

City of  
Fitchburg



Department of  
Public Works

**COMMISSIONER**

301 Broad Street  
978-829-1910  
978-345-9687 FAX

**STREETS & PARKS**

301 Broad Street  
978-829-1900  
978-345-9687 FAX

**WASTEWATER**

166 Boulder Drive, Suite 108  
978-345-9622  
978-345-9623 FAX

**SEWER COLLECTION**

301 Broad Street  
978-829-1900  
978-345-9687 FAX

**WATER**

1200 Rindge Road  
978-345-9616  
978-345-9555 FAX

**ENGINEERING**

301 Broad Street  
978-829-1917  
978-345-9687 FAX

**CEMETERIES**

115 Mount Elam Road  
978-345-9578  
978-345-9686 FAX

September 30, 2019

Mr. Newton Tedder  
U.S. Environmental Protection Agency – Region I  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

Re: 2016 Massachusetts Small MS4 General Permit Annual Report – Year 1  
MAR041189, City of Fitchburg

Mr. Tedder,

Please find enclosed the 2016 Massachusetts Small MS4 General Permit Annual Report for the City of Fitchburg. This report covers the Year 1 reporting period from July 1, 2018 through June 30, 2019.

If you have any questions regarding the report please do not hesitate to contact me at (978) 829-1905.

Sincerely,  
FITCHBURG DPW – ENGINEERING DIVISION

Nicholas J. Erickson, PE  
Civil Engineer

Attachments

cc: Stephen L. DiNatale, Mayor  
Nicolas Bosonetto, PE, Commissioner of Public Works  
File

**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:

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:

Fax 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 and an explanation of why it is not posted on the web:

## Part II: Self Assessment

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

**Impairment(s)**

Bacteria/Pathogens     
  Chloride     
  Nitrogen     
  Phosphorus  
 Solids/ Oil/ Grease (Hydrocarbons)/ Metals

**TMDL(s)**

*In State:*

Assabet River Phosphorus     
  Bacteria and Pathogen     
  Cape Cod Nitrogen  
 Charles River Watershed Phosphorus     
  Lake and Pond Phosphorus

*Out of State:*

Bacteria/Pathogens     
  Metals     
  Nitrogen     
  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 1 Requirements

- Develop and begin public education and outreach program
- Identify and develop inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
  - The SSO inventory is attached to the email submission
  - The SSO inventory can be found at the following website:  

[www.fitchburgma.gov/463/Stormwater](http://www.fitchburgma.gov/463/Stormwater)
- Develop written IDDE plan including a procedure for screening and sampling outfalls
- IDDE ordinance complete
- Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation
  - The priority ranking of outfalls/interconnections is attached to the email submission
  - The priority ranking of outfalls/interconnections can be found at the following website:  

[www.fitchburgma.gov/463/Stormwater](http://www.fitchburgma.gov/463/Stormwater)
- Construction/ Erosion and Sediment Control (ESC) ordinance complete
- Develop written procedures for site inspections and enforcement of sediment and erosion control measures
- Develop written procedures for site plan review
- 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

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

Annual Requirements

*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

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:

The "Potential structural BMPs" box is not checked because the City does not discharge to any water bodies covered under an approved TMDL. Therefore the requirements of Appendix F do not apply.

### 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:

Found one additional 8" clay pipe outfall to Greenes Pond. This brings the total number of outfalls to 278.

## 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:

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: Stormwater pollution is trash, oil, cigarette butts, & dog waste.**

Message Description and Distribution Method:

Think Blue Massachusetts "Fowl Water" video (<https://www.thinkbluemassachusetts.org/>)  
Advertisement on Facebook, Instagram, & YouTube

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

31,638 social media impressions from residents of Fitchburg (8,651 Facebook/Instagram and 22,987 YouTube).

Over 400,000 social media impressions total from the Central Massachusetts Regional Stormwater Coalition.

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:

At the time the NOI was prepared, the City of Fitchburg was not aware that the Central Massachusetts Regional Stormwater Coalition would be undertaking this marketing campaign on behalf of its member communities. Because of this it was omitted from the NOI.

