

Municipality/Organization : Town of Rehoboth

EPA NPDES Permit Number: MAR041152

MassDEP Transmittal Number: W-041314

**Annual Report Number
& Reporting Period:** April 1, 2016 - March 31, 2017

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2017)**

Part I. General Information

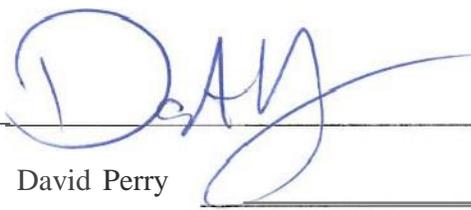
Contact Person: David Perry Title: Stormwater Officer

Telephone#: 508-252-6891
Email: liscoirrigation@comcast.net

Mailing Address: 148 Peck St. Rehoboth, Ma. 02769

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: David Perry

Title: Stormwater Officer

Date: 08/01/17

Part II. Self-Assessment

The Town of Rehoboth has completed the required assessment and has determined that the municipality is in Complete compliance with twenty- seven [27] of the permit conditions including:

BMP 1.1 Public education: Have reached 100% of residents in Rehoboth

BMP1.2 Stormwater Informational: Have videos running on public access channel

BMP1.3 Form Partnership: Have had dialog with state Highway officials about bridge and culvert repairs

BMP1.4 Informational Library: Stormwater materials accessible at Town Hall, C.O.A, and public library

BMP1.5 Educational Bulletin Board: We have three [3] public bulletin boards in town with stormwater material on them

BMP1.6 Tributary Signage: We have identified six [6] locations in Town signs are installed.

BMP2.1 Stormwater committee: On going for almost five [5] years . Forming new committee

BMP2.2 Public Meetings on By-Law: All stormwater meeting are advertised as public meetings

BMP2.3 Roadside Cleanup: The Rehoboth Business Association has a cleanup every April

BMP 3.1 Stormwater Committee: Appointed by the Board of Selectmen September 2008/Proposed change in 2013 Met with CC and Planning Board the streamline process

BMP3.2 By-Law Stormwater: Enforced

BMP3.3 Storm Sewer Map: Done on CD and G.P.S

BMP3.4 Oil Drop-Off: Done once a year at our Highway Dept.

BMP3.5 Detection Plan: Our Stormwater Officer and Conservation office receive complaints and respond

BMP3.6 Educate Public Employees and Businesses: Deliver or Mail Stormwater Material /Personl communication

BMP4.1 Erosion Control: Stormwater Officer, Conservation and Planning Board, also included in Permit application

BMP4.2 Site Plan Review: Done by Conservation and Planning Board and Stormwater Committee.

BMP4.3 Mechanism for Site Inspection: Being done by our Conservation agent. And /or Stormwater Officer.

BMP4.4 Sanction for Compliance: In new By-law.

BMP4.5 Procedure for Receiving Info from Public: Complaints logged with Conservation Office

& Stormwater Officer BMP4.6 Certification for Contractors: In our new By-law

BMPS.1 BMP O&M Plan for Development: In new By-law

BMPS.2 Use of Structural or Non-Structural BMPs: In our Sub-Division control law and Stormwater By-Law .

BMPS.3 Post-Construction Runoff: In our sub-division control laws, Town by-laws and Stormwater By-Laws.

BMPS.4 Certification for Property/Business Owners: Being done through our Stormwater Committee by having businesses keep logs on drainage cleaning

BMP6.1 O&M Plan for Town Properties/Structures: Procedures for Street Sweeping and catch basin cleaning

BMP6.2 Employee Training: The Stormwater committee is made up of members of most Boards and Dept. in Town there are bring their training back to their Dept.

The Town of Rehoboth has appointed a Stormwater Committee and Stormwater Officer to be responsible for fulfilling many of the requirements of this MS4 General permit.

