

STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NOTICE OF INTENT

General Permit 3-9014
National Pollutant Discharge Elimination System (NPDES) Number: VTR050002
For Stormwater Discharges From Small Municipal Separate Storm Sewer Systems

Please provide the following information in support of your application for coverage under the General Permit.

1. Name of MS4 applying for coverage under General Permit 3-9014, NPDES Number VTR050002: **Town of Shelburne**

Mailing Address: **P.O. Box 88, Shelburne, Vermont 05482**

Phone Number: **802-985-5111**

Fax Number: **802-985-9550**

E-Mail Address: **pbohne@shelburnevt.org**

2. Name and Title of person responsible for overall coordination of the storm water management program: **Bernard T. Gagnon, P.E., Director of Public Works**

Mailing address: **P.O. Box 88, Shelburne, Vermont 05482**

Phone number: **802-316-1320**

Fax number: **802-985-9550**

E-mail Address: **bgagnon@shelburnevt.org**

3. An estimate of the square mileage served by your small MS4:

Based on calculations derived using ArcView GIS, the total area of the MS4 subject to this permit (census-designated urbanized area plus area of Monroe Brook Watershed) is 5253 acres, or 8.2 square miles. The area of the census-designated urbanized area is 3192 acres, or about 5 square miles, while the area of the Monroe Brook Watershed is 3138 acres, or 4.9 square miles. Some 1067 acres, or 1.67 square miles, lie in both the Monroe Brook Watershed and the census-designated urbanized area. See Figures 1-3 below.

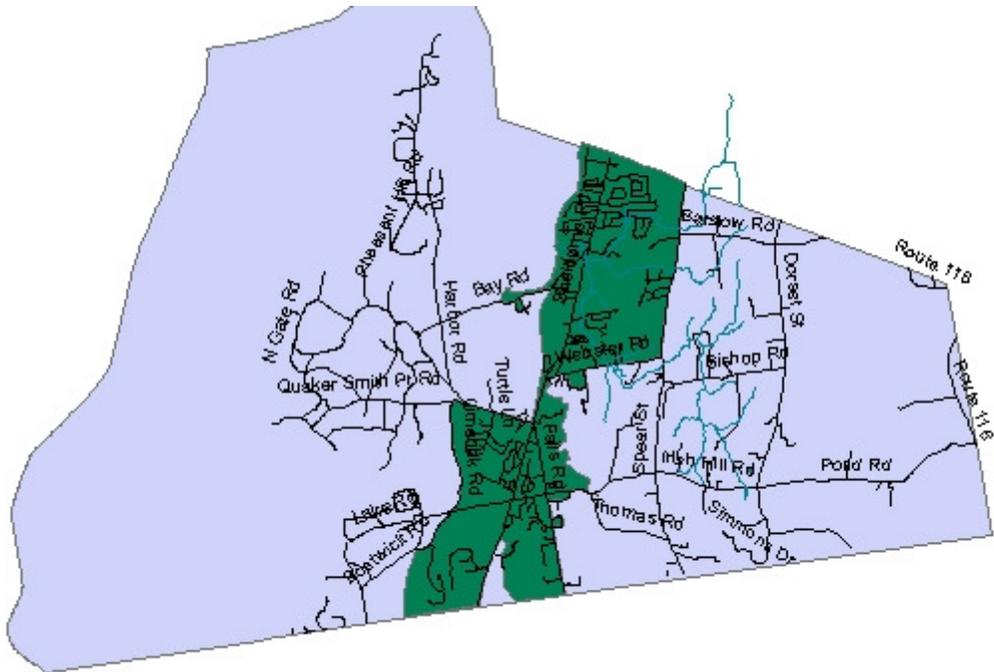


Figure 1. Census-designated urbanized area

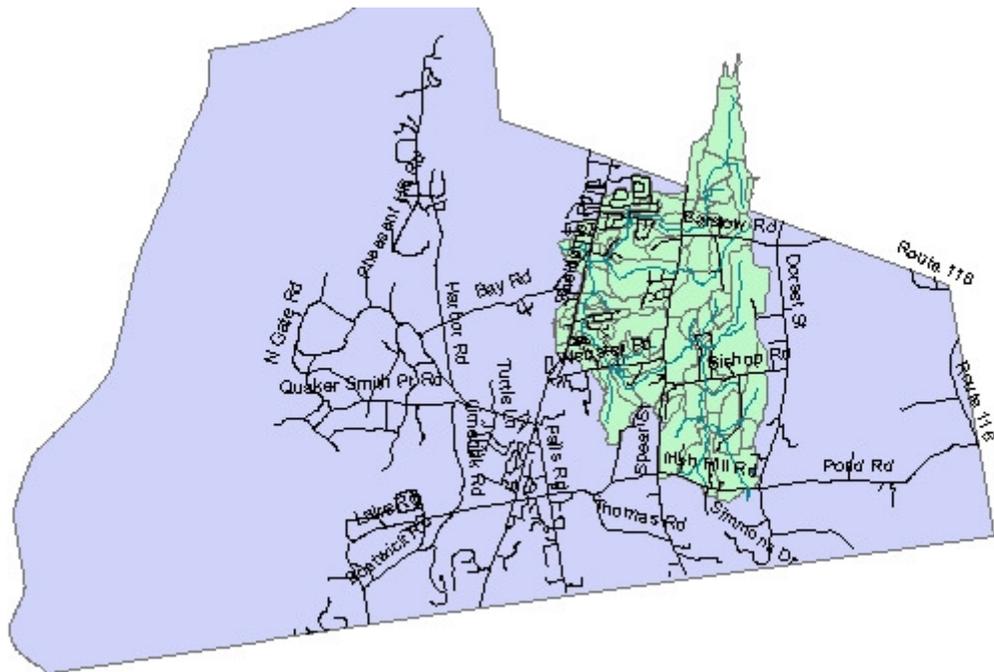


Figure 2. Monroe Brook Watershed area

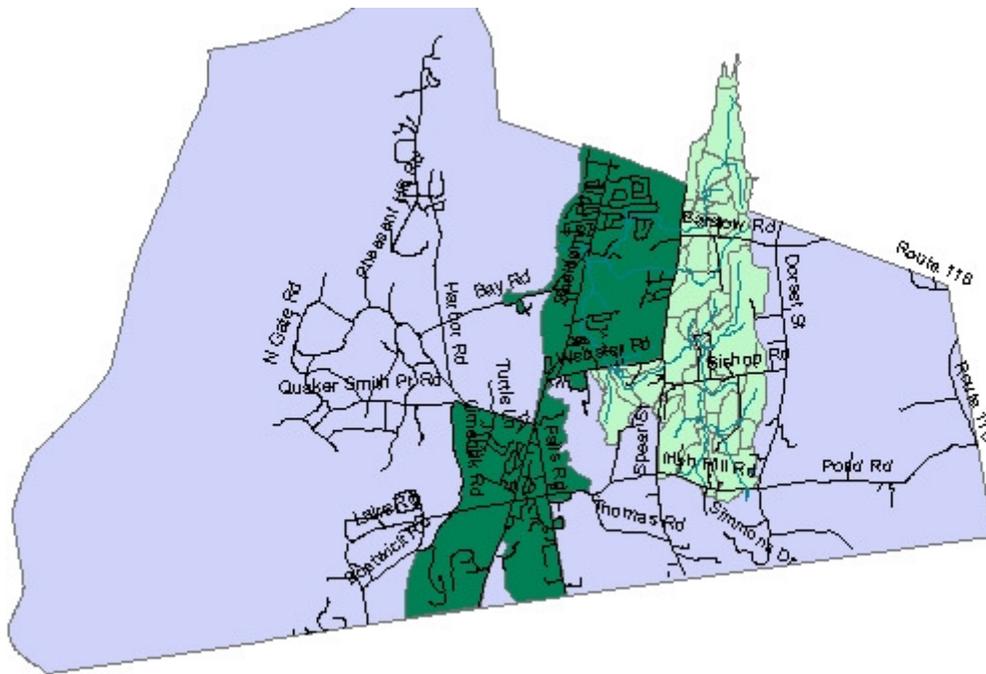


Figure 3. Shelburne MS4 area

4. Identify the names of all known waters that receive a discharge from the MS4. If known, indicate the number of outfalls to each water:

Inventories of discharge points/outfalls have been prepared by the Chittenden County Regional Planning Commission (CCRPC) and the Vermont Agency of Natural Resources (VT-ANR) for the Town of Shelburne. Waters with the potential to be receiving discharge from the Shelburne MS4 include the following: Monroe Brook, LaPlatte River, McCabe's Brook, Lake Champlain, Bartlett Brook. The CCRPC mapping shows all stormwater infrastructure. The VT-ANR mapping shows outfalls within the Monroe Brook watershed. Based on VT-ANR mapping, there are approximately 100 outfalls within the Monroe Brook Watershed. Based on the CCRPC mapping, the table below shows the approximate number of outfalls from stormwater infrastructure within each watershed. For mapping of discharge points in See Figures 4 - 6 below.

