



St. Albans Town
Stormwater Management Program 2013

Table of Contents

WATER QUALITY BASED REQUIREMENTS	1
REQUIREMENTS TO MEET WATER QUALITY STANDARDS	1
DISCHARGES TO IMPAIRED WATERS	2
DISCHARGES TO IMPAIRED WATERS WITH AN APPROVED TMDL.....	2
DISCHARGES TO IMPAIRED WATERS WITHOUT AN APPROVED TMDL	3
MINIMUM CONTROL MEASURES	3
1. Public Education and Outreach on Storm Water Impacts	3
BMP 1-1 <i>Maintain Storm Water Web Site</i>	3
BMP 1-2,3,4 <i>Participate in RSEP,</i>	4
BMP 1-5a <i>Develop Informational Brochures</i>	4
BMP 1-5c <i>News Media Feature Stories</i>	4
BMP 1-5d <i>For municipalities: Develop school materials and teacher trainings</i>	4
Rationale	4
Person Responsible	5
Measurable Goals	5
2. Public Involvement and Participation (choose 3 or BMP 2-9).....	5
BMP 2-3 <i>On-going Public Workshops</i>	5
BMP 2-4 <i>Inventory Storm Drains</i>	5
BMP 2-5 <i>Sponsor Stream Corridor Clean Up Day</i>	5
Rationale	5
Person Responsible	5
Measurable Goals	5
3. Illicit Discharge Detection and Elimination	5
BMP 3-1 <i>Develop and enforce a program to detect and eliminate illicit discharges</i>	6
BMP 3-2 <i>Develop and maintain a storm sewer GIS or AutoCAD map</i>	6
BMP 3-3 <i>Develop and implement an Illicit Discharge Ordinance</i>	6
BMP 3-4 <i>Develop and implement an illicit discharge detection plan, focus on impaired waters and random dumping</i>	6
BMP 3-5 <i>Inform public of illicit discharge and disposal hazards</i>	6

BMP 3-6	<i>Address specific categories of Illicit Discharges, if necessary</i>	6
BMP 3-7	<i>Prepare annual report of monitoring and corrective actions taken</i>	6
Rationale		6
Person Responsible		7
Measurable Goals		7
4.	Construction Site Storm Water Runoff Control	8
BMP 4-1	<i>Develop and implement procedures to ensure MS4 construction activities are properly permitted</i>	8
BMP 4-2	<i>Review existing MS4 regulations for effectiveness in managing construction related E & S and consistency with state construction permits</i>	8
BMP 4-2a	<i>Adopt E & S requirements that are at least as stringent as state requirements</i>	8
BMP 4-3	<i>Develop and implement an erosion control ordinance that regulates development not subject to state permitting</i>	8
Rationale		8
Person Responsible		8
Measurable Goals		8
5.	Post-Construction Storm Water Management in New Development and Redevelopment.	9
BMP 5-1	<i>Review existing MS4 regulations for effectiveness in managing storm water runoff and consistency with state operational permits</i>	9
BMP 5-1a	<i>Assess changes to regulations to support LID</i>	9
BMP 5-1b	<i>Assess changes to regulations to minimize impervious surfaces through street & parking design</i>	9
BMP 5-1c	<i>Adopt requirements that are at least as stringent as state requirements</i>	9
BMP 5-2	<i>Develop and implement procedures to identify projects that disturb >1 acre</i>	9
BMP 5-3	<i>Adopt an ordinance, planning, zoning and subdivision reg, or other regulatory mechanism for post-construction runoff</i>	9
BMP 5-4	<i>Develop and implement inspection procedures for development</i>	10
BMP 5-5	<i>Develop and implement procedures to ensure MS4 development activities are properly permitted</i>	10
Rationale		10
Person Responsible		10
Measurable Goals		10
6.	Pollution Prevention/ Good Housekeeping for Municipal Operations	11

