Municipality/Organization: Groton

EPA NPDES Permit Number: #ma041193

MaDEP Transmittal Number: W-041197

Annual Report Number
& Reporting Period: No. 7: March 11-March 12

NPDES PII Small MS4 General Permit
Annual Report

Part I. General Information

Contact Person: Robert T Delaney Jr Title: DPW DIRECTOR

Telephone #: 978-448-1162 Email: tdelaney@townofgroton.org

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: Robert T Delaney Jr

Title: DPW director
Date:

Part II. Self-Assessment

The Town Of Groton has completed its self assessment and has determined we are in compliance with the permit except for the following provisions.

Groton currently has influence on two water bodies of concern which have a TMDL.
The town is investigating additional implementation strategies components that with the actions currently being taken by the Town will enhance its existing Storm water Management Program as needed to be protective of impaired waters

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
1a	Yearly flyer in tax bills	Tom Delaney/ DPW	Reach all home owners	Complete River Awareness was the topic	Continue mailings with different themes if budget allows.
Revised	*Town wide mailing in corporation with NWRA*				
1b	Hazardous waste day	Board of Health/Recycling	Reduce waste	New facility open and continue operations and collection	Continue to recruit new members for the new facility.
Revised					
1c	Increase recycling efforts within the Town	Board of Health/ recycling	Reduce waste	Regionalized recycle program operational	Try to encourage more towns and businesses to join facility.
Revised					
1d	Water conservation equipment	Water Department	Reduce water use	Department continues to distribute water saving devices.	Continue with program.

1e	Educational programming	DPW	Inform public of educational programming		

1a. Additions

1f	Rotating themes related to storm water on kiosk built in environmentally sensitive area for education	Earth removal storm water advisory committee and DPW	Public and contractor education	Update as needed	Update as needed
1G	**Plans to accept new recyclable items at recycling center**	**DPW**	Reduce waste	Advertise collection of new material	Find new items to recycle

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 – Permit Year 10
2a	Stenciling	Tom Delaney/ DPW	Stencil Basins to Waterways	Installing Drain Labels continues	Look for more areas
Revised	*Drain markers on basin tops*	Tom Delaney/ DPW	Label basins as water only		
2b	Stream Cleaning and Ditch maintenance	Tom Delaney/ DPW	Increase water Flows	150+- feet of and 5 inlets and road side ditches cleaned and Rip Rapped	Continue with maintenance program
Revised					
2c	Increase cooperation with Nashua River Watershed Association	Tom Delaney/ DPW MRWA	Assist when we can to improve water quality	Continue to pickup debris from stream cleaning days.	Continue Cooperation with NWRA
Revised					

2a. Additions

2d	Installation of water crossing signs	DPW /NRWA	Mark streams that cross under roadways	complete	Replace as needed
2e	Low Impact development Workshop	Planning Board/ DPW	A move towards LID	Update and educate as needed	Updated bylaw as needed

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 – Permit Year 10
3a	Visual inspection	Tom Delaney/ DPW	Detect illegal hookups	No hookups found	Continue to monitor for illegal connections
3b	Bylaw prohibiting hookups into Town System	Tom Delaney/ DPW	Prohibit Discharge into MS4	Bylaw adopted	In place, revise as needed
3c	Mapping of Basins and Outfalls	Tom Delaney/ DPW	Map System	Manholes and outfalls together and put on Town GIS	In place revise as needed

3a. Additions

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 – Permit Year 10
4a	Bylaw Subdivision Regulation	Planning Board	No net increase of water runoff from sites.	Bylaw in place	Revisit and make additions if and when necessary when our education of new and better requirements improve.
Revised					
4b	Town of Groton Wetlands Bylaw	Conservation Commission	Strict Regulations	50 foot no disturb bylaw in place and increased buffer to 200	In Place
Revised					
4c	Site Plan Review	Planning Board	Water Management in projects	Bylaws in place regarding any storm water management	In place revise as needed
Revised					
4d	Erosion Control Bylaw	Planning Board	Sedimentation and erosion control.	Bylaws in place for erosion Control as well as an enforcement officer and a system in place for fines.	In place revise as needed
Revised					
4e	Bylaw for open drainage in New construction LID	Planning Board/ Highway	Open drainage for ground water recharge	In place	In place revise as needed
Revised	*Also long term maintenance addressed in new regulations.*				

4a. Additions

	New storm water committee	Selectman	Update Erosion committee to include Stormwater in scope	in place	In place
	New Storm water Bylaw	Stormwater/erosion committee	Update regulations and maintance plan bylaw for new systems	In place	In place

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 – Permit Year 10
5a	Subdivision Regulation	Planning Board	No net increase of water flows from new construction	In Place	In place
Revised					
5b	Site Plan Review	Planning Board	Storm Water Management Plan required for developments	In Place	In place
Revised					
5c	Erosion Control Bylaw	Earth removal Committee	Erosion and Sedimentation control	In Place	In place Update as needed
Revised					

5a. Additions

5d	Expanded Post construction Bylaw	Earth Removal Planning Board	Revise Bylaw to mimic state regulations	In place	In place Update as needed
5c	Updating regulations	Planning Board and Stormwater	All regulations above to be reviewed and updated	In place	In place Update as needed

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 – Permit Year 10
6a	Environmental assessment	Tom Delaney/ DPW	Town facility assessment and environmental compliance	Completed	In place Update as needed
6b	Spill response	Tom Delaney/ DPW	Spill plan	In place	In place Update as needed
6c	Illegal Dumping Control	Tom Delaney/ DPW	Reduce illegal dumping	Allowing residents to dump brush for free.	Continue as needed
6d	Oil Recycling	Tom Delaney/ DPW	Continue oil collection and Used oil heat technology	Continue with current uses	Continue
6e	Increased frequency of Street Sweeping	Tom Delaney/ DPW	Increase sweeping in environmentally sensitive areas	In Place	Continue

