



A. Permittee Information	
1. Name of MS4:	Town of St Albans
2. Permit Number:	3 - 9014
B. Minimum Control Measures	
1. Public Education and Outreach Franklin County Regional Stormwater Education, Public Involvement, and Participation Outreach Program	
1.1 Website address:	www.fcsvt.org.
1.2 Participation in Regional Outreach Strategy	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, summary of activities attached
2. Public Involvement and Participation	
2.1 Participation in Regional Involvement Strategy	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, summary of activities attached
3. Illicit Discharge Detection and Elimination	
3.1 Stormwater infrastructure mapping complete or continuing:	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes
3.1 Number of stormwater outfalls inspected:	312
3.2 Number of stormwater outfalls tested:	00
3.3 Number of illicit discharges detected and eliminated:	00
3.4 Additional information attached	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
4. Construction Site Runoff Control	
4.1 Continued implementation of an Erosion Control Ordinance	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
4.2 Additional information attached	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
5. Post Construction Management for New Development and Redevelopment	
5.1 Continued implementation of an ordinance for disturbances of greater than one acre that are not subject to the Agency's post-construction permit program	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
5.2 Additional information attached	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
6. Pollution Prevention and Good Housekeeping	
6.1 Participation in the Municipal Compliance Assistance Program	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes; Participation year:2018
6.2 Number of catch basins inspected:	111
6.3 Number of catch basins cleaned:	24
6.4 Lane miles swept: 53.51	6.5 Cubic yards of material collected by street sweeping: 18
6.6 Number of staff who attended training:	8
6.7 Additional information attached	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
C. Flow Restoration Plan Implementation	
1. Summary of FRP implementation in stormwater impaired waters is attached:	<input checked="" type="checkbox"/> NA <input type="checkbox"/> Yes
D. Phosphorus Control Plan Implementation	
1. Has a Road Erosion Inventory (REI) been completed for your municipality?	<input checked="" type="checkbox"/> NA <input type="checkbox"/> No <input type="checkbox"/> Yes

**Franklin County Regional Stormwater Education,
Public Involvement and Participation Program**
Summary of Activities January 1 – December 31, 2018

The information below summarizes many of the accomplishments in 2018 conducted by Northwest Regional Planning Commission and Friends of Northern Lake Champlain in fulfillment of the Regional Stormwater Educational Program (RSEP) for the City and Town of St. Albans. The RSEP is charged with satisfying the relevant requirements of the Minimum Control Measure (MCM) One, Public Education and Outreach, and MCM Two, Public Involvement and Participation of the Phase II NPDES Permit.

The minimum requirements to be completed on MCM 1 regarding Public Education and Outreach are provided in Table 1 below.

Table 1. MCM 1 – Public Education and Outreach activities and goals.

MCM #	Activity	Measurable Goal(s)	Status
1-1	Maintain stormwater website	Perform annual updates Document number of contacts and feedback to website	✓ ✓ 30
1-2,3,4	Participate in RSEP	Maintain Regional Stormwater Education Program (RSEP) membership and activities	✓
1-5a	Develop or acquire information brochures	Update brochures as necessary	✓ 4 2 Flyers created to promote FCS 2 Guidance documents
1-5b	Distribute stormwater brochures	Report number of brochures distributed	✓ 50
1-5c	Seek local news media to run new or feature stories	Report number of media buys and/or stories run	✓ 1 News story ✓ 2 Media buys ✓ Many Social Media shares
1-5d	Develop school materials and teacher meetings	Update of materials as necessary. Teacher meetings and attendance. Teacher input on use in classroom.	✓ 20+ Teachers engaged 500 students participated

**Franklin County Regional Stormwater Education,
Public Involvement and Participation Program**
Summary of Activities January 1 – December 31, 2018

Stormwater Website (www.fcsvt.org) - Task 1-1

NRPC performed updates to areas of the website as needed. The website was also used to announce RSEP sponsored events such as the clean-up events and the fall workshop. The website provides for an opportunity to promote stormwater awareness to community residents.

In 2019 NRPC has plans to add new material that has been developed (workshop materials and clean up event details) and reorganize the current website to be more interactive.

Google Analytics provides information about the use of the website, below is a summary of statistics from January 1, 2018 to December 31, 2018 for web traffic within the United States only:

- 44 visits from across the US and 30 of these visits originated in Vermont. The number of Vermont visits is equal to the number of visit from 2016.
- There were 68/47 page views (US/VT).
- 100% of VT visitors were new visitors to the website and spent an average duration of 0:55 (min:sec) on the site.
- 37% of the VT sessions were viewing multiple pages on the website per visit however the majority of visitors are only viewing one page.
- The majority of the page views were for pages about the program itself such as “About Us”, “Contact Us” and “Disclaimer”.

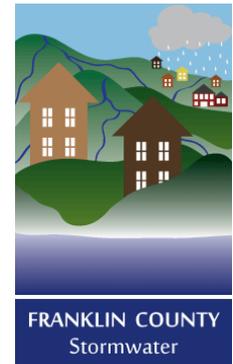
Informational Brochures – Task 1-5a,b

In 2018, the focus was to continue to bring awareness to the Franklin County Stormwater Collaborative brand. The Collaborative utilized existing printed promotional brochures that provide basic information on stormwater pollution and directs the person to the website for more information. NRPC created two promotional flyers that provided detail on the two workshops provided in 2018.

New brochures were developed for use at tabling events with partner organizations, for social media use, and electronic distribution (see Appendix 1). In 2018, a total of 50 brochures were distributed at local events including the “Take a Stake in Our Lake” event hosted by the St. Albans Area Watershed Association; brochures were also available to the public from the municipal offices of the City of St. Albans and the Town of St. Albans.