BMP 6-1	<i>Describe operation and maintenance program for reducing pollutant runoff from MS4 operations.....</i>	11
BMP 6-1a	<i>New construction and land disturbance</i>	11
BMP 6-1b	<i>Maintenance of fleet and buildings, all municipal garages, parks, open space, construction and maintenance practices for gravel roads, snow disposal and storm water systems.....</i>	11
BMP 6-1c	<i>Training, maintenance schedules, and inspection procedures for long-term structural controls.....</i>	11
BMP 6-1d	<i>For municipal facilities where fertilizers are applied, prohibit the use of fertilizers containing phosphorus unless warranted by a soil test.....</i>	11
BMP 6-2	<i>For municipal garages, an MS4 may participate in ANR’s Municipal Compliance Assistance Program.....</i>	11
BMP 6-3	<i>Provide a list of all industrial facilities that the MS4 owns or operates that are subject to the MSGP.....</i>	12
Rationale	12
Person Responsible	12
Measurable Goal.....	12

StormWater Management Program

The following represents the Town of St. Alban's StormWater Management Program, (SWMP) as required by the State of Vermont, Agency of Natural Resources, Department of Environmental Conservation, National Pollutant Discharge Elimination System, (NPDES), General Permit 3-9014 (2012) for Storm Water discharges from Small Municipal Separate Storm Sewer Systems. The SWMP contains measurable goals for the development and implementation of the six minimum measures described in Subparts IV. F and G of the permit, and additional measures necessary to protect water quality described in Part IV of the permit.

WATER QUALITY BASED REQUIREMENTS

Pursuant to Clean Water Act 402(p) (3) (B) (iii), the permit includes provisions which require the permittee to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and to satisfy the Clean Water Act.

REQUIREMENTS TO MEET WATER QUALITY STANDARDS

Discharges shall not cause or contribute to an exceedance of applicable water quality standards for the receiving water. Applicable water quality standards are the Vermont Water Quality Standards that are in place upon the effective date of the permit.

Except for discharges addressed by part IV.C.1 of the permit, if at any time the Town becomes aware that a discharge causes or contributes to an exceedance of applicable water quality standards, the Town shall within 60 days of becoming aware of the situation eliminate the conditions causing or contributing to the exceedance of water quality standards. If elimination within 60 days is infeasible the Town shall document in its SWMP measures and anticipated timeframes to eliminate the conditions causing or contributing to the exceedance. Within 30 days of eliminating the condition, the Town shall document the measures used to correct the condition in the SWMP. The Town shall include in its annual report a description of any such discharges identified during the reporting period; a description of measures taken to eliminate conditions during the reporting period or the basis of a finding that elimination is infeasible; and a timeframe for completion of all steps necessary to eliminate such discharges. The Town shall comply with any additional requirements or schedules established by the Secretary, including any requirements to submit additional information concerning the potential cause of the exceedance.

DISCHARGES TO IMPAIRED WATERS

The Vermont Agency of Natural Resources has identified both the Stevens and Rugg Brook Watersheds as being impaired by storm water. The Town of St. Albans intends to achieve compliance through the implementation of the Storm Water Management Plan, (SWMP) contained on the following pages, to include specific actions outlined within the six minimum control measures.

The Vermont Agency of Natural Resources considers Stevens and Rugg Brook to be impaired due to non-support of aquatic life. For both watersheds, the source of the impairment from multiple sources is excessive stormwater runoff. For Stevens and Rugg Brook the water quality target is represented by measuring stormwater volume, so the 'loading capacity is actually the greatest volume of stormwater volume they can receive without violating the streams aquatic life criteria'.

The Town's SWMP contains several strategies aimed at reducing the flow for both brooks. These strategies include educating the public on stormwater issues, working with local groups to perform stream cleanups and other implementation projects, and controlling sediment through the implementation of Construction Site Storm Water Runoff Controls, and Post-Construction Storm Water Management in New Development and Redevelopment. The plan also works toward the control of illicit discharges through the implementation of the Town's Illicit Discharge Detection and Elimination Program. The Town also intends to continue existing programs associated with animal control to facilitate the removal of dead animals from the roadway system, and, programs to minimize dog waste in Town parks.

