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 Organi	zation: City of Methu	nen	
EPA N	PDES Permit Number: M	A041210		
Primaı	y MS4 Program Manag	er Contact Informat	tion	
Name:	Stephen Gagnon		Title: Engineering Dept. Administrator	
Street A	Address Line 1: Searles B	uilding, Room 206		
Street A	Address Line 2: 41 Pleasa	nt Street		
City:	Methuen	State: MA	Zip Code: 01844	
Email:	SJGagnon@ci.methuen.n	ıa.us	Phone Number: (978) 983-8550	
Stormy	water Management Prog	ram (SWMP) Infor	rmation	
SWMF	Location (web address):	https://www.cityofme	nethuen.net/engineering/pages/stormwater-information	on
Date S	WMP was Last Updated:	October 2020		
If the S	SWMP is not available on	the web please provid	ide 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

Impairment(<u>s)</u>			
	⊠ Bacteria/Pathogens	☐ Chloride	☐ Nitrogen	
	⊠ Solids/ Oil/ Grease (Hy	ydrocarbons)/ Metal	S	
TMDL(s)				
In State:	☐ Assabet River Phospho	orus 🗆 Bact	eria and Pathogen	☐ Cape Cod Nitrogen
	☐ Charles River Watersh	ed Phosphorus	☐ Lake and Pone	d Phosphorus
Out of State:	☐ Bacteria/Pathogens	☐ Metals	☐ Nitrogen	☐ Phosphorus
			C	lear Impairments and TMDLs
	ppleted that permit requirent dditional information will becements		•	requirement leave the box
⊠ Inspect	ted and screened all outfalls	s/interconnections (e	excluding Problem a	nd Excluded outfalls)
	ed outfall/interconnection proper inspections as necessary	riority ranking base	d on the information	collected during the dry
	onstruction bylaw, ordinancermit requirements	e, or other regulator	ry mechanism was up	odated and adopted consistent
any additional impacts of Coattempt to con. The City and	-	of the above year 3 are requirement that of the reason the requirement that of the field verified 732	requirements could could not be complet ment could not be co previously mapped	mpleted below: outfall locations. This
Erosion Cont Drain System Regulations t been drafted	pted two stormwater ordina rol" and "An Ordinance Go " after three City Council r o implement the Administra for adoption for the Conver lic hearings, these Regulation	verning Illicit Conr eadings in Permit Y ative Land Disturba sation Commission	ections and Discharger 2 (April 21, Maynce Review and Stor Due to COVID-19	ges to the Municipal Storm 19, and June 18, 2020). rmwater Management have

Page 3 City of Methuen 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 O The updated SSO inventory is attached to the email submission • The updated SSO inventory can be found at the following website: 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 SWPPs 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: IDDE Training: Due to COVID-19 restrictions, it was not possible to gather DPW personnel for IDDE Training in Permit Year 3. A prerecorded IDDE training was prepared for DPW employees to view on demand that will be rolled out to staff in Permit Year 4. SWPPPs: Initial SWPPP inspections were conducted in July 2021 at the Highway Facility, Transfer Station, and Water Maintenance Garage. SWPPPs have been drafted and will be finalized in Permit Year 4. One corrective action noted for the Highway Facility is to cover all sand and salt piles.

City-wide Good Housekeeping: City facilities and vehicles / equipment have been inventoried and draft SOPs developed during Permit Year 3. The City will review and finalize this program and train appropriate City

staff in multiple departments during Permit Year 4. See p. 16 for more information.

Stormwater BMPs: The City improved its inventory of stormwater BMPs in Permit Year 3. Inspections of all BMPs are planned for Permit Year 4 under a MassDEP Asset Management Grant. See p

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable) <u>Annual Requirements</u>

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 requirement any additional details, please use the box below:	ents listed above or provide

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

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

yould like to describe progress made on any incomplete requirements listed above or providails, please use the box below:
nents to Riverside Park were completed, including a drainage bioretention area. However, in information to calculate phosphorus removal for PY3.
rease (Hydrocarbons), or Metals
reet sweeping frequency of all municipal owned streets and parking lots to a schedule that s with potential for high pollutant loads
inspection and maintenance for catch basins to ensure that no sump shall be more than 50; Cleaned catch basins more frequently if inspection and maintenance activities indicated ediment or debris loadings
yould like to describe progress made on any incomplete requirements listed above or providails, please use the box below:
box below to provide any additional information you would like to share as part of your
t is it is

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

submitted?

