

**Year 2 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2019-June 30, 2020**

*\*\*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. Please ONLY report on activities between July 1, 2019 and June 30, 2020 unless otherwise requested.*

**Part I: Contact Information**

Name of Municipality or Organization:

EPA NPDES Permit Number:

**Primary MS4 Program Manager Contact Information**

Name:  Title:

Street Address Line 1:

Street Address Line 2:

City:  State:  Zip Code:

Email:  Phone Number:

**Stormwater Management Program (SWMP) Information**

SWMP Location (web address):

Date SWMP was Last Updated:

If the SWMP is not available on the web please provide the physical address:

## Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

<b><u>Impairment(s)</u></b>			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
<b><u>TMDL(s)</u></b>			
<i>In State:</i>	<input checked="" type="checkbox"/> Assabet River Phosphorus	<input type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input checked="" type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
			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 2 Requirements

- Completed Phase I of system mapping
- Developed a written catchment investigation procedure and added the procedure to the SWMP
- Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or
  - operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater

*Optional:* If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

The Central Massachusetts Stormwater Regional Coalition (CMRSWC) offered to its members a SWPPP template and workshop, but it came late in the Permit Year (mid-June) - delayed from April/May due to COVID-19. Given the short timeframe, the Town of Shrewsbury was not able to complete the SWPPP by June

30, 2020 - the end of Permit Year 2. However, the Town has been working on completing the SWPPP during first quarter of Permit Year 3 (see submitted SWPPPs). The SWPPP, as of the submittal of the Annual Report, is mostly complete with links to them found at the end of the SWMP, and is expected to be complete by the end of Permit Year 3 in addition to quarterly inspections required by Permit Year 3.

### Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
  - This is not applicable because we do not have sanitary sewer
  - This is not applicable because we did not find any new SSOs
  - The updated SSO inventory is attached to the email submission
  - The updated SSO inventory can be found at the following website:
 

<https://shrewsburyma.gov/DocumentCenter/View/5473/>
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated outfall and interconnection inventory and priority ranking as needed

*Optional:* If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

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

#### Annual Requirements

##### *Public Education and Outreach\**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provided 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)*

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Re: Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time.

The Town initially planned to distribute educational material to dog owners at the same time they would mail out the license application, but did not due to a conflict with also distributing the 2020 U.S. Census. However, additional educational messages relating to managing pet waste was conducted via physical copies at the Town Clerk's office and on social media. Unfortunately, physical distribution at the Town Clerk's office was largely ineffective this year due to COVID-19. The Town plans to distribute educational material dog owners along with license renewal for 2021.

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

### Annual Requirements

#### *Public Education and Outreach\**

- Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers
- Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distributed 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*

- Increased 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 already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. 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 were documented.

- The BMP information is attached to the email submission
- The BMP information can be found at the following website:

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Re: Potential structural BMPS

No new structural BMPs were installed during Permit Year 2.

## **Solids, Oil and Grease (Hydrocarbons), or Metals**

### Annual Requirements

#### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

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

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

**Lake and Pond Phosphorus TMDL**

- Completed Legal Analysis

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

The Town of Shrewsbury has implemented a Stormwater Utility for the purposes of funding compliance activities required by the NPDES Permit, including the Lake and Pond Phosphorus TMDL requirement.

The Town does not foresee any legal roadblocks which may prohibit or prevent the Town from implementing the Lake and Pond Phosphorus TMDL.

*Optional:* Use the box below to provide any additional information you would like to share as part of your self-assessment:

### 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:

As the Town performed their outfall screening, a number of outfalls were either inactivated typically due to not being outfalls (as defined by the MS4-2016 Permit) or removed from the list because they are not owned by the Town of Shrewsbury. As of August 17, 2020, 35 outfalls were inactivated, and 21 outfalls were found to not be owned by the municipality. More information can be found under MCM 3 > Screening of Outfalls and Interconnections.

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The Massachusetts Year 2016 Integrated List of Waters was updated from Draft to Final.

Comparing the 2014 and 2016 list, the following changes were made:

The following impairments were removed:

West Brook (MA 51-43) (formerly Mill Pond, MA 51105): Turbidity

Newton Pond (MA 51110): Aquatic plants (macrophytes)

Poor Farm Brook (MA 51-17): Low flow alterations

The following impairments were added:

Flint Pond (North Basin) (MA 51050): Nutrient/ Eutrophication Biological Indicators.

Flint Pond (South Basin) (MA 51188): Nutrient/ Eutrophication Biological Indicators.

Jordan Pond (MA 51078): Harmful algal blooms.