DISCHARGES TO IMPAIRED WATERS WITH AN APPROVED TMDL

Flow Restoration Plans - The Town has been working in collaboration with the City of St. Albans to complete a flow restoration plan (FRP) for Stevens Brook. It is the Town's intention to again partner with St. Albans City for a Rugg Brook FRP; we applied for a VTrans grant to fund a flow restoration plan for Rugg Brook in August 2013. The Town shall submit the FRP's to the Secretary no later than three years after the date of issuance of an authorization to discharge to the Town under this permit. The FRP shall contain the following;

- An identification of the suite of necessary storm water BMP's that will be used to achieve the flow restoration targets.
- A design and construction schedule for the storm water BMP's that has been identified as necessary to achieve the flow restoration targets.
- A financing plan that estimates the cost of implementing the FRP.

- A regulatory analysis that identifies and describes what, if any, additional regulatory authorities will be needed to implement the FRP.
- An identification of regulatory assistance that will be needed to implement the FRP.
- An identification of any third party that is responsible for implementation of the FRP.

Plan to Address Expired Permits – Within twelve months following the date of issuance of an authorization to discharge, the Town shall submit a plan for addressing expired state permits discharging to the MS4 system to ensure that all permitted facilities demonstrate compliance with the existing expired permit.

Landowner Technical Assistance – Two years after the issuance of an authorization, the Town shall develop a program to identify opportunities for and provide technical assistance to landowners in the implementation by landowners of low impact BMP’s.

Protection and Regulation of Development in Stream Corridors – Several years ago, the Town of St. Albans included buffers, or stream bank protection in its bylaws. Generally, the bylaw does not allow development within 75 feet of the center of named streams throughout the community. All new development in St. Albans subject to Site Plan Approval is required to submit for review and approval, a vegetation and landscape plan. The Town will further evaluate strengthening its buffer policy by embarking on a plan to map stream corridors to depict areas that have been converted to impervious surface and areas that are undeveloped or have not been converted to impervious surface. This will allow the Town to identify specific areas of the stream corridor that warrant additional protections.

Flow and Precipitation Monitoring Program – The Town in collaboration with the City will be evaluating options for addressing flow and precipitation monitoring within Rugg and Stevens Brook. The Town will submit notification to the VT DEC in a timely manner.

Six Minimum Control Measures – The Town has developed a SWMP which contains the required Six Minimum Control Measures to reduce pollutants to the Maximum Extent Practical.

MINIMUM CONTROL MEASURES (MCM 1 – 6)

1. Public Education and Outreach on Storm Water Impacts (Best Management Practice –BMP)

BMP 1-1 Maintain Storm Water Website - The Town of St. Albans will create & maintain a stormwater tab on their website which will contain stormwater information. The Town will update it periodically to keep the general and regional stormwater information accurate. The Town’s website is www.stalbanstown.com. The RSEP

shall create a regional stormwater website; the two sites will be linked to each other.

BMP 1-2,3,4 Participate in RSEP (MCM 2.9) - The Town, in collaboration with the City of St. Albans will develop and participate in a regional stormwater education program (RSEP) that will be managed thru Northwest Regional Planning Commission (NWRPC). The Town will continue to participate in regional stormwater education and outreach thru the RSEP, which may adopt the name Franklin County Clean Streams (*FCCS*) for a portion of the public outreach program. A memo of understanding is being drafted and will be submitted upon execution. This RSEP will follow the guidance provided in the following EPA identified documents:

-fact sheet 2.3, Stormwater Phase II Final Rule, Public Education and Outreach Minimum Control Measure (January 2000),
<http://www.epa.gov/npdes/pubs/fact2-3.pdf>;

-National Menu of Best Management Practices for NPDES Stormwater Phase II,
<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>;

- Measurable Goals Guidance for Phase II Small MS4s,
<http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm>

BMP 1-5a-b Develop & Distribute Informational Brochures – The RSEP will develop or acquire informational brochures once the RSEP is formalized. The RSEP will distribute brochures to both municipalities.

