

Municipality/Organization: Marlborough, MA

EPA NPDES Permit Number: MAR041128

MaDEP Transmittal Number: W-035393

**Annual Report Number
& Reporting Period:** No. 11 – May 2013- May 2014

**NPDES PII Small MS4 General Permit
MAR041128
Annual Report
#11**

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 Vigant

Title: Mayor

Date:

4/30/2014

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 '13-May'14.

Part D 1-1 – Informational brochures. The May 2013 mailing did not go out in the spring '13 bills unfortunately, due to a technical mix up. However, the brochure will be mailed in the spring '14 water bills. 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

Part D 1-2 – Storm Drain Marking. We began our storm water marker replacement project in the spring of 2012. The markers which were installed 8+ years ago are now fading, chipping or have fallen off due to the adhesive wearing out. In 2010 we purchased 6,000 replacement markers. In spring 2013 we worked again with a girl scout and volunteer groups to replace markers that have been removed and to begin replacing markers that have faded. When doing marker replacements we also require that the door hangers be hung on every door near the replaced marker as an added reminder to resident, this will be an ongoing project. This 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 2013-2014, perhaps 100 times a year or more. The YouTube link to this PSA can be seen through the Engineering web page on the city web and can be viewed here. http://www.youtube.com/watch?v=ieIm6bT5j10&feature=player_embedded

Part D 1-4 Student Education- The Conservation Commission continued to work with the local watershed group now called OARS (the SuAsCo Watershed organization) who worked in summer of 2013 with the Boys and Girls club in Marlborough to run their “water wise” workshop series. They did not run workshops in Marlborough for the general public this year.

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.

Part D 2-5- Stream Teams. –All the streams in the city have been surveyed by stream teams except two small remaining stream tributaries which still need to be reviewed and will be done in the fall 2014. 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

Part D 2-4; 3-2, 3-3, 3-4, 4-2- The Stormwater Regulations, the Stormwater Management Ordinance and the Illicit discharge ordinances are on the books and are currently being enforced and followed.

The web links to both these ordinances are as follows:

Link to City Code: <http://www.ecode360.com/?custId=MA1056>; Search word: “Stormwater Management” and “Detection and Elimination of Illicit Discharge to Municipal Storm Drain System”

The stormwater regulations can be found at: 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.

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

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. Annual training, materials handling and labeling and specific storage protocols are in place. Annual evaluations by MIAA also keep the DPW in compliance. This program is working well.

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 10 (Reliance on non-municipal partners indicated, if any) | Planned Activities – continuing |
|----------|-------------------------|------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-1 | Informational brochures | Conservation/ Priscilla Ryder | Distribute city wide annually | The brochure is complete. (web link noted above) This was mailed out in the water bill cycle in May of '14 | We will send out the flier annually in the water bills May cycle. |
| 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 began spring 2012. | 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 10 times per week. (see link above) | PSA will continue to air indefinitely. A link to this PSA is now on the website. http://www.youtube.com/watch?v=ieIm6bT5jl0&feature=player_embedded |
| 1-4 | Student Education | | Speak to middle school class | The Water Wise Workshop series was held again in summer of '13 as part of the Boys and Girls club program and was successful. | We anticipate funding to be provided for another summer of Water Wise Workshops in summer of '14 through the OARS organization. |
| Revised | | OARS and Conservation Commission/ Priscilla Ryder | Water Wise workshop program developed and implemented | | |
| 1-5 | Web site posting | Conservation/ Priscilla Ryder | Post storm water information on City Web site | The Stormwater web page has been posted at http://www.marlbrough-ma.gov/Gen/MarlboroughMA_PublicWrks/MarlboroughMA_Engineering/Stormwater-Management | Information to be updated as needed annually in May of each year. |

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| 1-6 | Prepare compliance report | Conservation/ Priscilla Ryder | Prepare annual report | Report prepared April '13 | 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 st 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