#### **BMP: Clean Water Begins with You.**

Message Description and Distribution Method:

CMRSWC purchased the print ads in newspapers in our members' distribution areas.

Targeted Audience:

Responsible Department/Parties:

## Measurable Goal(s):

Ad published as follows:

Gate House/Wicked Local, which has a print circulation of 1.4 million and 2.2 million monthly unique visitors. All CMRSWC member communities are within Wicked Local's coverage area.

Worcester Telegram & Gazette, which has a print circulation of about 22,000 and 800,000 monthly unique visitors. CMRSWC communities within the subscription area are: Auburn, Charlton, Dudley, Fitchburg, Grafton, Holden, Leicester, Lunenburg, Marlborough, Millbury, Northbridge, Northborough, Oxford, Paxton, Rutland, Shrewsbury, Southborough, Southbridge, Spencer, Sterling, Sturbridge, Upton, Uxbridge, West Boylston, and Westborough.

Stonebridge Press (includes Auburn News, Blackstone Valley Tribune, Charlton Villager, Spencer New Leader, Southbridge Evening News, and Sturbridge Villager), which has a print circulation of about 40,000. CMRSWC communities within the subscription area are: Auburn, Charlton, Leicester, Spencer, Sturbridge.

Message Date(s): Oct 3 & 5, 2018; Dec 30, 2018

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:

At the time the NOI was prepared, the City of Fitchburg was not aware that the Central Massachusetts Regional Stormwater Coalition would be undertaking this marketing campaign on behalf of its member communities. Because of this it was omitted from the NOI.

**BMP: Incorporate Think Blue Massachusetts Material into City Website**

Message Description and Distribution Method:

Stormwater 101 video from the Think Blue Massachusetts stormwater campaign posted to City's website.

Targeted Audience: Residents

Responsible Department/Parties: DPW Engineering

Measurable Goal(s):

The IT Department has the ability to monitor web traffic and downloads from the City web page. They reported 3 video downloads during the permit term.

Message Date(s): Posted to City website Fall 2018-current.

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:

Web traffic monitoring was substituted for a Survey Monkey/Doodle Poll to measure effectiveness of

message. The change was made because there was concern over how to effectively poll visitors to the web page, and a potential lack of responses.

### **BMP: WPI WROC Collaboration - Stormwater Runoff Education & Environmental Stewardship**

#### Message Description and Distribution Method:

Fitchburg DPW and Fitchburg Public Schools worked with team of WPI students to develop an environmental education program for 5th grade students consisting of a Student Workbook and complementary Educator Resource Guide. Together the Student Workbook and Educator Guide combine interdisciplinary learning and hands-on, outdoor activities to instill environmental stewardship among Fitchburg's younger generations.

The WPI team presented their work, including several educational slides about stormwater and various pollutants, at a publicly televised School Committee meeting.

Targeted Audience: Residents

Responsible Department/Parties: DPW Engineering/Schools

#### Measurable Goal(s):

Over 25 attendees at meeting. Broadcast publicly on FATV, available to watch at <https://videoplayer.telvue.com/player/yycCAZPb0NN3zj2o5qio-YFMNC43NjCG>.

Message Date(s): April 23, 2018

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:

Did not have necessary permissions to post to the City's social media accounts during Spring 2018 as required per Appendix H. Substituting this public education opportunity that occurred during Spring 2018. Necessary permissions have been obtained and will be used in the next permit year.

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:

Consistent with the City's approved NOI, the draft SWMP was posted to the City web site with the public encouraged to submit comments to DPW Engineering. In addition, the City actively pursued community partnerships with several groups on various stormwater topics, including:

-Central MA Regional Stormwater Coalition (CMRSWC): Fitchburg is an active member, with its Civil Engineer sitting on the Steering Committee.



-Fitchburg State University (FSU): The City's Civil Engineer presented to a group of over 150 students during FSU's Upward Bound youth program career night.