BMP 1-5c News Media Feature Stories – The RSEP will coordinate with the local newspaper, the St. Albans Messenger to run at least two stories per year on stormwater related issues. The media outreach will aim for spring and fall timelines, and will include key messages on stormwater runoff and systems, with tips on prevention methods related to soil and lawn care and construction erosion.

BMP 1-5d For municipalities: Develop educational materials and meet with teachers - The RSEP will develop or acquire educational materials and conduct meeting(s) with teachers.

Rationale Development of a regional stormwater program seemed the best approach to educating our unique integrated stormwater area since stormwater fails to recognize municipal boundaries.

Person Responsible Northwest Regional Planning Commission (NWRPC) will be managing the RSEP, providing regional education and outreach to everyone choosing to work, live or play in Franklin County.

Measurable Goals The MOU for the RSEP will be submitted upon execution. The brochures and a copy of news articles will be forwarded and the website work will be done. The websites shall be updated periodically. The RSEP will develop its programs, and coordinate all efforts with local watershed groups. The media stories and educational trainings will be documented.

2. Public Involvement and Participation (choose 3 or BMP 2-9)

BMP 2-3 *Institute an ongoing public workshop* – RSEP will work with existing local/regional organizations to conduct workshops that cover topics on targeted stormwater messages mentioned above as well as understanding of the connection with impervious area and water quality.

BMP 2-4 *Inventory Storm Drains* – The permittee will undertake an effort to update its storm drain inventory. Upon completion of the inventory, a stenciling storm drain project shall be developed.

BMP 2-5 *Sponsor stream corridor cleanup day* - RSEP will coordinate a community clean up event; this event may coincide with the annual Green Up Day in May. This event will target different stream reaches each year.

Rationale The best management practices under this minimum measure are intended to educate the community with the goal of changing behavior by improving the level of awareness surrounding water pollution. Our message – “it’s our water, our solution” hopefully becomes a household buzz word and raises awareness.

Person Responsible NWRPC will be managing this effort.

Measurable Goals The RSEP will document attendance at all workshops and training sessions. The number of bags collected at the clean up event will also be tracked. The storm drain inventory and stenciling program will be documented.

3. Illicit Discharge Detection and Elimination (IDDE)

- BMP 3-1 *Develop and enforce a program to detect and eliminate illicit discharges* – The state Department of Environmental Conservation (DEC) initiated a contract with Aldrich and Elliott to perform an illicit discharge detection and elimination report (IDDE – contract #24481 signed 6/21/13). Once a final report is completed under this contract, the Town will assess the locations of any pinpointed illicit discharges, and will formulate an implementation schedule to address each illicit discharge. The Town will also work to develop an ordinance to prohibit illegal dumping into the stormwater system.
- BMP 3-2 *Develop and maintain a storm sewer GIS layer on the town tax maps* – The Town currently has a comprehensive dataset of its storm sewer network. Town will continue to update our GIS, and include a stormwater layer on its town tax maps.
- BMP 3-3 *Develop and implement an Illicit Discharge Ordinance* – The town will develop, adopt and enforce an IDDE ordinance with plans to implement within 2 years.
- BMP 3-4 *Develop and implement an illicit discharge detection plan, focus on impaired waters and random dumping* – The Town will develop and implement a detection plan once the IDDE state study is complete and the IDDE ordinance has been adopted.
- BMP 3-5 *Inform public of illicit discharge and disposal hazards* – The Town will support the development of a Franklin County RSEP to create an informative effective public outreach program. The RSEP will inform the public, business and public employees about improper disposal methods.
- BMP 3-6 *Address specific categories of Illicit Discharges, if necessary* – The Town will evaluate the specific categories of Illicit Discharges as listed in the permit, and if any are determined to present a significant risk to water quality, then the Town will address these issues.
- BMP 3-7 *Prepare annual report of monitoring and corrective actions taken* - The Town will prepare annual reports as the MS4 permit requires. The town recently hired a planner to assist with the ongoing permit compliance reporting requirements.
- Rationale The best management practices identified under this minimum measure are aimed at identifying the illicit discharges and creating regulations to encourage compliance. Through the development of new and revised regulations, the town will strive to minimize future illicit discharges.