<u>Watershed</u>	<u>Approximate Number of Outfalls</u>
Monroe Brook	100
LaPlatte River	10
McCabe's Brook	12
Lake Champlain	20
Bartlett Brook	0

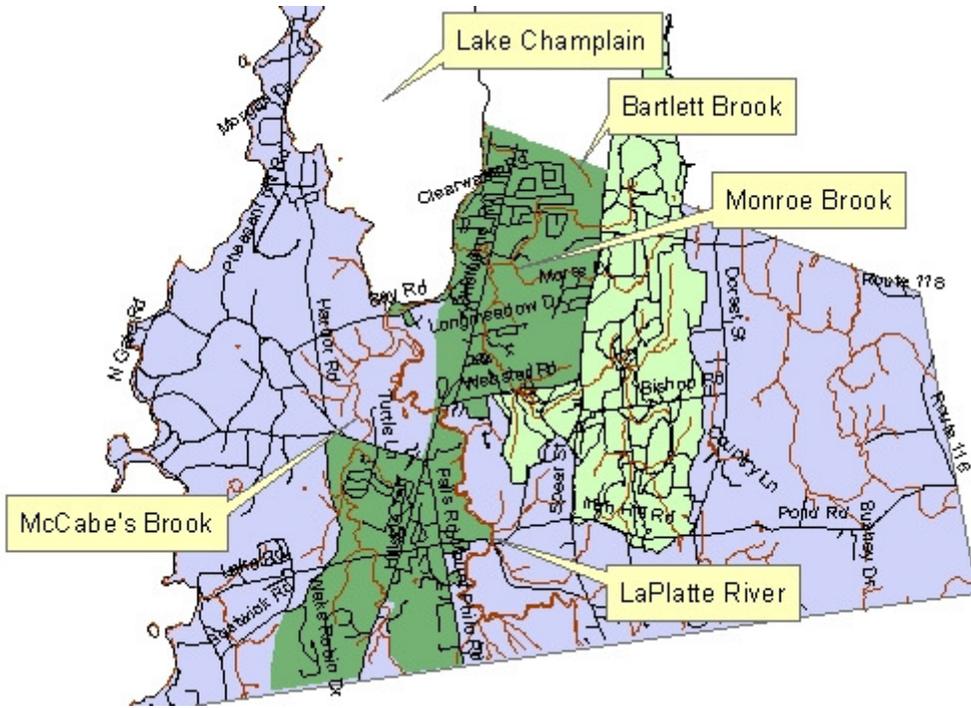


Figure 4. Watersheds and Associated Receiving Waters Within Shelburne MS4 area

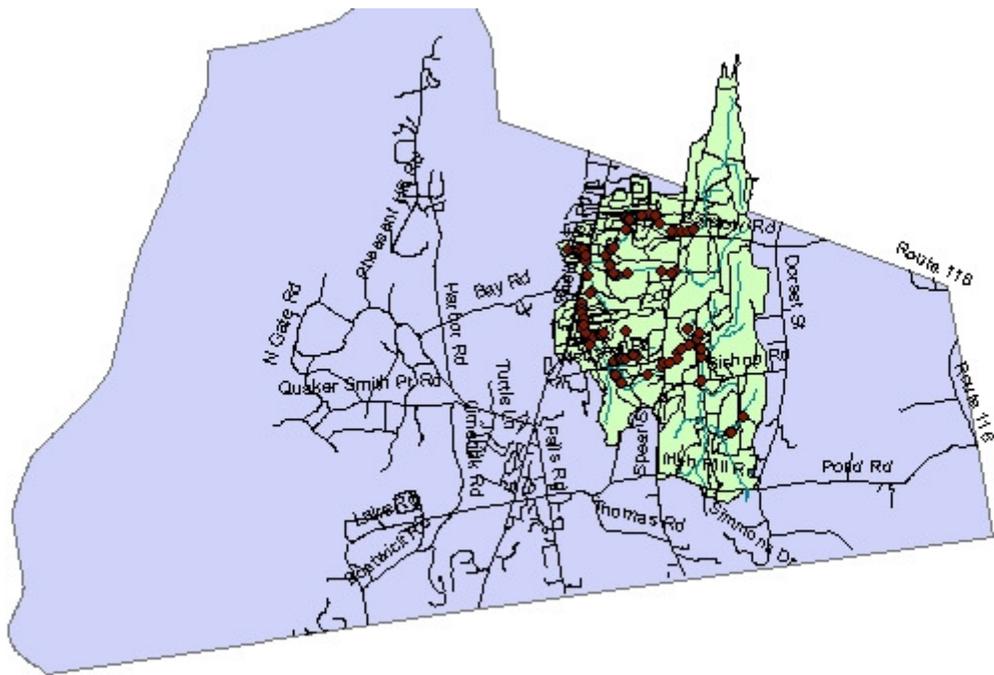


Figure 5. VT-ANR Documented Outfalls in the Monroe Brook Watershed

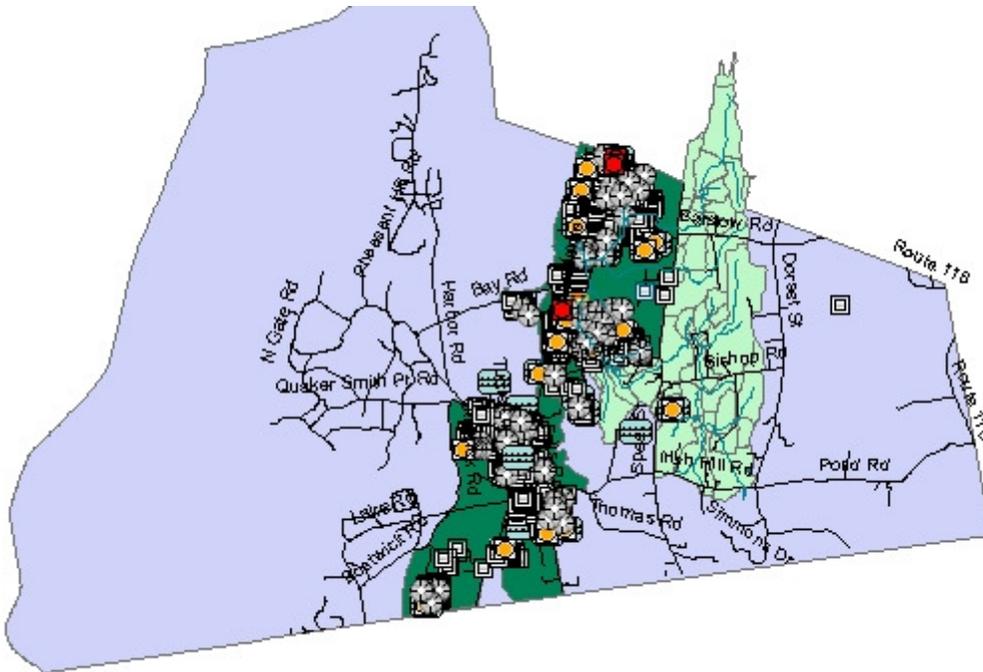


Figure 6. CCRPC Mapping of Stormwater Infrastructure.

5. You may partner with other MS4s to develop and implement your storm water management program. Each MS4 must fill out an NOI form. (You may also jointly submit the same NOI with one or more MS4s.) If you elect to partner with another MS4, the description of your storm water management program must clearly describe which permittees are responsible for implementing each of the control measures.

The Town of Shelburne is a signatory of a Memorandum of Understanding that originally became effective January 31, 2003 and was renewed effective March 10, 2008. This MOU establishes an agreement among the Parties for a group of Municipal Separate Storm Sewer Systems to contract to undertake a Regional Stormwater Education Program that conforms with and satisfies the relevant requirements regarding Minimum Control Measure of the Phase II NPDES program for Program Years 2008 – 2013, as established in the relevant general permit by the Vermont Department of Environmental Conservation. See MOU attached.

6. If you are relying on another governmental entity regulated under the storm water regulations (40 CFR 122.26 & 122.32) to satisfy one or more of your permit obligations (see Part 4.4), identify the entity(ies) and the element(s) they will be implementing. You do not need to identify the Agency of Natural Resources with respect to minimum measures 4 and 5. If you are participating in the regional MOU to implement minimum measure 1 check here.

See response to 5 above and attached MOU for additional details.

7. For each of your chosen best management practices (BMPs) and the measurable goals related to the storm water minimum control measures in Part 4.2 of the General Permit provide the following information:
- Your timeframe for implementing the BMP (you must develop and fully implement your program by the expiration date of this permit):
 - The person or persons responsible for implementing or coordinating the BMPs for your storm water management program:
 - A description of the best management practices (BMPs) that you or another entity will implement:
 - The measurable goals for each of the BMPs including, as appropriate, the months and years in which you will undertake required actions, including interim milestones and the frequency of the action. When possible, your measurable goal should include outcome measures related to the BMPs impact on water quality, stream channel stability, ground water recharge, and flood protection (EPA has provided guidance on developing measurable goals at: www.epa.gov/npdes/stormwater/measurablegoals/index.htm).
 - When requested in 4.2 of the General Permit, provide a rationale for how and why you selected the BMPs and measurable goals for your storm water management program.

See attached.

8. Submit your NOI together with the correct fees at the following address:

Vermont Agency of Natural Resources
Department of Environmental Conservation
Water Quality Division, Stormwater Management Program
103 South Main Street, Building 10 North
Waterbury, Vermont 05671-0408

9. This NOI must be signed by a principal executive officer, ranking elected official or other duly authorized employee 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.

Signature

Date

Proposed Minimum Control Measures

3.1 Special Conditions: Discharges to Water Quality Impaired Waters

3.1.1.1 Determine whether storm water discharge from any part of the MS4 significantly contributes directly or indirectly to a 303(d) listed (i.e., impaired) waterbody. *If you have discharges meeting this criterion, you must comply with Part 3.1.2; if you do not, Part 3.1 does not apply to you.*

The Town of Shelburne proposes to address this requirement using information compiled in connection with planning and engineering associated with the Selected Contributors subject to Total Maximum Daily Load (TMDL) to be developed by VT-ANR for Monroe Brook and using information obtained as outlined below. The Town anticipates extensive discussion with the Agency regarding the significance of identified discharges and the significance (or lack thereof) such discharges will represent following implementation of solutions as a result of the TMDL process.

3.1.1.2 If you have a discharge described in 3.1.1.1 you must also determine whether a TMDL has been developed and approved by EPA for the listed waterbody. If there is a TMDL, you must comply with both Parts 3.1.2 and 3.1.3; if no TMDL has been approved, you must comply with Part 3.1.2 but Part 3.1.3 does not apply until a TMDL has been approved.

In the event it is determined that storm water discharge from the MS4 significantly contributes to an impaired waterbody following implementation of solutions as a result of the TMDL process, the Town of Shelburne will confirm the status of any TMDL(s) in development that could be relevant to the requirements of this section.