Lake Quinsigamond (MA 51125): Enterococcus.

Shirley Street Pond (MA 51196): Nutrient/ Eutrophication Biological Indicators.

Poor Farm Brook (MA 51-17): E. coli.

## 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 this reporting period:**

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

#### **BMP: Think Blue Campaign by CMRSWC**

Message Description and Distribution Method:

On behalf of the members of the Central Massachusetts Regional Stormwater Coalition, Think Blue Massachusetts ran an educational advertising campaign from May 16th to June 5th, 2020. The “Fowl Water” advertisement helps viewers visualize stormwater pollution from motor oil, pet waste, and trash become stormwater pollution.

CMRSWC selected Facebook and Instagram sponsored video and YouTube pre-roll advertisements because these channels offer superior “bang for the buck” to cable and broadcast television. They provide granular reporting that helps demonstrate what was accomplished.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The advertising budget for the campaign worked out to approximately 1.3 cents per resident. Campaign budgets have been falling year over year. This year’s campaign occurred during the COVID-19 lockdowns. The silver lining is that the advertising placement costs were lower and our message was shown to a semi-captive audience.

At the close of the advertising campaign, CMRSWC surveyed Massachusetts residents in the areas where the campaign ran:

- \* 17% of residents surveyed recalled seeing the ads, up from 15% in 2019 and 8% in 2018.
- \* Those who recall the ad are more likely to recognize that stormwater goes directly to local waterways(52%) than those who do not recall the ad (32%).
- \* Those who recall the ad are more likely to describe stormwater has having “major” or “some” impact on waterways (49%) than those who do not recall the ad (31%).

Facebook and Google provided CMRSWC with aggregate information for the region served by the stormwater coalition. CMRSWC allocated the impressions among each city on a proportional basis, using U.S. Census estimates of the population of each municipality. The Town of Shrewsbury received 51,509 Facebook/Instagram impressions and 50,877 YouTube impressions for a total of 102,386 impressions.

Message Date(s):

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:

The Town planned for compliance with the NPDES Permit assuming no aid from other communities and coalitions.

### **BMP: Seasonal Message (Autumn)**

Message Description and Distribution Method:

The Town of Shrewsbury has distributed annual seasonal messages for the proper disposal of leaf litter through their social media (Twitter and Facebook). In addition, the educational material has been posted on the Town's Stormwater Management webpage for anyone to access 24/7.

CMRSWC shared a message on Twitter in Fall to encourage proper disposal of leaf litter.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

In Permit Year 2, the Town of Shrewsbury posted to their social media 2 different educational messages in October 2019, and retweeted a tweet by @ThinkBlueMass.

The "Be a Leaf Hero - Tip #1" message was posted to both Facebook and Twitter with 983 people reached and 943 impressions, respectively.

The "Be a Leaf Hero - Tip #2" message was posted to Twitter 977 impressions.

The CMRSWC twitter account has approximately 240 followers and averages between 100-200 impressions per tweet.

Message Date(s): Town: October 9th to 10th, 2019 | CMRSWC: October 18th, 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:

CMRSWC provided outreach.

### **BMP: Seasonal Message (Spring)**

Message Description and Distribution Method:

The Town of Shrewsbury has distributed annual seasonal messages for the proper use and disposal of grass clippings and the proper use of slow-release phosphorus free fertilizers through their social media (Twitter and Facebook). In addition, the educational material has been posted on the Town's Stormwater Management webpage for anyone to access 24/7.

CMRSWC also shared a message on Twitter encouraging the proper use and disposal of grass clippings and encouraged the proper use of slow-release fertilizers.



Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

In Permit Year 2, the Town of Shrewsbury posted to their social media an educational message in April 2020

The "Lawn and Garden Tips" message was posted to both Facebook and Twitter with 1,266 people reached and 1,128 impressions, respectively.

The CMRSWC twitter account has approximately 240 followers and averages between 100-200 impressions per tweet.

Message Date(s):

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: Seasonal Message (Summer)**

Message Description and Distribution Method:

The Town of Shrewsbury has distributed annual seasonal messages for the proper management of pet waste in the summer through their social media (Twitter and Facebook). In addition, the educational material has been posted on the Town's Stormwater Management webpage for anyone to access 24/7. Lastly, pet waste management flyers are physically available at Town Hall at the Town Clerk's Office.

CMRSWC also shared a message on Twitter in Fall to encourage proper disposal of leaf litter.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

In Permit Year 2, the Town of Shrewsbury posted to their social media 2 different educational messages in April and June 2020.

The "Please Clean Up After Your Pet" message was posted to both Facebook and Twitter with 3,255 people reached and 1,767 impressions, respectively.

