southburlington
VERMONT

Stormwater Management Plan

City of South Burlington, Vermont

South Burlington
Stormwater Utility

6/3/2013

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Introduction

This Stormwater Management Plan (SWMP) documents the City of South Burlington's strategy to address and reduce the impacts of stormwater runoff. The preparation of this plan is required by the Vermont Municipal Separate Storm Sewer System (MS4) permit number 3-9014 issued by the Vermont Department of Environment al Conservation (DEC) on December 5, 2012. This plan contains all the required elements described in the 2012 Vermont MS4 permit and is intended to minimize the adverse impact that unmanaged stormwater runoff from the City of South Burlington can have on water quality.

Impacts of Stormwater

The impervious surfaces created by the buildings and pavement that make up our urban areas causes rainwater and snowmelt to flow quickly over the landscape rather than soak naturally into the soil. This can lead to changes in stream flow, increase flooding, damage private and public property, erode stream banks, and destroy aquatic habitat. As runoff flows over impervious surfaces it can collect pollutants such as sediment, petroleum products from automobiles, nutrients from lawn fertilizer, trash, bacteria from pet waste, soaps, detergents, and other chemicals. These pollutants are then carried by runoff to lakes and streams. The combined impacts of hydrologic change in streams and water pollution can have serious negative impacts for water bodies.

Municipal Background

The City of South Burlington is located in the northwest corner of Vermont along the shores of Lake Champlain (Figure 1). The City covers 29.6 square miles and includes numerous commercial enterprises that are critical to Vermont and the region, including the Burlington International Airport. During the 1960's South Burlington was the fastest growing municipality in the State of Vermont. The City has continued to grow since that time and with a population of 18,017 (2010 census data) is one of Vermont's largest municipalities.

Watershed Descriptions

All of South Burlington drains to Lake Champlain (Figure 2). Runoff from the City reaches the lake via the Winooski River and its tributaries, or small streams that drain directly to the Lake (Figure 3).