6a. Additions

6f	Hazardous waste training for employees	Tom Delaney/DPW	Training by insurance company to recognize hazards	Summer 2012	Implement items learned

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 – Permit Year 10
7a	Increase Basin Cleaning	Tom Delaney/ DPW	Increase Cleanings in sensitive areas	In Place	Continue
Revised					
7b	Salt Spreader calibrations to reduce salt usage	Tom Delaney/ DPW	Reduce Salt use by 10%	In Place	Continue
Revised					
7c	Oil traps on Basins in Sensitive areas	Planning Board\ Tom Delaney/ DPW	Oil traps in New Subdivisions on all catch Basins	In Place	Continue
Revised					
7d	Conversion to Leaching Basins when Practical	Tom Delaney/ DPW	Recharge ground water when possible	4 built	Continue
Revised					

7a. Additions

7e	Oil hoods on basins	DPW	Install oil traps on basins	Try to adapt 5 per year	

Part IV. Summary of Information Collected and Analyzed

Year 1
Basin Inspections list is being compiled and will be integrated into the mapping phase of our Plan. Details will include if there was an illicit connection, type, condition, oil trap condition if present, dates cleaned, etc..
No other data to report at this time.
Year 2
Nothing new to report at this time. No illicit connections have been discovered during repairs, inspections and cleanings.
Year 3
All location of known manholes, basins, and outfalls have been GIS located and added to our base map system. No illicit discharges were located during mapping and inventory. Several LID workshops and public hearings and New LID and erosion control Bylaw have been approved at Town Meeting to encourage open drainage and LID. Several old as well as new videos were shown on local access channel relative to storm water as well as television interviews with Planning Administrator and Highway Surveyor relative to LID. Town wide mailing of river awareness flyers cosponsored by Nashua River Watershed Association
Year 4
Major components of permit complete.
Information left to obtain for species habitat is forthcoming.
Year 5
See Self assessment for new accomplishments.
Waiting to hear for federal listed species.
Year 6
Continue public education
Update rules and regulations as needed
Year 7
The major components of the EPA storm water grant have been completed, because we saved money and were under budget, we have money for an additional project.
BMP's for ditch cleaning established in house to be consistent town wide.
Updating bylaws and regulations as required, most were in place prior to permit.
TMDL recommendations received and plan for updating is in process. Most of the recommendations have been in place prior to report.
Copy of recommendation available.
Year 8
Major goals of the permit goals have been completed. Maintenance items ongoing and done as routine work are geared to enhance the aspects of this plan. Hazardous waste training this summer for staff to recognize problems.
New IT personnel on board to help enhance GIS mapping and new web based program to make access to maps of stormwater infrastructure easier. Stream teams monitoring with NWRA quarterly on select water ways.
New members of Stormwater committee appointed that may have new ideas for enhancement of program now on board
Awaiting new regulations for continuation of program.

Year 9

Maintenance items in plan continue. Upgrading and cleaning of our system is our priority. Conversions, cleaning and retrofitting of basins with oil hoods is new goal. Hazardous waste center operational as well as regional recycling center and efforts being made to increase use of both. Continuing to work with NWRA and stream teams for cleanings and monitoring.
Updating Master plan to encourage LID techniques in new developments.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures ** **INCLUDES INSPECTIONS**	($)	8600
Total program expenditures since beginning of permit coverage	($)	40K+_
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)	GENERAL	REVOLVING

Education, Involvement, and Training

Estimated number of property owners reached by education program(s **ELECTRIC CUSTOMERS**	(# or %)	100%
Storm water management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	10+
Shoreline cleaned since beginning of permit coverage	(mi.)SAME	ANNUAL PROGRAM
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	2 per month
▪ community participation ** customers	(# or %)	20%
▪ material collected ** **NEED TO WAIT FOR NEW DATA FALL 12**	(tons or gal)	??
School curricula implemented **MANDITORY RECYCLE PROGRAMS**	(y/n)	y

Legal/Regulatory

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

▪ Post-Development Stormwater Management					X

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	254
System-Wide mapping complete (complete storm sewer infrastructure) **BASINS+MANHOLE**S	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	0
▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	100%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	7
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	7
% of population on sewer	(%)	12%
% of population on septic systems	(%)	98%

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	6
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	100%
Tickets/Stop work orders issued **	(# or %)	5
Fines collected **	$	2
Complaints/concerns received from public **	(#)	10-15

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

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)	AS NEEDED
Qty of structures cleaned **	(#)	20+_
Qty. of storm drain cleaned **	(%, LF or mi.)	150 feet
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	50+_ TON
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	COMPOST
Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	GENERAL
• Hourly or per basin contract rate **	($/hr or $ per basin)	0
• Disposal cost**	($)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified in contracts	(y/n)	0
• % Structures cleaned with clam shells **	(%)	25

• % Structures cleaned with vactor **	(%)	0

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	4+
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	350 TON
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	COMPOST
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	BUDGET
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	0
• Disposal cost**	($)	0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	75
• % Roads swept with vacuum sweepers **	%	0

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	20%
▪ Herbicides	(lbs. or %)	NA
▪ Pesticides	(lbs. or %)	NA
Integrated Pest Management (IPM) Practices Implemented	(y/n)	N

	(Preferred Units)	Response

Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	60 10 0 0 0 0 40
Pre-wetting techniques utilized **	(y/n or %)	Y
Manual control spreaders used **	(y/n or %)	N
Zero-velocity spreaders used **	(y/n or %)	N
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	25-30%
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	25%
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	N
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	NONE
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	NONE