The "Do Your 'Doody' for Clean Water" message was posted to both Facebook and Twitter with 2,959 people reached and 647 impressions, respectively.

The CMRSWC twitter account has approximately 240 followers and averages between 100-200 impressions per tweet.

Message Date(s): 23rd, 2020

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:

CMRSWC provided outreach.

### **BMP: Septic Smart Week**

Message Description and Distribution Method:

The Town of Shrewsbury has distributed educational material to owners of septic systems about proper maintenance through their social media (Twitter and Facebook). In addition, the educational material has been posted on the Town's Stormwater Management webpage and Health Department's Title V webpage for anyone to access 24/7.

CMRSWC also shared a message on Twitter messages regarding Septic Smart week to provide information to owners of septic systems about proper maintenance.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

The Town of Shrewsbury posted tips for septic system owners on their social media accounts using educational material provided by the USEPA, coordinating the messages with Septic Smart week in September 2019. The following messages were made before and during Septic Smart week with the number of people reached (Facebook) and/or impressions made (Twitter).

Septic Smart Week - Save the Date (0 People Reached, 754 Impressions)

Tip #1: Think at the Sink (1,209 People Reached, 702 Impressions)

Tip #2: Don't Strain Your Drain! (870 People Reached, 677 Impressions)

Tip #3: Keep it Clean! (820 People Reached, 687 Impressions)

Tip #4: Shield Your Field! (679 People Reached, 779 Impressions)

Tip #5: Protect It and Inspect It! (825 People Reached, 831 Impressions)

Tip #6: Don't Overload the Commode! (1,071 People Reached, 734 Impressions)

Tip #7: Pump Your Tank! (736 People Reached, 705 Impressions)

The CMRSWC twitter account has approximately 240 followers and averages between 100-200 impressions per tweet.

Message Date(s): Town: September 15th to 20th, 2019 | CMRSWC: September 12th, 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:

CMRSWC provided outreach.

**BMP: Dumpster and Food Permits**

Message Description and Distribution Method:

The Town of Shrewsbury has distributed educational material encouraging the proper management of dumpsters with the issuance and renewal of every dumpster permit, and educational material encouraging best management practices to prevent stormwater pollution with the issuance and renewal of every food permit. In addition, the educational material has been posted on the Town's Stormwater Management webpage and Health Department's Title V webpage for anyone to access 24/7.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

From October 1st to June 30th, 2019, sixty-seven (67) dumpster permits and two hundred eight (208) food permits have been issued.

Message Date(s):

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:

**MCM2: Public Participation**

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

Since October 2018, the Town of Shrewsbury created a group e-mail (stormwater@shrewsburyma.gov) for the public to send their questions, comments, and concerns to regarding stormwater. This e-mail has been available during this reporting period, and will continue to be available for the foreseeable future. The Town also made publicly available their Stormwater Management Plan on their Stormwater Management website for the public to review and comment.

On October 26, 2019, the Town of Shrewsbury a Drive-Through Household Hazardous Waste Event, open to Shrewsbury residents only.

\* <https://www.facebook.com/events/531877280719306/>

\* <https://shrewsburyma.gov/DocumentCenter/View/6252/>

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

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

CMRSWC members participated in public outreach and involvement at the following public events in Year 2 of the permit:

- Holden Truck Day (July 25, 2019)
- Grafton National Night Out (August 7, 2019)
- Palmer National Night Out (August 7, 2019)
- Holden Days (August 24, 2019)
- Mass STEM Week at Framingham State University (October 22, 2019)
- Mass STEM Week at Keefe Technical High School (October 23, 2019)
- Metrowest STEM mentorship program (October 23, 2019)
- Mass STEM week showcase (October 25, 2019)
- Elementary school programs in Auburn, Dudley, Framingham, Hopkinton, and Holden
- Framingham Public Works Open House (December 7, 2019)

As a result of the COVID-19 pandemic, CMRSWC halted participation in public events from March 2020 – June 2020.

### **MCM3: Illicit Discharge Detection and Elimination (IDDE)**

#### **Sanitary Sewer Overflows (SSOs)**

*Check off the box below if the statement is true.*

- This SSO section is NOT applicable because we DO NOT have sanitary sewer

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

Number of SSOs identified:

Number of SSOs removed:

#### **MS4 System Mapping**

*Below, check all that apply.*

The following elements of the Phase I map have been completed:

- Outfalls and receiving waters
- Open channel conveyances
- Interconnections
- Municipally-owned stormwater treatment structures
- Waterbodies identified by name and indication of all use impairments
- Initial catchment delineations

*Optional:* Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

In order to be efficient with research efforts to map interconnections, the Town of Shrewsbury plans to map/screen/sample their interconnections as they conduct the catchment investigations and find interconnections as

the effort to map interconnections align very closely to the catchment investigations.