Person Responsible Town Planner, Department of Public Works and Regional Planning will collaborate on this MCM.

Measurable Goals Work products: IDDE study, IDDE ordinance and annual reports.

4. Construction Site Stormwater Runoff Control

- BMP 4-1 Develop and implement procedures to ensure MS4 construction activities are properly permitted – The town will develop procedures to ensure proper permitting in the MS4 impaired area’s as part of its comprehensive bylaw update.
- BMP 4-2 Review existing regulations for effectiveness in managing construction related Erosion & Sediment (E&S) and consistency with state construction permits – The town will review all MS4 E & S regulations as part of the bylaw update, to ensure MS4 compliance is included in the revised bylaws.
- BMP 4-2a Develop and implement an E & S ordinance that regulates development subject to state requirements – The Town will develop and adopt an E & S ordinance that meets state requirements.
- BMP 4-3 Develop and implement an E & S ordinance that regulates development **not** subject to state permitting –The Town ordinance will include requirements for projects that fall below the minimum regulatory threshold as set by the VT DEC. At a minimum, sub jurisdictional projects will be required to comply with the *Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006)*.

Rationale The best management practices under this measure are aimed at limiting erosion and sedimentation from land disturbance activities, thus preventing sediment discharge to the aquatic environment and to the municipal stormwater management system.

Person Responsible As with all other aspects of this plan, the implementation of this measure will require Selectboard and community support to regulate stormwater runoff from constructions sites.

Measurable Goals – the measurable goal of the MCM will be the development and implementation of an Erosion and Sediment Control Ordinance.

5. Post-Construction Storm Water Management in New Development and Redevelopment.

- BMP 5-1 Review existing regulations for effectiveness in managing storm water runoff and consistency with state operational permits – The town will evaluate its regulations and ensure that local post-construction stormwater standards are consistent with the State standards.
- BMP 5-1a Assess changes to regulations to support LID – Northwest Regional Planning will assist the town to evaluate town regulations, and create a document that describes how well existing town regulations address stormwater and green infrastructure. They expect to complete the low impact development (LID) evaluation by the fall of 2014.
- BMP 5-1b Assess changes to regulations to minimize impervious surfaces through street & parking design – This will be evaluated as part of the Regional Planning LID evaluation. The Town shall consider revisions to its Technical Roadway Standards. Revised standards allow for most roadways to be constructed at a narrower width, and as well, allow increased options for open drainage systems to promote pre-treatment of storm water runoff. Standards have been developed to support High Density Mixed-Use Development, which requires that front yards contain a minimum of 50% green space unless in a designated area of growth that allows more compact development to maintain the more rural surrounding areas. The Town Zoning regulations require at least 30% green space on all development within its commercial areas and 40% within its light industrial/commercial areas. PUD's are allowed waivers to reduce parking areas unless more parking is warranted by actual need and shared parking is encouraged to reduce impervious areas where appropriate.
- BMP 5-1c Adopt requirements that are at least as stringent as State requirements -The regulation to be developed for post-construction stormwater management will be at least as stringent as State standards.
- BMP 5-2 Develop and implement procedures to identify projects that disturb >1 acre – The Town's post construction regulations to be developed will include procedures to identify these developments as part of the town comprehensive bylaw updates.
- BMP 5-3 Review all ordinances, planning, zoning and subdivision reg, or other regulatory mechanism for post-construction runoff – Stormwater post construction best management practice review will be included in our bylaw updates as well as the MCM that require E & S ordinance and an IDDE ordinance. Our comprehensive

bylaw updates, plans to incorporate all subdivision, zoning bylaws and ordinances.

BMP 5-4 *Develop and implement inspection procedures for development* – The town will develop and implement an inspection procedure for development projects to ensure post-construction stormwater controls are being implemented properly and maintained over time.

