

**Municipality/Organization:** Marlborough, MA

**EPA NPDES Permit Number:** MAR041128

**MaDEP Transmittal Number:** W-035393

**Annual Report Number  
& Reporting Period:** No. 14 – May 2016- May 2017

**NPDES PII Small MS4 General Permit**  
**MAR041128**  
**Annual Report**  
**#14**

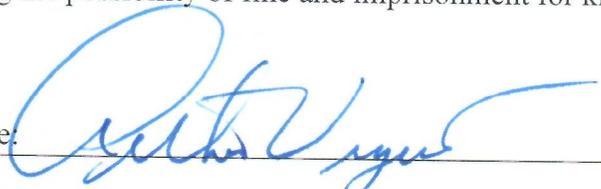
**Part I. General Information**

**Contact Person:** Priscilla Ryder **Title:** Conservation Officer

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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:** Arthur Vigeant

**Title:** Mayor

**Date:** 4/27/17

## Part II. Self-Assessment

The City of Marlborough has completed the required self assessment and has determined that our municipality is in compliance with all permit conditions, except as noted below. Below we have highlighted items that were completed and proved successful, and items which were changed slightly or delayed for reasons noted, for this past year- May '16-May' 17.

Part D 1-1 – Informational brochures. The brochure this year was not mailed out in the water bills as previously done, since the feedback we were getting was that no one was reading it and it did not seem an effective use of resources. However, it is posted on the DPW Engineering storm water web page and made available in several offices. A copy of the brochure can be found at the following link [http://www.marlborough-ma.gov/Gen/MarlboroughMA\\_PublicWrks/MarlboroughMA\\_Engineerng/stormwater-flyer.pdf](http://www.marlborough-ma.gov/Gen/MarlboroughMA_PublicWrks/MarlboroughMA_Engineerng/stormwater-flyer.pdf)

Part D 1-2 – Storm Drain Marking. We continued with our storm drain replacement program in 2016-2017. One areas was done by boy scouts. About 150 markers were replaced. When doing marker replacements, we are also requiring that the door hangers be hung on every door near the replaced marker as an added reminder to resident. This marker replacement program will be on-going.

Part D 1-3 – Cable TV show- A Public Service Announcement has been airing since the fall of '09 which follows a small rubber duck down a storm drain sharing a message that only clean water should go down the storm drain. It continued to runs in 2016-2017, 8 times per week. The link to this PSA can be seen through the Engineering web page on the city web.

Part D 1-4 Student Education- The local watershed group called OARS (the SuAsCo Watershed organization) has discontinued the education program in Marlborough but holds it in several area towns. Therefore, this kids' education program did not happen this past year in Marlborough.

Part D 1-5 – Web site - The Storm Water web page is updated annually and is posted at [http://www.marlborough-ma.gov/Gen/MarlboroughMA\\_PublicWrks/MarlboroughMA\\_Engineerng/Stormwater-Management](http://www.marlborough-ma.gov/Gen/MarlboroughMA_PublicWrks/MarlboroughMA_Engineerng/Stormwater-Management).

Part D 2-5- Stream Teams. –All the streams in the city have been surveyed by stream teams. The stream team reports have revealed that for the most part our streams are healthy. Although we did find several illicit discharges which were identified, reported and corrected. In general, the inspections are revealing a relatively healthy system. The

stream team reports are now posted on line at the following link.

[http://www.marlborough-ma.gov/Gen/MarlboroughMA\\_ConCommisn/StreamTeamReports](http://www.marlborough-ma.gov/Gen/MarlboroughMA_ConCommisn/StreamTeamReports)

The web links to both these storm water ordinances and Illicit Discharge Detection and Elimination System ordinance are as follows:

Link to City Code: <http://www.ecode360.com/?custId=MA1056>; Search word: “chapter 271: Stormwater Management” and “chapter 511: storm sewers”

The storm water regulations can be found at: [http://www.marlborough-ma.gov/Gen/MarlboroughMA\\_PublicWrks/MarlboroughMA\\_Engineerng/2011%20STORMWATER%20RULES%20%20REGS.pdf](http://www.marlborough-ma.gov/Gen/MarlboroughMA_PublicWrks/MarlboroughMA_Engineerng/2011%20STORMWATER%20RULES%20%20REGS.pdf)

Part D 4-2; 4-4– We have not established a baseline testing protocol for the streams in the city. As noted in previous reports we do have some baseline data on several of the major stream systems done on Ft. Meadow Reservoir, Millham Reservoir, and the Sudbury Reservoir and Hop Brook which can be used in the future as needed for future comparison. The Stream Team reports noted above have provided valuable data and information about stream health and have allowed for follow up and elimination of discharges into the stream system. With new testing requirements anticipated in the next round of EPA permits it was determined that the specific testing protocol would be developed once these new criteria are established.