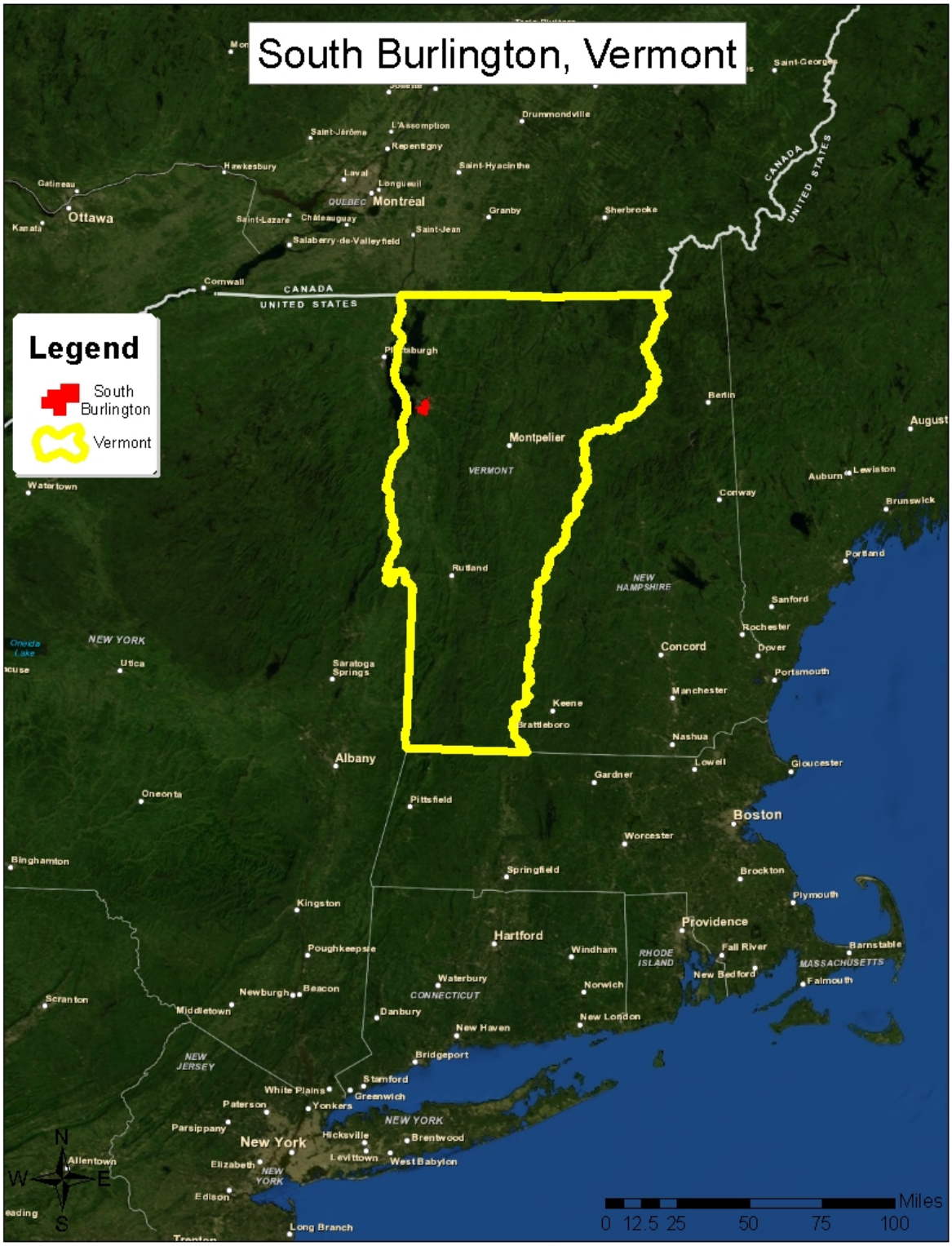

Figure 1 – City of South Burlington Vermont Location Map

Figure 2 - South Burlington Watershed Summary Information

Watershed	Total Watershed Drainage Area (Acres)	Drainage Area in South Burlington (Acres)	Watershed Impervious Area (Acres)	Total Number of Stormwater Outfalls in the Watershed	Number of South Burlington Owned Stormwater Outfalls in the Watershed	303(d) Listed Pollutants
Lake Champlain (Citywide)	5,269,760	10,640	1,965	490	202	Phosphorus
Winooski River	691,200	4,436	646	107	64	Mercury
Muddy Brook	13,594	2,384	192	35	18	Nutrients, Temperature
Potash Brook	4,673	4,511	968	315	112	Stormwater, E. coli
Bartlett Brook	704	667	134	56	19	Stormwater
Centennial Brook	884	587	153	36	20	Stormwater
Munroe Brook	3,540	327	19	4	4	Stormwater
Englesby Brook	609	91	32	0	0	Stormwater, E. coli
North Brook	218	218	91	0	0	None
Lakeshore Direct Drainages	661	384	74	8	3	None