In April 2008 the Town of Rehoboth Stormwater by-law went into effect. Signage for resource areas needing extra protection and public awareness have been purchased and erected. Stencils have been created to mark catch basins in town to further protect the resource areas from stormwater runoff. Additional trash receptacles have been purchased and placed where the Committee has become aware of that trash maybe reaching our resource areas. The Stormwater Committee has continued to follow up on resident's complaints and concerns. Permits have come before the Stormwater Committee for review and approval. The Stormwater Committee and Stormwater Officer have answered 4 complaints and have resolved or answered all.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach Maintain up to date materials at all town locations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s)- Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities- Permit Year 14
1.1	Public Education Outreach Program	Stormwater Committee	Reach 100% of residents	Publish in local paper articles	Continue reaching out to the public
Revised					
1.2	Stormwater Informational Videos	Stormwater Committee	Reach all households with cable access	Continue running videos also make our own video in our Town showing BMPs and videos from the EPA site	Continue running videos also make our own video in our Town showing BMPs and videos from the EPA site
Revised					
1.3	Form Partnership	Highway Supt.	Address Stormwater concerns along state highways	Continued to clear blocked Culvert and maintain Numerous outflows and Culverts. Replaced culverts. Hired new contractors to clean CB.	Rebuild or installed rip-rap swales at pt discharges, Clear culverts and repair wash-outs along roads. Monitor CB cleaning
Revised					
1.4	Informational Library	Stormwater Committee	Maintain Stormwater material up to date	Maintain up to date materials at all town locations	Maintain up-to-date materials at all town locations
Revised					
1.5	Educational Bulletin Board	Stormwater Committee	Target visitors to all Town locations	Maintain up to date materials on all Town Bulletin Boards	Maintain up-to-date materials at Town Bulletin boards.
Revised					
1.6	Tributary Signage	Highway Supt.	Identify Valuable resource areas	Small amount of funds available, maintained existing.	Identify and add new signage.

$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$	$\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$	$\frac{1}{5} + \frac{1}{5} = \frac{2}{5}$	$\frac{1}{6} + \frac{1}{6} = \frac{2}{6} = \frac{1}{3}$
---	---	---	---

1a. Additions

$\frac{1}{8} + \frac{1}{8} = \frac{2}{8} = \frac{1}{4}$	$\frac{1}{10} + \frac{1}{10} = \frac{2}{10} = \frac{1}{5}$	$\frac{1}{12} + \frac{1}{12} = \frac{2}{12} = \frac{1}{6}$	$\frac{1}{15} + \frac{1}{15} = \frac{2}{15}$
---	--	--	--

2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s)- Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 14
2.1	Stormwater Committee	Board of Selectman	To regulate the by-law and anything pertaining to the regulation	To continue upgrading the Town Stormwater by-laws. Reviewing Stormwater Permits.	Met with Planning and Conservation to review the Stormwater permitting Process and propose procedural changes.
Revised					
2.2	Public Meetings to discuss by-law	Stormwater Officer	Inform and received information from the public and business sector	Met with planning and To discuss combining Permits. Worked closely with Highway Dept.	Continue attending meetings with boards to insure by-law is implemented. Working with ConCom and Planning Boards to streamline permit process
Revised					
2.3	Roadside Clean-up	Rehoboth Business Association	To reduce roadside waste entering drainage system	Boy and Girl Scouts as well as private citizens and groups performed road side clean-ups. Promoted by local online paper. Have appointed person to oversee clean-up projects.	To extend our clean-up to Sept each year as well as April. Better coordinate and promote roadside clean-up with townwide coordination.
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s)- Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 14
3.1	Stormwater Committee	Committee and Stormwater Officer	Person in charge of enforcement and BMPs	Promoted enforcement of by-law	Continue to Promote and enforce Stormwater by-law. Conservation agent passes info on to citizens as well as to Stormwater Officer.
Revised					
3.2	By-Law prohibiting Stormwater Discharge with enforcements	Stormwater Committee Stormwater Officer	Legal mechanism to control and enforce stormwater runoff	Continue to uphold by-law	Continue to upgrade our by-law to include new BMPs Work closely with both CC and Planning as both boards have jurisdiction over by-law. Keep up to date with DPW
Revised					
3.3	Stormwater Sewer System Map	Stormwater Officer	Map all catch basins in Town	Continue to locate all non-structure drainage on our Town roadways, 4 added – worked with new DPW Superintendent	Continue mapping any new catch basins and Stormwater drainage structures. Work with DPW and Hwy Superintendent
Revised					
3.4	Oil Drop Off Days	Highway Dept.	Reduction in potential illicit discharge	Went from 2 to 6 collection days a year	Maintain over 12 collection days a year
Revised					

3.5	Detection Plan	Stormwater Officer and Highway Supt.	Respond to complaints and inquiries within 48 hours and maintain logs	Responded to complaints and concerns within 24 hrs. Met on 2 private calls and 2 municipal. Worked with Hwy Dept on culvert replacement.	To respond to complaints and find solutions and maintain laws. Found that face to face fast response gets best results. Work side-by-side with Hwy Dept.
Revised					