The Town of Shrewsbury hired a contractor to conduct a flyover on the Town. This flyover will include data such as manhole locations, and updated elevations for catchment delineations. The flyover was conducted in Spring of 2020, and the Town expects receive this data from the contractor by late 2020.

### **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:

<https://shrewsburyma.gov/Admin/DocumentCenter/Document/View/8162/>

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

Number of outfalls screened:

### **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:

No catchment investigations were conducted during this reporting period.

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

### **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:

No illicit discharges were found during this reporting period.

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:

Number of illicit discharges removed:

Estimated volume of sewage removed:  gallons/day

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 (July 1, 2018)**.

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

### **Employee Training**

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

CMRSWC was awarded a MS4 Municipal Assistance grant from MassDEP to conduct IDDE training workshops. Fuss & O'Neill conducted training workshops for municipal employees of MS4-regulated communities on implementing IDDE program requirements. The training workshops were held on May 5, 2020 and May 7, 2020 remotely via GoTo Meeting. The workshops were originally intended to be in-person but were adapted to virtual workshops due to COVID-19. The training provided at these workshops satisfies the MS4 Permit requirements for annual IDDE training as outlined in Section 2.3.4.11 of the MS4 Permit. A video, summary, & sign-in sheets are available at:

<https://www.centralmastormwater.org/toolbox/pages/2020-idde-workshop-ms4-assistance-grant>

### **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:

Number of inspections completed:

Number of enforcement actions taken:

*Optional:* Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

The Town of Shrewsbury requires site plan review from projects disturbing at least 5,000 square feet of land

instead of only projects from disturbing 1 acre or more of land. The number of site plan reviews in total was 31, but only 3 of those projects disturbed at least 1 acre.

## **MCM5: Post-Construction Stormwater Management in New Development and Redevelopment**

### **Ordinance or Regulatory Mechanism**

*Below, select the option that describes your ordinance or regulatory mechanism progress.*

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- Bylaw, ordinance, or regulations have not been updated or adopted

### **As-built Drawings**

Describe 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:

On February 19, 2019, the Board of Sewer Commissioners adopted the Stormwater Management Rules & Regulations under Article 21, the Stormwater Management Bylaw. These regulations require all projects that have an approved Stormwater Management Permit to submit as-built plans within two (2) years of project completion in order to receive a Certificate of Compliance. In addition, as part of the Stormwater Management Permit Application, applicants must submit to the DPW a Long-Term Operation and Maintenance Plan signed by the property owner.

### **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:

The Town has not started on their Street Design and Parking Lot Assessment Report.

### **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:

The Town has not started on their Green Infrastructure Report.

**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:

The Town has not formally developed an Retrofit Properties Inventory. However, as part of the DPW's Road Resurfacing Program, the Town has been replacing existing catch basins with more current up-to-code catch basins (e.g. replacing CBs w/o sumps for CBs w/ sumps). Roads that had catch basins replaced include Lake Street, a few on South Quinsigamond Ave, and one on South Street near Centech North.

**MCM6: Good Housekeeping**

**Catch Basin Cleaning**

*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:

Number of catch basins cleaned:

Total volume or mass of material removed from all catch basins:

*Below, report on the total number of catch basins in the MS4 system.*

Total number of catch basins:

*If applicable:*

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

**Street Sweeping**

*Report on street sweeping completed **during this reporting period** using one of the three metrics below.*

Number of miles cleaned:

Volume of material removed:

Weight of material removed:

**O&M Procedures and Inventory of Permittee-Owned Properties**



*Below, check all that apply.*

The following permittee-owned properties have been inventoried:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

**Stormwater Pollution Prevention Plan (SWPPP)**

*Below, report on the number of site inspections for facilities that require a SWPPP completed **during this reporting period.***

Number of site inspections completed:

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

**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:

Every year, the DPW Water & Sewer Division conducts weekly monitoring of the bacteria levels along Lake Quinsigamond, Newton Pond, Old Mill Pond, Flint Pond, Jordan Pond, and Dean Pond. In late June 2020, the Town of Shrewsbury organized communications between several departments and key persons to share the monitoring results.