-Montachusett Opportunity Council (MOC) and the Nashua River Watershed Association (NRWA): Partnered with both organizations on a recent Municipal Vulnerability Preparedness Planning Grant application. Fitchburg was awarded \$102,000.

-Nashua River Watershed Association (NRWA): Continued partnership to perform monthly sampling of the North Nashua River just downstream from the City's East Wastewater Treatment Facility (WWTF) from April through October and tests for E. coli, dissolved oxygen, temperature, and conductivity. This information assists the City with monitoring its treated effluent from the WWTF.

-University of Massachusetts (Lowell & Amherst): Hired two summer interns, one from each school, to assist with dry weather outfall sampling and other MS4 related activities during the summer of 2019.

-Worcester Polytechnic Institute (WPI): Worked with a group of four students through the WPI Massachusetts Water Resource Outreach Center (WROC) on a project to develop an environmental education program for 5th grade students consisting of a Student Workbook and complementary Educator Resource Guide. Together the Student Workbook and Educator Guide combine interdisciplinary learning and hands-on, outdoor activities to instill environmental stewardship among Fitchburg's younger generations. The WPI team presented their work, including several educational slides about stormwater and various pollutants, at a publicly televised School Committee meeting.

The City did not have the opportunity to hold a public meeting to allow public comment on the SWMP as written on the City's approved NOI. This is the only difference from what was proposed in the NOI for MCM2.

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:

**Rain Barrel Purchase Program:**

For the second year in a row, the City's DPW Engineering Division, DPW Wastewater Division, and Conservation Commission partnered with the 'Great American Rain Barrel Company' to facilitate a City-subsidized rain barrel purchase program. In the program's inaugural year, the City offered the rain barrels at a discounted purchase price and sold a total of 118 rain barrels, which were distributed to the purchasers in early June 2018. This year the City again offered to subsidize the cost of rain barrels, and 53 rain barrels were sold and distributed to purchasers in June 2019. The vendor also provided a display/demonstration rain barrel to a local school (McKay Arts Academy, a Pre-K to 8th Grade School) for educational purposes. Additionally, the vendor provided a second display/demonstration rain barrel to the City, for City use in promoting the Rain Barrels Program, in advance of the Program's third year in 2020. The 'Rain Barrels Program' continues to be a key development and networking tool to help grow 'green infrastructure' in the City into other forms that will serve to help attenuate and infiltrate stormwater runoff on private properties.

### **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: Number of SSOs removed: 

*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: Total number of SSOs removed: 

### **MS4 System Mapping**

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

#### **Mapping:**

The City has GPS-located 100% of its outfalls/interconnections and approximately 75% of its catch basins and manholes. The City has also digitized ~75% of the drain lines based on record plans, but connectivity between points and lines needs to be updated. The City is in the process of mapping municipally-owned stormwater treatment structures and open channel conveyances, and expects to complete Phase I mapping within two years of the effective date of the MS4 permit as required. The City expects to complete Phase II mapping shortly thereafter.

#### **Equipment:**

During the reporting period, the City purchased a new survey-grade GPS to replace an aging Leica unit for use in mapping its stormwater infrastructure. The City also purchased two tablets enabled with data access for use during dry weather outfall screening and catch basin cleaning. The City migrated its GIS data to ArcGIS Online and has begun using the Survey123 and Collector applications on the tablets for real-time mapping and data collection capabilities.

### **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:

Outfall/Interconnection Inventory and Dry Weather Screening Data:  
[www.fitchburgma.gov/463/Stormwater](http://www.fitchburgma.gov/463/Stormwater)

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

Number of outfalls screened: 

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

Percent of total 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:

System Vulnerability Factors (SVFs) Assessment: [www.fitchburgma.gov/463/Stormwater](http://www.fitchburgma.gov/463/Stormwater)

*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:*

**Outfall Screening:**

During the reporting period, the City worked with its stormwater consultant Arcadis to develop a written outfall/interconnection screening and sampling procedure, which has been incorporated into the City's IDDE Plan. The City began dry weather outfall/interconnection screening in July 2019 using two summer interns and anticipates completion during the summer/fall of 2020. The City did not perform an initial ranking of outfalls/interconnections because it plans to perform dry weather screening, follow-up ranking, and catchment area investigations for all of its outfalls/interconnections.

