Year 1 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: May 1, 2018-June 30, 2019

**Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form**

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed.

**Part I: Contact Information**

Name of Municipality or Organization: Town of Grafton

EPA NPDES Permit Number: MAR041119

Primary MS4 Program Manager Contact Information

Name: Joseph Laydon
Title: Town Planner
Street Address Line 1: Grafton Municipal Center
Street Address Line 2: 30 Providence Rd
City: Grafton
State: MA
Zip Code: 01519
Email: laydonj@grafton-ma.gov
Phone Number: (508) 839-5335 x1144
Fax Number: (508) 839-4602

Stormwater Management Program (SWMP) Information


Date SWMP was Last Updated: Jun 30, 2019

If the SWMP is not available on the web please provide the physical address and an explanation of why it is not posted on the web:

N/A
Part II: Self Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

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<th>Impairment(s)</th>
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<td>Bacteria/Pathogens</td>
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<td>Chloride</td>
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<td>Charles River Watershed Phosphorus</td>
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Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

**Year 1 Requirements**

- x Develop and begin public education and outreach program
- x Identify and develop inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
  - o The SSO inventory is attached to the email submission
  - o The SSO inventory can be found at the following website:
- x Develop written IDDE plan including a procedure for screening and sampling outfalls
- x IDDE ordinance complete
- x Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation
  - o The priority ranking of outfalls/interconnections is attached to the email submission
  - o The priority ranking of outfalls/interconnections can be found at the following website:
- x Construction/ Erosion and Sediment Control (ESC) ordinance complete
- x Develop written procedures for site inspections and enforcement of sediment and erosion control measures
- x Develop written procedures for site plan review
- x Keep a log of catch basins cleaned or inspected
- □ Complete inspection of all stormwater treatment structures
Annual Requirements
- Annual opportunity for public participation in review and implementation of SWMP
- Comply with State Public Notice requirements
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- All curbed roadways have been swept a minimum of one time per year

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Public Education and Outreach*
- Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Public Education and Outreach*
- Distribute an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers
- Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)

Good Housekeeping and Pollution Prevention for Permittee Owned Operations
- Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs
- Any structural BMPs listed in Attachment 3 to Appendix F already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the phosphorus removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each annual report

Solids, Oil and Grease (Hydrocarbons), or Metals
Annual Requirements

*Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- ☐ Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads
- ☐ Prioritize inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Clean catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings

*Lake and Pond Phosphorus TMDL*

- ☐ Begin Phase 1 Lake Phosphorus Control Plan (LPCP)

Use the box below to input additional details on any unchecked boxes above or any additional information you would like to share as part of your self assessment:

- Grafton completed dry weather outfall screening in 2016, and no illicit discharges were found. Findings from dry weather outfall screening are documented in the written IDDE Program.

- Grafton sweeps all municipal owned streets and parking lots once per year. In Permit Year 2, Grafton will begin sweeping all municipal owned streets and parking lots twice per year (spring and fall).

- While developing our new public outreach program, Grafton continued public education initiated under the 2003 MS4 Permit with stormwater educational flyers and posters displayed in Town Hall. In Permit Year 2, Grafton will begin distributing spring, summer, and fall messages, as well as septic system maintenance and dog waste management messages.

- Per Appendix H requirements for discharges to nutrient-impaired waterbodies, Grafton will track and estimate nutrient removal for structural BMPs after developing a list of potential structural BMPs in Permit Year 5.
Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

Yes ☒  No ☐

If yes, describe below, including any relevant impairments or TMDLs:

"Quinsigamond Ave" in the NOI was replaced with Quinsigamond River in the SWMP for clarification. That distinction did not change relevant impairments or TMDLs. Grafton continues to review its list of receiving waters, outfalls, and impairments and will update as needed in Permit Year 2.
Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed during the reporting period: 5

Below, report on the educational messages completed during the first year. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

**BMP: 1-1 Stormwater Management Webpage**

Message Description and Distribution Method:
Updated our Stormwater Management webpage with general educational information on stormwater and as a repository for information (e.g., SWMP, IDDE Plan). As part of the website updates, included a post on the Planning and Conservation Facebook page about SWMP document availability.