NRPC also developed two technical resources to aid the implementation of stormwater practices by homeowners. These resources will be made available online in 2019 with planned website updates.

1. Technical resource sheet that identifies potential contractors for stormwater best management practice design and implementation.
2. Guide to plant availability from local suppliers for rain gardens and shoreline stability projects in Northwestern VT (see Appendix 1 for excerpt).



**Franklin County Regional Stormwater Education,
Public Involvement and Participation Program**
Summary of Activities January 1 – December 31, 2018

Media and Marketing – Task 1-5c

The Collaborative aimed to engage local news media in events with press releases throughout the year as well as utilize the available resources for sharing information with the communities such as Front Porch Forum, Facebook and municipal websites. The following have been ways the Collaborative has gotten the word out:

- NRPC provided announcements of events or other messaging with City/Town staff to share on Facebook or Front Porch Forum.
- NRPC worked with the City to create message boards/lawn signs for the Vermont Maple Festival that promoted the stormwater retention features in Taylor Park and directed folks to the Collaborative’s website.
- NRPC developed a 12-month outreach messaging plan to share on social media - starting in 2019.
- NRPC attended partner events to promote Franklin County Stormwater
 - Franklin County Conservation District's annual tree sale,
 - Friends of Northern Lake Champlain annual Tyler Place event, and
 - St. Albans Area Watershed Association's "Take a Stake in Our Lake" event.
- NRPC shared messaging with partners for posting on social media. It was discussed that NRPC will launch a Franklin County Stormwater Collaborative Facebook page in 2019 to have a presence in social media and a way for the messaging to be shared more readily by partners.
- FrontPorchForum Posts – NRPC posted 6 stormwater related announcements on FPF in 2018.
- Media buys were purchased in June and again in November/December 2018 that raised awareness of FCS and promoted the 2018 workshops on driveways and intentional gardening.
- There was once article in the St. Albans Messenger directly tied to stormwater in St. Albans and related to stormwater with the adoption of stormwater ordinance and utility (April 2018). The Messenger has a circulation of approximately 5,500 people.



Education of Teachers and Students – Task 1-5d

In 2018 the Collaborative contributed to the training of teachers as well as provided programming to area students.

- Teacher Training - In October of 2018 NRPC staff and Chip Sawyer from the City, assisted the Lake Champlain Basin Program with their "Watershed for Every Classroom" Educator Training. This year-long professional development program for educators in the Lake Champlain Basin (Vermont, New York and Québec) offers teachers inspiration, knowledge and skills to frame exciting place-based curriculum. The October session was focused in St. Albans to look at agricultural and water quality issues in the Bay area.

**Franklin County Regional Stormwater Education,
Public Involvement and Participation Program**
Summary of Activities January 1 – December 31, 2018

- Student Curriculum - In January of 2018 FNLC and NRPC partnered with the St. Albans Museum to develop an educational program for the Maple Run Unified School District and Georgia Elementary School. FNLC assembled a listing of potential water quality faculty and curriculum and St. Albans Museum brought history faculty, administrative, and financial resources (busing costs) to the project. The following is a summary of the programing provided to students in 2018.

In September 2018, over 500 third and fourth grade students and accompanying faculty and parent chaperons from St. Albans City and Town, and Georgia Elementary Schools participated in a half day pilot workshop which presented lessons on Lake Champlain and St. Albans Bay heritage and water quality improvement. These lessons have met with enthusiastic support from respective faculty and school administrators, so our non-profit organizations are encouraged to develop new curriculum for more advanced grades in the future.

Our program included five learning stations that are listed below with the faculty and organizations that served each station. Small groups of 12-18 students broke out to each station for about twenty minutes and congregated for a summary session at the conclusion of the morning.

Learning Stations:

1. **Lake Champlain History** was presented by Alex Lehning, St. Albans Museum Executive Director. Students formed into groups of three with a faculty member and a history note book to come up with answers about the historical transportation and community functions of St. Albans Bay.
2. **Creative Expression** was presented by Don McFeeters, St. Albans Museum Chair. Students created drawings of their impressions of the beach which are now on display at the St. Albans Museum.
3. **Soil Health** was demonstrated by Lindsey Wright, MRBA on the rainfall simulator table. Students were shown four types of soil (compacted ATV trail, cattle pasture, residential lawn, and forest), then they were asked to predict the amount and turbidity of runoff from a one-inch rainfall and discussed results of the demonstration and learned the value of building organic matter in soils.
4. **Watershed Runoff Table** was presented by LCBP Sea Grant to demonstrate runoff from a variety of pollutants (lawn fertilizer, road salt, cattle manure, etc.) from a variety of land uses (roads, lawns, farm fields) to their eventual endpoint (the Lake).
5. **Water Quality and Soil Conservation** practices on Vermont agricultural fields and farms were demonstrated and described by the state Agriculture Agency.

While the students participated in a wrap up exercise activity, faculty members were assembled for final feedback on the day and were unanimously supportive and requested to repeat the program on an annual basis. The local faculty members were especially appreciative that they were not handed a lesson plan that they would have to learn and teach from and that our program provided faculty members to lead each demonstration station.

This program is anticipated to continue in 2019.

**Franklin County Regional Stormwater Education,
Public Involvement and Participation Program**
Summary of Activities January 1 – December 31, 2018

The minimum requirements to be completed on MCM 2 regarding Public Involvement and Participation are provided in Table 2 below

Table 2. MCM 2 – Public Involvement and Participation activities and goals.