BMP 5-5 *Develop and implement procedures to ensure MS4 development activities are properly permitted.* – This will be considered during the bylaw update mentioned in BMP 5-2 and 5-3.

Rationale The Town understands the importance of post-construction stormwater management to limit volume and rate of flow, as well as the contribution of pollutants to the aquatic environment. The Town also understands that good post-construction stormwater management will result in a reduced burden on public stormwater infrastructure. As such, the Town considers this BMP to be a priority.

Person Responsible The Community and Selectboard support will be required to enforce the regulations for post construction stormwater runoff.

Measurable Goals The expected water quality outcomes under this minimum measure are improvements to clean water species by reducing stormwater runoff.

The initial regulatory mechanisms chosen to address post construction runoff from new development and redevelopment are the town comprehensive bylaws, the subdivision regulations, and the development of illicit discharge detection and elimination ordinance and an erosion and sediment ordinance.

All land development requires a permit from the Town. Through the issuance of a permit, the town includes relevant conditions which are attached to the permit. The Town will continue to use local zoning regulations to provide the legal authorities and strategies to protect and regulate development in stream corridors of stormwater impaired waters.

The Town Department of Public Works, Planner, and Zoning Administrator are responsible for the management of the post construction stormwater management plan.

6. Pollution Prevention/ Good Housekeeping for Municipal Operations

- BMP 6-1 Describe operation and maintenance program for reducing pollutant runoff from MS4 operations. – The Town is currently managing its municipal operations to reduce impacts to water quality however the procedures employed are not formally documented. The Town will develop an operations and maintenance program to reducing pollutant runoff from MS4 operations.
- BMP 6-1a New construction and land disturbance – New construction and land disturbance associated with municipal operations shall be addressed through the provisions of MCM#4 and #5 of this permit.
- BMP 6-1b Maintenance of fleet and buildings, all municipal garages, parks, open space, construction and maintenance practices for gravel roads, snow disposal and storm water systems – The town owns no buildings in the MS4 area, and owns no gravel roads. The Town will document its efforts to reduce pollutants when providing snow removal services to those affected areas as part of the operations program to be developed. The Town has also completed several erosion control projects along roads to reinforce roadside ditches to minimize erosion of the ditch lines and the edge of the roadways during periods of high runoff. As a part of new development, the Town’s design review process includes assessing the adequacy of storm water culverts, both public and private to avoid flood damage due to high runoff. The Town also cleans roadside ditches of debris and buildup on an as needed basis to ensure that blockages do not result in washouts within the drainage system. Finally, the Town’s road system serves primarily agricultural areas, where the Town has taken deliberate steps to preserve this land use, which generally prevents high density development within these areas. St. Albans Town has no municipally owned gravel or dirt roads.
- BMP 6-1c Training, maintenance schedules, and inspection procedures for long-term structural controls – The town will formally document its operations, training and inspection program to maintain the municipal stormwater infrastructure
- BMP 6-1d For municipal facilities where fertilizers are applied, prohibit the use of fertilizers containing phosphorus unless warranted by a soil test - This shall be addressed in the maintenance and training program, currently the town does not use fertilizer and has no plans to do so in the future.
- BMP 6-2 For municipal garages, an MS4 may participate in ANR’s Municipal Compliance Assistance Program - The municipal facility is not located within the MS4-

regulated area. The town will review ANR's municipal compliance assistance program and evaluate our future participation.

BMP 6-3 *Provide a list of all industrial facilities that the MS4 owns or operates that are subject to the MSGP* – The town does not own any industrial facilities.

Rationale The best management practices under this minimum measure are aimed at improving municipal operations to better protect water quality and reduce the burden on public infrastructure. The Town will evaluate its current housekeeping operations, with the goal of reducing pollutants whenever possible.

Person Responsible The Department of Public Works will be primarily responsible for this BMP, with assistance from the Town planner.

Measurable Goals The expected outcomes for this task are refining current practices for operations and maintenance, as well as housekeeping procedures. These refinements will have a benefit for streamlining operations and keeping pollutants out of surface waters.