**Drainage retrofits-** Although this does not fall under a specific category in the permit, the City has been aggressive in requiring street catch basins to be retrofitted with deep sumps when drainage systems are reconstructed. This will be an ongoing project so as drainage systems are upgraded they will all be retrofitted with deep precast concrete sumps and hoods where feasible.

Part D 6-3 Employee Training - The DPW has an Integrated Contingency Plan dated Sept. '03 which was updated in '06. The purpose of the plan is: “To describe how the Marlborough DPW handles emergencies associated with fires, injuries and releases and spills of hazardous chemicals, hazardous and extremely hazardous substances, hazardous wastes, hazardous matters and petroleum products at their Neil St. facility.” As noted in previous reports this document helps guide the handling and proper storage of hazardous materials at the DPW facility. Regular training, materials handling and labeling and specific storage protocols are in place. Routine evaluations by MIAA also keep the DPW in compliance.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<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 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – continuing</b>
1-1	Informational brochures	Conservation/ Priscilla Ryder	Distribute city wide annually	The brochure is complete. (web link noted above) After 12 years of mailing this out, we decided not to mail it the past two years but it is posted on the web site and is available in several offices.	We will be working to meet the new MS4 requirements for the next round.
1-2	Storm drain stenciling	Conservation/ Priscilla Ryder	Stencil ¼ of drains per year	All city storm drains were marked in 2009. 6000 additional markers have been purchased. A marker replacement program continues and will be ongoing. One areas in the center of the city was targeted this year.	Girl and Boy scouts and volunteers will continue to replace storm drain markers as needed.
1-3	Cable TV Program	Conservation/ Priscilla Ryder	Tape/ air once annually	A one-minute PSA has been running regularly since Fall of 2009 on the local cable channel approximately 8 times per week. This continues.	PSA will continue to air indefinitely. A link to this PSA is now on the website.
1-4	Student Education		Speak to middle school class	The State MCAS requirements limits classroom visits now.	We will look at other means of student education.
Revised		OARS and Conservation Commission/ Priscilla Ryder	Water Wise workshop program developed and implemented	OARS has moved their workshops to other towns (Marlborough residents are welcome) . However, through the storm drain marking programs the scouts are educated.	

1-5	Web site posting	Conservation/ Priscilla Ryder	Post storm water information on City Web site	The Stormwater web page has been posted at <a href="http://www.marlborough-ma.gov/Gen/MarlboroughMA_PublicWorks/MarlboroughMA_Engineering/Stormwater-Management">http://www.marlborough-ma.gov/Gen/MarlboroughMA_PublicWorks/MarlboroughMA_Engineering/Stormwater-Management</a>	Information to be updated as needed annually in May of each year.
1-6	Prepare compliance report	Conservation/ Priscilla Ryder	Prepare annual report	Report prepared April '17	Will submit reports based on new MS4 permit requirements.
1-7	Annual Reporting Reminders	Conservation/ Priscilla Ryder	Notices to non-residential properties	Annual reports from companies are being filed with the Conservation Commission by June 1 <sup>st</sup> of each year. We received several such reports.	Will do ongoing monitoring to ensure stormwater maintenance is done on private non-residential properties.

## 2. Public Involvement and Participation

<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 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Continuing</b>
2-1	Volunteer for stenciling	Conservation/ Priscilla Ryder	Volunteers to install storm drain markers	Have 6,000 new storm drain markers to replace faded and missing makers. Installed 200 in 2016 with scout volunteers.	All street storm drains have been marked, but old ones have faded and need replacing. Some newer ones have become unglued and need replacing. We will work on replacing markers as needed and hanging door hangers when that is done. Will use scouts and other volunteers for this work.
2-2	Household Hazardous Waste Collection day	Emerg. Mgt/ Don Cusson	Hold HHWCD Annually	One events was held in May 2016	One or Two events scheduled annually spring and fall.

2-3	Storm Water Management Advisory Committee	Conservation/ Priscilla Ryder	Form SWMAC	The SWMAC did not meet since the ordinance has passed.	Since the ordinances are passed, no further meetings have been scheduled.
2-4	Public Hearings	Conservation/ Priscilla Ryder	Hold Public Meeting on SWP	The public hearing was held on May 30, 2011 to review the Stormwater Regulations before being adopted.	No additional meetings needed.
2-5	Stream Team	Conservation/ Priscilla Ryder	Form Stream Team	Stream team volunteers have been monitoring streams and calling when/if they become discolored. Several illicit discharges were detected and followed up on.	All streams have been checked, reports are posted on line as noted above.
2-6	Clean up day	Mayor and City Council	Sponsor city wide Clean-up day	330 volunteers worked for three hours collecting tons of trash 4.23 tons during the annual city wide Clean Sweep in, '16	Annual cleanup to continue annually.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – continuing
3-1	GIS Mapping	DPW/ Nat Bowen GIS coordinator	Map City ¼ of Drainage System	All available information on drainage systems in the City have been entered into the GIS mapping system. The GIS information is routinely updated as new and better information becomes available.	The GIS information is routinely updated as new and better information becomes available and as new developments come on line. This will be ongoing.