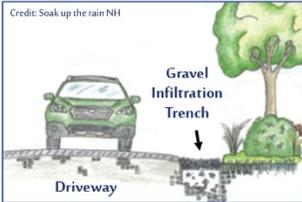
MCM #	Activity	Measurable Goal(s)	Status
2-1	Participate in RSEP	Maintain RSEP membership and activities	✓
2-2	Institute a public workshop series on stormwater awareness	Number of programs offered and participants at workshops	✓ 2 workshops ✓ 15 participants at St. Albans location and 47 participants overall
2-3	Institute a storm drain stenciling project	Number of storm drains stenciled or markers in place	<i>See Municipal reports</i>
2-4	Sponsor periodic community stream corridor “clean-up” days	Number of participants and nature of material removed	2 events <u>April Stools Day’s stats:</u> ✓ 8 volunteers ✓ 20 piles of pet waste ✓ 20 lbs of trash

Workshops – NRPC is conducting two workshops in 2018 on stormwater best management practices for driveways (June & December 2018) and using native vegetation for water quality and attracting pollinators (December 2018). These workshops were offered twice, once in St. Albans and a second time in Enosburgh.

FREE WORKSHOPS:

Never too early to plan for Spring!

DRAINAGE WORKSHOP



Credit: Soak up the rain NH

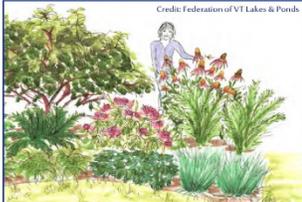
Gravel Infiltration Trench

Driveway

Driveways: Simple, Low Cost Solutions To Manage Water

Tuesday, December 4
6-8 p.m.
Enosburgh Emergency Service Building
83 Sampsonville Road, Enosburgh Falls

GARDENING WORKSHOP



Credit: Federation of VT Lakes & Ponds

Intentional Gardening: Water Quality, Wildlife Habitat & Pollinators

Wednesday, December 5, 6-8 p.m.
Northwestern Medical Center
Conference Room 2
133 Fairfield Street, St. Albans, VT

Tuesday, December 11, 6-8 p.m.
Enosburgh Emergency Service Building
83 Sampsonville Road, Enosburgh Falls

Register:
Contact
Amanda Holland
aholland@nrpcvt.com
802-524-5958

More Information:
www.fscvt.org



FRANKLIN COUNTY
Stormwater
www.fscvt.org

**Franklin County Regional Stormwater Education,
Public Involvement and Participation Program**
Summary of Activities January 1 – December 31, 2018

Storm drain stenciling – The Collaborative provides support to the City and Town in storm drain stenciling (mapping, volunteer recruitment if interest in engaging non-municipal staff in stenciling) and providing outreach messaging to bring awareness to the connection between the storm drain and the direct inputs to area waterways. Currently the municipalities are responsible for conducting stenciling activities of the storm drains and will report on the status of activities in their permit report.

Clean Up Events the Collaborative Lead or Participated in:

- April Stools Day event was held in Taylor Park on April 23rd, the Monday before Maple Fest in St. Albans. The Collaborative partnered with the Rotary for volunteer participation. Eight volunteers picked up 20 piles or poop and 20 pounds of trash.
- May Green Up Day event at St. Albans Bay Park on May 5th. FNLC partnered with the Boy Scouts and assisted with the cleanup but also educated volunteers present about the stormwater connection to the lake. We do not have a report of the number of volunteers or material removed from this event.

Other Efforts

- NRPC has received two grants that leverage the RSEP funding as match in order to further the RSEP's efforts and expand capacity.
 1. NRPC was awarded funding from EPA to develop 2 workshops for homeowners as mentioned above. The majority of NRPC's time to develop and hold workshops was covered by the grant and RSEP funds were used to match the cost of hiring consultants to develop presentations and additional resource material such as design case studies.
 - Stormwater BMP practices for driveways (offered June 2018 in St. Albans)
 - Intentional Gardening Using Native Vegetation (offered December 2018 in St. Albans)
 2. NRPC was awarded funding from the Lake Champlain Basin Program to convert NRPC's stormwater 101 workshop into a video series. This will provide this workshop material to a wider audience, accessible online. This project will continue into 2019.
- Partnered with Lake Champlain Sea Grant to create the St. Albans Green Infrastructure Bike Tour, this tour identified a series of practices along a bike route that can be visited to learn about different practices on the ground.

**Franklin County Regional Stormwater Education,
APPENDIX 1. MCM 1 Materials & Deliverables**

The following are examples of the range of promotional materials and advertising created for the 2018 Workshops. Brochures, posters, and flyers were displayed and distributed at a series of events in 2018.



Free homeowner workshop focusing on Driveways (paved and gravel) is this June 2018!

Driveways: Get Water Off & Keep Our Streams Clean

June 21st in St. Albans City
June 27th in Enosburgh Town

To save a seat for one of these upcoming trainings.
Contact Amanda at 524-5958 or aholland@nrpcvt.com
Provide you name, contact information, & preferred date

This workshop will focus on the key concepts for proper driveway drainage as well as a suite of simple solutions to meet a range of concerns. Photos of your driveways as there will be time to talk to professionals about your needs.



UPCOMING WORKSHOPS

What one thing can you do at home to improve water quality?

Plant a garden or enhance your driveway's drainage.
Sign up for one of the FREE opportunities below to learn more.