**Catchment Area Investigations:**

During the reporting period, the City worked with its stormwater consultant Arcadis to develop written catchment investigation procedures, which have been incorporated into the City's IDDE Plan. Arcadis also began to assess each of the City's catchment areas for System Vulnerability Factors (SVFs). The City plans to begin catchment area investigations with Arcadis during fall 2019 and anticipates completion per the schedule laid out in the 2016 MS4 permit.

**Combined Sewer Separation:**

The City of Fitchburg maintains approximately 148 miles of sewer pipe in its wastewater collection system. Historically, nearly 20% of the system was combined (28.7 miles), with an additional 251 combination manholes located throughout the remaining area. In 2012, the City entered into a Consent Decree with the EPA to address violations of its NPDES wastewater discharge permit, which were largely due to the combined sewer areas, combination manholes, and excessive infiltration and inflow. Since then, the City has been aggressively tackling its obligations under the Consent Decree and has separated 19.7 miles of combined sewer main (67% complete) and 71 combination manholes (28% complete). During this reporting period, the City contracted Weston & Sampson to design the next combined sewer separation project that will target separation of 4,600 linear feet of combined sewer and rehabilitation/replacement of 18,000 linear feet of aging sanitary sewer. Construction is anticipated to begin mid 2020.

**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:

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: 1

Estimated volume of sewage removed: 103,290 gallons

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: 23

Total number of illicit discharges removed: 19

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

#### Illicit Discharge Removal Report:

During the 2003 MS4 permit term, IDDE efforts resulted in the detection of 23 illicit connections to the stormwater system, 18 of which were removed during the 2003 MS4 permit term. During the first effective year of the 2016 MS4 permit term, one illicit connection (45 Shattuck Street) was removed. This illicit connection consisted of a sewer service tied into a drain line, and was discovered by a contractor performing a combined sewer separation project downstream of the area in October 2017. He noted a sewer smell in the drain line and alerted the DPW. The illicit connection was removed on August 21, 2018, and removed an estimated volume of sewage of 103,290 gallons during the reporting this reporting period. (This was calculated by multiplying 110 gallons/bedroom for residential home times 3 bedrooms times 313 days remaining during the reporting period following separation.)

Four known illicit connections discovered during the 2003 MS4 permit term have not been corrected: 37 Fairbanks Street, 16 York Avenue, Merriam Parkway Extension, and 181 Upham Street. Although the City's Wastewater Division plans to remove these connections, they consist of private wastewater infrastructure over which the City previously had no jurisdiction. The City has recently updated its stormwater and wastewater ordinances and now has the authority to enforce removal of these illicit connections. Merriam Parkway Extension will most likely be targeted first during the next combined sewer separation project, as this discharge receives flows from approximately four dwellings.

#### **Employee Training**

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

The City held two training sessions during the reporting period. The first was a series of workshops conducted by the City's stormwater consultant, Arcadis, to review updates to the City's stormwater and wastewater ordinances. The workshops were attended by representatives from the DPW, the Building Department, the Health Department, the Community Development Department, and the Conservation Commission. Training content included an overview of the 2016 MS4 permit requirements and IDDE.

The second training was also conducted by Arcadis and focused on dry weather outfall screening,

infrastructure inspection, and IDDE. Attendees included DPW Engineering and two summer interns, who spent the summer performing stormwater field inspections.

### **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:

### **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:

The City has updated its stormwater ordinance to comply with this requirement, and has developed a companion Stormwater Rules & Regulations document that is currently undergoing review by the City's Legal Department.

#### **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:

The City has updated its stormwater ordinance to comply with this requirement, and has developed a companion Stormwater Rules & Regulations document that is currently undergoing review by the City's Legal Department. These require the submission of as-built drawings, and require that an approved long term operation and maintenance plan be recorded upon the deed of the applicable property.

#### **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:

This has not been started yet. The City will complete by the Year 4 due date.