3.1.2 Water Quality Controls for Discharges to Impaired Waterbodies.

3.1.2.1 Your storm water management program (SWMP), including your operation and maintenance program for preventing or reducing pollutant runoff from municipal operations prepared pursuant to section 4.2.6, must include a section describing how your program will control to the maximum extent practicable the discharge of the pollutants of concern. This discussion must specifically identify measures and BMPs that will collectively control the discharge of the pollutants of concern. Pollutant(s) of concern refer to the pollutant identified as causing the impairment.

As noted by Water Quality Division Staff, the LaPlatte River is listed as impaired by E.coli from its mouth to Hinesburg. The Town of Shelburne will endeavor to address this situation and the permit condition related to it by catchbasin and culvert cleaning, public education and outreach (regarding the need to properly dispose of animal wastes), and, as financial resources allow, an illicit discharge and detection (ID&D) survey. (The town has no history of septic problems or wastewater leakage from municipal sewer lines.)

Sediment tends to harbor E. coli by providing a moist media in which it is able to grow. Therefore, by reducing sediment the Town will reduce potential "breeding grounds" for e. coli. And, although the principal cause of impairment in this segment is upstream agriculture, education/outreach regarding proper management of pet wastes and practices such as removing road kills should reduce or at least slow the growth of E. coli. An ID&D survey should help the Town identify illegal sanitary connections to the Town's stormwater system.

With respect to management of animal wastes, these activities are consistent with the practices in the NOI for managing for sediment in runoff. In addition, the need for pet waste management is anticipated to be one of the messages communicated to the public as part of the regional I/E effort.

Finally, as noted in relevant Notice of Intent/Application for Coverage, the Town of Shelburne will actively pursue compliance with the Monroe Brook TMDL.

3.1.3 Consistency with Total Maximum Daily Load (TMDL) Requirements. As set forth in 1.3.7 you must comply with recommendations applicable to your MS4 in the implementation section of the Lake Champlain TMDL and any future TMDLs for impaired waters affected by your MS4 adopted by the Secretary and approved by EPA pursuant to section 303(d) of the federal Clean Water Act.

As required, the Town of Shelburne will pursue compliance with applicable recommendations contained in the Lake Champlain TMDL and future watershed TMDLs. More specifically, as an existing stormwater permittee, it is our intent to provide to the Vermont DEC a written certification signed by a professional engineer that existing permitted stormwater management systems were built and are currently operating in compliance with the previously issued permit. Furthermore, in connection with the TMDL for the Monroe Brook watershed, the Town is currently designing solutions for two Selected Stormwater Discharges. It is the Town's expectation that these solutions will be designed to achieve the water quality, recharge, and channel protection requirements of the Vermont Stormwater Management Manual (The Center for Watershed Protection 2001).

As noted elsewhere in this document, the Town will also be expanding its review of erosion and sediment control at construction sites. A goal of construction site erosion and stormwater control is to have properly installed and functioning erosion control measures so that no soil moves offsite or into surface waters or wetlands during the construction process.

Although the condition of gravel roads can be a significant non-point source issue (depending on how the roads are maintained and upgraded), the Town has limited mileage of unpaved public roadways in the community. We will, however, promote "Better Backroads" techniques amongst individual property owners and homeowners associations, whenever possible.

In terms of preventative roadway maintenance, the Town will endeavor to reduce the susceptibility of infrastructure to flash flood damage through adequate sizing of culverts, stable culvert headers, etc. The Town will also examine its driveway access standards and update as appropriate, with an eye toward preventing increases of sediment and flow that could exceed the capacity of the town roads and ditches.

As noted in the Lake Champlain TMDL, “a riparian buffer is a band of vegetation between human land uses and surface waters that serves in many ways to protect the water quality and aquatic habitat of the adjacent river, stream, lake, pond, or wetland.” The Zoning Regulations for the Town of Shelburne currently require a streambank buffer (setback) of no less than 100 feet on each side of the following waterways: the LaPlatte River, McCabe's Brook and Monroe Brook. The Town is considering a 50' buffer on each side of the tributaries of Monroe Brook. The zoning regulations also include a 100 foot building setback from Lake Champlain. As noted in the regulations:

Existing trees and ground cover within the lakeshore setback area shall be preserved, maintained and supplemented by selective cutting, transplanting and the addition of new trees, shrubs and ground cover in order to provide a visual buffer from the lake and an absorption area for erosion prevention.

Buffers are also required around all areas designated as "Areas of Special Flood Hazard" on Shelburne's Federal Insurance Administration Flood Insurance Rate Map (FIRM) and all land within twenty-five (25) feet of Areas of Special Flood Hazard.

Again as noted in the Lake Champlain TMDL, “there is a direct link between impervious surface coverage and phosphorus export to surface waters.” As part of its ongoing review and updating of the zoning and subdivision bylaws, the Town will examine how regulations and standards might be changed to reduce the amount of runoff generated by projects. For example, land development standards “affect the amount of runoff generated by projects by defining street widths, housing densities, setback distances, and other factors.” Generally speaking, “development standards should encourage minimization of impervious surfaces and use of open vegetated channels for stormwater runoff.” In addition, new development subject to state stormwater permitting will be encouraged to use the 6 voluntary credits that often have the net effect of reducing impervious cover (particularly the environmentally sensitive rural development credit).

3.1.4 Determination of Compliance. The assessment of whether you are in compliance with TMDL requirements of a WIP are being met is expected to focus on the adequacy of your storm water controls (implementation and maintenance), not on the response of the receiving water.

Given the many sources of pollution affecting Lake Champlain, the Town appreciates that the permit calls for process compliance as opposed to outcome compliance.

4.1.4 Consultation with and involvement of public water suppliers

See response to 4.2.1.1 above.

4.4 Reviewing and Updating Storm Water Management Programs

4.4.1 Storm Water Management Program Review:

The Town of Shelburne will conduct an annual review of our Storm Water Management Program in conjunction with preparation of the annual report required under Part 5.3.

4.4.2 Storm Water Management Program Update:

If the Town of Shelburne wishes to change our Storm Water Management Program during the life of the permit, we will do so in accordance with the procedures in section 4.4.2 of the permit.

4.4.4 Transfer of Ownership, Operational Authority, or Responsibility for Storm Water Management Program Implementation:

The Town of Shelburne will implement the Storm Water Management Program on all new areas added to our portion of the municipal separate storm sewer system as expeditiously as practicable, but not later than one year from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.

4.2.1 Public Education and Outreach on Storm Water Impacts

4.2.1.1 Permit requirement.

To meet the requirements of section 4.2.1, the Town has developed and maintains on its own or in cooperation with other MS4s a web site with locally relevant stormwater management information and promotes its existence and use. Also, as noted elsewhere, it is participating in the regional MOU to implement minimum measure 1. The Town currently maintains its own web site, which has been expanded to include materials pertaining to stormwater including: the Town adopted stormwater ordinance, copies of all permits, background information on stormwater impacts, links to other resources including the RSEP website, and information for reporting illicit discharges. The Town will also cooperate in regional efforts to provide access to information via the web and may consider financially assisting third parties that provide water quality information and mapping over the internet.

To meet the requirements of section 4.1.4., the Town will consult with and involve public water suppliers with source water protection zones within Shelburne's MS4, namely the Champlain Water District (CWD) and the Town of Shelburne Water Department. At a minimum, the CWD will be included on the mailing/distribution list for

Shelburne’s stormwater-related materials and communications. CWD staff will have a standing invitation to attend all public meetings pertaining to the tasks described in this NOI and will be invited to participate in progress/strategy sessions with Town staff at least once annually. A synopsis of CWD’s source protection plan is provided below. In addition to coordinating with CWD, the Town has informed the Shelburne Water Department of the location of source protection zones. The water department has established a standard procedure for using diffusers and dechlorination tablets for fire hydrant flow testing and line flushing within source protection areas.

CWD’S SOURCE QUALITY

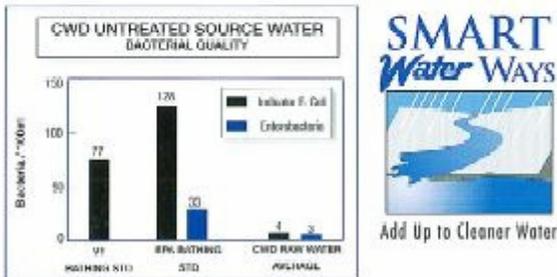
Many of the people who live along Shelburne Bay, and the streams flowing into Shelburne Bay, do not realize that their homes, yards, and parks are within an area called the “Shelburne Bay Watershed.” By protecting the Shelburne Bay watershed, residents help protect the quality of CWD’s deep Shelburne Bay source. The streams that make up this watershed include the Laplatte River, Potash Brook, North Brook, Munroe Brook, McCabes Brook, and Bartlett Brook. CWD’s water source is far off shore in Shelburne Bay. CWD invested in this source area because it is well away from potential sources of contamination.

CWD’s Watershed Management Program for Source Protection has the following objectives:

- Characterize watersheds (all the rain and snow melt that enter a specific stream or river come from an area that is called that stream’s “watershed”) and the Shelburne Bay Source.
- Build partnerships toward improving lake water quality.
- Educate people about Shelburne Bay’s role in providing drinking water.
- Limit degradation of the CWD source water.

In a major initiative addressing specific stormwater needs, Champlain Water District manages a grant program for Chittenden County municipalities that assists in the construction of stormwater control measures where they are needed the most. \$3.0 Million has been made available through this program through the efforts of Vermont’s Senate delegation.

For more info on stormwater measures go to www.smartwaterways.org



This graph shows how CWD untreated source water contains very low numbers of sanitary bacterial indicators even when comparing with levels USEPA says are allowable in bathing beach water. Of course, CWD finished water is absent of any bacteriological indicator organisms.

Champlain Water District continues to participate on the Steering Committee of the Laplatte Watershed Partnership to enhance stewardship within the Laplatte River Watershed. The Laplatte River Watershed is located in the Towns of Hinesburg, Shelburne, Charlotte, Richmond, and Williston. The river is the largest stream in the Shelburne Bay Watershed.