Drainage Workshop

Tuesday, December 4 from 6:00 - 8:00 p.m.
Enosburgh Emergency Service Building
83 Sampsonville Road, Enosburgh Falls

Driveways: simple, low cost solutions to manage water



- New techniques for redirecting water off paved or gravel driveways
- Reduce maintenance time and cost
- Prevent washouts at the interface with the public road



To register contact
Amanda Holland:
email - aholland@nrpcvt.com
phone - (802) 524-5958

For more information:
<http://www.fcsvt.org/>

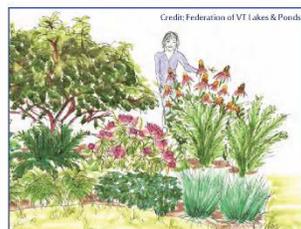
Gardening Workshop

Wednesday, December 5 from 6:00 - 8:00 p.m.
Northwestern Medical Center -
Conference Room #2
133 Fairfield Street, St. Albans

&

Tuesday, December 11 from 6:00 - 8:00 p.m.
Enosburgh Emergency Service Building
83 Sampsonville Road, Enosburgh Falls

Intentional gardening for water quality, wildlife habitat & pollinators



- Learn how to design a garden using native vegetation
- List of suggested plant combinations
- Convert your lawn into a landscape that improves water quality and enhances your property

TOP: Flyer used at tabling event.

LEFT: Messaging used in NRPC E-newsletter and shared with partners for distribution.

**Franklin County Regional Stormwater Education,
APPENDIX 1. MCM 1 Materials & Deliverables**

Stormwater Runoff from Your Driveway: *What is the Impact to Lake Champlain?*

Stormwater is precipitation, like rain or snowmelt, that is not absorbed into the ground and flows over the landscape. When rain hits impervious surfaces like driveways, sidewalks, and buildings it cannot soak into the ground and becomes runoff.








It comes off your roof... ...runs down your driveway... ...and flows into the town ditch or street.

Runoff can pickup and carry any pollutant it encounters on it's way such as oil, fertilizer, sediment, bacteria, and others.

No matter where you live (village, city, or rural countryside), it all drains to the closest stream which flows into Lake Champlain!



But how much runoff are we talking?

On average, driveways in the county are 148 feet long. For every storm that accumulates 1" of rain, the amount of water that hits your driveway would fill just over 2 aboveground swimming pools!





Stormwater impacts your Driveway & the Lake — A steady flow of water can cause erosion on paved or gravel driveways, washing dirt and debris into the street or ditch. Poor driveway drainage also leads to degradation as ruts and cracks appear.






ANSWERS

Solutions can be easy, attend a FREE workshop!

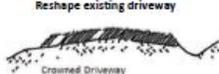
June 21st (St. Albans) & June 27th (Enosburgh)

Many options exist to retrofit your current driveway. Identify your property's site conditions and either apply a solution to "soak it up" or pathway to redirect water to a safe spot.









LEFT: Poster on display at local events.

Free WORKSHOPS
on Drainage and Gardening



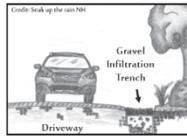
It is never too early to plan for spring!

TOP: Digital ad run by The Messenger.

LEFT: Print ad run by The Messenger.

Free WORKSHOPS
Never too early to plan for Spring!

DRAINAGE WORKSHOP



Driveways: Simple, Low Cost Solutions To Manage Water
Tuesday, December 4
6-8 p.m.
Enosburgh Emergency Building
83 Sampsonville Rd, Enosburgh

GARDENING WORKSHOP



Intentional Gardening: Water Quality, Wildlife Habitat & Pollinators - Wed., December 5
6-8 p.m. • Northwestern Medical Center
Conference Rm #2
133 Fairfield St., St. Albans
OR Tuesday, December 11 • 6-8 p.m.
Where: Enosburgh Emergency Bldg.
83 Sampsonville Rd, Enosburgh

Register:
Contact Amanda Holland
aholland@nrpcvt.com
802-524-5958

More information:
www.fscvt.org



**Franklin County Regional Stormwater Education,
APPENDIX 1. MCM 1 Materials & Deliverables**

Guide to Plant Availability in Northern Vermont

This resource indicates nurseries in and around Franklin and Grand Isle County that have plants available for use in rain gardens or other nature-based stormwater management shoreline stability projects. This plant list was mainly derived from *Shoreline Stabilization Manual* (2009) and *The Shoreline Stabilization Handbook* (2009).

The accompanying plant list is not all-inclusive as plant availability varies. Use this resource to plan where to buy specific plants need with plant selection or combinations, contacting a nursery or reviewing the resources below that provide information on suggested planting plans:

- Vermont Rain Garden Manual (www.uvm.edu/seagrant/sites/default/files/uploads/publications/Vermont_Rain_Garden_Manual.pdf)
- The Federation of Vermont Lakes & Ponds' publication Lakeshore Landscaping (https://dec.vermont.gov/sites/dec/files/wsm/lakes/Lakeshore_Landscaping.pdf)

Native Plant Priority

Within the plant list, the column labeled "VT Native" denotes a plant native to the area or not. When a plant is native, it means that the plant was developed, occurred naturally, or have existed for many years because they provide many benefits. They generally need less water to thrive since they are adapted to the habitat and soil.

Please visit the websites below for more information on native plants:

- <https://vtfishandwildlife.com/conservation/conservation>
- <http://vermontlakes.org/lakescaping-2/six-native-plants/>
- <https://vtinvasives.org/news-events/news/choose-native-plants/>

Excerpts from plant availability guide.

Local Nursery List

If you do not see your local nursery on the list they may still have plants that are adequate for rain gardens, call ahead and ask them. If you would like to add a nursery to this resource please contact Amanda at aholland@nrpcvt.com.

