



# Municipal Separate Storm Sewer System (MS4) 2019 Annual Report

## A. Permittee Information

1. Name of MS4: City of St. Albans

2. Permit Number: 7074 - 9014.AR

## B. Attached Documents REI Submittal NOI, RSEP Report, PW Material Handling Policy

The following documents have been prepared and submitted with this Annual Report:

- Annual Report Workbook (.xlsx)
- BMP Tracking Table (.xlsx)

## C. Certification of STPs constructed to comply with the FRP or PCP

The following BMPs were built or implemented within the past calendar year and were constructed in compliance with the approved Flow Restoration Plan (FRP) or Phosphorus Control Plan (PCP).

Name of System	Location
None.	

N/A

Name of Qualified Designer	Title
Signature	Date

## D. MS4 Operator Certification

This Annual Report shall be signed by a principal executive officer, ranking elected official or other duly authorized employee consistent with 40 CFR §122.22(b) and certified as follows:

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 gathered and evaluated 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 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.

<b>Chip Sawyer</b>	Director of Planning & Development
Print Name	Title
<b>Chip Sawyer</b>	<b>March 31, 2020</b>
Signature	Date

Digitally signed by Chip Sawyer  
Date: 2020.03.31 13:45:26 -04'00'

**Minimum Control Measure Reporting**

GP Part	MCM Requirements	Measurable Goal	Description of how requirement was met	List attachments if applicable	Activities planned for next year	Proposed change in BMP or measurable goal?
<b>MM#1: Public Education and Outreach on Stormwater Impacts</b>						
1.c (1)	Website maintained with locally relevant stormwater information	397 site visits and 1,257 page views.	<a href="http://www.fcsvt.org/">http://www.fcsvt.org/</a>	Franklin County Stormwater RSEP Report.	Same.	No.
1.c (2)	Maintain a program to identify opportunities and provide technical assistance on Low Impact BMPs	201 Visits to technical asst. pages.	Including these sections of website: Training, Homeowner DIY, Intentional Gardening, Driveway Drainage.	Above.	Same.	No.
1.c (3)	Participate in a regional stormwater education strategy or develop an MS4 specific program	Franklin County Stormwater is the City/Town RSEP, administered by NRPC.	The City pays \$5,000 annually to this effort. In addition to web visits reported above, the RSEP participates in produce of online videos and collaboration with organizations, like the St. Albans Museum, which bring in additional funds for educational programming. All in RSEP report attached.	Above.	Same.	No.
	Other					
<b>MM#2: Public Involvement and Participation</b>						
2.d	Participate in a regional stormwater public involvement and participation strategy or develop an MS4 specific program	3 participants at April Stool's Day. 20 participants in cigarette butt little pick-up.	See attached RSEP report for all MCM 2 activities and metrics.	Above.	Same.	No.
	Other					
<b>MM#3: Illicit Discharge Detection and Elimination</b>						
3.a (1)	Develop and maintain a GIS or AutoCAD map of the storm sewers in the regulated MS4 showing all outfalls	No updates to maps needed in 2019.	Public works cleaned all catch basins, and Watershed Consulting Assoc. visited all outfalls in preparation for REI submission.	REI submitted by Watershed Consulting Assoc. in December 2019.	Same.	No.
3.a (2)	Develop ordinance or policy prohibiting non-stormwater discharges and implement enforcement procedures	Achieved	Adopted as part of Stormwater Management and Operations on 05/14/18.	Previously submitted.	Complete.	No.
3.a (3)	Develop and implement a plan to detect and address non-stormwater discharges	7 OFs monitored. 4 OFs resolved.	7 OFs monitored in 2019. 4 OFs resolved, and 3 with recommendations.	2019 IDDE Report by WCA.	Continue monitoring OFs with recommendations and add more to monitoring.	No.
3.a (4)	Inform public on the dangers of illegal discharges	No catch basins stenciled in 2019.	No catch basins stenciled in 2019.	N/A.	Public notices as necessary. Stencil CBs.	No.
3.a (6)	Status of monitoring activities:					
	Outfalls Inspected:	27	Most inspected by WCA as part of REI.	See REI data.	Assuming fewer inspections in 2020. 2019 was an REI year.	No.
	Number of dry-weather samples taken:	2	OF 14 and 15 in 2019.	2019 IDDE Report by WCA.	Continue monitoring OFs with recommendations and add more to monitoring.	No.
	Feet of stormwater drainage pipe inspected:	Assumed None.	No camera inspections as part of IDDE in 2019. Some recommended for 2020. No other known camera inspections by Public Works in 2019.	2019 IDDE Report by WCA.	Continue monitoring OFs with recommendations and add more to monitoring.	No.
	Discharges Detected:	2	There were detections on OF 14 and 15 in 2019, but both require 2020 work to find the sources.	2019 IDDE Report by WCA.	Continue monitoring OFs with recommendations and add more to monitoring.	No.
	Discharges Corrected:	1	City eliminated cross-connect on OF 37. Will monitor to ensure there are no flooding issues.	2019 IDDE Report by WCA.	Continue monitoring OFs with recommendations and add more to monitoring.	No.
	Other					
<b>MM#4: Construction Site Stormwater Runoff Control</b>						
4.a (1)	Develop and implement procedures to ensure that construction activities undertaken by the MS4 are properly permitted	Achieved.	City projects follow EPSC guidelines and apply for State or local construction stormwater permits, depending on size of project.	N/A.	Same.	No.
	Number of permitted MS4 construction projects:	3	Neighborhood sidewalk project, Wastewater Treatment Plant renovations, Congress & Main site preparation.	N/A.	Same.	No.
4.a (2)	Review existing policies to determine effectiveness, consistency with state standards; Amend for consistency with state standards	Achieved.	Review performed during drafting of local ordinances 2015-2018. No updates required in 2019.	N/A.	Same.	No.
4.a (3)	Develop and implement ordinance that regulates earth disturbance <1ac	Achieved.	Adopted as part of Stormwater Management and Operations on 05/14/18.	Previously submitted.	Complete.	No.
	Number of projects with <1ac of disturbance subject to MS4 requirements:	2	City's Congress & Main site preparation project and a large addition to a home. Sites permitted and visited by staff.	N/A.	Same.	No.
	Other					
<b>MM#5: Post Construction Stormwater Management for New Development and Redevelopment</b>						
5.d	Review existing policies to determine effectiveness, consistency with state standards, opportunities for LID, and opportunities for changes to street and parking requirements; Amend for consistency with state standards	Achieved.	Review performed during drafting of local ordinances 2015-2018. No updates required in 2019.	N/A.	Same.	No.
5.e	Develop and implement procedures to identify projects that disturb >1ac but do not require a state post-construction permit	Achieved.	Adopted as part of Stormwater Management and Operations on 05/14/18.	Previously submitted.	Complete.	No.
	Number of projects >1ac of disturbance <1ac of impervious:	0	There was none in 2019.	N/A.	Same.	No.