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Continuing |
|-----------------|-------------------------------------------|--------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-1 | Volunteer for stenciling | Conservation/ Priscilla Ryder | Volunteers to install storm drain markers | Ordered 6,000 new storm drain markers to replace faded and missing makers. | 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 | Two events were held in May and November of '13 | Two events scheduled annually spring and fall. |
| 2-3 | Storm Water Management Advisory Committee | Conservation/ Priscilla Ryder | Form SWMAC | The SWMAC did not meet in 2012 | 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. |

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| 2-5 | Stream Team | Conservation/ Priscilla Ryder | Form Stream Team | Stream team groups went out to investigate additional streams in the city. Several illicit discharges were detected and followed up on. Reports are on line as noted above in the self- assessment. | Only two streams tributaries remain to be investigated, these will be checked in fall 2014 and report finalized. |
| 2-6 | Clean up day | Mayor and City Council | Sponsor city wide Clean-up day | 325 volunteers worked for three hours collecting 4.2 tons of trash during the annual city wide Clean Sweep in, '13 | Annual cleanup to continue 5-3-14 and annually. |
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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 10 (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 | 95% of the city's drainage system has been entered onto the GIS mapping system. New information being added as it is provided. | The remaining 5% of the final drainage linkages through private property will be done by interns as time permits and as as-built plans are submitted. This will be ongoing. |
| 3-2 | Ordinance Review | DPW/ city engineer Tom Cullen and Priscilla Ryder 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. |

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| 3-3 | Protocol development for IDDE | DPW/ city engineer Tom Cullen | 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 Tom Cullen | 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 Tom Cullen | 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

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any) | Planned Activities – continuing |
|----------|-------------------------------|--------------------------------|-------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 4-1 | Regulation Review | DPW/ City Engineer- Tom Cullen | Review applicable regulations | Stormwater Management Ordinance passed in Nov. '09 | Done – ordinance passed. |
| 4-2 | Sampling/Testing | DPW/city engineer- Tom Cullen | Sample/test to est. baseline | Have not established baseline for sampling. (see self assessment above) | Protocol for baseline sampling will be developed after new permit is issued. |
| 4-3 | Storm water management policy | DPW/ City Engineer- Tom Cullen | Adopt DEP Policy | Stormwater Management Ordinance passed in Nov. '09 | Done – ordinance passed |

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|-----|----------------------------------|--------------------------------|----------------------------|---------------|---------------|
| 4-4 | Re-sampling retesting discharges | DPW/ city engineer- Tom Cullen | Resample/retest discharges | See 4-2 above | See 4-2 above |
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5. Post-Construction Storm water Management in New Development and Redevelopment

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any) | Planned Activities – continuing |
|----------|-------------------------------|--------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------|
| 5-1 | Regulation Reviews | DPW/ city engineer- Tom Cullen | Review applicable regulations | See 4-1 above | See 4-1 above |
| 5-2 | Sampling/testing | DPW/city engineer- Tom Cullen | Sample/test to est. baseline | See 4-2 above | See 4-2 above |
| 5-3 | Storm water management policy | DPW/ city engineer- Tom Cullen | 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- Tom Cullen | 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

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any) | Planned Activities – continuing |
|-------------|-----------------|-------------------------------|----------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 6-1 revised | Street Sweeping | DPW/ Tom Temple | Sweep all streets annually | All streets were swept between April and Nov. 2013. | All streets will be swept between April and Nov. 2014 |

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| 6-2 revised | Catch basin cleaning | DPW/ Tom Temple | Clean ½ catch basins annually | 1/2 of catch basins were cleaned in 2012. | Anticipated 3/4 of catch basins will be cleaned in 2013. |
| 6-3 | Employee training | DPW/ city engineer | Train DPW employees | Training on integrated pest management practices was 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 annual training on hazardous materials and right to know. | In-house employee training will be ongoing regarding materials storage, sweeping, and IPM management. In the future custodial staff will also be trained. |

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 almost \$30M in 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 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 links to the various documents and reports.