvert maintenance was initiated in 2010 with several culverts reshaped and cleared..
Revised					
GN6-002	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.
Revised					

### 6a. Additions


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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 12</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Future Years</b>
	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	(\$)	\$10,000

**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	(%) 286	17%
▪ material collected – data not provided (oil based paints, chemicals, wet cell batteries)	(tons or gal)	unknown
School curricula implemented –	(y/n)	Y

## 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
▪ 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 %)	25
Illicit discharges identified		0
Illicit connections removed	(# ) (est. gpd)	None
% of population on sewer	(%)	0%
% of population on septic systems	(%)	100%

### Construction

Number of construction starts (>1-acre)	(#)	12
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 –	(gpy)	unknown

### Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1 per year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1 per year
Total number of structures cleaned	(#)	179
Storm drain cleaned	(LF or mi.)	200'
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
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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 %)	100%
▪ Herbicides	(lbs. or %)	75%
▪ Pesticides	(lbs. or %)	100%

Anti-/De-Icing products and ratios	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	75% varies depending on weather conditions
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes 50%
Automatic or Zero-velocity spreaders used	(y/n)	Yes 50%
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