Targeted Audience: Residents, Businesses, Industries, Developers

Responsible Department/Parties: Planning/Conservation

Measurable Goal(s):
55 views of SWMP Facebook post

Message Date(s): June 28, 2019

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

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**BMP: 1-2 Think Blue Massachusetts Advertising Campaign**

Message Description and Distribution Method:
Think Blue Massachusetts (https://www.thinkbluemassachusetts.org/) ran advertising campaigns on behalf of MS4 communities on May 31-June 25, 2018 and June 23-July 12, 2019. The "Fowl Water" advertisement, targeting MA urban residents, aimed to help viewers visualize stormwater pollution from motor oil, pet waste, and trash. A post-campaign survey demonstrated that the advertising campaigns were effective. Grafton amplified the message by posting the "Fowl Water" video on the Planning/Conservation Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: Massachusetts Statewide Stormwater Coalition
Measurable Goal(s):

- 2018 campaign for Central Mass region: Facebook impressions 178,070; Google impressions 226,000
- 2019 campaign (thru FY19) for Grafton only: Facebook impressions 3,996; YouTube impressions 10,619
- Fowl Water Video on Grafton Website: 135 people reached, 6 engagements, 1 share

Message Date(s):

- May 31-June 25, 2018 and June 23-July 12, 2019 (Think Blue)
- July 9, 2018 (Fowl Water Video)

Message Completed for: Appendix F Requirements □ Appendix H Requirements □

Was this message different than what was proposed in your NOI? Yes □ No ✗

If yes, describe why the change was made:

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**BMP: 1-7 Spring Message about Grass Clippings and Fertilizer**

Message Description and Distribution Method:

- Posted about lawn maintenance and stormwater on the Planning/Conservation Facebook page, with information about the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers.

Targeted Audience: Residents, Businesses, Developers

Responsible Department/Parties: Planning/Conservation

Measurable Goal(s):

- 1,088 people reached, 126 engagements, 2 share. Re-posted by Town of Grafton Facebook, 6 likes, 1 share.

Message Date(s): June 25, 2019

Message Completed for: Appendix F Requirements □ Appendix H Requirements ✗

Was this message different than what was proposed in your NOI? Yes □ No ✗

If yes, describe why the change was made:

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**BMP: 1-8 Summer Message about Dog Waste Management**

Message Description and Distribution Method:

- In 2019, posted the Think Blue June 7th post for dog waste cleanup on the Planning/Conservation Facebook page. In 2018, posted the Think Blue "Do Your Doody" dog waste post on the Planning/Conservation Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: Conservation/Planning
Measurable Goal(s):
2019: 11 likes, 1 comment
2018: 28 people reached, 0 engagements, 0 share

Message Date(s): July 11, 2018; June 21, 2019

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒
If yes, describe why the change was made:

BMP: Stormwater Education Flyers and Posters in Town Hall

Message Description and Distribution Method:
Continued to post stormwater education flyers and posters in Town Hall, as initiated under the 2003 MS4 Permit.

Targeted Audience: Residents, Businesses, Developers, Industries

Responsible Department/Parties: Conservation/Planning

Measurable Goal(s):
Continued to post and have these materials available in Town Hall.

Message Date(s): Ongoing

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒
If yes, describe why the change was made:

Add an Educational Message
MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during the reporting period:

The webpage also welcomes comments and provides an email address for comments: "stormwater@grafton-ma.gov"

Was this opportunity different than what was proposed in your NOI? Yes ☐ No ☒

Describe any other public involvement or participation opportunities conducted during the reporting period:

- Held our Town-Wide Volunteer Cleanup Event (BMP 2-2) on April 13, 2019. Grafton DPW removed approximately 60 cubic yards of waste.

- Held our Household Hazardous Waste Collection (BMP 2-3) on June 15, 2019 and drew approximately 400 cars worth of attendees and collected 11,425 pounds of waste.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period.

Number of SSOs identified: 0
Number of SSOs removed: 0

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified since 2013.

Total number of SSOs identified: 1
Total number of SSOs removed: 1

MS4 System Mapping

Describe the status of your MS4 map, including any progress made during the reporting period:

No progress made during this reporting period.
Screening of Outfalls/Interconnections
If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses.

- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened: 281

Below, report on the percent of total outfalls/interconnections screened to date.

Percent of total outfalls screened: 84

Catchment Investigations
If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following website:

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period: N/A

Below, report on the percent of catchments investigated to date.

Percent of total catchments investigated: N/A

Optional: Provide any additional information for clarity regarding the catchment investigations below:

N/A

IDDE Progress
If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

N/A
Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.

Number of illicit discharges identified: 0
Number of illicit discharges removed: \( \text{N/A} \)
Estimated volume of sewage removed: \( \text{N/A} \) [UNITS]

Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed since the effective date of the permit.

Total number of illicit discharges identified: 0
Total number of illicit discharges removed: \( \text{N/A} \)

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

\( \text{N/A} \)

**Employee Training**

Describe the frequency and type of employee training conducted during the reporting period:

Grafton DPW Town Engineer attended Central Massachusetts Regional Stormwater Coalition (CMRSWC) training “IDDE Implementation Workshop” on April 24, 2019 in Framingham.

**MCM4: Construction Site Stormwater Runoff Control**

Below, report on the construction site plan reviews, inspections, and enforcement actions completed during this reporting period.