YesNo

Part III: Receiving Waters/Impaired Waters/TMDL

from the outfall inventory because they are another stormwater asset, do not exist, or are managed by another entity (e.g., MassDOT or private). This caused changes to the City's receiving waters. Please see the "Receiving Waters" sheet in the attached outfall inventory for revisions to the City's receiving waters list since	If yes, describe below, including any relevant impairments or TMDLs:
the NOI was submitted.	During the 2021 outfall screening field effort, 12 outfalls were discovered and 315 outfalls were removed from the outfall inventory because they are another stormwater asset, do not exist, or are managed by another entity (e.g., MassDOT or private). This caused changes to the City's receiving waters. Please see the "Receiving Waters" sheet in the attached outfall inventory for revisions to the City's receiving waters list since the NOI was submitted.

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 : 7
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:Education and Outreach to Residents (Multi-media Methods) Message Description and Distribution Method:
Multiple brochures and flyers on proper usage of slow-release fertilizer are posted on the City's website. Additionally, announcements for City leaf and yard waste pickup were posted on the City's website and Facebook page in the Fall and Spring. These materials were used to satisfy the annual Spring and Fall messaging requirements per Appendix H for discharges to waters impaired for phosphorus
Targeted Audience: Residents
Responsible Department/Parties: DPW Operations
Measurable Goal(s):
The brochures, flyers, and announcement are available to all visitors on the City's website, the 8,400 Facebook followers, and the 3,300 Twitter followers. The October 19, 2020 Yard Waste Collection Announcement had 35 Likes, 44 Comments, and 77 shares. Similar metrics are available for other posts.
Message Date(s): Ongoing; Facebook and Twitter posts were published on 10/19/2020, 3/23/2021, and 4/29/2021.
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:Education and Outreach to Residents (Multi-media Methods)
Message Description and Distribution Method: A message to residents on stormwater topics of significance such as identifying and reporting illicit discharges and illegal dumping, pesticide and fertilizer use, sweeping walkways after snow melt, and auto care were included in the 2020 Water Quality Report. Additionally, information about the NPDES permit program was included. https://www.cityofmethuen.net/sites/g/files/vyhlif886/f/uploads/waterquality2020.pdf Print copies are also available at City Hall, Engineering Dept.

Targeted Audience: Residents; Businesses, Institutions, Commercial Facilities; Industrial Facilities

Responsible Department/Parties: DPW Operations

City of Methuen	Page 8
Measurable Goal(s):	
The 2020 Water Quality Report is available to all visitors on the City Water Department's we audience is intended to be all water customers.	bsite and the
Message Date(s): 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:Education and Outreach to Residents (Multi-media Methods)	
Message Description and Distribution Method:	
Multiple brochures and flyers on proper pet waste management and septic system maintenance the City's website. These brochures were used to satisfy the pet waste education requirement for discharges to waters impaired for phosphorus and bacteria/pathogens. City distributed the Waste and Surface Water Quality" brochure to pet owners with dog licenses.	per Appendix H
Targeted Audience: Residents	
Responsible Department/Parties: DPW Operations	
Measurable Goal(s):	
The brochures and flyers are available to all visitors on the City's website. 253 pet waste flyed distributed to residents with dog license renewals.	rs were
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 O No •	
If yes, describe why the change was made:	
BMP:Education and Outreach to Residents (Multi-media Methods)	
Message Description and Distribution Method:	1' 1
The DPW maintains "Mutt Mitt" stations at Riverside Park that include messaging regarding of pet waste.	proper disposal
Targeted Audience: Residents	

Responsible Department/Parties: DPW Operations

City of Methuen Page 9
Measurable Goal(s):
Maintain signage and supplies for collection and disposal of pet waste. Keep trash barrels from being full.
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:Education and Outreach to Residents (Multi-media Methods) Message Description and Distribution Method:
A message to residents on spring/summer 2021 stormwater outfall inspections was posted on the City's website, Facebook, and Twitter, with links to learn more about Methuen's SWMP and outfalls.
Targeted Audience: Residents
Responsible Department/Parties: DPW Operations
Measurable Goal(s):
The information is available to all visitors on the City's website, the 8,400 Facebook followers, and the 3,300 Twitter followers. The Facebook post had 46 likes, 2 comments, and 3 shares.
Message Date(s): April 14, 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:Education and Outreach to Residents (Multi-media Methods) Message Description and Distribution Method:
On August 4, 2020, the City's Engineer and Environmental Planner/Energy Manager went on MCTV "Working for You" program to discuss the City's Energy/Environment Program and included Stormwater Management in this discussion.
Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

