

**Year 3 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2020-June 30, 2021**

*\*\*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, 2020 and June 30, 2021 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>Impairment(s)</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>TMDL(s)</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
			<input type="button" value="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 3 Requirements

- Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)
- Updated outfall/interconnection priority ranking based on the information collected during the dry weather inspections as necessary
- Post-construction bylaw, ordinance, or other regulatory mechanism was updated and adopted consistent with permit requirements

*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 3 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:

As of August 4, 2021, the Town of Shrewsbury has inspected and screened 97.1% (or 442 out of 455) of their known outfalls and outgoing interconnections (OF/IC).

Of the 13 remaining OF/IC to be screened:

\* 3 OF/IC were found during Permit Year 3 while reviewing as-built plans for outfalls which were difficult to locate (or as part of Catchment Investigations), but: (1) were found near the last week of Permit Year 3, but did not have time to screen; or (2) a work order was not created. The Town of Shrewsbury changed platforms at the beginning of Permit Year 3 to aid with compliance in the MS4-2016 Permit. Being a new platform, some things were missed and technical/training issues had to be sorted out. Steps were taken to make sure this does not happen again.

\* 10 OF/IC were found after Permit Year 3 while reviewing as-built plans as part of Catchment Investigations.

These OF/IC are and any additional OF/IC found during Permit Year 4 will be scheduled to be inspected and

screened by the end of Permit Year 4.

### 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 system map due in year 2 as necessary
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Updated inventory of all permittee owned facilities as necessary
- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

*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:

As required by the MS4-2016 Permit, Stormwater Pollution Prevention Plans (SWPPPs) were written and implemented at three (3) facilities by the end of Permit Year 2. As part of the SWPPP, each facility was supposed to be inspected once per quarter (with at least one inspection during a rain event per year). As a result of COVID-19, work-from-home, and social distancing, these facilities were only inspected once during Permit Year 3. The Town expects to resume with its quarterly inspections in Permit Year 4.

**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:

The planned annual message encouraging the proper management of pet waste was not distributed during Permit Year 3 (reporting period of July 1, 2020 to June 30, 2021). However, annual messages were distributed during June 2020 (Permit Year 2), and July 2021 (Permit Year 4).

Despite the message having not been distributed during Permit Year 3, the Town of Shrewsbury still satisfies the requirement of distributing such messages every year on June and/or July. This message distribution does not include the distribution of educational material to dog owners at the time of issuance/renewal.

In addition, the Town of Shrewsbury is a member of the Central Massachusetts Regional Stormwater Coalition (CMRSWC) who contracted with Capital Strategic Solutions (CSS) to assist with satisfying the public education and outreach requirements through social media messaging. See MCM 1 - Public Education & Outreach - BMP - CMRSWC - Social Media Messaging for more information.

**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 3.

**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:

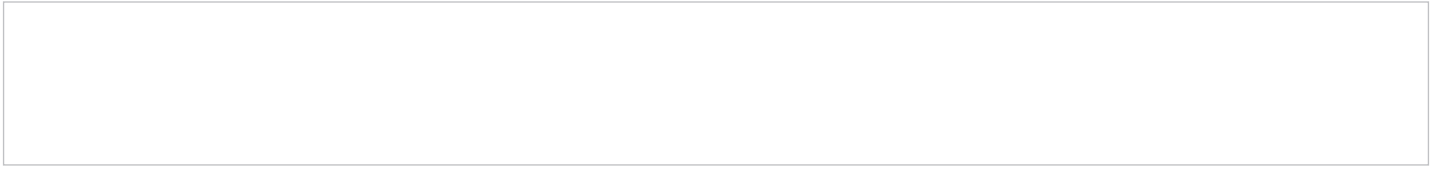
**Lake and Pond Phosphorus TMDL**

- Completed the funding source assessment

*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 implemented the Stormwater Utility in 2019 for the purposes of funding compliance activities required by the MS4-2016 Permit, which includes the Lake and Pond Phosphorus TMDL Requirements.

*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 and began their catchment investigations, a number of outfalls were either (1) inactivated because they were incorrectly categorized (e.g. culvert inlet/outlets, bmp inlets, etc.), duplicates of existing mapped outfalls, or set as markers to investigate; or (2) put in a separate category for being privately-owned.