Nurseries	Perennials	Grasses	Ferns	Trees/Shrubs
H&B Greenhouse and Nursery	X			X
The River Berry	X	X		X
Arcana	X	X	X	X
Full Circle Garden	X	X	X	
The Farm Between				X
Vermont Willow Nursery				X
Intervale				X
Northeast Pollinator Plants	X	X		

H&B Greenhouse and Nursery

Address: 1213 Highgate Rd, Highgate Center, VT 05459
Phone: 802-868-3604
Website: www.hbgreenhouse.com

This nursery provides native and non-native perennials, shrubs, and trees suitable for shoreline and stormwater projects however, plant lists were not available for trees and shrubs.

Rain Garden and Shoreline Stability Plant List

Blue is for Rain Garden
Yellow is for Shoreline Stability
Green is both

Boxes marked with an "x" means it is available

Boxes marked with an "ssp." means there is a similar plant or that it isn't specified in the catalogs

Latin Name	Common Name	VT Native	Northeast	Fairfax	Full Circle	Arcana	River Berry Farm	H&B	The Farm Between	Intervale
------------	-------------	-----------	-----------	---------	-------------	--------	------------------	-----	------------------	-----------

FERN

<i>Adiantum pedatum</i>	Northern Maidenhair Fern	x			x					
<i>Asplenium Platyneuron</i>	Ebony Spleenwort	x				ssp.				
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	x				ssp.				
<i>Athyrium filix-femina</i>	Lady Fern	x		x	x					
<i>Dennstaedtia punctilobula</i>	Hay-scented Fern	x			x					
<i>Dryopteris filix-mas x marginalis</i>	Vermont Wood Fern	x			x					
<i>Dryopteris goldiana</i>	Goldie's Wood Fern	x				ssp.	x			
<i>Dryopteris intermedia</i>	Evergreen Wood Fern	x				ssp.				
<i>Matteuccia struthiopteris</i>	Ostrich Fern	x	x	x	x					
<i>Onoclea sensibilis</i>	Sensitive Fern	x			x					
<i>Osmunda cinnamomea</i>	Cinnamon Fern	x	x	x	x					
<i>Osmunda claytoniana</i>	Interrupted Fern	x				x				
<i>Osmunda regalis</i>	Royal Fern	x			x					
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	x								
<i>Polystichum acrostichoides</i>	Christmas Fern	x	x	x						

Did you know this planter collects rainfall
from Main Street?

It allows water to settle into the soil and
reduces the pollution that flows into
Stevens Brook.

Want to learn more?

Visit Franklin County Stormwater at

www.fcsvt.org.



LEFT: "Lawn sign" for
stormwater planters
along Main Street in St.
Albans City.

Selectboard
Brendan Deso, Chair
Bruce Cheeseman, Vice Chair
Stan Dukas
Jessica Frost
Al Voegele



Anna Bourdon, Town Clerk
Carrie Johnson, Town Manager

March 28, 2019

Christy Witters
Planning and Municipal Program Coordinator
Agency of Natural Resources
Department of Environmental Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620-3522

RE: Town of St. Albans Phosphorus Control Plan Progress Report - 2019

This memorandum summarizes our progress toward the completion of a Phosphorus Control Plan (PCP) for the Town of St. Albans. The PCP is a required component of the Town's MS4 permit with the State of Vermont DEC. The PCP implementation program is as follows along with the attached outline of MCM tasks over the same time period.

Task	Due Submission/Date
Submit the initial annual PCP Report	April 1, 2019
Submit the annual PCP report and the implementation program with an inventory of the Road Erosion Inventory	April 1, 2020
Submit the annual PCP report and the Implementation Table with results of the Road Erosion Inventory	April 1, 2021
Implementation of an approved PCP	June 17, 2036

The initial planning tasks and several initial actions are what will guide the development of our complete PCP. These include the following:

- *Review of PCP requirements and reduction targets assigned to St. Albans*
DEC has informed the MS4 communities including St. Albans that they will not be calculating the Phosphorus (P) reduction targets for each community, but that it will be the responsibility of the MS4 community to complete this calculation. We have reviewed the instruction sheet the DEC provided and are in the process of calculating the P reduction targets required for St Albans.

- *Flow Restoration Plan (FRP) review*

Rehabilitation, retrofit, and newly proposed BMPs included in the Rugg Brook FRP and Stevens Brook FRP are being assessed for optimization for P control. Many projects that are underway and under consideration are being designed as gravel wetlands to not only provide flow reductions but also to provide P control. All future projects are being assessed to ensure they will benefit the PCP.

- *Town Stormwater Ordinance and Utility*

Future stormwater ordinance and utility will achieve P reduction benefits by treating runoff from impervious surfaces on private lands during development and potential redevelopment. Our future adoption and implementation of a stormwater ordinance and utility will include added erosion and sedimentation controls and address stormwater runoff from earth disturbance activity of less than one acre of land.

- *Good Housekeeping*

Street cleaning and leaf litter are proceeding and we have been reviewing preliminary findings to understand the full benefits of street sweeping and leaf litter removal toward meeting our future PCP goals.

- *Stream restorations*

St Albans will cooperate, coordinate, and collaborate with state agencies, the NRPC, and other organizations to implement the following actions designed to reduce stormwater flows and reduce pollutants:

- Assist with agricultural stream bank stabilization by linking farmers and others with the technical and regulatory assistance for stream alterations; and,
- Improve watershed health by restoring riparian buffers and land forest cover.