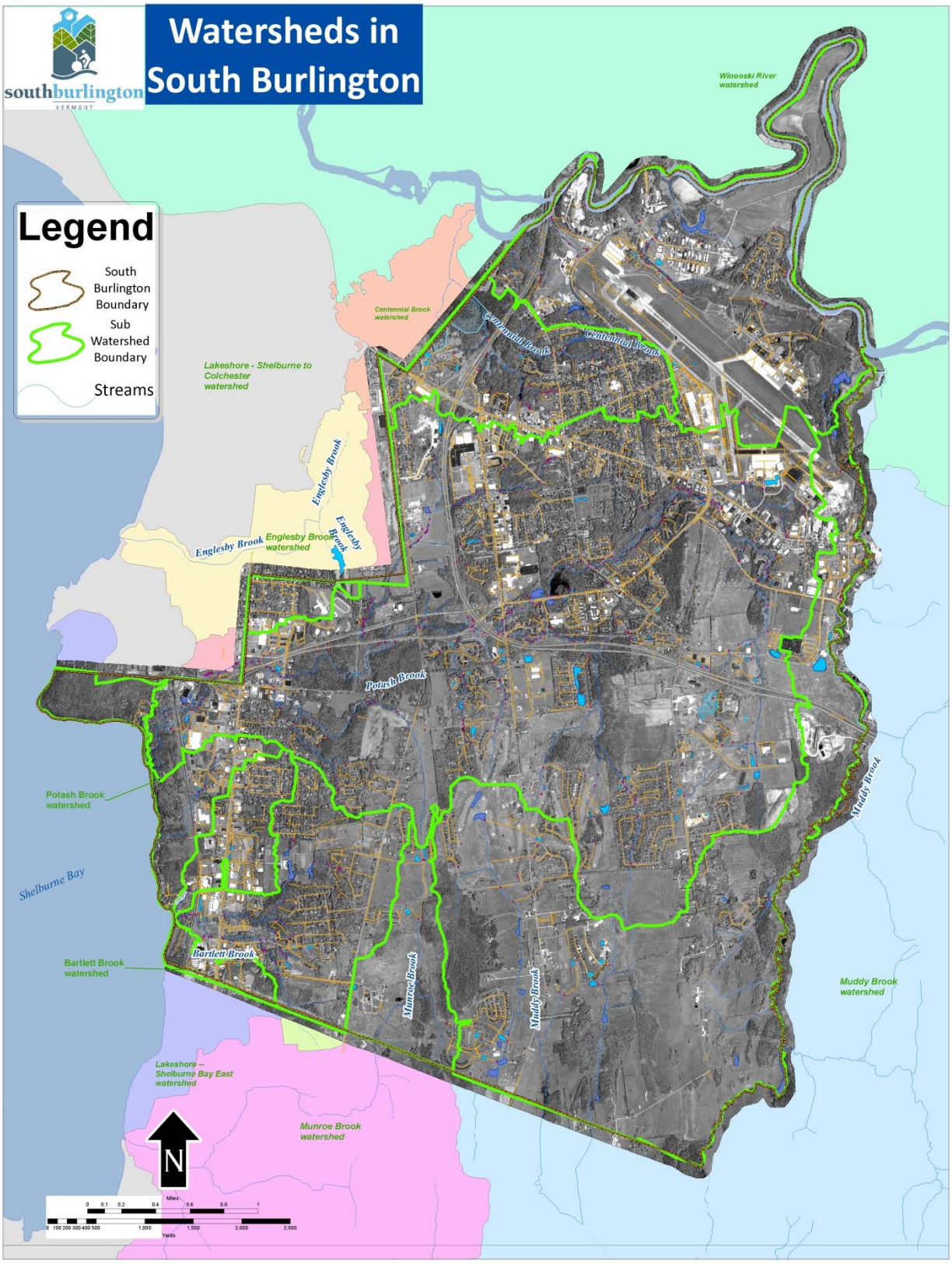

Figure 3 - Map of South Burlington Watersheds

Stormwater Management Program

The MS4 permit is a federally mandated stormwater permit under the National Pollutant Discharge Elimination Systems (NPDES) program. In Vermont, the MS4 permit program is administered by the Vermont Agency of Natural Resources (ANR). The MS4 permit is issued by ANR for a five year period. The primary mechanism by which the City of South Burlington meets requirements of the MS4 permit is through the activities of the South Burlington Stormwater Utility.

Stormwater Discharges

The MS4 permit authorizes discharges of stormwater to enter waters of the State and waters of the United States. The following non-stormwater discharges are allowed to co-mingle with discharges of stormwater provided they are not substantial contributors of pollution to the MS4:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Flows from riparian habitats and wetlands, and
- Discharges from firefighting activities.

Any discharge to the City's MS4 that is not contained in the above list, or covered under a separate NPDES permit, will be treated as illicit discharges and dealt with according to requirements of the MS4 permit and regulations established in City ordinance.

Stormwater Utility Description

The City of South Burlington was the first municipality in Vermont to create a Stormwater Utility. The Utility was created in order to address increasing environmental problems and regulatory requirements associated with stormwater runoff. The South Burlington Stormwater Utility (SBSU) is a division of the Department of Public Works (DPW) and its operation is overseen by the Deputy Director of Public Works, who is also designated as the Stormwater Superintendent. The SBSU collects fees from all developed property in the City. This funding is used to manage the City's stormwater program.

Additional information on the SBSU can be found on line at www.sburlstormwater.com or by calling (802) 658-7961.

Six Minimum Measures and Measurable Goals

Much of the SBSU's time is spent complying with the MS4 permit requirements called the "six minimum measures". These measures include:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping.

The MS4 permit requires that the City identify Best Management Practices (BMPs) by which it will achieve the goals of each minimum measure. The City must also provide a rationale regarding why each BMP was selected and a measureable goal for each BMP.

Public Education and Outreach on Stormwater Impacts

In order to comply with minimum measure 1, Public Education and Outreach, the City must implement a public education program that distributes educational materials to the community. In order to meet this requirement the City will take the following steps:

- Maintain a website dedicated to stormwater management – The City previously created a web site (www.sburlstormwater.com) dedicated to stormwater management in South Burlington. The site has proven to be an excellent way for the City to communicate directly with the public on topics related to stormwater, including updates on stormwater improvement projects. Use of the web site will be continued.
    - Measureable Goal: The City's annual report will contain information on web site visitors and other web statistics.
- Participate in the Regional Stormwater Education Program (RSEP) – The Vermont MS4 communities previously worked together to create the RSEP program. The RSEP combines the resources of multiple MS4 communities to create and distribute educational materials related to stormwater. RSEP is able to distribute this information to a wider audience than any municipality could reasonably achieve on its own. The City is a signatory on the RSEP Memorandum of Understanding (MOU) that runs from 2013 to 2018 (Appendix A).
    - Measureable Goal: The City will continue to participate on the RSEP steering committee and make payments in accordance with the terms of the MOU. The City will provide a summary of RSEP activities, RSEP web site statistics (www.smartwaterways.org), and a total of the City's cash contributions to the RSEP program on an annual basis.

Public Involvement and Participation

In order to comply with minimum measure 2, Public Involvement and Participation, the City must implement a public involvement/participation program designed to engage the public in stormwater issues. In order to meet this requirement the City will take the following steps:

- Participate in the Chittenden County Stream Team (CCST) program - The CCST program leverages the resources of multiple communities to create a more engaging public participation program than any single municipality could reasonably achieve on its own. The City will continue to participate on the CCST steering committee and make payments in accordance with the terms of the CCST MOU (Appendix B). More information on the CCST can be found on-line at: http://www.ccstreamteam.org/
    - Measureable Goal: The City will report annually on CCST activities including the number of volunteers that participated in stormwater related events and a total of the City's cash contributions to the CCST program.

- Storm drain stenciling program - The City previously established a storm drain stenciling program. As part of this program, metal markers that contain a "No Dumping" or similar water quality message are affixed to the storm drain grates. In some cases, the asphalt adjacent to the storm drain is painted with a similar message. These "stencils" will be installed/painted by SBSU staff and public volunteers whenever possible.
    - Measureable Goal: The City will continue its storm drain stenciling program and report the number of new "no dumping" labels put in place on an annual basis.