**Additional Information**

*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:

#### MCM 5 - Post Construction Stormwater Management in New Development and Redevelopment - Ordinance or Regulatory Mechanism

As part of the Stormwater Management Rules & Regulation, the Town of Shrewsbury requires any projects which disturb equal to or more than 5,000 square feet of land to apply for a Stormwater Management Permit, which includes implementing post-construction stormwater management in new development and redevelopment. These regulations were implemented ahead of schedule in Permit Year One (due in Permit Year Two) consistent with the NPDES Permit. However, upcoming changes to the NPDES Permit will require these Regulations to be modified to fit the changes (due in Permit Year Three).

#### MCM 6 - Good Housekeeping - Total Number of Catch Basins

The total number of catch basins decreased from 5600 to 5547 as a result of data-clean up. These numbers are based on the number of catch basins that the Town of Shrewsbury owns and maintains. The Town expects this number to continue to change as we continue with data cleanup and begin catchment investigations.

#### MCM 6 - Good Housekeeping - CB Sumps > 50% Full on 2 Consecutive Routine Cleanings

Unfortunately, the Permit Year 2 data was not as useful as the Town hoped with a significant amount of unusual percentage of sump filled amounts due to a combination of technical and user errors (e.g. -500% full). Starting in Permit Year 3, the Town went live with a new platform with a customizable form and instant validations for QA/QC to minimize technical and user errors. Once the Town has two consecutive routine cleaning's worth of reliable data for any catch basin to examine, then the cleaning frequency will be adjusted accordingly. Catch basins, by default and for the most part, are scheduled to be cleaned biennially (every other year) and may be adjusted to annually or quadrennially (or more/less frequent, as needed). We expect this process to start by Permit Year 4.

#### MCM 6 - Good Housekeeping - Street Sweeping

2019 Street Sweeping (Jul to Dec 2019) = 180.51 tons

2020 Street Sweeping (Jan to Jun 2020) = 235.04 tons

Total (Jul 2019 to June 2020) = 415.55 tons

#### MCM 6 - Good Housekeeping - Yard Waste Pickup

2019 Yard Waste (Jul to Dec 2019) = 108.99 tons

2020 Yard Waste (Jan to Jun 2020) = 32.12 tons

Total (Jul 2019 to June 2020) = 141.11 tons

#### MCM 6 - Good Housekeeping - Inventory of Permittee-Owned Properties

An inventory of permittee-owned properties including parks, open space, buildings, facilities, vehicles, and equipment is available upon request. Portions of the inventory contain critical information where the Town feels, for safety and other reasons, should not be too readily available to the public.

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Our municipality is a member of the Central Massachusetts Regional Stormwater Coalition (CMRSWC). CMRSWC was awarded an Environmental Merit Award from EPA Region 1. Each participating community, including Shrewsbury, was recognized as part of the award. The award was presented in September 2019.

CMRSWC presented on building public awareness and the benefits of regional collaboration at the following

## events:

- EPA New England Soak up the Rain webinar titled “Working Together: Collaborative Stormwater Management in Central Massachusetts” (December 5, 2019)
- New England Water Environment Association Annual Conference (Jan 2020)
- Massachusetts Association of Conservation Commissions Annual Conference, presentation titled "NPDES MS4 Permit: How are Municipalities Complying with Permit Requirements?" (February 28, 2020)

CMRSWC partnered with MassDEP to sponsor two 2020 Worcester Polytechnic Institute -Water Resource Outreach Center projects: 1) “Managing Stormwater Costs” and (2) “Promoting STEM Education on Watersheds & Stormwater in MA”.

### **COVID-19 Impacts**

*Optional:* If any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

#### MCM 2 - Public Involvement and Participation

The following activities were canceled due to COVID-19. The timing of these activities coincided with the stay-at-home advisory issued by Governor Charlie Baker. These activities are expected to resume in Spring of 2021

- \* Spring Cleanup
- \* Earth Day (SELCO)

### **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 3 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

### **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
- 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
- Continue investigations of catchments associated with Problem Outfalls
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary

Provide any additional details on activities planned for permit year 3 below:

Update Stormwater Management Rules & Regulations to reflect the upcoming changes to the NPDES Permit, clarity, and increase compliance rate.

Update Stormwater Pollution Prevention Plans

## Part V: Certification of Small MS4 Annual Report 2020

### 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:  Title:

Signature:  Date:

*[Signatory may be a duly authorized representative]*

*Note: When prompted during signing, save the document under a new file name.*

### Annual Report Submission

*Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.*

EPA: [stormwater.reports@epa.gov](mailto:stormwater.reports@epa.gov)

MassDEP: [laura.schifman@mass.gov](mailto:laura.schifman@mass.gov)

### Paper Signature:

*If you did not sign electronically above, you can print the signature page by clicking the button below.*

*Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.*