3-2	Ordinance Review	DPW/ city engineer and Conservation Officer	Review applicable ordinances	A public hearing was held on May 30, 2011 for the Stormwater regulations. The regulations were adopted in June 2011.	No further action needed.
3-3	Protocol development for IDDE	DPW/ city engineer	Develop protocol for IDDE	Detection and Elimination of Illicit Discharge to Municipal Storm Drain System Ordinance was passed in Nov. '09	None further action needed
3-4	Ordinance Modifications	DPW/ city engineer	Drainage ordinance modifications	Detection and Elimination of Illicit Discharge to Municipal Storm Drain System Ordinance was passed in Nov. '09	Done Ordinance passed.
3-5	Stream Team inspections	Conservation/ Priscilla Ryder	Inspect city's streams/outfalls	See 2-5 above	See 2-5 above
3-6	Ill. Dis. Notice/Enforcement	DPW/ city engineer	Disconnect w/in 6 mos.	Currently ongoing. When illicit connections are identified, owners are required to disconnect as outlined in the ordinance.	This will be ongoing

#### 4. Construction Site Storm Water Runoff Control

<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 14 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – continuing</b>
4-1	Regulation Review	DPW/ City Engineer-	Review applicable regulations	Stormwater Management Ordinance passed in Nov. '09	Done – ordinance passed.
4-2	Sampling/Testing	DPW/city engineer-	Sample/test to est. baseline	Have not established baseline for sampling. (see	Protocol for baseline sampling will be developed after new permit is issued.

				self assessment above)	
4-3	Storm water management policy	DPW/ City Engineer-	Adopt DEP Policy	Stormwater Management Ordinance passed in Nov. '09	Done – ordinance passed
4-4	Re-sampling retesting discharges	DPW/ city engineer-	Resample/retest discharges	See 4-2 above	See 4-2 above

### 5. Post-Construction Storm Water Management in New Development and Redevelopment

<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 14 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – continuing</b>
5-1	Regulation Reviews	DPW/ city engineer-	Review applicable regulations	See 4-1 above	See 4-1 above
5-2	Sampling/testing	DPW/city engineer-	Sample/test to est. baseline	See 4-2 above	See 4-2 above
5-3	Storm water management policy	DPW/ city engineer-	Adopt DEP Policy	See 4-1 and 4-3 above	See 4-1 and 4-3 above
5-4	Re-sampling/retesting	DPW/ city engineer-	Resample/retest discharge	See 4-4 above	See 4-4 above
5-5	Annual Reporting	Conservation/ Priscilla Ryder	Achieve annual reporting compliance	See 1-7 above	See 1-7 above
5-6	Random inspections	Conservation/ Priscilla Ryder	Inspect 10 facilities	See 1-7 and 1-7a above	See 1-7 and 1-7a above

**6. Pollution Prevention and Good Housekeeping in Municipal Operations**

<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 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – continuing</b>
6-1 revised	Street Sweeping	DPW/ Tom Temple/ Ken Calder	Sweep all streets annually	All streets were swept between April and Nov. 2016.	All streets will be swept between April and Nov. 2017
6-2 revised	Catch basin cleaning	DPW/ Tom Temple/ Ken Calder	Clean 2/3 catch basins annually	2/3 of catch basins were cleaned in 2016.	Anticipated 2/3 of catch basins will be cleaned in 2017.
6-3	Employee training	DPW/ Tom Temple	Train DPW employees	Regular training on integrated pest management practices has been done for school buildings and field maintenance. The DPW has been keeping up with good housekeeping practices discussed in previous years and continue to do regular training on hazardous materials and right to know.	In-house employee training will be ongoing regarding materials storage, sweeping, and IPM management.

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)**  
 – The TMDL for the Assabet River and “Brook and Pond Assessment” for Hop Brook were both issued. Both these documents indirectly require the city to significantly reduce the concentration of phosphorus discharged from the city’s 2 wastewater treatment plants (POTW’s). The reports do not require non-point nutrient source controls. However, the implementation of the city’s Stormwater Ordinance and Illicit Discharge Detection and Elimination Ordinance will help to reduce nutrients from stormwater runoff emanating from existing and proposed developments.

The City has completed construction upgrades to its Westerly Wastewater Treatment Plant (Assabet River), the new plant opened in 2012. The upgrades to the Easterly Wastewater Treatment Plant (Hop Brook) are still currently under construction. The design of both plants include facilities that will markedly reduce point source nutrient loadings to the receiving waters by reducing phosphorus from our present permitted limit of .75 mg/L to .1 mg/L, an 87% reduction.

#### **Part IV. Summary of Information Collected and Analyzed**

All applicable information is included in Part II and III above and includes the web links to the various documents and reports.

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