4.2.1.2 Decision process.

Not Applicable

Narrative for Permit

Description of BMP to be implemented:

BMPs to be implemented are those documented in MOU and established by the scope of work developed by the representatives of the MS4s that have signed the MOU. In connection with web based material posted on the Town of Shelburne site, the stormwater website contains educational information for a variety of target audiences.

BMPs and Timeframe.

The schedule for implementing the BMPs associated with this task will be as established by the MS4s that have signed the MOU. As the permit is in the second 5-year period educational materials have been produced and websites are complete. The task over this permit cycle will consist of maintaining and updating materials and websites to keep the information current and relevant.

Person/persons responsible for Implementation/ Coordination.

The person responsible for Implementation and coordination is Bernard Gagnon, Town Director of Public Works.

Measurable Goals for BMPs:

The measurable goals for BMPS associated with this task include the maintenance of the town web site, and the media development and advertising described in the MOU. It is anticipated that the advertising campaign will also benefit from pre- and post campaign surveying to assist in: a) selection of outcomes and b) measurement of efficacy. It is anticipated that the web site will be updated monthly, or as needed, during the rest of the permit term.

4.2.2 Public Involvement/ Participation

4.2.2.1 Permit requirement.

To meet this permit requirement, the Town has implemented a Stormwater public involvement/ participation program, which at a minimum, complies with State and local public notice requirements, by utilizing the existing Shelburne Natural Resources and Conservation Committee, the LaPlatte River Watershed Group, the Lewis Creek Association, and other organizations.

4.2.2.2 Decision process.

4.2.2.2.1 Plan to actively involve the public in the further development and implementation of the program

The Town of Shelburne has involved, and will continue to involve, the general public in the development of this program. Informal discussions on stormwater have been held with the Planning Commission and Natural Resources Committee. Discussions have been held in the Public Forum during Selectboard meetings for the adoption of the Stormwater ordinance and public works specifications update related to stormwater. Input from the public has been sought in connection with two significant events: 1) the Shelburne Community Profile, a major (1 and ½ day) public event to be held in mid May of 2003, and 2) an opinion survey conducted in 2004 as part of the Town Plan update. The Town will continue to provide forums for public input/discussion through Selectboard meetings, Planning Commission meetings, and specially scheduled public presentations, as required.

4.2.2.2.2 The target audiences for our public involvement program

Planning for the Shelburne Community Profile explicitly recognized the need to attract a diverse audience, including residents, small and large business owners (e.g., Vermont Teddy Bear), professional associations (such as the Shelburne Business and Professional Association), environmental groups (such as Shelburne Citizens for Responsible Growth), homeowners associations, and educational organizations. Ongoing efforts relating to stormwater education and outreach will continue to follow this model.

Narrative for Permit

Description of BMPs to be implemented

The Town's Stormwater public involvement/ participation program will include the following:

- **Creation of an on-going public workshop series on stormwater awareness.**
- **Maintenance of storm drain stenciling completed for all storm drains during the first 5-years of the permit.**
- **Distribution of "bags-on-board" dog waste bags at license renewal and Town sponsored dog obedience classes.**
- **Support for citizen "volunteer monitoring" group.**
- **Support for an "adopt-a-stream" program, starting first with the existing LaPlatte River Watershed Group.**

Public involvement/participation activities can gain much needed public support for stormwater management program implementation. The success of the overall program relies on changes in the public's attitudes and behaviors. Early and frequent public involvement in stormwater management increases awareness and broadens public support. By providing interested members of the public with the opportunity to participate in the

design of the stormwater program, the potential for legal challenges decreases and stakeholders' sense of program ownership increases. In addition to changing stakeholders' attitudes, opportunities to participate also play an important role in education and behavior modification.

Storm drain stenciling projects offer an excellent opportunity to educate the public about the link between the storm drain system and drinking water quality. Each storm drain marker installed is a circular metallic plate attached to the storm drain with the message: "No Dumping – Drains to waterway".

By raising public awareness of urban runoff, storm drain stenciling programs should discourage practices that generate nonpoint source pollutants. As with any public education project, however, it is difficult to precisely measure the effect that storm drain stenciling programs have on human behavior. Nor is it easy to measure reductions in certain components of urban runoff, which by definition is diffuse in origin. To date, the Town has received several calls from residents indicating that they have observed and appreciate the markers and in some cases generating questions as to what can be dumped (e.g. swimming pool water). This is a direct indicator that the education program is working.

BMPs and Timeframe.

The Town has implemented these programs and intends to maintain them during the next permit cycle. Public workshops on stormwater awareness will be organized and held on an annual basis. Storm drain markers previously installed will be inspected and maintained/replaced on a bi-annual basis. Support for citizen/volunteer-based groups (e.g. LaPlatte Partnership) on stormwater monitoring and education issues will continue, including annual visual inspection efforts. Support for an "adopt-a-stream" program, starting first with the existing LaPlatte River Partnership, the Town of Shelburne will continue to work with volunteer-based groups on stormwater monitoring and education issues, including annual stream corridor cleanup efforts. One focal point for this effort has been a geomorphic assessment of the Laplatte Watershed and other tributaries flowing into Shelburne Bay.

Person/persons responsible for Implementation/ Coordination.

The person responsible for Implementation and Coordination is Bernard Gagnon, Town Director of Public Works.

Measurable Goals for BMPs:

The measurable goals for BMPS associated with this task are as follows.

Public workshop series

The Town will hold public meetings and solicit public input on stormwater issues annually. The Town will follow state public notice requirements to ensure that the public has an

opportunity to participate in the program. As part of the effort, the Town will develop news releases for local newspapers in order to solicit interest on the same schedule as the public meetings.

Storm Drain Stenciling project

The Town's Measurable Goal is to maintain markers on all storm drains during each permit year.

“Volunteer Monitoring” group and “Adopt-a-stream” program

The Town's Measurable Goal is for a volunteer-based volunteer monitoring group(s) to complete five stormwater-related events, one in each of the five permit years.

The Town's Measurable Goal is for volunteer-based “Adopt-a-stream” group(s) to complete five stormwater-related events, one in each of the five permit years.

Volunteer programs promote the stewardship of local waters. By educating volunteers and the community about the value of local waters, the kinds of pollution threatening them, and how individual and collective actions can help solve specific problems, volunteer monitoring programs and:

- **Establish a connection between watershed health and the citizens' individual and collective behaviors**
- **Build bridges among various agencies, businesses, and organizations**
- **Create a constituency for local waters that promotes personal and community stewardship and cooperation.**

4.2.3 Illicit Discharge Detection and Elimination

4.2.3.1 Permit requirement.

The Town of Shelburne will endeavor to comply with the permit section 4.2.3.1.1 Develop, implement and enforce a program to detect and eliminate illicit discharges.

To meet this permit requirement, the Town has developed, implemented and enforces a program to detect and eliminate illicit discharges into the Town of Shelburne's MS4.

In addition, the Town has effectively prohibited through ordinance, non-storm water discharges into the Town's storm sewer system and implemented appropriate enforcement procedures and actions.

4.2.3.1.4 Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system.

To meet this permit requirement, the Town has compiled and/or utilizes existing local or Agency data and established monitoring priorities for storm drain outfalls based on their

potential to contribute to pollution. The Town has investigated outfalls in the order of established priorities. The Town has conducted such investigations itself, and coordinated with storm drain investigation activities of others (i.e. VT-ANR).

4.2.3.1.5 Publicity about hazards associated with illegal discharges

The Town has informed public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste, via BMPs associated with the Public Education and Public Involvement/Participation tasks described above.

4.2.3.1.6 Special categories of non-storm water discharges or flows

The Town has no data to indicate that the categories of non-storm water discharges listed in 4.2.3.1.6 represent significant contributors of pollutants to the Town of Shelburne's MS4.

4.2.3.1.7

The Town will provide the Secretary with a summary of monitoring activities conducted and corrective actions taken in accordance with the permit.

4.2.3.2 Decision process.

4.2.3.2.1 How map will be regularly updated.

The storm sewer map showing the location of all outfalls and the names and location of all receiving waters has been developed by the CCRPC with input from the ANR's Stormwater staff. Sources of information used for the map included ANR stormwater permits, mapping completed by Civil Engineering Associates, mapping completed by Stormwater staff, and plans on file in the Shelburne Planning office.

Outfall locations have been verified in connection with planning for selected contributors in the Town of Shelburne. In the future, the outfall locations will be verified in connection with fieldwork done in conjunction with Illicit Discharge Detection and Monitoring, Construction related Stormwater Management, and Post Construction related Stormwater Management activities conducted by the Town of Shelburne. The level of verification activity will be constrained by the Town's fiscal, staffing, and technical resources.

The map will be updated annually via a requirement (permit condition) for all development applicants to supply the Town of Shelburne with a digital file containing the location and attributes of stormwater facilities to the Shelburne Planning Office. These files must be in ArcView shapefile or geodatabase format.

4.2.3.2.2 The mechanism (ordinance or other regulatory mechanism) to be used to effectively prohibit illicit discharges into the MS4 and why you chose that mechanism.

The Town of Shelburne has enacted an ordinance (adopted by the Shelburne Selectboard on August 10, 2006) to regulate and prohibit illicit discharges. The ordinance is available to the public through posing and download from the Town website.

4.2.3.2.3 Plan to ensure through appropriate enforcement procedures and actions that the Town's illicit discharge ordinance (or other regulatory mechanism) is implemented.

The Town of Shelburne enforces the ordinance as part of its overall enforcement activities, carried out via the Public Works Director or Zoning Administrator and delegated Design Review Board (DRB) Coordinator. A Plan to ensure appropriate enforcement procedures and actions has been created and multiple enforcement actions, with positive results, have occurred since adoption of the ordinance.

4.2.3.2.4 Plan to detect and address illicit discharges to your system, including discharges from illegal dumping and spills.

The Town of Shelburne has developed specific protocols for the detection and correction of violations in connection with drafting of the illicit discharge ordinance and/or the crafting of an illicit discharge detection and elimination plan. These protocols include dry weather field screening for non-storm water flows and field tests of selected chemical parameters as indicators of discharge sources and address on-site sewage disposal systems that flow into the Town of Shelburne's storm drainage system. Details regarding this Plan are presented below.