City of Methuen	Page 10
Measurable Goal(s):	
The show was shown on the Government Channel Comcast 8/ Verizon FIOS 32 on Wednesdays at 1 Saturdays at 9 am and Sundays at 5 pm. Can also be found On Demand. https://methuen-ma.viebit.cplayer.php?hash=uQMDZiQbbZbL	
Message Date(s): August 3, 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:Education and Outreach to Residents (Multi-media Methods)	
Message Description and Distribution Method:	
Stormwater Ordinance Fact Sheets are available at the Methuen Community Development/Conserva Office.	ıtion
Targeted Audience: Developers; Residents	
Responsible Department/Parties: Conservation Committee	
Measurable Goal(s):	
Fact sheets are available to all visitors.	
Message Date(s): Ongoing	
Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐	
Was this message different than what was proposed in your NOI? Yes ○ No ●	
If yes, describe why the change was made:	

Add an Educational Message

MCM2: Public Participation

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

The Stormwater Management Plan (SWMP) was posted for public review and made publicly available on the Town's website. There is contact information provided along with the plan for the public to provide feedback. Additionally, the Town posted a link to their stormwater page on Facebook and Twitter on April 14, 2021. The Stormwater Program requirements and request for funding was presented at the March 15 and April 5 City Council Meetings. These meetings were open for public participation through Zoom and broadcast live (cable TV and online live).

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**:

- A Household Hazardous Waste Collection Day was held on June 12, 2021 by the City of Methuen Department of Public Works.
- The City of Methuen allowed residents to dispose of Christmas trees from December 30, 2020 to February 28, 2021.
- The Methuen City Council organized Community Cleanup Days on October 10, 2020 and April 24, 2021.
- The City of Methuen DPW had Yard Waste curbside pickup from October 20 to December 11, 2020 and May 3 to June 25, 2021.
- The City's DPW personnel participate in the Merrimack Valley DPW/Stormwater Collaborative and attended most of the monthly meetings. These meetings included the following topics: local MS4 planning efforts, grant opportunities, good housekeeping, and workplace safety.

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: 0 Number of SSOs removed: 0

MS4 System Mapping

Optional: Provide additional status information regarding your map:

During the 2021 outfall screening field effort, 315 out of 719 outfalls were removed from the inventory because they are another stormwater asset, do not exist, or are managed by another entity. 12 unmapped outfalls were discovered, mapped, and inventoried.

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.

City of Methuen	Page 12
\circ	No outfalls were inspected
•	The outfall screening data is attached to the email submission
\circ	The outfall screening data can be found at the following website:
Below, report of	on the number of outfalls/interconnections screened during this reporting period.
	Number of outfalls screened: 417
Below, report o	on the percent of outfalls/interconnections screened to date .
	Percent of outfalls screened: 100
Ontional: Prov	vide additional information regarding your outfall/interconnection screening:
During the 202 Please see the	21 outfall screening field effort, 417 outfalls were successfully investigated and screened. attached updated outfall inventory for details, updated ranking, screening results, and receiving complete summary report is being reviewed by the City and will be appended to the IDDE Plan
Catchment In	
	lease submit all data collected during this reporting period as part of the dry and wet weather 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 o	on the number of catchment investigations completed during this reporting period.
	Number of catchment investigations completed this reporting period: 0
Relow report	on the percent of catchments investigated to date.
Beiow, report o	
	Percent of total catchments investigated: 0
Optional: Prov	vide any additional information for clarity regarding the catchment investigations below:
In 2004, the C	n preparation for Catchment Investigations was prepared for the highest priority catchments. ity retained CDM to inspect and screen all known outfalls. At that time 7 of the 500 screened have elevated fecal coliform. In 2008, the City and consultants investigated these 7 catchment

areas using drain inspection procedures developed by Boston Water & Sewer Commission, including dye testing to confirm one suspected cross connection. Additional work was completed to address suspected illicit

discharges; however it is unclear is confirmatory sampling was conducted. These catchments will be

IDDE Progress

addressed first in Permit Year 4.

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 O The illicit discharge removal report is attached to the email submission O 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: 0 gallons/day Estimated volume of sewage removed: 0 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: 0 Total number of illicit discharges removed: 0

Page 13

Employee Training

planned to be removed below:

City of Methuen

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

Due to COVID-19 restrictions, it was not possible to gather DPW personnel for IDDE Training in Permit Year 3. A prerecorded IDDE training was prepared for DPW employees to view on demand that will be rolled out to staff in Permit Year 4.

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or

The City's Environmental Planner completed the EPA Soak Up Rain Webinar - Greener Streets on 11/18/2020 and Mass. Municipal Vulnerability Preparedness (MVP) Program Webinar - Implementing Nature-Based Solutions on 1/21/2021. The City's Engineering Department Administrator also discussed IDDE during Merrimack Valley DPW/Stormwater Collaborative monthly meetings.

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: 2

Number of inspections completed: 12

Number of enforcement actions taken: 0

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

The City's peer review consultant (TEC) provides Planning with routine construction inspection reports; there were monthly inspections of the "Emerald Pines" development. City staff performed many other inspections at active construction sites during the permit term; we were unable to obtain a total number and tracking inspections across all City departments and the City is working to improve tracking procedures.