- *3 Acre Permit Criteria*

Under the new Stormwater Rule the DEC will be releasing a 3-acre permit that will require retrofitting of larger impervious surfaces. We are analyzing how the Town will obtain credit for these 3-acre sites under our PCP, and the junction of PCP and FRP plan requirements.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

Edward Connell

EXECUTIVE SUMMARY

The citizens of St Albans value a clean Lake Champlain and St Abans Bay. A clean lake attracts businesses and tourists to Town and is a major driver of the State's economy.

Phosphorus (P) pollution is the predominant threat to consistently clean, safe, and enjoyable water in Lake Champlain and St Albans Bay. P is a nutrient that stimulates excessive growth of algae, turning the water bright green and producing a foul odor. In excessive amounts, algae can impair recreational uses, aesthetic enjoyment, the taste of drinking water, and the biological community. In some cases, algal blooms like cyanobacteria (blue-green algae) produce toxins that harm animals and people. Most of the P is found in eroded soil and runoff from farm fields, barnyards, roads, parking lots, and stream banks, and in wastewater discharges. Efforts to reduce all these sources of P will accelerate over the next ten years, but the lake may be slow to improve.

P loading into Lake Champlain and St Albans Bay are dominated by “non-point sources,” which are generated by stormwater runoff and erosion across the landscape and throughout the community. Contrasting are the “point sources” such as wastewater are conveyed by a pipe or other discrete conveyance. The “point sources” are more closely regulated. However, “point sources” discharging inadequately treated wastewater during rain events contribute substantial amounts of P to Lake Champlain and St Albans Bay.

For this PCP to reduce non-point source loading of P, it will rely on the stalwart steps, tasks, and actions by the Town of St Albans and its adherence to the information outlined on the following pages. This document is our “reasonable assurances” that the necessary non-point source reductions will actually occur.

This report documents the Town of St Albans' current and future efforts to comply with the conditions of our MS4 General Permit and the P control measures stated in the *Vermont Lake Champlain Phosphorus TMDL Phase 1 Implementation Plan* to the maximum extent practicable, controlled by, and as applicable to a municipality.

PART I: SUMMARY OF MINIMUM CONTROL MEASURE ACTIVITIES

1. Public Education and Outreach

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
1-1 Implement Public Education and Outreach	Ongoing	Maintain basic information on stormwater on a web page that describes its stormwater programs	Track annual number of visits to web page	NRPC	2019	2036	
1-2 Address Public Education and Outreach for Pollutants	Ongoing	Provide content on website that provides basic technical assistance	Track annual number of visits to web page	NRPC	2019	2036	
1-3 and 1-4 Participate in a regional stormwater education strategy	Ongoing	Participate in and provide financial support for the Franklin County Stormwater Collaborative	Document the annual number of site visits to the website	NRPC	2019	2036	
1-5 Develop and distribute stormwater information	Ongoing	Update information and brochures as necessary	Report number of brochures distributed, media buys, and or stories run	NRPC	2019	2036	

1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

The Franklin County Stormwater Collaborative is a collaborative between the Northwest Regional Planning Commission, the City of St Albans, various other organizations, and the Town of St Albans based on a Memorandum of Understanding to operate a Regional Stormwater Education, Public Involvement, and Participation Program that conforms with and satisfies the relevant requirements regarding Minimum Control Measure One and Minimum Control Measure Two of the Phase II NPDES Permit for Program Years 2019-2023, as established in General Permit 3-9014 (2018). The Franklin County Stormwater Collaborative provides resources in a variety of formats and links to external resource providers so that website visitors will have access to an assortment of opportunities and can select the resource or entity best suited to provide technical assistance.

1.3 Details of activities implemented to educate the community on stormwater

The Town of St Albans will participate in and provide financial support to the Franklin County Stormwater Collaborative. The Franklin County Stormwater Collaborative will generally consist of a program that provides periodic advertising and school outreach throughout each year. The Collaborative will educate the general public in the MS4 area about key storm water quality issues by using local and online media advertising, community events, and other media resources to drive viewers to the website and learn about the program.

2. Public Involvement/Participation

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
2-1 Comply with public notice requirements for the Stormwater Management Plan	Ongoing	All Stormwater Management documents will be available to the public for review and comment	Document the annual number of site visits to the website	NRPC and Town	2019	2036	
2-2 Comply with public notice requirements for Annual Report	Ongoing	Copies of each Annual Report will be available to the public for review and comment	Document the annual number of site visits to the website	NRPC and Town	2019	2036	
2-3 Institute a storm drain stenciling project	Ongoing	Inventory storm drains to be stenciled	Number of storm drains stenciled	Town	2019	2036	Link with high potential IDDE sites
2-5 Sponsor community stream corridor “clean-up” days	Ongoing		Report number of participating groups and individuals	NRPC and Town	2019	2036	Link with high potential IDDE sites
2-9 Participate in RSEP	Ongoing	Participate in RSEP	Number of meetings	NRPC	2019	2036	

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

The Franklin County Stormwater collaborative was formed in 2014 by the Town of St. Albans, the City of St. Albans, the NRPC, and other partner organizations to educate and encourage residents to get personally involved in reducing stormwater pollution and mitigating stormwater flows. This effort conducts continuing public education and outreach measures required by our and other stormwater permits.

Franklin County Stormwater uses a website, print, workshops, and other media outlets to distribute info detailing the region’s stormwater problems and seasonal water quality issues in Lake Champlain and St. Albans Bay. The website is a cost effective way to reach the public and educate them about water quality related issues with people utilizing the internet on a frequent basis for news and information. Additionally, it follows the successful methodology that others have used to educate the public about unique regional stormwater issues.