4.2.3.2.4.1 Procedures for locating priority areas which includes areas with higher likelihood of illicit connections

The Town of Shelburne has located priority areas as part of the development of a Town Illicit Discharge Management Plan. Details regarding this Plan are presented below.

4.2.3.2.4.2 Procedures for tracing the source of an illicit discharge

The Town of Shelburne has developed procedures for tracing the source of an illicit discharge, including specific techniques the Town will use to detect the location of sources, as part of the Town Illicit Discharge Management Plan. Details regarding this Plan are presented below.

4.2.3.2.4.3 Procedures for removing the source of the illicit discharge

The Town of Shelburne has developed procedures for removing the source of the illicit discharges as part of the Town Illicit Discharge Management Plan. Details regarding this Plan are presented below.

4.2.3.2.4.4 Procedures for program evaluation and assessment

The Town of Shelburne has developed procedures for program evaluation and assessment as part of the Town Illicit Discharge Management Plan. Details regarding this Plan are presented below.

4.2.3.2.5 How Town plan's to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

The Town of Shelburne has developed procedures to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste in multiple phases. Education of employees has taken place through training provided by the RSEP as well as training through Vermont Local Roads, VTRANS, and other sources. Information relevant to the general public is distributed through the Town and/or RSEP website, as well as media campaigns and literature produced through RSEP. Information for reporting Illicit Discharges is available on the Town website.

Narrative for Permit

Description of BMP to be implemented:

Storm Sewer System Map

As noted above, a storm water facilities map showing the location of all outfalls and the names and location of all receiving waters has been developed by the CCRPC with input from the ANR's Stormwater staff. Sources of information used for the map included ANR stormwater permits, mapping completed by Civil Engineering Associates, mapping completed by Stormwater staff, and plans on file in the Shelburne Planning office.

The outfall locations will continue to be verified in connection with fieldwork done in conjunction with Illicit Discharge Detection and Monitoring, Construction related Stormwater Management, and Post Construction related Stormwater Management activities conducted by the Town of Shelburne.

The map will be updated annually via a requirement (permit condition) for all development applicants to supply the Town of Shelburne with a digital file containing the location and attributes of stormwater facilities to the Shelburne Planning Office. These files must be in ArcView shapefile or geodatabase format.

In conjunction with other ongoing Town activities, field surveys will continue to be conducted to: verify the mapped locations of outfalls and the receiving waters they discharge into; to identify any outfalls in the field missed in the mapping effort; and to identify any potential illicit discharges from the outfall.

Develop a plan to detect and address illicit discharges to your system, including discharges from illegal dumping and spills.

The Town of Shelburne has developed specific protocols for the detection and correction of violations in connection with drafting of the illicit discharge ordinance. Within the constraints of the Town's fiscal, staffing, and technical resources, these protocols will include dry weather field screening for non-storm water flows and field tests of selected chemical parameters as indicators of discharge sources and address on-site sewage disposal systems that flow into the Town of Shelburne's storm drainage system.

The illicit discharge detection plan addresses the following:

- 1. Priority areas for assessment;**
- 2. Field assessment activities;**
- 3. Characterization of any discharges found;**
- 4. Procedures to trace an illicit discharge; and**
- 5. Procedures to remove an illicit discharge.**

Areas have been prioritized according to the risk for illicit discharges. It is the intent of the Town to continue to prioritize areas Town wide as mapping data are maintained. At a minimum, locations will be subject to visual and olfactory inspection as they are assessed for dry weather discharges (i.e., while field crews map the outfall locations). When feasible and judged prudent by field personnel, grab samples will be taken to permit further basic analyses (e.g., tested for e. coli) and/or optical brighteners will be employed to trace pollution sources.

Field assessment activities to identify dry weather flows are contingent upon weather. Other factors influencing non-stormwater contributions to the storm drainage system include time of day when residential use of the sanitary sewer system is greatest and increased wastewater flows during periods of the year when a specific industry is especially busy.

Once an illicit discharge is identified through inspections or another process, then the source of this discharge must be identified. The following steps will be followed to try to identify a source of pollution found in the storm drain system:

- Visual inspections of surface area;**
- Visual inspections of storm drain system; and/or**
- More detailed inspection procedures, including grab sampling, tracing with optical brighteners, etc.**

Ordinance to Prohibit Non-Stormwater Discharges

The Town of Shelburne has enacted an ordinance (adopted by the Shelburne Selectboard on August 10, 2006) to regulate and prohibit illicit discharges. The ordinance is available to the public on the Town website. The illicit discharge ordinance includes:

- Prohibitions on illegal dumping or discharges to the storm drainage system;**
- Prohibitions on illicit connections from sanitary sewers to the storm drainage system;**
- Authority to inspect properties for illicit discharges; and/or**
- Penalties and enforcement options.**

Spill Response Plan

To the extent that permit requirements are not already met by existing emergency response plans in place in Shelburne (e.g., in fulfillment of Community Right to Know and Emergency preparedness regulations, coordinated with the Shelburne Fire Department), the Town has developed a spill response plan that includes coordination with the Agency of Natural Resources Department of Environmental Conservation. A written spill response plan is needed to identify appropriate actions when a spill occurs. The Town of Shelburne Plan identifies, for different kinds of spills, who should be contacted and what the municipality will do in response. The plan also includes recordkeeping and reporting requirements so that each spill, the response, and its outcome are tracked.

Plan for Enforcement Actions

The Town has developed and implemented an enforcement plan to insure compliance with local ordinances. This enforcement plan will be used for illicit discharges, construction site discharges, and post construction discharges.

The enforcement plan developed for this BMP addresses how to handle non-compliance with local ordinances and discharges from illicit sources, construction sites, and post-construction BMPs. The Plan recognizes that there are various enforcement and legal actions available to ensure compliance with local ordinances and that the specific action taken will depend on legal authority and the severity of the discharge. In general, enforcement actions will escalate to the next level if they have not been resolved in an appropriate timeframe. For example, the different levels of enforcement actions include:

- Warning:** A verbal or written notice to the owner of the identified illicit discharge. This warning gives the owner an appropriate timeframe to fix the problem and notify the owner of potential penalties if the discharge is not eliminated by this time.
- Administrative Action:** A formal action; also called a notice of violation, order to abate, or cease and desist order. The administrative action requires elimination of the discharge but does not assess any fines or penalties. Similar to a warning, the action specifies a timeframe to correct the problem.
- Administrative Action with Fine and/or Cost Recovery:** An administrative action with a financial penalty assessed against the owner. Also, this could include the recovery of cleanup and abatement costs.
- Legal Action:** Any action that brings the owner into the court system, including a formal citation or civil/criminal actions.

The enforcement plan developed is flexible but specific enough to give detailed guidance to inspectors on the level of penalty to assess. The enforcement plan includes a range of administrative penalties available under the local ordinance.

Conduct Field Inspections

Within local fiscal, technical, and staffing resource limits, Town staff or others on behalf of the Town will endeavor to continue visual inspection of known outfalls that discharge to surface waters during dry weather. As noted above, field assessment activities to identify dry weather flows are contingent upon dry weather. Other factors influencing non-stormwater contributions to the storm drainage system include time of day when residential use of the sanitary sewer system is greatest and increased wastewater flows during periods of the year when a specific industry is especially busy.

While Town staff are in the field, conducting periodic stormwater system inspections or conducting other activities, they can also be inspecting outfalls for any signs of illicit discharges. Visual assessment criteria can be used to assist field staff with the typical visual signs associated with illicit discharges. Field inspection activities consist of visiting outfall locations using the system map and recording visual observations at each outfall within a priority area.

For accessible outfalls, staff will complete the field inspection form. If an outfall is not accessible, field crews will use the system map and identify the nearest point to access the system. Staff may also locate the storm sewer manhole closest to the outfall and remove the cover to identify signs of dry-weather flow, such as odor or residue.

Train Municipal Staff on Spill and Illicit Discharge BMPs

The Town will continue to provide training to relevant municipal staff, such as field maintenance crews, illicit discharge inspectors, and other first responders, on the proper BMPs to use for spills and illicit discharges. Included in the training will be who to call for different types of spills. This training will be combined with other training of municipal staff conducted in conjunction with Housekeeping activities, etc. The Town will also participate in RSEP municipal employee training.

BMPs and Timeframe.

The implementation of BMPs associated with this task have been completed and are in an on-going/maintenance mode.

Person/persons responsible for Implementation/ Coordination.

The person responsible for Implementation and coordination is Bernard Gagnon, Town Director of Public Works. Other persons available to assist with Coordination are Dean Pierce, Director of Planning; Craig Wooster, Fire Chief; Paul Goodrich Director of the Highway Department.

Storm Water System Map

Coordination: Bernard Gagnon

Ordinance to Prohibit Non-Stormwater Discharges

Coordination: Bernard Gagnon

Spill Response Plan

Coordination: Craig Wooster and Bernard Gagnon

Plan for Enforcement Actions

Coordination: Bernard Gagnon

Training of Municipal Staff on Spill and Illicit Discharge BMPs

Coordination: Bernard Gagnon and Paul Bohne, Town Manager

Measurable Goals for BMPs:

The measurable goals for BMPS associated with this task are as follows.

Storm Water System Map

The Town's Measurable Goal is for this BMP is to annually update the storm water facilities map developed by the CCRPC.

Illicit discharge detection plan

The Town's Measurable Goal for this BMP is to maintain and enforce its illicit discharge detection plan and ordinance.

Plan for Enforcement Actions

The Town's Measurable Goal is for this BMP is to maintain and use its enforcement plan.

Ordinance to Prohibit Non-Stormwater Discharges

The Town's Measurable Goal for this BMP is to enforce its adopted ordinance that prohibits illicit discharges to the storm drain system and to continue to make this available to the public.

Spill Response Plan

In connection with this BMP, it is the Town's Measurable Goal to maintain and enforce its spill response plan.