Illicit Discharge Detection and Elimination

In order to comply with minimum measure 3, Illicit Discharge Detection and Elimination (IDDE), the City must develop, implement, and enforce a program to detect and eliminate non-stormwater discharges that may be entering the MS4. In order to meet this requirement the City will take the following steps:

- Maintain a storm sewer systems map – Knowing the location and type of structures that make up the City's storm sewer system is critical to its maintenance. The City previously developed a Geographic Information System (GIS) based map of stormwater infrastructure located in South Burlington. The SBSU will continue to maintain and improve this information and make it available upon request.
    - Measureable Goal: The City's annual report will contain information on the number of stormwater drainage structures, miles of stormwater conveyance, and stormwater outfalls that are located in South Burlington. Digital versions of the map will be made available upon request.
- Conduct video inspections of the storm sewer system – The DPW previously purchased equipment that enables us to complete video inspections of our underground pipe systems. While above ground inspections are still a valuable tool, a proactive underground pipe inspection program will allow the SBSU to find maintenance issues or illicit connections that may otherwise have gone unnoticed until they resulted in a serious problem.

- Measureable Goal: The City will continue its video inspection program and report the linear feet of pipe inspected each year.

- Conduct stormwater outfall inspections – Evaluating the water at stormwater outfalls allows the City to identify potential locations where illicit discharges may be entering the MS4. The City previously developed a program to inspect City owned stormwater outfalls and will continue this program. Should the City determine that there are significant water quality concerns at an outfall it will take proactive steps to identify the source of the problem. This may include video inspection of the upstream system or sample collection and analysis.
  - Measureable Goal: The City will inspect no less than 50% of its stormwater outfalls each year and report the number of inspections completed annually.
  - Measureable Goal: The City will report the number of outfall samples collected annually. Sample results will be made available upon request.
- Enforce existing ordinances regulating non-stormwater discharges to the MS4 –The City's "Ordinance Regulating the Use of Public and Private Sanitary Sewerage and Stormwater Systems" was last amended on March 21, 2005. The ordinance makes it clear that illicit discharges are not allowed to enter the stormwater system (see Article V Section 5).
  - Measureable Goal: The City will report the number of illicit discharges encountered each year and provide a summary of the discharge and actions taken to correct the situation.
  - Measureable Goal: The City will continue to enforce it existing ordinance.
  - Measureable Goal: The City will review its existing ordinance and make any updates required by the new permit within 2 years of authorization under the 2012 MS4 permit.
- Inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste – The City's stormwater web site has a section dedicated to detection and elimination of illicit discharges. Information on the site indicates how illicit discharges were successfully eliminated and describes the resulting benefits to water quality.
  - Measureable Goal: The City will dedicate a section on its stormwater website (http://www.sburlstormwater.com/stormwater-projects/) to illicit discharge detection and elimination success stories.
- Coordination with drinking water suppliers – The Champlain Water District (CWD) operates the potable water system within the City of South Burlington MS4 area. As part of their normal preventative maintenance procedures, the district must annually flush the lines and fire hydrants in the water system. This flushing is necessary to keep the pipes clean and prevent accumulation of silt and tuberculation in the pipes that would be stirred up during a hard use (e.g. firefighting) of the system. Regular flushing helps ensure the reliability of water system components and that customers receive high quality, sanitary potable water at their tap. The CWD has BMPs in place to ensure that their maintenance activities will not result in discharges to the MS4 that could contribute to water quality issues. Example BMPs include the use of a hydrant diffuser and dechlorinator, as applicable and positioning diffusers to prevent erosion when flushing hydrants.

- Measureable Goal: The CWD will continue to use BMPs to prevent pollution from entering the MS4. Before the end of the permit cycle the City will meet with CWD to review their BMPs relating to discharges of drinking water to the MS4. If necessary, improvements will be made to CWD BMPs.

Construction Site Stormwater Runoff Control

In order to comply with minimum measure 4, Construction Site Stormwater Runoff Control, the City must develop and enforce a program to reduce pollutants originating at construction sites from entering the MS4. The City recognizes construction site runoff control as a key means of protecting and improving surface water quality in South Burlington. Therefore, the City will assist the ANR in implementing requirements of the Construction General Permit (3-9020) and maintain its own standards related to construction erosion control. In order to meet this requirement the City will take the following steps:

- Implement local regulations related to erosion control – The City previously established standards dealing with erosion from all construction sites. These requirements are codified in Article 16 (Construction and Erosion Control Standards) of the Land Development Regulations (LDRs). Through this provision in the LDRs, the City has the authority to issue zoning violations and to pursue enforcement of construction and erosion control non-compliance on sites of all sizes in Vermont Environmental Court.
    - Measureable Goal: Continue to enforce the existing LDRs pertaining to Construction and Erosion Control Standards.
- Conduct construction site inspections – SBSU staff will be trained in the appropriate use of construction site BMPs and conduct inspections to ensure that construction contractors working in the City are implementing BMPs in compliance with local regulations and any State permits that their project may be subject to.
    - Measureable Goal: The City will report the number of construction site inspections it conducts each year.
- Distribute construction BMP handout – The City will develop a simple brochure that summarizes local regulations regarding stormwater runoff from construction sites. The brochure will also provide information on BMPs for construction sites and identify sources of additional information.
    - Measureable Goal: Before the conclusion of permit year 3 the City will develop a simple informational brochure that can be distributed to construction contractors working in the City.
    - Measureable Goal: After year 3 of the permit, the City will report the number of building permits and construction site BMP brochures it distributes each year.
- Assist the ANR with implementation of its Construction General Permit (3-9020) – The Vermont ANR has issued General Permit 3-9020 for stormwater runoff from construction activities which result in land disturbance of greater than 1 acre. The City will assist ANR with its implementation of this program.