5.f	Adopt an ordinance or policy that requires projects that disturb >1ac to utilize a combination of structural, non-structural, and low impact BMPs and ensure long-term maintenance		0 There was none that required regulation by City ordinance in 2019.	N/A.	Same.	No.
5.g (1)	Develop and implement procedures for inspecting projects subject to the MS4's ordinance	Achieved.	Adopted as part of Stormwater Management and Operations on 05/14/18.	Previously submitted.	Complete.	No.
	Number of STPs (without state permits) inspected by MS4:		0 There was none in 2019.	N/A.	Same.	No.
5.g (2)	Develop and implement procedures to ensure that development activities undertaken by the MS4 are properly permitted	Achieved.	City projects follow guidelines and apply for State or local stormwater management permits, depending on size of project. There were none needing state or local permits in 2019.	N/A.	Same.	No.
	Other					
<b>MM#6: Pollution Prevention and Good Housekeeping for Municipal Operations</b>						
6.b (2)	Conduct stormwater training for staff	2 trainings attended	1 staffer attended an erosion control seminar in Eden, VT, and 2 attended a similar workshop in Richmond.	N/A.	Same.	No.
6.b (3)	Implement controls for reducing or eliminating the discharge of pollutants from the MS4	Achieved.	See below.	N/A.	Same.	No.
	STPs constructed, upgraded, & maintained	3 maintained.	List in BMP tracking table	BMP Tracking Table	Same.	No.
	STPs incorporated into the MS4	0 in 2019. 3 Existing.	List in BMP tracking table	BMP Tracking Table	Same.	No.
	Inspections performed on fleet vehicles, buildings, garages, parks, open spaces	Regular inspections.	Regular maintenance as needed. Notably, the Johnstn Sweeper and the Vac-Con Sewer/Stormwater maintenance truck were inspected and maintained over the winter.	See Nonstructural tab.	Same.	No.
	Catch basin cleaning	62 CBs inspected/cleaned	Complete 'Non Structural Tab'	See Nonstructural tab.	Same.	No.
	Street Sweeping	166 yds debris swept.	Complete 'Non Structural Tab'	See Nonstructural tab.	Same.	No.
	Leaf/organic waste removal program	None in 2019.	Complete 'Non Structural Tab'	N/A.	No plans for 2020 as of yet.	No.
6.b (4)	Develop and implement procedures for proper disposal of wastes	Procedure written up in 2019.	Will attach with report.	St. Albans Material Handling Policy.	Update as needed.	No.
6.c	Prohibit use of phosphorus containing fertilizers on facility operations unless warranted by a soil test; submit copy of test	Achieved.	This is a standard City policy. Also included in contracts, when appropriate.	N/A.	Update as needed.	No.
6.d	Participate in the Agency's Municipal Compliance Assistance Program (or other audit program) for municipal garages	No MCAP visit in 2019.	No MCAP visit in 2019. Contacted MCAP program for status in 2020.	N/A.	Contact MCAP for 2020.	No.
	Other					

<b>Additional MS4 Reporting Requirements</b>	
Annual Review of SWMP completed	Yes
Results of information collected and analyzed, if not included elsewhere	N/A
Notice that permittee is relying on another entity to satisfy some of its permit obligations	Northwest Regional Planning Commission: MCMs 1 and 2.
Estimated funds spent on stormwater management for the fiscal year*	\$155,813 (Stormwater Utility FY2019 budget)
Other information, if applicable	

