

Municipality/Organization: Newbury
EPA NPDES Permit Number: MA RO 41212
MassDEP Transmittal Number: W-040791
Annual Report Number & Reporting Period: Year 15
April 1, 2017– March 31, 2018

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

Part I. General Information

Contact Person: Mr. John O'Connell **Title:** Chairman, Stormwater Committee
Telephone #: 978-465-2216 **Email:** johnoconnell.ces@verizon.net
Mailing Address: Town Hall, 12 Kent Way, Byfield, MA 01922

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: Tracy Blais
Title: Town Administrator
Date: 4/26/18

Part II. Self-Assessment

Part II. Self-Assessment

The principal activities this year involved a continued effort to prepare ourselves for compliance with the 2016 permit. Our plans to start outfall testing fell through for several reasons. We intend to start wet weather testing in the spring of 2018.

These activities include:

- 1. Continuing Education and Training**
- 2. Acquisition of a high quality probe and test kits**

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
1-1	Article/brochure about stormwater to be included in the tax bill once annually	Stormwater Committee	Newsletter/Brochure distributed to all households in Newbury	Septic system flyer was placed on town website and another flyer placed in town library.	Distribution is planned
Revised					
	Continued Participation in the Greenscapes North Shore Program	Stormwater Committee	Annual Contract with Greenscapes	Town no longer involved with Greenscapes Program. Other flyers made available in Town Hall and Library. Stormwater Management message is on town's website.	Continue to distribute Greenscapes material already on hand
Revised					
1-2	Educate dog owners about picking up dog waste	Stormwater Committee	Distribute fact sheet to Dog Owners	Town Clerk and Police continue to deliver pet waste handouts to dog license applicants	Will continue this program
Revised					
1-3	Stormwater education program for school children	Stormwater Committee	Inquire about presentation to Middle or Elementary school children		This event has been determined to be not effective. Other ways to educate school children are being discussed with the school district primarily related to the rain garden at the elementary school
Revised					
1-4	Maintain pet waste clean-up signs at schools, parks and beaches	DPW	Signs posted	Signage was maintained.	Will continue to maintain signage
Revised					
1-5	Annual update of SWMP at a televised Selectmen's meeting	Stormwater Committee	Update Board of Selectmen on SWMP status.	Board of Selectmen were updated on the program at their October 3rd televised meeting	Will update entire Board of Selectman at regular meeting.
Revised					

1a. Additions

1a-1	Schools - Outreach	Stormwater Committee	Involve school children in Stormwater Management	Made video of rain garden at elementary school and put it up on town website	
1a-2	Public Education	Board of Health	Control hazardous material dumping	Handout solid waste flyers at transfer station on one occasion	Continue program
1a-3	Public Education	Board of Health	Control hazardous material dumping	Hazardous material collection day held at Newbury Elementary School parking lot	Hold future hazardous material collection events
1a-4	Public Education	Stormwater Committee	Distribute brochures	Stormwater brochure placed at Town Clerk's Counter	Continue in future years
1a-5	Public Education	Stormwater Committee	Newspaper article	Article ran in local newspaper re: Pathogens in Stormwater	

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
2-1	Form Stormwater Advisory Committee		Form committee within 12 months of submission of NOI. Meet twice annually thereafter during permit term.	One meeting was held this year	Hold further meetings as necessary
Revised		Planning Board			
2-2	Comply with state public notification guidelines at MGL Ch. 39 s.23B	Town Clerk	Notices posted in Town Hall, library and other locations	All relevant meetings complied with open meeting law	All relevant meetings will comply with open meeting law
Revised					
2-3	Stencil catch basins with “don’t dump” message	DPW	Identify and prioritize catch basins to be stenciled with “Don’t Dump” message.	Catch basin stencils were still readable	Catch basin stencils will be up-graded as necessary
Revised					
2-4	Household Hazardous Waste Collection	Board of Health	Track number of brochures picked up by Town Residents	Stormwater handouts have been handed out periodically at the transfer station. Hazardous materials drop-off days are scheduled.	Handouts will continue. Hazardous material drop-off day is being scheduled.
Revised					
2-5	Volunteer Testers	Stormwater Committee	Training commenced for 4 volunteer testers	No testing occurred due to permit postponement	Training will recommence in spring of 2018
Revised					
Revised					