- Measureable Goal: When a project will disturb greater than 1 acre of land the City will include in its findings of fact a note that we believe the project requires a State of Vermont Construction General Permit (3-9020). A summary of the projects in South Burlington that will exceed 1 acre of disturbance will be reported each year.

Post Construction Stormwater Management for New Development and Redevelopment

In order to comply with minimum measure 5, Post Construction Stormwater Management, the City must develop and enforce a program to control stormwater runoff from new and re-development projects. This goal is primarily achieved through the actions of the SBSU and it's staff. One of the SBSU's primary functions is to maintain STPs that were installed to manage post-construction stormwater runoff. In order to meet this requirement the City will take the following steps:

- Maintain a list of Stormwater Treatment Practices (STPs) maintained by the City – The SBSU maintains numerous STPs located throughout the City. In addition, the SBSU works with residential properties to take-over responsibility of existing STPs that have been reconstructed so that they meet current stormwater treatment standards. Maintenance of STPs by SBSU staff ensures that they will continue to operate to their maximum potential and meet any appropriate maintenance standards.
  - Measureable Goal: The City will maintain a list of the STPs for which it has maintenance responsibility. This list will be reported annually. In addition, the City will track the number of new STPs constructed by the City and the existing STPs that were transferred to the City and report this information annually.
- Inspection of City maintained STPs – The SBSU maintains numerous STPs located throughout the City. As part of normal maintenance activities, the City conducts inspections of these STPs to ensure that they are functioning properly. Some of these STPs are subject to State permits that also require inspections. In order to minimize efforts related to duplicative inspection and reporting requirements, inspection information for all City maintained STPs will be relayed to ANR as part of the MS4 annual report.
  - Measureable Goal: The City will inspect all STPs for which it has maintenance responsibility twice a year. The City will report the number of inspections conducted on an annual basis. The results of these inspections will be available upon request.
- Implement local regulations related to post-construction stormwater management - The City's Land Development Regulations (LDRs) include requirements for stormwater controls to minimize water quality impacts from runoff on projects of any impervious acreage, irrespective of the area disturbed. The City addresses these needs through the following requirements in the LDRs: Article 12 (surface water protection, including stream buffers), Article 14 (site plan review; includes trash management, snow storage areas, and landscaping standards), and Article 16 (construction and erosion control standards). These regulations apply City-wide to all new development, redevelopment and construction and are enforceable in Vermont Environmental Court.
  - Measureable Goal: Continue to enforce the stormwater management regulations contained in the LDRs.

- Measurable Goal: Before the conclusion of permit year 3, the City will evaluate the existing Stormwater Management Overlay district found in section 12.03 of the LDRs and determine what changes could be made to improve and expand these regulations. Progress towards this goal will be reported annually until completed.
- Measurable goal: City staff in the department of planning and zoning and the SBSU will ensure that stormwater management related regulations found in the City's LDRs are properly interpreted and implemented during the City's project approval process.

- Assist the ANR with implementation of its stormwater permitting program (3-9015) – The Vermont ANR has issued General Permit 3-9015 that regulates post-construction stormwater runoff. All projects that create greater than 1 acre of impervious area must obtain permit coverage from the ANR. The City will assist ANR with its implementation of this program.
  - Measureable Goal: When a project will create greater than 1 acre of impervious area the City will include in its findings of fact a note that we believe the project requires a State of Vermont General Stormwater Permit (3-9015). A summary of the projects in South Burlington that will create 1 acre of impervious area will be reported each year.

Pollution Prevention / Good Housekeeping for Municipal Operations

In order to comply with minimum measure 6, Pollution Prevention / Good Housekeeping for Municipal Operations, the City must evaluate the systems it has in place to prevent and reduce polluted runoff from municipal operations. The City must also develop and enforce a program to control stormwater runoff from new and re-development projects. In order to meet this requirement the City will take the following steps:

- Proper disposal of animal waste - The City is responsible for cleaning up animal wastes left on City property, when they are not appropriately taken care of by residents. In order to facilitate residential assistance, the City hands out pet waste bags when dog licenses are purchased from City Hall. In addition, City parks and other recreation areas have permanent pet waste bag dispensers and signage reminding residents to pick up after their pets.
  - Measureable Goal: The City will report the number of pet waste bags distributed on an annual basis.
- Participate in the Municipal Compliance Assistance Program (MCAP) – Municipal staff and facilities are subject to many different state and federal environmental regulations. In order to ensure continued compliance with these regulations the City works with ANR staff in the Environmental Assistance Office to identify shortfalls in current practices and design solutions to address any issues that could result in non-compliance with environmental regulations.
  - Measureable Goal: The City will work with ANR staff and complete an MCAP inspection before the end of the 5 year permit cycle.
- Inspection of City maintained STPs – The SBSU maintains numerous STPs located throughout the City. As part of normal maintenance activities, the City conducts inspections of these STPs to ensure that they are functioning properly. Some of these STPs are subject to State permits that also require inspections. In order to minimize efforts related to duplicative inspection and

reporting requirements, inspection information for all City maintained STPs will be relayed to ANR as part of the MS4 annual report.