<b>Impaired Waters Response Plan</b>	
Impaired Stream	Rugg Brook.
Impairment	Stormwater sediment.
Status of implementation	Pursuing implementation of FRP.
Planned activities for upcoming year	Continue final design of SASH/Nason St. BMP.
Other information, if applicable	

<b>Impaired Waters Response Plan</b>	
Impaired Stream	Stevens Brook.
Impairment	Stormwater sediment.
Status of implementation	Pursuing implementation of FRP.
Planned activities for upcoming year	Continue design of Lo. Welden Cooling Ponds BMP. Begin design of Lemnah Drive BMP. Start conversation with VT DEC about Hungerford Land BMP.
Other information, if applicable	

\* Optional response.

### Non Structural BMP Reporting

Complete Table 1 or 2, depending on tracking method used by MS4

Table 1. Area tracking method			
Sub Area Name (Lake segment, route, etc.)	St. Albans Bay		
Area of streets swept (acres)	46.5		
P Load from Streets where sweeping occurs (kg/year)	20		
Sweeper Frequency	Weekly		
Sweeper Technology	Vacuum Assisted		
Year sweeping started	2008		
If weekly or monthly, number of months streets are swept	8		
Phosphorus Credit	4.27%		
Phosphorus Reduction from Street Sweeping (kg/year)	0.853333333		
Catch Basin Cleaning			
P Load from Streets where catch basin cleaning occurs (kg/year)			
Phosphorus Credit	2%	2%	2%
Phosphorus Reduction from Catch Basin Cleaning(kg/year)			

Table 2. Measurement of material tracking method	
Combined dry weight of material collected (kg)	
<b>OR</b> Cubic yards of material collected	10 yards total from 62 catch basins.
Number of sediment samples taken	None.
Lab where samples were processed	N/A
Record the average TP result	N/A
Was a particle size analysis done?	No.
Please attach results from the lab	N/A

**\*\*There is currently no approved accounting methodology based on weight or volume of material collected. Should a method be developed, DEC anticipates information like that in Table 2 could be required.**

Table 3. Phosphorus Reduction Factor				
	2/year (spring and fall)	Monthly	Weekly	4X in the fall
Mechanical Broom	1%	3%	5%	17%
Vacuum Assisted	2%	4%	8%	17%
High Efficiency Regenerative Air-Vacuum	2%	8%	10%	17%

<b>Flow Restoration Plan Implementation</b>		
	Rugg Brook	Stevens Brook
Summary of actions taken to implement FRP components	Design project for SASH/Nason BMP	Began design of Lo. Welden Cooling Ponds BMP.
Extent of BMP implementation	Design	Design
Estimate of the extent of completion for remaining items	No other BMPs were advanced in 2019.	No other BMPs were advanced in 2019.
Assessment of ability to meet outstanding schedule items	No actionable evidence at this time that schedule cannot be met, but the true feasibility of all BMPs has not yet been tested against realities in the field, including landowner issues, VT DEC permitting conflicts, and final costs.	No actionable evidence at this time that schedule cannot be met, but the true feasibility of all BMPs has not yet been tested against realities in the field, including landowner issues, VT DEC permitting conflicts, and final costs.

<b>Stream Flow Monitoring</b>	
Participate in MOU with VTDEC to monitor sw impaired streams	Participating.
Funds spent on stream flow monitoring in 2019	\$8,813

<b>Stream Corridor Protection</b>	
Ordinance or regulation adopted to protect and regulate development in sw impaired water stream corridors	Stream Corridor Rules previously adopted are available at <a href="http://www.stalbansvt.com/stormwater">www.stalbansvt.com/stormwater</a>

<b>Phosphorus Control Plan Development</b>	
Extent of implementation of the Municipal Roads Standards	
Road Erosion Inventory (REI)	Uploaded to 'Municipal Roads General Permit Implementation Table' in Dec. 2019
Map and identify connected curbed and catch basin road segments to specified outlets	Mapped in Previous Years.
Roads and Outlets planned for upgrade within the first permit term (through July 2023)	Planning to do erosion repairs for O9906 and O9908 in 2020.
Roads and Outlets planned for upgrade in calendar year 2020.	Planning to do erosion repairs for O9906 and O9908 in 2020.
Extent of street sweeping and catch basin cleaning	See 'Non-structural tab'
Extent of stormwater BMP implementation	See 'BMP Tracking Table'
Estimate of the extent of remaining items requiring completion	NA - PCP due April 1, 2021
Assessment of the ability to meet outstanding schedule items	NA - PCP due April 1, 2021
List of '3 acre sites' that have been taken over by the MS4	None.
Has this acreage been included in the MS4's baseload calculations?	N/A
Has the baseload been calculated based on municipally owned and controlled developed lands?	Yes.
Summarize progress on establishing P credits for existing projects	Ready for a first draft of PCP for City's review.
Summarize progress on identifying additional projects necessary to meet the PCP targets	Based on draft P credits, no projects in addition to those listed current FRPs may be needed at this time for final PCP.