2.3 Public Involvement/Participation reporting metrics

The program engages citizens across the area in understanding and implementing programs to reduce non-point source pollution and stormwater volume to enable compliance by MS4 permittees within MCM #2. The program utilized a website, social media, workshops, and other networking tools to form a cadre of concerned citizens and professionals interested in hands-on activities to reduce the harmful effects of stormwater. The group organized events and workshops to engage and educate citizens in the types and uses of BMP’s.

METRICS	IMPLEMENTED	DATE	POSTED
Availability of the 2018 Stormwater Management Plan announced to public	Yes	January 2019	Town website
Availability of MS4 Annual Reports announced to public	Yes	April and October each year	Town website

3. Illicit Discharge Detection and Elimination

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
3-1 Develop written IDDE program	In Progress	IDDE program template will be developed as part of a stormwater ordinance and utility	Adoption and implementation of a stormwater ordinance and utility	Selectboard and or stormwater utility board	October, 2019	January, 2021	
3-2 Develop list and map of all MS4 storm water outfalls	In Progress	Update existing MS4 stormwater outfall mapping to include all town maintained storm water facilities	A shapefile map layer with all stormwater facilities within the Town	Department of Public Works and Planning Department	July, 2019	November, 2021	
3-3 Implement citizen IDDE reporting program	In Progress	A program to allow the general public to report suspected IDDE	IDDE reporting system	Director of Administration and Department of Public Works	July, 2019	January, 2021	Part of future stormwater ordinance and utility
3-4 Establish legal authority to prohibit illicit discharges	To be developed	A stormwater ordinance and utility accepted by the Selectboard	IDDE reporting system with reporting log	Director of Administration and Department of Public Works	July, 2019	January, 2021	
3-5 Develop record keeping system for IDDE tracking	To be developed	A stormwater ordinance and utility accepted by the Selectboard	IDDE reporting system with reporting log	Director of Administration and Department of Public Works	July, 2019	January, 2021	Part of future stormwater ordinance and utility

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
3-6 Address IDDE in areas with pollutants of concern	To be developed	A stormwater ordinance and utility accepted by the Selectboard	Document illicit discharges and categorize to determine trends	Director of Administration and Department of Public Works	July, 2019	January, 2021	Part of future stormwater ordinance and utility

3.2 Describe any IDDE activities planned for the next year, if applicable.

A future stormwater ordinance and utility will delineate responsibilities for prevention, control, removal, and for reporting IDDE discharges. The ordinance will include specific standards for IDDE monitoring.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

DATE	LOCATION AND SUSPECTED SOURCE	RESPONSE TAKEN
2017 - No illicit discharges were reported	Not applicable	None required
2018 - No illicit discharges were reported	Not applicable	None required

3.4 Provide a record of illicit discharges occurring during the reporting period and through end of reporting period.

No IDDE to report.

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

There were no IDDE to report under our current system. A future stormwater ordinance and utility will delineate responsibilities with an IDDE reporting system that will include a reporting log, documentation of illicit discharges types, and categorize volumes to determine any specific trends or trouble locations.

3.6 IDDE reporting metrics

METRICS		METRICS	
Estimated or actual number of MS4 outfalls	Not applicable	Mapping MS4 infrastructure	Not applicable
Estimated or actual number of interconnections	Not applicable	Outfall assessment and priority ranking	Not applicable
Outfall mapping complete	Not applicable	Dry weather screening of all High and Low priority outfalls complete	Not applicable
Interconnection mapping complete	Not applicable	Catchment investigations complete	Not applicable

4. CONSTRUCTION SITE RUNOFF CONTROL

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 General Permit	Ongoing	Procedures to ensure that excavation and construction activities are properly permitted	Compliance	Zoning, Planning, and DPW	2019	2036	
4-2 Develop/ implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Review existing regulations for effectiveness and consistency with state construction permitting	Compliance	Zoning, Planning, and DPW	2019	2036	
4-3 Review site plans for stormwater flow	New task	Not applicable	Compliance	None at this time	2019	2036	Part of future stormwater ordinance and utility
4-4 Conduct site inspections	New task	Not applicable	Compliance	None at this time	2019	2036	Part of future stormwater ordinance and utility

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
4-5 Implement procedure to allow public comment on site development	Ongoing	36 were available for review during 2018	Continuing Compliance	Zoning, Planning, and DPW	2019	2036	
4-6 Implement procedure to notify developers about the DEC stormwater permit program	Ongoing	All developers with correctly sized projects were informed the stormwater permit program	Continuing Compliance	Zoning and Planning	2019	2036	

Supplemental information for all tasks under MCM #4.

All tasks under MCM #4 will be influenced by the Town of St Albans future adoption and implementation of a stormwater ordinance and utility that will include added erosion and sedimentation controls and address stormwater runoff from earth disturbance activity of one or less acres of land. Our intent is to complement the Vermont Department of Environmental Conservation Stormwater Permit Program regulates discharges from impervious surfaces.

5. Stormwater Management

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
5-1 Review existing regulations for effectiveness in managing stormwater runoff and consistency with state operational permit	Ongoing	Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Annual assessment of regulations to support LID	Zoning, Planning, and DPW	2019	2036	
5-2 Enforce LID/runoff reductions for development and redevelopment projects	Under Development	Integrate LID/runoff reduction into development and redevelopment	Minimize impervious surface through street and parking lot design	Zoning, Planning, and DPW	2019	2036	
5-3 Identify retention and detention ponds in priority areas	Under Development	Retention ponds, detention ponds, and hydrodynamic separators will be inventoried	Develop a GIS inventory and shapefile	Planning and DPW	2020	2025	

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Under Development	Develop Operation and Maintenance program will be developed and implemented	Operations and maintenance program	Planning and DPW	2019	2036	Annual updates as part of future stormwater ordinance and utility
5-5 Direct connection drain and outfall mapping	Under Development	Inventory and map all stormwater outfalls discharging directly to impaired waters	Develop a GIS inventory and shapefile	Planning and DPW	2019	2025	
5-6 Address post-construction issues in areas with pollutants of concern	Under Development	Develop inspection procedures for development	Procedures that ensure development activities are properly permitted	Planning and DPW	2019	2022	Part of future stormwater ordinance and utility

Supplemental information for all tasks under MCM #5.