- Measureable Goal: The City will inspect all STPs for which it has maintenance responsibility twice a year. The City will report the number of inspections conducted on an annual basis. The results of these inspections will be available upon request.

- Street sweeping - The Department of Public Works and Stormwater Utility are responsible for the maintenance of the streets, bike paths, and municipal parking lots within the City. Maintenance of these facilities includes sweeping on a regular basis. The City's current practice is to sweep all curbed roads, curbed paths, and parking lots with curb twice per year. The first sweeping occurs as soon as practicable following snowmelt in the spring. The latter occurs as late in the fall as possible to allow for the collection of leaves. Main roads are swept more frequently, as staff time allows or as needed.
    - Measureable Goal: Sweep all curbed streets, curbed bike paths, and parking lots with curb that the City owns at least twice per year. The total volume of material removed will be reported annually.
- Storm drain cleaning – The SBSU is responsible for maintenance of the publicly owned stormwater drainage system in South Burlington. The municipality owns over 2,800 storm drains and 85 miles of pipe. If the system is not properly maintained it can result in increased pollution and flooding issues.
    - Measureable Goal: The SBSU will clean a minimum of 250 storm drains and the associated piping each year. The total volume of material removed will be reported annually.
- Storm drain inspections - The SBSU is responsible for maintenance of the publicly owned stormwater drainage system in South Burlington. Part of the SBSU's established maintenance program includes regular inspection of drainage structures to ensure their proper operation and condition.
    - Measureable Goal: Inspect a minimum of 350 storm drains each year. The total number of storm drains inspected will be reported annually.
- Properly dispose of materials collected from street sweeping, pond maintenance, and the stormwater drainage system – The City previously developed and implemented procedures for disposing of materials collected from street sweeping, maintenance of STPs, and cleaning of the stormwater drainage system (Appendix C).
    - Measureable Goal: Continue to implement the City's approved procedure for handling of materials collected during street sweeping, maintenance of STPs, and cleaning of the stormwater drainage system.
- Minimize winter sand and salt usage – The DPW's current practice is to manage winter snow and ice with the application of salt products and normal plowing practices. All of the City's salt trucks have calibrated systems on board to regulate the flow of salt from the trucks. In the winter of 2008, the City began purchasing equipment that allows the use of a liquid chloride salt product. Treating road salt with this liquid chloride mixture prior to spreading on the road reduces the amount of salt lost to scatter (i.e. salt that bounces off the road). In addition,

application of liquid chloride reduces the operating temperature of the salt allowing it to work at more effective at lower temperatures. These practices will reduce the total amount of salt needed to achieve similar results. The use of the liquid chloride is currently being expanded to the entire fleet.

- Measureable Goal: The salt delivery systems on plow trucks will be calibrated at the beginning of each winter to ensure proper distribution of salt.

Technical Assistance for Low Impact Best Management Practices

Within two years of receiving authorization under the 2012 MS4 permit the City will develop a program to identify opportunities for and provide technical assistance related to low impact BMPs to landowners in South Burlington.

Regulation of Development in Stream Corridors of Stormwater Impaired Waters

Within two years of receiving authorization under the 2012 MS4 permit the City will adopt strategies to protect and regulate stream corridors in stormwater impaired waters. The City will submit a report to ANR regarding protection and regulation of stream corridors in stormwater impaired watersheds within 2 years of receiving authorization under the 2012 MS4 permit.

Stream Flow Monitoring

This section is reserved for a description of the flow monitoring plan required by section IV.C.1(e)(7) of the 2012 MS4 permit. The 2012 MS4 permit requires that the City prepare a plan for flow monitoring in stormwater impaired streams within 3 months of receiving authorization under the 2012 MS4 permit. The SWMP will be amended to include this information once it is approved by the Vermont ANR.

Municipally Operated Industrial Facilities

The City owns facilities that are subject to the ANR's Multi-Sector General Permit (MSGP). These facilities are listed below:

- Bartlett Bay Wastewater Treatment Plant (4889-9003)
- Airport Parkway Wastewater Treatment Plant (4888-9003)

These facilities have obtained coverage under the MSGP. Management of these facilities is the responsibility of the City's Wastewater Superintendent. Stormwater Utility staff provides assistance as appropriate.

Impaired Waters and TMDL Requirements

Impaired waters are those waters that the Secretary of ANR has identified as not meeting Vermont Water Quality Standards. Once a waterbody is designated as impaired, the State of Vermont lists it on the Vermont "303(d) list" and submits this information to the U.S. Environmental Protection Agency (EPA). In some cases, ANR will prepare a Total Maximum Daily Load (TMDL) for an impaired waterbody. A TMDL is a calculation of the maximum amount of a particular pollutant that a waterbody can receive and still meet water quality standards. Below is a description of each waterbody in South Burlington

with an approved TMDL and a summary of the additional actions that the City will take to comply with TMDL requirements.