Train Municipal Staff on Spill and Illicit Discharge BMPs

The Town's Measurable Goal is for this BMP is to Train relevant staff annually.

4.2.4 Construction Site Storm Water Runoff Control

Pursuant to EPA rules the Town must develop and enforce a program to reduce pollutants in any storm water runoff to Shelburne's MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The Town must also regulate such runoff consistent with state requirements (applying to construction activities that result in creation of new or expansion of old impervious surface of greater than one acre).

Instead of adopting its own program to regulate stormwater runoff from construction activities that meet federal requirements, the Town may qualify for coverage under a state issued general permit by developing and implementing a program to assist the Secretary in the Agency's regulation of qualifying discharges. The Town has crafted a Construction Site Storm Water Runoff Control program that we believe qualifies for this status. In order to achieve this status, the program must include the following:

4.2.4.1.1 Procedures to identify construction activities meeting the one-acre and five-acre regulatory thresholds and to report such activities to the Secretary to assure that all such projects are properly permitted.

Through its Planning and Zoning Process, the Town requires submission of site plans for all development. In addition, the Town requires submission of an excavation/fill permit application for disturbance of ground. During its review process of these submissions, the Town identifies if more than one acre of disturbance will occur and requires submission of a VT-ANR construction permit for Town files before final permits are issued. Requirements for developer/contractor application and receipt of the VT-ANR stormwater permit can be found in the Town Zoning Bylaws Subdivision Bylaws, and Public Works Specifications.

4.2.4.1.2 Procedures to assist the Secretary in inspecting permitted construction sites for compliance with the conditions of their permits. In conducting such inspections Town staff will not be expected to be familiar with the erosion control plans submitted to the Secretary by the permittee. However, Town staff should inspect for obvious signs of noncompliance such as eroding soils and turbid waters.

Subdivision and Zoning approvals and Public Works specifications generally require submission of an erosion and sediment control plan for Town information and use, when such a plan has been required by and prepared for VT-ANR stormwater permit compliance. The Public Works Specifications give the Town the authority to inspect sites for compliance with such plans.

4.2.4.1.3 Procedures to assure that construction activities undertaken by the Town are properly permitted and implemented in accordance with the terms of the permit.

The Town has requirements in place to assure that Town projects are properly permitted.

4.2.4.1.4 In conjunction with the review required by section 4.2.5.1.2, the Town will review existing policies; planning, zoning and subdivision regulations; and ordinances to determine their effectiveness in managing construction-related erosion and sediment and controlling waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at construction sites that may cause adverse impacts to water quality. The policies, regulations, and ordinances must also be reviewed for their consistency with the requirements of the Secretary's general permits for stormwater runoff from large and small construction sites. The Town may adopt requirements that complement or are more stringent than the requirements of the Secretary.

As part of its permit, the Town has reviewed and by May 2008 will have amended, as necessary, existing policies, zoning and subdivision regulations, and ordinances to determine their effectiveness in managing construction-related erosion and sediment and controlling waste.

4.2.4.1.5 The Town must adopt an erosion control ordinance, planning, zoning and subdivision regulation, or other regulatory mechanism at a minimum for development activities not subject to state or federal erosion control requirements.

As part of its permit, and following the review described in 4.2.4.1.4, the Town is in the process of updating our zoning and subdivision regulations, and has adopted language to address this requirement. The Town has completed amendment of our Public Works Specifications for development activities not subject to state or federal erosion control requirements.

4.2.4.2 Decision process.

The Town's decision process for the development of a construction site storm water control program is addressed below.

4.2.4.2.1 Mechanism that Town will use to require erosion and sediment controls at construction sites and basis for choosing that mechanism.

The Town of Shelburne intends by May 2008, to have amended the Shelburne Zoning and Shelburne Subdivision Bylaws, and has completed amendment of Shelburne Public Works standards to address the requirements of this section. Amendment of the bylaws has been identified as the preferred mechanism because virtually all land development (except for some agriculture related land development) taking place in the Town is subject to one or both of these regulations. Amendment of the Public Works standards for public facilities has been identified as a preferred mechanism because the subject and jurisdiction of the standards corresponds closely with requirements of this section.

4.2.4.2.2 Procedures for site inspection and enforcement of control measures, including how Town will prioritize sites for inspection and how Town will assist the Agency in identifying and inspecting projects subject to the Agency's construction general permits.

The Town of Shelburne has developed procedures for site inspection in connection with the amendment of the Shelburne Public Works standards. The Town has developed procedures for enforcement of control measures in connection with the aforementioned amendment of the Zoning and Subdivision Bylaws. As noted below, the prioritization of sites for inspection and development of enforcement of control measures will be the focus of a specific task undertaken by the Town.

4.2.4.2.3 Responsibility for overall management and implementation of construction site storm water control program and, if different, responsibility for each of the BMPs identified for this program.

The person responsible for Implementation is Paul Bohne, Town Manager. The persons responsible for Coordination are Dean Pierce, Director of Planning, and Bernard Gagnon, Director of Public Works.

Bylaw amendment

Coordination: Dean Pierce

Development of procedures for site inspection, enforcement of control measures

Coordination: John Adams and Bernard Gagnon

Training of Field Inspectors

Coordination: Bernard Gagnon

Training of Plan Reviewers

Coordination: Bernard Gagnon

Review of Site Plans for Erosion and Sediment Controls

Coordination: Bernard Gagnon

Receive Information from the Public

Coordination: Dean Pierce and Bernard Gagnon

Inspection of construction sites

Coordination: Bernard Gagnon

4.2.4.2.4 Evaluation of the success of this minimum measure

The Town of Shelburne will evaluate the success of its regulation of erosion and sediment controls at construction sites at the end of the permit period. The Town will attempt to identify the impact of its regulation of erosion by analyzing water quality data collected by the State of Vermont, the University of Vermont, the Champlain Water District, and

others. (The Town does not at this time intend to develop its own comprehensive water quality sampling program.)

Other ways the Town will evaluate the success of this measure is by tracking the following indicators:

- Number of erosion-related complaints reported by residents and others;
- Number of projects and involved land area (acres) subject to erosion and sediment controls;
- Number of erosion-related public comments citing improvement in water quality;
- Policy development activities (i.e., review of existing policies, adoption of new policies, and implementation of policies).

Narrative for Permit

Description of BMP to be implemented:

Bylaw Amendment

The Town of Shelburne has developed and is adopting, through bylaw amendment and expansion of local public works standards, an erosion and sediment control mechanism in compliance with permit requirements. The jurisdiction of these new local regulations include all land development activities subject to local land use regulatory review.

It is the Town's intent that, under the amendments, larger projects, specifically construction activities meeting the one-acre and five-acre regulatory thresholds established by General Permit 3-9020 (2008) and General Permit 3-9001 (2003) will be referred to the Agency of Natural Resources. Construction projects resulting in a land disturbance of equal to or greater than one acre that do not qualify for coverage under one of these general permits will be referred to the Agency of Natural Resources for an individual NPDES permit.

It is also the Town's goal that, instead of adopting its own program to regulate stormwater runoff from construction activities that meet the requirements of 40 C.F.R 122.34(b)(4), it will obtain coverage under this general permit by developing and implementing a program to assist the Secretary in the Agency's regulation of such discharges. To that end, the amended regulatory structure includes elements indicating the Town of Shelburne's willingness to assist the Secretary by:

- Including procedures to identify construction activities meeting the one-acre and five-acre regulatory thresholds and to report such activities to the Secretary to assure that all such projects are properly permitted; and
- Randomly inspecting state-permitted development and redevelopment projects for compliance with the conditions of their permits (with inspection limited to inspecting for obvious signs of noncompliance such as eroding soils, turbid water, structural deficiencies, catch basins in need of cleaning and other readily observable

problems; the Town will only report suspected violations to ANR and not initiate an independent enforcement action).

The Town has evaluated, and where necessary (to establish an appropriate level of consistency between local, state, and federal requirements) amended, erosion control requirements (in the current zoning bylaw, subdivision bylaw, and public works standards) that pertain to land development not subject to state or federal erosion control requirements.

Development of procedures for site inspection, enforcement of control measures:

As part of a dedicated planning effort, the Town of Shelburne has developed procedures relating to site inspections and enforcement of control measures. At present, such procedures include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, the characteristics of soils, and receiving water quality (as determined by ongoing and/or historic monitoring conducted by the Agency of Natural Resources, UVM, and others).

Training of Reviewers and Inspectors

The Town of Shelburne trains Field Inspectors and, if necessary, Plan Reviewers charged with responsibility for this series of BMPs (plan review activities may continue to be conducted by outside consulting engineers who assist the Town). Training will continue to be provided by outside consultants or via recognized training programs.

Review of Site Plans

The Town of Shelburne will review site plans for compliance with Erosion and Sediment Control requirements. Procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements and for classification of projects that would be subject to state/federal review.

Factors to be verified during the site plan review process include:

- **The plan meets all local erosion and sediment control requirements;**
- **The construction operator is aware of their responsibility for implementing and maintaining erosion and sediment controls, and is aware of the penalties for failing to do so;**
- **Erosion and sediment controls are consistent with the VT-ANR Regulations and Guidelines for Erosion and Sediment Control and are planned and clearly described on the plan;**
- **Post-construction controls consistent with the VT-ANR Regulations and Guidelines for Erosion and Sediment Control are planned and clearly described on the plan;**
- **The construction operator and landowner are aware of the responsibility for implementing and maintaining the post-construction controls, and are aware of the penalties for failing to do so.**

Prior to construction, a pre-construction site plan meeting between the Town and the construction operator may be required to ensure that both parties are comfortable with the plan and requirements.

Receive Information from the Public

The Town of Shelburne has created a web-based system for receiving information from the Public regarding erosion control and illicit discharge problems. The Town also receives comments by telephone and appropriate stormwater contacts are listed on our website.

Inspection of construction sites

The Town of Shelburne has developed a system for the inspection of construction sites regulated by bylaw amendments and modification of standards. Inspection frequency is based on prioritization criteria.