Since August 17, 2020,

\* 53 outfalls were added (totaling 74 since the NOI was submitted); and

\* 74 outfalls were inactivated (totaling 109 since the NOI was submitted);

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 17th to June 4th, 2021. 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 just less than 1 cent per resident. Campaign budgets have been falling year over year.

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

\* 16% of residents surveyed recalled seeing the ads, down from 17% in 2020, but within the survey margin of error.

\* Those who recall the ad are more likely to recognize that stormwater goes directly to local waterways (50%) than those who do not recall the ad (36%).

\* Those who recall the ad are more likely to describe stormwater has having “major” or “some” impact on waterways (53%) than those who do not recall the ad (27%).

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 15,676 Facebook/Instagram impressions; 38,948 YouTube impressions; and 6,628 Spanish language impressions for a total of 61,252 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.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

In Permit Year 3, the Town of Shrewsbury posted to their social medias (Facebook and Twitter) 3 educational messages ("Be a Leaf Hero") in August, September, and October 2020.

Facebook Impressions | Twitter Impressions | Date

1,200 | 695 | August 2020

511 | 592 | September 2020

601 | 598 | October 2020

Message Date(s): August 28th, September 25th, and October 16th, 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:

### **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.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

In Permit Year 3, the Town of Shrewsbury posted to their social media an educational message in April 2021.

The "Lawn and Garden Tips" message was posted to both Facebook and Twitter with 812 people reached and 576 impressions made, respectively.

Message Date(s): April 22, 2021

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.

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works, Town Clerk

Measurable Goal(s):

The annual message encouraging the proper management of pet waste was not distributed during Permit Year 3 (reporting period of July 1, 2020 to June 30, 2021). However, annual messages were distributed during June 2020 (Permit Year 2), and July 2021 (Permit Year 4). Despite the message having not been distributed during Permit Year 3, the Town of Shrewsbury still satisfies the requirement of distributing such messages every year on June and/or July. This message distribution does not include the distribution of educational material to dog owners at the time of issuance/renewal.

However, pet waste management flyers were kept available at Town Hall at the Town Clerk's Office during the times when Town Hall was open to the public, and was provided with the issuance/renewal of dog license permits.

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:

### **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.

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 2020. The following messages were made before and during Septic Smart week with the number of people reached (Facebook) and/or impressions made (Twitter).

Facebook People Reached | Twitter Impressions | Message

954 | 870 | Septic Smart Week - Save the Date

828 | 549 | Tip #1: Think at the Sink

998 | 703 | Tip #2: Don't Strain Your Drain!

820 | 902 | Tip #3: Keep it Clean!

876 | 580 | Tip #4: Shield Your Field!

657 | 588 | Tip #5: Protect It and Inspect It!

912 | 977 | Tip #6: Don't Overload the Commode!

561 | 694 | Tip #7: Pump Your Tank!

Message Date(s): September 14th to 18th, 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:

### **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: Businesses, institutions and commercial facilities

Responsible Department/Parties: Department of Public Works, Fire Department, Health Department

Measurable Goal(s):

For Calendar Year 2020, 75 dumpster permits have been issued.

For Fiscal Year 2021, 275 food permits have been issued.

Message Date(s): Upon issuance and renewal of every dumpster or food permit.

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: Central Massachusetts Regional Stormwater Coalition - Social Media Messaging**

Message Description and Distribution Method:

Our community is a member of the Central Massachusetts Regional Stormwater Coalition (CMRSWC). In November 2020, CMRSWC contracted Capital Strategic Solutions (CSS) to assist with messaging requirements for MCM 1. A CMRSWC Facebook page and Instagram account were created, to supplement CMRSWC's existing Twitter account. Weekly messages were distributed through social media to target audiences consisting of residents, developers, businesses, institutions, commercial and industrial facilities located in CMRSWC communities. Topics on ways to reduce water pollution included: proper disposal of hazardous wastes, how to prepare for winter conditions, proper car washing techniques, septic system maintenance, yard maintenance, pet waste disposal, etc.

Targeted Audience: Businesses, institutions and commercial facilities; Residents; Developers; Industrial

Responsible Department/Parties: CMRSWC

Measurable Goal(s):

By June 2021, 220 had been added to the CMRSWC Facebook and Instagram pages with over 2,500 impressions on Facebook and over 2,200 impressions on Instagram with over 1,000 engagements. CMRSWC's Twitter account had over 3,000 posts with 492,400 impressions. CMRSWC's tweets had over 2,000 engagements. CMRSWC's social media posts were shared by numerous municipalities, organizations, and the EPA.