Stormwater Impaired Watersheds and Flow Restoration Plans

The City of South Burlington will develop Flow Restoration Plans (FRPs) for the following stormwater impaired watersheds: Bartlett Brook, Centennial Brook, Englesby Brook, Munroe Brook, and Potash Brook. Once developed, each approved FRP will be included in the SWMP as an appendix.

Schedule

The City will complete FRPs for the stormwater impaired watersheds listed above within 3 years of receiving authorization under the 2012 MS4 permit.

Regulatory Analysis and Assistance

This section is reserved for an analysis of the regulatory authority and assistance that the City will need in order to implement the stormwater TMDLs. This analysis must be completed within 6 months of the City receiving authorization under the 2012 MS4 permit. The SWMP will be amended to include this information once it is approved by the Vermont ANR.

Reporting

Once FRPs are approved by the Vermont ANR the City will include updates on FRP implantation in its annual report.

Lake Champlain Phosphorus TMDL

All of South Burlington ultimately drains to Lake Champlain. Vermont's 303(d) list of impaired waters indicates that Lake Champlain is impaired due to excessive phosphorus. The state of Vermont had an established TMDL for Lake Champlain but it was reconsidered and disapproved by EPA in 2011. EPA is currently drafting a new TMDL for the Lake. This section of the SWMP will be updated when the Lake Champlain Phosphorus TMDL and implementation plan is approved.

Review and Updates to the SWMP

In order for the SWMP to remain effective it must be reviewed and updated on a regular basis.

Annual Reporting

The City will submit an annual report to the Vermont ANR on or before April 1 of each year. The report will detail the City's efforts over the previous calendar year and include the following information:

- The status of the City's compliance with MS4 permit conditions
- An assessment of the appropriateness of the BMPs identified in the SWMP
- A report on progress towards implementation of the BMPs identified in the SWMP
- A report on the progress of FRP development and implementation
- A summary of stream flow monitoring data in the stormwater impaired watersheds

- A summary of stormwater activities that the City plans to undertake during the next reporting cycle (i.e. calendar year)
- Proposed changes to the City's approved SWMP
- Notice that the City if relying on another entity to satisfy permit obligations.

Amendments

Amendments or changes to the City's SWMP will be made in writing to ANR and contain the signatures of appropriate City staff. These changes may occur at any time, but efforts will be made to coordinate these requests with scheduled reporting activities.

Individual Responsible for Implementation

The South Burlington City Manager is ultimately responsible for implementation of the City's SWMP. The Stormwater Superintendent, Deputy Director of Public Works, Director of Public Works, City Health Officer, Director of Planning and Zoning, and Wastewater Superintendent are responsible for various subcomponents of the plan, but through the City Manager's overall authority.

Signatures

"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."

Kevin Dorn
Interim City Manager

6/3/13
Date

Thomas J. DiPietro Jr.
Deputy Director of Public Works / Stormwater Superintendent

5/31/13
Date

Appendix A – RSEP MOU

CHITTENDEN COUNTY
REGIONAL STORMWATER EDUCATION PROGRAM
MEMORANDUM OF UNDERSTANDING
FOR THE PERIOD MARCH 10, 2013 THROUGH MARCH 9, 2018

This Memorandum of Understanding ("MOU") establishes an agreement among the Parties (as specified in Section 1) for a group of Municipal Separate Storm Sewer Systems ("MS4s") to contract to operate a Regional Stormwater Education Program ("Program") that conforms with and satisfies the relevant requirements regarding Minimum Control Measure One ("Public Education and Outreach") of the Phase II NPDES Permit for Program Years 2013--2018), as established in General Permit 3-9014 (2012) (MS4 Permit") as continued or renewed by the Vermont Department of Environmental Conservation ("VTDEC").

1. **Parties to the MOU** – The parties to this agreement are:

    a. **MS4s** – the undersigned municipalities and other entities and any other MS4 that may execute this agreement following approval of that MS4's inclusion as a party to this MOU by a 2/3^{rds} majority of the voting members of the Steering Committee and

    b. **Lead Agency** – the Chittenden County Regional Planning Commission ("CCRPC"), unless a majority of the Steering Committee favors a different lead agency or the CCRPC no longer wishes to act as the Lead Agency.

2. **Steering Committee**

    a. **Composition** – The voting members of the Steering Committee shall consist of one representative from each of the MS4s who are signatory to this Agreement as designated by each MS4. The voting members may, by a 2/3^{rds} majority vote, invite one or more other organizations to each appoint a representative to serve as a new member, a non-voting member or as an advisory member of the Steering Committee. Such organizations may include, but not be limited to, the Lake Champlain Committee, the Champlain Water District, the Chittenden Solid Waste District, other MS4s, or other municipalities.

    b. **Duties** – The voting members of the Steering Committee shall advise the Lead Agency on the development and performance of Program Services and on matters bearing on the administration of this agreement. The Steering Committee will endeavor to meet, quarterly or more often as needed.