#### **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:

This has not been started yet. The City will complete by the Year 4 due date.

### **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:

This has not been started yet. The City will complete by the Year 4 due date.

## **MCM6: Good Housekeeping**

### **Catch Basin Cleaning**

Describe the status of the catch basin cleaning optimization plan:

This text box will not display more than one line of text. Please see the "Additional Information" section.

*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:

*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, if known.*

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:

If a catch basin sump is found to be more than 50% full during two consecutive routine inspections/cleanings, the Superintendent of Streets is notified and he or she will re-prioritize the subject area to receive more frequent cleanings.

**Street Sweeping**

Describe the status of the written procedures for sweeping streets and municipal-owned lots:

The City has worked with its stormwater consultant, Arcadis, to develop a written Standard Operating Procedure (SOP) for street sweeping. The entire City is swept twice a year at a minimum, once in the spring and once in the fall. Priority areas, which include main roads, parking lots, areas around churches, areas around schools, and areas at the bottoms of hills, are typically swept an additional 4-6 times per year, or as needed following large rain events, special occasions, etc.

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

- Number of miles cleaned:
- Volume of material removed:  [UNITS]
- Weight of material removed:

*If applicable:*

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

Rural, uncurbed roadways with no catch basins are swept twice per year at a minimum. Hilly areas are defined as priority areas, and are swept following large rain events. Most of the rural roadways in the City have some sort of stormwater infrastructure (drop inlets, cross culverts, paved swales, etc.). These are cleaned on an as-needed basis.

**Winter Road Maintenance**

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

The City has worked with its stormwater consultant, Arcadis, to develop a written Standard Operating Procedure (SOP) for winter road maintenance. This SOP is incorporated into a written Snow & Ice Manual, which is updated every two years at a minimum.

**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:

The City is currently in the process of inventorying its municipally-owned properties and has compiled a draft GIS layer applicable parcels. The City expects to complete this during Year 2 of the permit term with the assistance of its stormwater consultant, Arcadis.

### **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:

The City has contracted Arcadis to assist with developing O&M procedures for parks and open spaces, buildings and facilities, and vehicles and equipment. The City expects to complete this during Year 2 of the permit term.

### **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:

The City has contracted Arcadis to assist with developing SWPPPs for applicable facilities. The City expects to complete this during Year 2 of the permit term.

*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:

As mentioned above, the City expects to complete this during Year 2 of the permit term.

### **O&M Procedures for Stormwater Treatment Structures**

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

As mentioned above, the City is actively working on mapping its municipally-owned stormwater treatment structures. Once complete, the City will prepare O&M procedures for each type. The City expects to complete this during Year 2 of the permit term.

## **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

### **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:

MCM6, Catch Basin Cleaning Optimization Plan Details:

The City has worked with its stormwater consultant, Arcadis, to develop a written Standard Operating Procedure (SOP) for catch basin cleaning. This SOP targets construction areas, high-traffic areas, and areas at the bottoms of hills where sediment tends to accumulate most. Each of these SOPs will help to minimize the amount of sediment entering the City's stormwater system.

The City currently owns two clamshell trucks and one vacuum truck that are used in catch basin cleaning. Typically one operator goes out in the City each day to clean catch basins with a clamshell truck, while the vacuum truck is used by other crews for specialty work (vacuum excavation, dewatering, clearing culverts and pipe blockages, etc.). On occasion, the vacuum truck will be used for very full or clogged catch basins. The City also recently hired two stormwater laborers, whose primary function during construction season will be to rebuild catch basins and drain manholes, clear drop inlets and culverts, etc.

The City has also purchased and is in the process of implementing a tablet enabled with data access to track catch basin cleaning operations using ArcGIS online and the Survey123 and Collector applications. This will provide the City with valuable data for each catch basin in its system, including location, condition, and depth of sediment/debris. Once enough data is compiled, the City will use it to further optimize its catch basin cleaning schedule and prioritize catch basin repairs.

### **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

### **Annual Requirements**

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:  Title:

Signature:  Date:

*[Signatory may be a duly authorized representative]*