A portion of each task under MCM #5 will be influenced by the Town of St Albans future adoption and implementation of a stormwater ordinance and utility that will include added erosion control, sedimentation elimination, pollutant reduction, and address stormwater runoff from earth disturbance activity of one or less acres of land.

Additionally, St Albans will cooperation, coordinate, and collaborate with state agencies, the NRPC, and other organizations to implement the following actions designed to reduce stormwater flows and reduce pollutant loading into Lake Champlain and St Albans Bay.

- Cooperate with the existing stormwater education and outreach programs;
- Enhance of our municipal floodplain and river corridor protection bylaws and other mitigation measures to minimize flood risks and maximize floodplain functions;
- Mitigate and control internal phosphorus loading in St. Albans Bay;
- Prevent adverse stream channel modifications;
- Expand local technical and regulatory assistance from state agencies and other organizations;
- Assist with agricultural stream bank stabilization practices by linking farmers and others with the technical and regulatory assistance for stream alterations,
- Increase the number of river and floodplain restoration projects;
- Improve watershed health by restoring riparian buffers and developed land forest cover;
- Coordinate wetland restoration projects;
- Capitalize on opportunities to implement restoration projects involving the removal of river, river corridor, floodplain encroachments, and the completion of projects that maximize potential equilibrium conditions (i.e., river-based storage functions);
- Implement our priority non-point source reduction projects; and,
- Leverage state, federal, and other additional funds to support municipal stormwater infrastructure needs.

5.3 Post-Construction Stormwater Management reporting metrics

METRICS	QUANTITY
Baseline Directly Connected Impervious Area (DCIA)	To be determined
DCIA disconnected	To be determined
Retrofits completed	To be determined
DCIA disconnected	To be determined
Estimated cost of retrofits	To be determined
Detention or retention ponds identified	To be determined

5.4 Briefly describe the method to be used to determine baseline DCIA

The Town of St Albans will by 2023 complete a GIS mapping/inventory of all DCIA within our 2 MS4 areas and the remainder of town by 2025. The GIS mapping/inventory will include sufficiently detailed information to implement future retrofits and disconnections. Also, our GIS mapping/inventory will build upon the MS4 base load information created by DEC. The Town will then use the GIS mapping/inventory to determine the impervious area associated with each structure and begin setting priorities for implementation of retrofits and disconnections.

6. Pollution Prevention/Good Housekeeping

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
6-1 Develop/ implement formal employee training program	Ongoing	2016 - 3 2017 - 5 2018 - 4	Continuing	Planning and DPW	2019	2036	
6-2 Implement MS4 property and operations maintenance	Ongoing	Not applicable	Implementation	Planning and DPW	2019	2036	
6-3 Coordination with interconnected MS4	Ongoing	Coordinate MS4 duties with City	Continuing	Planning and DPW	2019	2036	
6-4 Develop/ implement program to control pollutants to the MS4	To Be Developed		Implementation	Planning and DPW	2019	2023	Part of future stormwater ordinance and utility
6-5 Evaluate additional measures for discharges to impaired waters	To Be Developed		Implementation	Planning and DPW	2019	2036	Part of future stormwater ordinance and utility
6-6 Track projects that disconnect DCIA	To Be Developed		Implementation	Planning and DPW	2019	2036	

MCM	STATUS	ACTIVITIES IN CURRENT REPORTING PERIOD	MEASURABLE GOAL	DEPARTMENT / PERSON RESPONSIBLE	DUE	DATE COMPLETED OR PROJECT COMPLETION DATE	ADDITIONAL DETAILS
6-7 Implement infrastructure repair/rehab program	To Be Developed		Continuing	Planning and DPW	2019	2023	
6-8 Develop/implement plan to identify/prioritize retrofit projects	To Be Developed		Continuing	Planning and DPW	2019	2024	
6-10 Develop/implement street sweeping program	To Be Developed	currently all town roads are swept one time per year	Implementation	Planning and DPW	2019	2023	
6-11 Develop/implement catch basin cleaning program	To Be Developed	currently all town roads are swept one time per year	Implementation	Planning and DPW	2019	2036	
6-12 Develop/implement snow management practices	To Be Developed		Implementation	Planning and DPW	2019	2023	

6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

The Town does not use any fertilizer in its parks or facilities and will continue this policy into the future.

6.3 Pollution Prevention and Good Housekeeping reporting metrics

METRICS	QUANTITY
Employee training provided for staff	2016 - 3 2017 - 5 2018 - 4 2019 – 6 planned
Street Sweeping	
Currently the Town’s road sweeping program insures that all town roads are swept at least one time per year.	
Catch basin cleaning	
Cleaned and improved roadside ditch.	1,075 linear feet
Culvert replacements with larger sizes	12
Catch basin cleaning	8 yards of material removed
Improved culvert inlets and outlets by adding headwalls and other armoring	3 locations
Snow management and control	
To be Developed	
Municipal turf management	
To be Developed	No use of any fertilizer in its parks or facilities
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
To be Developed	