Message Date(s): November 2020 to June 2021

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:

Social media messaging is a new service being provided by the CMRSWC member communities in Permit Year 3 and, therefore, would not have previously been identified on the Town of Shrewsbury's NOI.

Add an Educational Message

## **MCM2: Public Participation**

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

Town of Shrewsbury has 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.

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:**

The Town of Shrewsbury hosted several cleanup events where volunteers helped pick up trash throughout the Town:

- \* Jordon Pond Cleanup Event | 2020 | ~10 Volunteers
- \* Jordon Pond Cleanup Event | 2020 | ~10 Volunteers (this event occurred twice in 2020)
- \* Fall Cleanup Event | 2020 | 37 Locations | ~125 Volunteers
- \* Spring Cleanup Event | 2021 | 55 Locations | ~150 Volunteers

In Fall of 2020, the Town of Shrewsbury coordinated with Lake Quinsigamond Watershed Association to have volunteers install storm drain markers. These areas include:

- \* Newton Pond area
- \* 8 on Candlewood Way
- \* 7 on Sewall Street between Holden and Gulf Street
- \* 2 on Holden Street in front of Worcester Sand & Gravel
- \* 136 in the South Quinsigamond Area (57 southbound, 79 northbound [76 lakeway and 3 waterway markers])

### **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**

*Optional:* Provide additional status information regarding your map:

The most recent map can be found at the following website:  
<https://shrewsburyma.gov/DocumentCenter/View/6612/>

**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. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.*

- No outfalls were inspected
- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

<https://shrewsburyma.gov/DocumentCenter/View/10035/>

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

Number of outfalls screened:

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

Percent of outfalls screened:

*Optional: Provide additional information regarding your outfall/interconnection screening:*

[THE TEXT BELOW IS THE SAME AS PART II: SELF-ASSESSMENT - YEAR 3 REQUIREMENTS AND WAS POSTED HERE AGAIN FOR REFERENCE.]

As of August 4, 2021, the Town of Shrewsbury has inspected and screened 97.1% (or 442 out of 455) of their known outfalls and outgoing interconnections (OF/IC).

Of the 13 remaining OF/IC to be screened:

- \* 3 OF/IC were found during Permit Year 3 while reviewing as-built plans for outfalls which were difficult to locate (or as part of Catchment Investigations), but: (1) were found near the last week of Permit Year 3, but did not have time to screen; or (2) a work order was not created. The Town of Shrewsbury changed platforms at the beginning of Permit Year 3 to aid with compliance in the MS4-2016 Permit. Being a new platform, some things were missed and technical/training issues had to be sorted out. Steps were taken to make sure this does not happen again.
- \* 10 OF/IC were found after Permit Year 3 while reviewing as-built plans as part of Catchment Investigations.

These OF/IC are and any additional OF/IC found during Permit Year 4 will be scheduled to be inspected and screened by the end of Permit Year 4.

**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.*

- No catchment investigations were conducted
- 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:

*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:*

Catchment Investigations were somewhat started to aid in the finding of screening of outfalls or their upstream drainage infrastructures, but none were officially started.

### **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.*

- No illicit discharges were found
- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

*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:*

Dry Weather Outfall Sampling indicated 2 likely sewer inputs. Sampling was conducted at the end of June, 2021 with the final results coming in end of July 2021. As of August 16, 2021, the Town of Shrewsbury is currently investigating possible these inputs.

### **Employee Training**

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

Employees involved in the IDDE program participated in annual IDDE training provided virtually by Central Massachusetts Regional Stormwater Coalition on May 26, 2021. A summary and recording of the training is

available on the CMRSWC website.

### **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:

Currently, not all inspections are tracked or logged. The number of inspections completed only represents the ones that have been tracked or logged.

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

#### **As-built Drawings**

*Below, report on the number of as-built drawings received **during this reporting period.***

Number of as-built drawings received:

*Optional:* Enter any additional information relevant to the submission of as-built drawings:

The Town of Shrewsbury updated their Stormwater Rules & Regulations on June 10, 2021 to ensure a higher compliance rate with the Stormwater Management Permit Application for MCM 4 and 5. Please see Additional Information near the end of this report for more information.

#### **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 of Shrewsbury contracted an engineering consulting firm to develop this report for the Town.