Number of site plan reviews completed: 6
Number of inspections completed: 11
Number of enforcement actions taken: 1
MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance Development

Describe the status of the post-construction ordinance required to be complete in year 2 of the permit term:

Grafton's Stormwater Management Bylaw and Regulations requires post-construction stormwater management for new development and redevelopment projects. During Permit Year 2, Grafton will revise the bylaw and regulations, as needed, to bring the bylaw and regulations into compliance with new water quality requirements in the 2016 MS4 Permit. The Bylaw and Regulations are available on Grafton Conservation Commission’s website at: https://www.grafton-ma.gov/conservation-commission/pages/stormwater-bylaw

As-built Drawings

Describe the status of the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites required to be complete in year 2 of the permit term:

Grafton will continue to collect as-built drawings as required of projects that receive a Stormwater Permit under the Stormwater Management Bylaw and Regulations.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

No progress made during the reporting period.

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

Grafton has completed a green infrastructure assessment meeting permit requirements as part of a 2016 report available at the following link: https://www.grafton-ma.gov/planning-department/pages/low-impact-development-study

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

No progress during the reporting period.
MCM6: Good Housekeeping

Catch Basin Cleaning
Describe the status of the catch basin cleaning optimization plan:
Grafton cleans all catch basins annually and will review procedures for potential optimization in Year 2.

If complete, attach the catch basin cleaning optimization plan or the schedule to gather information to develop the optimization plan:
- The catch basin cleaning optimization plan or schedule is attached to the email submission
- The catch basin cleaning optimization plan or schedule can be found at the following website:
  N/A

Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins during this reporting period.
- Number of catch basins inspected: 650
- Number of catch basins cleaned: 650
- Total volume or mass of material removed from all catch basins: 57 tons

Below, report on the total number of catch basins in the MS4 system, if known.
- Total number of catch basins: 650

If applicable:
Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:
N/A

Street Sweeping
Describe the status of the written procedures for sweeping streets and municipal-owned lots:
No progress made during this reporting period.
Report on street sweeping completed during the reporting period using one of the three metrics below.

- Number of miles cleaned: 85 lane miles
- Volume of material removed: [UNITS]
- Weight of material removed: 80 tons

If applicable:

For rural uncurbed roadways with no catch basins, describe the progress of the inspection, documentation, and targeted sweeping plan:

N/A

Winter Road Maintenance

Describe the status of the written procedures for winter road maintenance including the storage of salt and sand:

No progress made during this reporting period.

Inventory of Permittee-Owned Properties

Describe the status of the inventory, due in year 2 of the permit term, of permittee-owned properties, including parks and open spaces, buildings and facilities, and vehicles and equipment, and include any updates:

No progress made during this reporting period.

O&M Procedures for Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment

Describe the status of the operation and maintenance procedures, due in year 2 of the permit term, of permittee-owned properties (parks and open spaces, buildings and facilities, vehicles and equipment) and include maintenance activities associated with each:

No progress made during this reporting period.

Stormwater Pollution Prevention Plan (SWPPP)

Describe the status of any SWPPP, due in year 2 of the permit term, for permittee-owned or operated facilities including maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater:

No progress made during this reporting period.
Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed: N/A

Describe any corrective actions taken at a facility with a SWPPP:

N/A

O&M Procedures for Stormwater Treatment Structures

Describe the status of the written procedure for stormwater treatment structure maintenance:

No progress made during this reporting period.

Additional Information

Monitoring or Study Results

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- Not applicable
- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

N/A
Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

N/A

**Activities Planned for Next Reporting Period**

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 2 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Complete system mapping Phase I
- Begin investigations of catchments associated with Problem Outfalls
- Develop or modify an ordinance or other regulatory mechanism for post-construction stormwater runoff from new development and redevelopment
- Establish and implement written procedures to require the submission of as-built drawings no later than two years after the completion of construction projects
- Develop, if not already developed, written operations and maintenance procedures
- Develop an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; review annually and update as necessary
- Establish a written program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained in a timely manner
- Develop and implement a written SWPPP for maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes
- Develop, if not already developed, written procedures for sweeping streets and municipal-owned lots
- Develop, if not already developed, written procedures for winter road maintenance including storage of salt and sand
- Develop, if not already developed, a schedule for catch basin cleaning
- Develop, if not already developed, a written procedure for stormwater treatment structure maintenance
- Develop a written catchment investigation procedure *(18 months)*

**Annual Requirements**

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
• Review site plans of construction sites as part of the construction stormwater runoff control program
• Conduct site inspection of construction sites as necessary
• Inspect and maintain stormwater treatment structures
• Log catch basins cleaned or inspected
• Sweep all uncurbed streets at least annually

Provide any additional details on activities planned for permit year 2 below:
Part V: Certification of Small MS4 Annual Report 2019

40 CFR 144.32(d) 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, I certify that 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.

Name: Timothy McInerney
Title: Town Administrator
Signature: [Signature may be a duly authorized representative]
Date: 7/26/19