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
3-1	Conduct dry weather outfall screening	Stormwater Committee	Locate outfalls within regulated area during first year of permit term. Percent of outfalls screened.	Dry weather flow was investigated in previously reported outfall. Broken pipe was encountered. Upstream source of flow appears to be water-main leakage or possibly groundwater. Fecal coliform test showed well below maximum allowable. Also the surfactants were at 0.25 -0.50 mg /l. All other tests were ok.	Catch basins and pipe was replaced. It appears that the dry weather flow was due to ground water intrusion into broken pipe.
Revised		Committee			
3-2	Map stormwater outfalls	Stormwater Management	Locate outfalls on a map within regulated area	Large scale map locating outfalls, manholes, catch basins and catch basin pipe sizes has been completed. Field checking was completed.	Specific locations of several outfalls were not found. Search for these will continue. Several of the “missing” outfalls have been found.
Revised		Committee			
3-3	Assess need for stormwater GIS layer	-DO-	Decision on whether to go forward with a stormwater GIS within first two years of the permit.	Task 3-3 is complete	Task 3-3 is complete
Revised					
3-4	Develop and implement plan to identify and remove non-stormwater discharges		Number of illicit connections found and removed.	All catch basins were cleaned this period. Those with sumps more than one-half full have been flagged. Additional outfalls have been inspected for dry-weather flow. Catch basin locations determined by GPS	Continue semi-annual cleaning with annual cleaning for high-load catch basins.
Revised					
3-5	Develop a by-law to require inspection of construction for correct connection to a municipal sewer	Building Dept	Draft by-law for properties connected to a municipal sewer system by end of first permit year.	Task 3-5 complete	Tasks complete

Revised					
3-6	Installation of vacuum sewers on Plum Island	Board of Health	Connection of every household on Plum Island to sewer system	Hook-ups are complete	Hook-ups are complete
Revised					

3a. Additions

3a-1	Plan for upcoming testing program required by forthcoming permit	Stormwater Committee	Assemble a team of volunteer testers, publish a procedure, train volunteers and develop partnerships with adjacent communities	Team assembled and training begun, all testing equipment and supplies purchased, agreement signed with City of Newburyport re: E-Coli testing in Newburyport WPCF Lab. Held planning session with Newburyport personnel. No further testing accomplished this period. Equipment acquired	Complete training and start formal testing
3a-2			Construct a testing center on town property.	8' x 10' room built in DPW Headquarter	Task complete
3a-3			Obtained a "mobile app" for recording inspection and testing results and commenced training in its use.		

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
4-1	Construction site Erosion Sediment Bylaw for construction sites greater than 1 acre in size	Planning Board	Draft by-law by end of first permit year	Revised illicit discharge and erosion control rules and regulations adopted. Revision of subdivision rules and regulations is complete, public hearings held and rules and regulations are in place.	Revise further from time to time as required
Revised		Conservation Commission			
4-2	Require a waste management plan at construction sites larger than one acre	Planning Board	Draft by-law by end of first permit year and present to Town Meeting in second permit year	Task 4-2 complete	Task 4-2 complete
Revised					
4-3	Review site plans for stormwater impacts	Planning Board	Policies for Site Plan Review developed. Commence Site Plan Reviews by end of second permit year	Task 4-3 complete, subject to 4-1 above	Task 4-3 complete
Revised		Conservation Commission			
4-4	Consider public input	Planning Board	Number of public hearings held	Public hearings was held for revision to illicit discharge rules and regulations and document issues, and subdivision rules and regulations.	Task 4-4 complete
Revised		Conservation Commission			
Revised					
4-5	Inspect erosion and sediment controls	Building Inspector	Develop procedure by end of first permit year, including inspection checklist. Commence reviews by end of second permit year.	Stormwater bylaw in place	Task 4-5 complete

Revised		Conservation Commission			
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4a. Additions

4.1a				Erosion control flyers are attached to building permit applications	Continue handing out erosion control flyers