3a Additions:					
----------------------	--	--	--	--	--

3.6	Educate Public, Employees and Businesses about illegal discharge	Stormwater Committee	Hold workshops on Stormwater discharge and	Had more meetings and worked on bringing Stormwater, Planning and CC up to speed on the by-law	Continue to attend planning board meetings and meet with DPW employees and head.
Revised					

|

BMP ID#	BMP Description	Responsible Dept/Person	Measurable Goal(s)	Progress on Goal(s)- Permit Year 13 (non-municipal partners Indicated, if any)	Planned Activities – Permit Year 14
	Stormwater By-Law	Stormwater Committee Stormwater Officer	Legal Mechanism to control stormwater discharge	Educated developers of our by-law and permitting process as well as new applicants through CC and Planning Depts.	Streamline application process with Planning and ConCom. Look at blanket permit.
Revised					
4.1	Site Plan review Procedure	Conservation and Planning Board; Stormwater Committee	To guide contractors in the proper way of controlling erosion and sediment	Looked for alternatives such as structures to reduce TSS in our resource areas. Direct surface runoff to Forebays and directly into resource area. Worked closely with Hwy Dept.	To look at new ideas on erosion and sediment control and new ways to minimize new impact. Have a more visible presence and be more hands-on. Work closely with Hwy Dept
Revised				Made site inspections and met with developers and DPW	Stormwater Officer continues to inspect sites and meet with DPW>
4.2	Mechanism for Site inspection and enforcement	Stormwater Officer and Highway Dept	Enforcement and Inspection written in By-law		
Revised				Now have sanctions and penalties built into by-law	Now have sanctions and penalties built into by-law
4.3	Sanctions to Ensure Compliance	Stormwater Committee Stormwater Officer Hwy Dept	Sanctions and fines in new by-law		
Revised					

4.5	Procedure for Receiving info from Public	Stormwater Officer Town Hall	Respond to complaints and inquiries	To have complaints go to one location to log and assign to the proper dept. Concerns went to employee email	All complaints go to Stormwater Office are logged and filed.
Revised				Engineers are certified, made sure contractors followed engineered plan	Continue to make sure applications are complete an contractors are certified and knowledgable of Stormwater BMPs
4.6	Certification Procedure for Contractors	Stormwater Committee	To have contractors prove their knowledge of Stormwater BMPs		
Revised					
4a.Additions					

S. 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 13	Planned Activities - Permit Year 14
5.1	BMP Operations & Maintenance Plan	Stormwater Committee	Mechanism to require O&M plan and be able to inspect and enforce	O&M plan with ConCom and planning board	Continue to require filing an O&M plan with the Stormwater Committee and Officer. Develop spreadsheet so Officer can track O&M plan for compliance
Revised					
5.2	Establish Standards for structural or non-structural BMPs	Committee and Planning Board	To require structural or non-structural BMPs	Enforced our by-lawa to upgrade our BMPs	To require contractors to use structural or non-structural BMPs and find ways to improve these BMPs
Revised					

5.3	Post-construction Runoff controls	ConCom Planning Board Stormwater Committee	To control runoff in and around construction site	Monitored sited post-construction. More importantly, during construction. Working with CC and Planning Board	Continue to make sure requirements are met during construction; also focusing on perpetual maintenance of runoff controls.
Revised					
5.4	Certification Procedure for property/business Owners	Stormwater Committee Stormwater Officer	Require business owners to be familiar with their O&M plan	Worked to have record keeping and inspections by town	Make sure business owners follow up on required inspections and certifications on their O&M plan
Revised					
Sa.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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 14
6.1	O&M plan for Municipal Properties/Structures	Stormwater Committee & Highway Dept.	Prevent and or reduce pollutants runoff from municipal drainage	Tried to maintain all O&M plans with limited funds. Worked with DPW. DPW did a good job with headwall maintenance and outflow structures	Continue street sweeping, catch basin cleaning, fire water hole cleaning, stream and river headwalls maintenance and outflows
Revised					
6.2	Employee Training	Stormwater Committee and Highway Dept.	Train all Highway and BOH employees on municipal procedures	Meet with DPW on site and had pre-construction meetings	Meet with DPW on site as well as periodic office meetings to discuss target projects.
Revised					
Revised					
Revised					
Revised					
Revised					

6a. Additions

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

BMP ID#	BMP Description NIA	Responsible Oept./Person Name	Measurable Goal(s)	Progress -On Goal(s) – Permit Year (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

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

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Stormwater Committee has reviewed plans and issued permits. The Highway Dept. has continued to improve roadside drainage and swales. We have seen a great improvement in the way we handle Stormwater in our Town. Surface discharges have been cleared and rip-rap swales installed, over plows cleaned on 8 stream crossings.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2006 through March 31, 2007)