### **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 of Shrewsbury contracted an engineering consulting firm to develop this report for the Town.

### **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 of Shrewsbury contracted an engineering consulting firm to develop this report for the Town.

## **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:

Unfortunately, the data collected from catch basin cleanings in Permit Year 2 data was not as useful as the Town hoped due to a significant amount of unusual percentage of sump filled amounts as a result of a combination of technical and user errors (e.g. some sumps were -500% full).

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. The catch basin cleaning data collected in Permit Year 3 was found to have much less errors and unusual data.

Starting in Permit Year 4, when the Town will begin to have two consecutive routine cleaning's worth of

reliable data, the investigations for catch basins whose sumps were more than 50% full during routine cleanings will begin.

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).

### **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:  [Select Units]
- Weight of material removed:

### **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:

[THE TEXT BELOW IS THE SAME AS PART II: SELF-ASSESSMENT - ANNUAL REQUIREMENTS AND WAS POSTED HERE AGAIN FOR REFERENCE.]

As required by the MS4-2016 Permit, Stormwater Pollution Prevention Plans (SWPPPs) were written and implemented at three (3) facilities by the end of Permit Year 2. As part of the SWPPP, each facility was supposed to be inspected once per quarter (with at least one inspection during a rain event per year). As a result of COVID-19, work-from-home, and social distancing, these facilities were only inspected once during Permit Year 3. The Town expects to resume with its quarterly inspections in Permit Year 4.

## **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 June 2020, the Town of Shrewsbury organized communications between several departments and key persons/organizations 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:

#### Annual BMP Inspections

- \* As of August 6, 2020, the Town of Shrewsbury has 121 stormwater BMPs logged on their system.
- \* Out of the 121 BMPs, 3 were found in Permit Year 4 during Catchment Investigations.
- \* Out of the remaining 118 BMPs, 6 were not inspected during Permit Year 3.
- \* This is a compliance rate of 94.8%
- \* For Permit Year 3 and beyond, the Town of Shrewsbury changed platforms to aid in permit compliance. Steps were taken to make sure these BMPs are not missed for Permit Year 4.

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

On June 10, 2021, the Town of Shrewsbury updated their Stormwater Management Rules & Regulations to (1) better match the language of the modified MS4-2016 Permit (effective January 6, 2021), and (2) to ensure a higher compliance rate with the Stormwater Management Permit Application for MCM 4 and 5.

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

The total number of catch basins decreased from 5,547 to 4,458 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. Most of the data-clean-up is from separating private drainage infrastructure from public. The Town expects this number to continue to change as we continue with data cleanup and begin catchment investigations although not as dramatically as Permit Year 3.

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

2020 Street Sweeping (Jul to Dec 2020) = 212.33 tons

2021 Street Sweeping (Jan to Jun 2021) = 358.06 tons

Total (Jul 2020 to June 2021) = 570.39 tons

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

2020 Yard Waste (Jul to Dec 2020) = 757.99 tons (PU) + 164.23 tons (DO)

2021 Yard Waste (Jan to Jun 2021) = 232.01 tons (PU)

Total (Jul 2020 to June 2021) = 1,154.23 tons

\* PU = Pick-Up by Contractor

\* DO = Drop-Off at DPW Garage

#### 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 security reasons, should not be too readily available to the public.

### **COVID-19 Impacts**

*Optional:* If any of the above year 3 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 TEXT BELOW IS THE SAME AS PART II: SELF-ASSESSMENT - ANNUAL REQUIREMENTS AND WAS POSTED HERE AGAIN FOR REFERENCE.]

As required by the MS4-2016 Permit, Stormwater Pollution Prevention Plans (SWPPPs) were written and implemented at three (3) facilities by the end of Permit Year 2. As part of the SWPPP, each facility was supposed to be inspected once per quarter (with at least one inspection during a rain event per year). As a result of COVID-19, work-from-home, and social distancing, these facilities were only inspected once during Permit Year 3. The Town expects to resume with its quarterly inspections in Permit Year 4.

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

Yes, I agree

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

### **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 curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls

- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- 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
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)

Provide any additional details on activities planned for permit year 4 below:

\* As part of the SWPPP, the development of a Spill Prevention, Control, and Countermeasure (SPCC) plan for once of the Town's facilities.

## Part V: Certification of Small MS4 Annual Report 2021

### 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]*