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
5-1	Develop a draft bylaw to apply Standards 2,3,4,7,and 9 of the Massachusetts Stormwater Policy to the entire Town. Present to Town Meeting.	Planning Board	Present to Town Meeting by end of 7 th permit year.	Task 5-1 is complete	Task 5-1 is complete
Revised					
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Planning Board	Select BMP manual by end of 6 th permit year.	See Task #4-4 Adopted MASS DEP stormwater handbook in Rules and Regulations for upland areas.	No further actions anticipated
Revised					
5-3	Develop draft bylaw that ensures long-term maintenance of private structural BMPs. Present to town meeting	Planning Board	Compliance with regulations, present to Town Meeting by end of second permit year.	Task 5-3 is complete	Task 5-3 is complete
Revised					
Revised					
Revised					
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
6-1	Identify sensitive receptors within the Town	Conservation Commission	List of sensitive receptors developed, staff notified by the end of 1 st permit year	Task is complete	Task is complete
Revised					
6-2	Street Sweeping	DPW	Percent of streets swept annually	Streets are swept a minimum of twice per year, with some streets having additional sweeping as needed.	Continue sweeping streets twice per year
Revised					
6-3	Sidewalk Sweeping	DPW	Sidewalks will be swept as scheduled during permit year 9	Sidewalks continue to be swept annually	Continue sweeping sidewalks annually
Revised					
6-4	Roadway deicing	DPW	Amount of deicing compounds used	Continued documenting quantity of de-icing compounds	Continue documenting quantity of de-icing compounds
Revised					
6-5	Minimize impacts from vehicle washing	DPW	Establish if further vehicle washing controls are needed and if so, evaluate and select the appropriate controls (i.e. containment area)	Continued use of biodegradable soaps	Continue use of biodegradable soaps
Revised					
6-6	Minimize impacts from vehicle maintenance	DPW	Amount of hazardous materials used	Continued employee training, signage, materials, inventory, etc.	Continue employee training, signage, materials, inventory, etc
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations (CONTINUED)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
6-7	Maintain the storm drain system	DPW	Number of catch basins cleaned annually	Since the most recent catch basin cleanouts indicated that the increase in street sweeping has significantly reduced the quantities of materials in the sump, it was decided that other stormwater BMP's were more cost effective. In this regard, seven old catch basins with dirt bottoms and no sumps were completely rebuilt	Clean out catch basins every other year, per the Town of Newbury Stormwater Management Plan. Clean annually any catch basin found with sump more than 50% full.
Revised					
6-8	Minimize pesticide and fertilizer use for parks and other landscaped areas	DPW	Training conducted; on the amount of herbicides/fertilizers used	DPW and licensed subcontractors followed green landscaping procedures	Continue to follow green landscaping procedures
Revised					
6-9	Control of illegal dumping	DPW	Number of signs posted; number of sites cleaned up	Continued monitoring and cleaning up dump sites and posting signs	Continue monitoring of clean-up operations
Revised		Police Dept			
Revised					
Revised					
Revised					

6a. Additions

6a-1	Retrofit stormwater system to provide BMP's	Stormwater Committee			
6a-2	Employee and Volunteer Training	Stormwater Committee	Seminars for DPW personnel	DPW director and stormwater volunteers attended two workshops on landscaping practice and DPW headquarters housekeeping	Continue staff education
6a-3	Retrofit project at Byfield Center	DPW	Prevention of silt transfer to Parker River	Construction essentially complete. Tie-in remains.	Complete tie-in

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
1-1 Revised				There are no TMDL's or WLA's at this time in the Town of Newbury	
Revised				All of Newbury's receptors are "impaired waters" so all of our activities will be in support of a TMDL should it be issued	
1-2 Revised					
1-4 Revised					
2-3 Revised					
3-1 Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) (CONTINUED)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities For Permit Year 16
3-2 Revised					
3-4 Revised					
3-5 Revised					
3-6 Revised					
6-2 Revised					
6-3 Revised					
6-7 Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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, 2016 through March 31, 2017)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed (volunteer)	(y/n)	Y
Annual program budget/expenditures **	(\$)	0
Total program expenditures since beginning of permit coverage	(\$)	\$160,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		GEN. FUND
		FREE CASH

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	N
Shoreline cleaned since beginning of permit coverage	(mi.)	-
Household Hazardous Waste Collection Days		
^D days sponsored **	(#)	1
^E community participation **	(# or %)	
^F material collected **	(tons or gal)	
School curricula implemented	(y/n)	N

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					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

	(Preferred Units)	Response
Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	100
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
■ Paper/Mylar	(%)	100
■ CADD	(%)	-
■ GIS	(%)	-
Outfalls inspected/screened **	(# or %)	100%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	<1
% of population on septic systems	(%)	>99

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	0
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 \$)	0
Complaints/concerns received from public **	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	0
Site inspections (for proper BMP installation & operation) completed **	(# or %)	4
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	N
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)	Semi-annual
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	"
Qty of structures cleaned **	(#)	400
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$13/basin
• Disposal cost**	(\$)	included
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 **	(%)	100
• % Structures cleaned with vector **	(%)	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)	2+
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	fill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of:
 ("N/A" = never used; "100%" = elimination)

* Fertilizers	(lbs. or %)	
* Herbicides	(lbs. or %)	N/A
* Pesticides	(lbs. or %)	N/A
Integrated Pest Management (IPM) Practices Implemented	(y/n)	N/A

	(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	100 0 0 0 0 0 0
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	-
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	N/A
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N/A
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N/A

Administrative Assistant

From: John O'Connell <johnnoconnell.ces@verizon.net>
Sent: Thursday, April 19, 2018 8:48 AM
To: Administrative Assistant
Subject: Fw: MS4 revised 0416
Attachments: MS4AnnualReport - Revised 041618.doc

Follow Up Flag: Follow up
Flag Status: Flagged

Ellen: It's that time of year again, for our annual report to go out to EPA and DEP. The addressees are the same as last year, it is due on May 1, and it requires Tracy's signature. Thank you. John

From: improperties@verizon.net
Sent: Monday, April 16, 2018 2:05 PM
To: johnnoconnell.ces@verizon.net
Subject: MS4 revised 0416

Here you are John.

Thanks, Gail