Programmatic

Stormwater management position created/staffed!	(y/y	yes
Annual program budget/expenditures **	\$	\$400.00
Total program expenditures since beginning of permit coverage	(\$)	\$14,000.00
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)	GF	\$400.00

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	100%	70%
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(#or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned**	(y/n or mi.)	YES **
Shoreline cleaned since beginning of permit coverage	(mi.)	3 miles**
Household Hazardous Waste Collection Days		
• days sponsored **	(#)	6
• community participation**	(#or%)	50%
• material collected **	(tons or gal)	4000 gal
School curricula implemented	(y/n)	Yes **

Legal/Regulatory

Prior to Phase II	Existing Authorities	Drafted	In Review	Adopted
-------------------	----------------------	---------	-----------	---------

Regulatory Mechanism Status (indicate with "X")				
• Illicit Discharge Detection & Elimination				X
• Erosion & Sediment Control	X			X
• Post-Development Stormwater Management				X
Accompanying Regulation Status (indicate with "X")				
• Illicit Discharge Detection & Elimination				X
• Erosion & Sediment Control	X			X
• Post-Development Stormwater Management				X

Mapping and Illicit Discharges

(Preferred Units) R'

Outfall mapping complete	(%)	90% **
Estimated or actual number of outfalls	(#)	83
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
• Paper/Mylar	(%)	
• CADD	(%)	100%
• GIS	(%)	100%
Outfalls inspected/screened **	(# or%)	75% **
Outfalls inspected/screened (Since beginning of permit coverage)	(# or%)	85%
Illicit discharges identified **	(#)	10 **
Illicit discharges identified (Since beginning of permit coverage)	(#)	67
Illicit connections removed **	(#); and (est. flod)	12
Illicit connections removed (Since beginning of permit coverage)	(#);and (est. gpd)	28
% of population on sewer	(%)	0%
% of population on septic systems	(%)	100%

Construction

Complain

Number of construction starts (> 1-acre) **	(#)	40
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100% **
Site inspections completed **	(#or%)	0% **
Tickets/Stop work orders issued **	(#or%)	0 **
Fines collected**	(# and\$)	None
s/concerns received from public **	(#)	2**

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%)	0 **
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(yin)	N
Low-impact development (LID) practices permitted and encouraged	(yin)	N

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)**	(times/yr)	1 time/ Plus as needed
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)**	(times/yr)	1 time
Qty of structures cleaned * *	(#)	1021
Qty. of storm drain cleaned**	(%, LF or mi.)	200' **
Qty. of screenings/debris removed from storm sewer infrastructure**	(lbs. or tons)	250 Ton
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Highway Dept

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)** (town owned)	(\$)	\$0..In hose HWY Dept.
• Hourly or per basin contract rate** (no contract- Hwy employee)	(\$/hr or \$ per basin)	\$90.00/hr
• Disposal cost**	(\$)	0
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	3
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified in contracts	(Y/n)	0
• % Structures cleaned with clam shells**	(%)	100%
• % Structures cleaned with vactor * *	(%)	0% **

VI. STREET SWEEPING SCHEDULES

Average frequency of street sweeping (non-commercial/non-arterial streets)**	(times/yr)	2/or as needed
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	2
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1,000 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Highway Dept.
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$20K-\$25K
• Hourly or lane mile contract rate **	(\$/hr. or Ln mi.)	\$125.00 /hr
• Disposal cost**	(\$)	Highway
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	3
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	0
• % Roads swept with rotary brush sweepers **	%	100%
• % Roads swept with vacuum sweepers * *	%	0

Reduction (since beginning of permit coverage) in application on public land of: ("NIA" = never used; "100%" = elimination)		
• Fertilizers	(Lbs. or%)	200lbs
• Herbicides	(Lbs. or%)	NIA
• Pesticides	(Lbs. or%)	NIA
Integrated Pest Management (IPM) Practices Implemented	(Yin)	Yes

Average Ratio of Anti-IDE-Icing products used** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCb % CMA % Kac % KCl % Sand % salt	NIA NIA NIA NIA NIA NIA 70% 30%
Implementing beet juice		
Pre-wetting techniques utilized **	(Yin or%)	no
Manual control spreaders used **	(Yin or%)	7 **
Zero-velocity spreaders used**	(Yin or%)	no
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or%)	10% - **
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or%)	10% - **
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(yin or#)	yes
100% of salt/chemical pile(s) covered in storage shed(s) by May 2013	(Yin)	100%

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	#or y/n	Yes
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	#or y/n	Yes
<ul style="list-style-type: none">Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	No