BMPs and Timeframe.

BMPs associated with this task have been implemented and work is on-going.

Person/persons responsible for Implementation/ Coordination.

As noted above, the person responsible for Implementation is Bernard Gagnon, Town Director of Public Works. The persons responsible for Coordination are Dean Pierce, Director of Planning, and Bernard Gagnon, Director of Public Works.

Measurable Goals for BMPs:

The measurable goals for BMPs associated with this task are as follows.

Bylaw and Standards amendment

In progress. Zoning Bylaws are in progress and expected to be completed by May 2008. Public hearings have been completed by the Planning Commission. Public Works specifications are complete.

Development of procedures for site inspection, enforcement of control measures

Completed.

Training of Plan Reviewers and Field Inspectors

The Town's Measurable Goal is for this BMP is to conduct annual refresher training supplemented by periodic specialty training, including participation in RSEP municipal employee training.

Review of Site Plans for Erosion and Sediment Controls

The Town's Measurable Goal is for this BMP is to review site plans and require State permits, as required, for sediment and erosion control.

Receive Information from the Public

The Town's Measurable Goal is for this BMP is to establish a web based system for receiving comments, which is complete, and to maintain this system through the permit period.

Inspection of construction sites

The Town's Measurable Goal is for this BMP is to continue the inspection of construction sites through the permit period.

As noted above, ways the Town will evaluate the success of this measure is by tracking the following indicators:

- Number of erosion-related complaints reported by residents and others;
- Number of projects and involved land area (acres) subject to erosion and sediment controls;
- Number of erosion-related public comments citing improvement in water quality;
- Policy development activities (i.e., review of existing policies, adoption of new policies, and implementation of policies).

4.2.5 Post-Construction Storm Water Management in New Development and Redevelopment

4.2.5.1 Permit requirement.

4.2.5.1.1 Pursuant to EPA rules the Town must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects (post construction) that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Town's MS4.

Pursuant to 10 V.S.A. §§ 1263 and 1264 and Agency rules and procedures adopted thereunder, the Secretary is required to regulate stormwater runoff from construction activities that result in creation of new or expansion of old impervious surface of greater than one acre. *State stormwater permits for post-construction stormwater management do not cover new development and redevelopment projects that disturb greater than or equal to one acre of land but that have less than one acre of impervious surface.*

In order to qualify for coverage under the general permit the Town of Shelburne must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Town of Shelburne's MS4 from construction activities that result in a land

disturbance of greater than or equal to one acre and that have less than one acre of impervious surface and assist the Secretary in the regulation of construction activities that result in a land disturbance of greater than or equal to one acre and that have an one acre or more of impervious surface.

4.2.5.1.2 In conjunction with the review required by section 4.2.5.1.4, the Town must review existing policies; planning, zoning and subdivision regulations; and ordinances to determine their effectiveness in managing stormwater runoff that discharges into the Town's MS4 from new development and redevelopment projects to prevent adverse impacts to water quality. The policies, regulations, and ordinances must also be reviewed for their consistency with the requirements of the Secretary's rules and general permits regulating stormwater runoff from new development and redevelopment projects that have one or more acres of impervious surface.

As part of its permit, the Town has reviewed existing policies, zoning and subdivision regulations, and ordinances to determine their effectiveness in managing post construction-related erosion and sediment and controlling waste, and their consistency with State Rule.

4.2.5.1.3 The Town must develop and implement procedures to identify new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, and to report to the Secretary such activities that have one or more acres of impervious surface.

The Town is in the process of developing such procedures in its Zoning regulations and Subdivision Bylaws, and has completed revision of its Public Works Specifications.

4.2.5.1.4 For stormwater runoff that discharges into the Town's MS4 from new development and redevelopment projects that disturb greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale) and that have less than one acre of impervious surface the Town must adopt an ordinance, planning, zoning and subdivision regulation, or other regulatory mechanism that:

4.2.5.1.4.1 Prevents or minimizes water quality impacts from stormwater runoff from such developments; and

4.2.5.1.4.2 Utilizes a combination of structural and/ or non-structural best management practices (BMPs) which are appropriate for your community and consistent with the Agency's 2002 Vermont State Stormwater Management Manual (and any amendments thereto); and

4.2.5.1.4.3 Ensures adequate long-term operation and maintenance of BMPs.

As part of its permit, and following the review described in 4.2.5.1.2, the Town is in the process of adopting zoning and subdivision regulations, and has completed adoption of public works specifications for development activities that result in a land disturbance of greater than or equal to one acre and that have less than one acre of impervious surface. As appropriate, the amendments have incorporated state standards by reference.

4.2.5.1.5 For stormwater runoff that discharges into the Town's MS4 from new development and redevelopment projects that disturb greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale) and that have more than one or more acres of impervious surface the Town must:

4.2.5.1.5.1 Develop and implement procedures to assist the Secretary in inspecting permitted development and redevelopment projects for compliance with the conditions of their permits. In conducting such inspections Town staff will not be expected to be familiar with the post-construction stormwater control plans submitted to the Secretary by the permittee. However, Town staff should inspect for obvious signs of noncompliance such as eroding soils, turbid water, structural deficiencies, catch basins in need of cleaning and other readily observable problems. The Town will only be expected to report suspected violations to ANR and not to initiate an independent enforcement action. Town staff is encouraged to attend training programs on post-construction stormwater management conducted by the Secretary.

The Town has developed such procedures.

4.2.5.1.5.2 Develop and implement procedures to assure that development and redevelopment activities undertaken by you, including road projects, are properly permitted and constructed and maintained in accordance with the terms of the permit.

The Town has developed such procedures

4.2.5.2 Decision process.

4.2.5.2.1 What are the mechanisms (ordinance or other regulatory mechanisms) the Town will use to address post-construction runoff from new developments and redevelopments that result in a land disturbance of greater than or equal to one acre and that have less than one acre of impervious surface and why did the Town choose that mechanism. If the Town needs to develop a mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.

The Town of Shelburne is in the process of adopting post-construction stormwater runoff procedures by amending the Shelburne Zoning and Subdivision Bylaws, and has completed amendment of Shelburne Public Works standards to address the requirements of this section. Amendment of the bylaws has been identified as the preferred mechanism because virtually all land development (except for some agriculture related land development) taking place in the Town is subject to one or both of these regulations.

4.2.5.2.2 How the Town will ensure the long-term operation and maintenance (O& M) of the selected BMPs. Options to help ensure that future O& M responsibilities are clearly identified include an agreement between the Town and another party such as the post-development landowners or a stormwater utility.

The Town of Shelburne will require all new stormwater detention/retention practices and stormwater quality devices to be maintained by the property owner. This is accomplished

by including a maintenance requirement in the local ordinance, bylaws, and specifications. In addition, owners or developers of property will be required to sign a maintenance agreement before final permits are issued. This agreement will require the property owners to submit annual forms certifying that an inspection and any necessary maintenance have been completed. In addition, in some cases, the Town will directly take over the system as public infrastructure and become the permittee responsible for inspection, O & M, and compliance.

The need for maintenance of facilities associated with existing development will be addressed via the administration of local subdivision, zoning, and site plan approvals that pertain to such facilities. At a minimum, unperformed maintenance will be brought to the attention of parties prior to closings involving the sale of properties subject to such local approvals.

4.2.5.2.3 The Town's procedures for site inspection and enforcement of control measures, including how the Town will prioritize sites for inspection and how the Town will assist the Agency in identifying and inspecting projects subject to the Agency's post-construction stormwater permits.

The Town of Shelburne has developed procedures for site inspection in connection with an amendment to the Shelburne Public Works standards. The Town has developed procedures for enforcement of control measures in connection with the aforementioned amendment of the Zoning and Subdivision Bylaws. The prioritization of sites for inspection and development of enforcement of control measures will be the focus of a specific task undertaken by the Town.

4.2.5.2.4 Who is responsible for overall management and implementation of your post-construction storm water management program and, if different, who is responsible for each of the BMPs identified for this program.

The person responsible for Implementation is Bernard Gagnon, Town Director of Public Works. The persons responsible for Coordination are Dean Pierce, Director of Planning, and Bernard Gagnon, Director of Public Works.

Bylaw amendment

Coordination: Dean Pierce

Develop a Plan to Address Post-Construction Runoff and Program to ensure the long-term O&M of structural stormwater BMPs

Coordination: Bernard Gagnon

Training of Field Inspectors

Coordination: Bernard Gagnon

Train of Plan Reviewers

Coordination: Bernard Gagnon

Review of Site Plans for Erosion and Sediment Controls
Coordination: Bernard Gagnon

Inspection of construction sites
Coordination: Bernard Gagnon

4.2.5.2.5 How Town will evaluate the success of this minimum measure, including how Town selected the measurable goals for each of the BMPs.

The Town of Shelburne evaluate the success of its regulation of post construction erosion and sediment controls at the end of the permit period. The Town will attempt to identify the impact of its regulation of erosion by analyzing water quality data collected by the State of Vermont, the University of Vermont, and others. The Town does not at this time commit to the development of its own comprehensive water quality sampling program.

Description of BMPs to be implemented:

The Town of Shelburne has developed and adopted, through bylaw amendment and expansion of public works standards, erosion and sediment controls in compliance with the State of Vermont requirements for control of stormwater and erosion post-construction. The jurisdiction of these new local regulations includes, at a minimum, all construction activities “that result in a land disturbance of greater than or equal to one acre and that have less than one acre of impervious surface.” However, it is the Town’s intent that larger projects, specifically “construction activities that result in a land disturbance of greater than or equal to one acre and that have an one acre or more of impervious surface” will be referred to the Agency of Natural Resources. As appropriate, the amendments incorporate state standards by reference.