During inspections, formal written enforcement actions were not taken, but were verbally communicated to contractors and noted on site inspection reports. For the next visit, the inspector made sure to identify if corrective actions were taken.

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: 12

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

12 final as-built drawings were received in PY3 (7 subdivisions, 3 commercial, and 5 Conservation Commission). Additionally, many interim as-built drawings associated with partial building release were received but are not included in the number reported above.

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:

Preparation for the Street Design and Parking Lots Report has not yet begun as this requirement is due in Permit Year 4.

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:

Preparation for the Green Infrastructure Report has not yet begun as this requirement is due in Permit Year 4.

City of Methuen			Page 15		
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:					
Preparation for the Retrofit Properties Inventory has not yet begun as this requirement is due in Permit Year 4.					
MCM6: Good Housel	keeping				
Catch Basin Cleaning Below, report on the number of catch basins inspected and clean removed from the catch basins during this reporting period.	ned, along with ti	he total volur	ne of material		
Number of catch basins inspected: 398					
Number of catch basins cleaned: 398					
Total volume or mass of material removed from a	all catch basins:	0	[Select Units]		
Below, report on the total number of catch basins in the MS4 sys	stom				
Total number of catch basins: 6,755	item.				
70 1: 11					
If applicable: Report on the actions taken if a catch basin sump is more than 50 inspections/cleaning events:	0% full during tv	wo consecuti	ve routine		
No catch basins were reported as more than 50% full due to limit	ited use of sand	for winter roa	ad deicing.		
The catch basin truck operator position was vacant for most of the candidate during COVID-19; therefor the City was not able to complete Permit Year 3. Once material is hauled to a solid waste facility removed; cleanings are stored in a separate pile at the Highway.	lean as many cat the City will rec	ch basins as	planned for		
Street Sweeping					
Report on street sweeping completed during this reporting perio	od using <u>one</u> of th	he three metr	ics below.		
Number of miles cleaned: 1,057	- •				
	Select Units]				
O Weight of material removed: 1,485	ons				

Number of site inspections completed: 3	
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.

O Not applicable

Stormwater Pollution Prevention Plan (SWPPP)

- O 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):

https://merrimack.org/wp-content/uploads/2021/03/MRWC-2020-Water-Quality-Monitoring-Report.pdf

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:

The Merrimack River Watershed Council has a water quality program and the 2020 report presents data collected from July to November 2020. The data were collected at 10 sites along the Merrimack River on dry and wet weather days and following CSOs.

EPA also conducted outfall investigations in May 2021. EPA data is not attached to the email submission.

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:

Sweeping is reported in total miles swept and multiple passes are required for wider roads. (For reference, there are approx. 167 miles of accepted roads, 29 miles unaccepted roads. All roads were swept twice or more.)

The City was awarded a SRF Asset Management Planning Application for Financial Assistance. The remaining paperwork is due October 15, 2021. The project will cover the following MS4 program requirements:

- Develop an inventory of the City's facilities
- Continue data collection for outfalls and catch basins that will be included in Phase II mapping

- Conduct catchment investigations
- BMP retrofit assessment
- Inspect municipal BMPs and maintenance needs
- Develop educational materials
- Funding Analysis
- Conduct a condition assessment of the stormwater system which will help update the outfall and interconnection priority ranking
- Prepare Asset Management Plan

The proposed timeline for this work will begin in December 2021. It is anticipated that the updates will be completed in Permit Year 5 (FY 2023).

In April 2021, the City applied for a Municipal Vulnerability Preparedness Action Grant of \$80,250 for Searles Pond/Bloody Brook Corridor Resilience Planning. The project will conduct resilience planning and develop a management plan for the conservation area and corridor that has a history of flooding. Tasks associated include:

- robust civic engagement process
- conditions assessment
- alternatives evaluation

In April 2021, the City applied for a 604(b) Water Quality Management Planning grant of \$50,000 for Spicket River Nutrient and Pathogen Reduction. The City is partnering with the Merrimack River Watershed Council, GroundWork Lawrence, the City of Lawrence, and the Merrimack Valley Planning Commission for the project, which will cover the following:

- land use assessment
- water quality data collection
- watershed-based plan development
- preliminary designs for BMPs
- multi-lingual water quality outreach campaign

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:

COVID-19 impacts are discussed through the report as related to each requirement.					

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:

The City acknowledges the Permit Year 4 requirements in the General Permit and intends to complete as many activities as possible based on funding, staff availability, and City support.

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:	Patrick Bower	Title:	Director, Dept. of Public Works
	[Signatory may be a duly authorized representative]	Date:	09/28/21