With respect to stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale) and that have less than one acre of impervious surface, the Town’s amended regulatory structure includes elements to:

- **Prevent or minimize water quality impacts from stormwater runoff from such developments; and**
- **Utilize a combination of structural and/ or non-structural best management practices (BMPs) which are appropriate for Shelburne and consistent with the Agency's 2002 Vermont State Stormwater Management Manual (and any amendments thereto); and**
- **Ensure adequate long-term operation and maintenance of BMPs.**

With respect to stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale) and that have more than one or more

acres of impervious surface, the amended regulatory structure includes elements indicating the Town of Shelburne's willingness to assist the Secretary by:

- Occasionally inspecting state-permitted development and redevelopment projects for compliance with the conditions of their permits (with inspection limited to inspecting for obvious signs of noncompliance such as eroding soils, turbid water, structural deficiencies, catch basins in need of cleaning and other readily observable problems; the Town will only report suspected violations to ANR and not initiate an independent enforcement action);
- Developing and implementing procedures to assure that development and redevelopment activities undertaken by the Town, including road projects, are properly permitted and constructed and maintained in accordance with the terms of the permit.

Post-Construction Runoff Control Plan

The Town of Shelburne has developed a Plan to address post-construction runoff during the plan review, construction inspection, and post-construction maintenance inspection process. In development of the plan, key water quality and water quantity issues in the Town have been considered, as are existing flood management and stormwater planning strategies. Also, plan review processes have been examined to identify opportunities to integrate post-construction controls. For example, new developments undergoing plan review for control of construction related runoff provide an opportunity to reduce impervious surfaces or incorporate swales, drywells or other BMPs.

As part of the Plan, a program to ensure the long-term O&M of structural stormwater BMPs has been developed. (This requirement only applies to new BMPs installed as part of new construction; existing BMPs installed prior to the effective date of the Phase II stormwater program are not specifically addressed.) The post-construction O&M program includes the development of the following elements:

- Requirements for private property owners to maintain facilities;
- Database of structural BMPs;
- Inspection procedures, including a schedule for conducting inspections; and
- Inspection form.

Training

The Town will continue to arrange to provide training or coordinate with existing training efforts to educate--when warranted as a result of a lack of training or professional experience--construction plan reviewers and field inspectors on post- construction runoff control BMPs and maintenance standards.

Site Plan Review

Town staff and/or consultants will review site plans prior to construction to ensure that they include post-construction controls in compliance with relevant regulations. As part of this review, the Town will require submittal of information pertaining to the proper operation and maintenance of storm drain components and BMPs.

Inspections

Town staff and/or others will inspect priority structural post-construction BMPs for compliance with operation and maintenance (O&M) standards.

BMPs and Timeframe.

Implementation of BMPs associated with this task has been or will be shortly completed.

Person/persons responsible for Implementation/ Coordination.

The person responsible for Implementation is Paul Bohne, Town Manager. The persons responsible for Coordination are Dean Pierce, Director of Planning, and Bernard Gagnon, Director of Public Works.

Measurable Goals for BMPs:

The measurable goals for BMPs associated with this task are as follows.

Bylaw Amendment

In progress. Zoning Bylaws are in progress and expected to be completed by May 2008. Public hearings have been completed by the Planning Commission.

Develop a Plan to Address Post-Construction Runoff and Program to ensure the long-term O&M of structural stormwater BMPs

Completed.

Training for Plan Reviewers and Field Inspectors

Completed. Refresher training will be on-going at least annually.

Site Plan Review for Post-Construction BMPs

Implemented and on-going.

Inspections of Structural Post-Construction BMPs

Implemented and continuing through the permit period.

4.2.6 Pollution Prevention/ Good Housekeeping for Municipal Operations

The Town recognizes that by implementing good housekeeping and pollution prevention procedures, employees can ultimately reduce stormwater pollutants and save the municipality money over time. Preventing litter and other debris from entering the system can reduce damage to the system and reduce the need for expensive, time-consuming repairs and maintenance.

4.2.6.1 Permit requirement.

4.2.6.1.1 The Town must describe the operation and maintenance program for preventing or reducing pollutant runoff from municipal operations, including, at a minimum: new construction and land disturbance and maintenance of fleet and buildings, parks, open space, and stormwater systems. The program must include a training component, maintenance schedules, and inspection procedures for long term structural controls.

At present, the Town does not have a formal operation and maintenance program for preventing or reducing pollutant runoff from municipal operations. It is the Town's intention to achieve compliance through participation in the Agency's Municipal Compliance Assistance Program or another facility audit program approved by the Secretary.

4.2.6.1.2 Compliance with this measure may be achieved by participation in the Agency's Municipal Compliance Assistance Program or the EPA's self-audit initiative or another facility audit program approved by the Secretary.

See above.

4.2.6.1.3 The Town must provide a list of industrial facilities own or operated by the Town that affect your MS4 and are subject to an individual NPDES Multi-Sector Permit or the Agency's General Permit 3-9003 Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity.

Not Applicable. No Town facilities are currently subject to a Multi-Sector General Permit.

Include the NPDES permit number or a copy of the Industrial NOI form for each facility. A Stormwater Pollution Prevention Plan prepared for an industrial facility that you own or operate which is in compliance with the requirements of an individual NPDES permit or the MSGP satisfies the requirements of this section 4.2.6 for that facility.

See note above.

4.2.6.2 Decision process. The Town must document its decision process for the development of a pollution prevention/ good housekeeping program for municipal operations. The Town's rationale statement must address both your overall pollution prevention/ good housekeeping program and the individual BMPs, measurable goals, and responsible persons for your program. *The rationale statement must include the following information, at a minimum:*

4.2.6.2.1 The Town's operation and maintenance program to prevent or reduce pollutant runoff from your municipal operations. The Town's program must specifically list the municipal operations that are impacted by this operation and maintenance program.

The Town will annually report statistics on catch basin pumping and street sweeping operations (i.e. frequency, gallons/pounds removed, etc.)

4.2.6.2.2 The Town's program description should address the following areas:

4.2.6.2.2.1 Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4.

4.2.6.2.2.2 Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/ sand storage locations and snow disposal areas you operate.

4.2.6.2.2.3 Procedures for the proper disposal of waste removed from your MS4 and your municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris.

The Town has developed such a program which also addresses the requirements associated with developing the storm water management program (SWMP) specified in 3.1.2.1

4.2.6.2.3 Who is responsible for overall management and implementation of your pollution prevention/ good housekeeping program and, if different, who is responsible for each of the BMPs identified for this program.

The person responsible for Implementation is Paul Bohne, Town Manager. The person responsible for Coordination is: Bernard Gagnon, Director of Public Works; Dean Pierce, Director of Planning.

4.2.6.2.4 How the Town will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The Town of Shelburne will evaluate the efficacy of its housekeeping and Pollution prevention activities at the end of the permit period. The Town will attempt to identify the impact of its practices by analyzing water quality data collected by the State of Vermont, the University of Vermont, and others. The Town does not at this time commit to the development of its own comprehensive water quality sampling program.

Description of BMPs to be implemented:

Operation and Maintenance (O&M) Plan

As the permittee, it is important that a municipality's own operations minimize contamination of stormwater discharges and serve as a model for the entire regulated area. Municipal operations can contribute significant amounts of pollutants to stormwater. As part of its permit, the Town has developed and will continue to enhance and implement a municipal O&M Plan that addresses pollution prevention and good housekeeping procedures for the following municipal activities:

- **Park and Open Space Maintenance**
- **Fleet and Building Maintenance**
- **New Construction and Land Disturbances**
- **Stormwater System Maintenance**
- **Roads, Highways, and Parking Lot Maintenance**

Park and Open Space Maintenance

Park and open space areas can contribute pesticides, herbicides, fertilizers, litter, and sediment to the storm drainage system if they are not properly maintained, or if municipal staff do not carry out maintenance activities in an efficient manner. As part of its permit, the Town agrees to implement park and open space maintenance pollution prevention/good housekeeping practices in accordance with the O&M plan.

Vehicle and Equipment Washing

Spills and leaks not contained during repairs and fueling can contribute gasoline, oil, and grease to the storm drainage system. As part of its permit, the Town agrees to implement publicly-owned vehicle and equipment washing pollution prevention/good housekeeping practices in accordance with the O&M plan cited above.

Road and Highway and Parking Lot Maintenance, Street Sweeping, and Stormwater system maintenance

Roads and other paved areas collect pollutants such as heavy metals, oil and grease, sediment, and litter from vehicles and motorists. These materials collect and wash into the storm drainage system during the "first flush" of a rain event. As part of its permit, the Town agrees to implement catch basin cleaning and stormwater system maintenance pollution prevention/good housekeeping practices (e.g., culvert clearing) in accordance with the O&M plan cited above. It also agrees to implement street sweeping, salting, and snow removal pollution prevention/good housekeeping practices for roads, highways, and parking lots in accordance with the plan.

Employee Training on O&M Plan Implementation

As part of its permit, the Town agrees to conduct employee training on the procedures contained in the O&M plan.

BMPs and Timeframe.

BMPs associated with this task have been completed.

Person/persons responsible for Implementation/ Coordination.

The person responsible for Implementation is Paul Bohne, Town Manager. The person responsible for Coordination is: Bernard Gagnon, Director of Public Works.

Measurable Goals for BMPs:

The measurable goals for BMPs associated with this task are as follows.

Operation and Maintenance (O&M) Plan

Completed.

Park and Open Space Maintenance

The Town's Measurable Goal is for this BMP is to implement all pollution prevention/good housekeeping practices for park and open space maintenance at all park areas and other open spaces maintained by the jurisdiction.

Vehicle and Equipment Washing

The Town's Measurable Goal is for this BMP is to conduct all vehicle and equipment washing in a self-contained covered building or a designated wash area that meets the required criteria.

Stormwater System Maintenance

The Town's Measurable Goal for this BMP is to inspect and maintain, as needed, catch basins and other stormwater system facilities based on a schedule described in the O&M plan (bi-annually).

Road and Highway and Parking Lot Maintenance and Street Sweeping:

The Town's Measurable Goal is for this BMP is to continue to implement required procedures on roads, highways, and parking lots.

Employee Training on O&M Plan Implementation

The Town's Measurable Goal is for this BMP is, for all employees involved in stormwater management or municipal maintenance, to receive ongoing training on the procedures in the O&M plan.