3. **Lead Agency**

    a. **Duties** – The Lead Agency will provide Administrative Services in terms of administering this MOU and agreements with contractors (including executing contracts, receiving and disbursing funds, and monitoring the provision of services) on behalf of the MS4s. The Lead Agency shall not provide services related to this program for entities outside of the MS4 signatories. Additional coordination shall be only at the direction of the Steering Committee or its chair. The Lead Agency may also provide other Non-Administrative services (including, but not limited to, public education and outreach activities, public relations, grant writing, web site editing, etc.) as

directed by the Steering Committee and at a level consistent with each year's Program Budget as described in Section 6.a. The Lead Agency is not a guarantor that services will be performed.

b. **Compensation** – The MS4s agree to compensate the Lead Agency for the actual costs of performing Administrative and Non-Administrative duties defined in Section 3.a. Compensation shall be for hourly wages, appropriate overhead and expenses. Compensation for Administrative Duties shall not exceed ten (10%) percent of the Program Budget as specified in Section 6 without prior approval of a simple majority of the Steering Committee present at the time of the vote or by email response. Personnel costs for Lead Agency staff engaged in Administrative or Non-Administrative Duties shall be calculated at a rate of salary plus fringe. The Lead Agency shall submit invoices no more frequently than monthly. Invoices shall provide a description of work tasks completed by the Lead Agency for that billing period with sufficient detail to the satisfaction of the steering committee.

4. **Selection of Contractors** – In general, the Steering Committee shall competitively bid for contract(s) for Program Services that collectively satisfy the requirements for Minimum Control Measure One ("Public Education and Outreach") of the Phase II NPDES Permit for Program Years 2013 – 2018 as established by the MS4 Permit and as defined in Section 5. All contracts shall be awarded based on qualifications, price, and the ability of the entity to provide services that meet the relevant MS4 Permit requirements. However, upon consent of the majority of the voting members of the Steering Committee present, the RSEP may waive the bid process for select contracts. Contracts may be up to 5 years in length and shall include, but not be limited to, language specifying the right of the RSEP to cancel a contract if services are not being adequately provided and language specifying that payments to contractors shall be made only for services rendered.

5. **Program Services** – The Steering Committee, assisted by the Lead Agency and contractors, will implement a media advertising campaign and provide stormwater education services that satisfy the requirements of Minimum Control Measure One ("Public Education and Outreach") of the Phase II NPDES Permit for Program Years 2013 – 2018), as established by the MS4 Permit, in accordance with Section 5.a..

a. **Program Content** – The Program Content for each Program Year will be as defined in the Communications Plan for that year as approved by a majority of the Steering Committee. Annual Program elements will include, at a minimum: 1) operation of the Program's website, www.smartwaterways.org or its equivalent, 2) the hosting of occasional educational seminars open to the public concerning stormwater pollution prevention and related topics, and 3) advertisements in various media.

6. **Program Budget, Costs, and Payments**

a. **Program Budget**

1) The annual Program Budget shall consist of the sum of the annual $5,000 payments for a given Program Year made by participating MS4s plus any Public Participation payment as described below in Sections 6b and 6c, respectively.

2) Prior to March 1st of every year, the Steering Committee shall adopt a Program Budget governing expenditures for the subsequent program year. Budget categories shall include, but not be limited to: Lead Agency Administrative Duties, Lead Agency Non-Administrative Duties, Media Advertising Purchases, Media Marketing Consulting Services, and Other Contractual Services.

b. **Participating MS4 Maximum Annual Costs and Payments** – Except as otherwise provided for in this section or in section 12c, each MS4 that is a party to this MOU shall by July 30 of each program year make a single annual payment of $5,000 to pay for Program Services (as defined in Section 5) and Lead Agency services (as defined in Section-3.a.). In the event that costs are less than anticipated or that grants or other funding sources become available, a majority of the voting members of the Steering Committee may decide to reduce each MS4's payment by an equal amount. The Steering Committee may require additional dues from new members joining after March 9, 2013 to help defray program development costs incurred since the Program's inception.

c. **Public Participation Payments** – Any payments made by an MS4 (regardless of whether or not the MS4 is a Party to this MOU) to the Lead Agency as a part of compliance with Section 4.2.2.1 of the MS4 Permit (governing payments in lieu of undertaking specific Public Involvement/Participation Activities) shall pay for Program Services as defined in Section 5.

d. **Other Funds** – Any funds made available to the Program other than Participating MS4 Costs and Payments (pursuant to Section 6.b.) or Public Participation Payments (pursuant to Section 6.c.) shall be dedicated to reducing the annual costs of each MS4 participating in the Program, except as a majority of the voting members of the Steering Committee may decide.

e. **Excess Funds** – Any funds remaining at the end of a Program Year, less any earmarked set aside funds (such as survey funds, etc), shall be carried over to the next Program Year, unless a 2/3^{rds} majority of the voting members of the Steering Committee decides otherwise. Following the payment for all Program Services and Lead Agency services at the end of Program Year 2018, any funds remaining shall be carried forward for successive years where program services continue under successive agreements. Any funds refunded to the MS4s participating in this MOU shall be refunded based upon a prorated portion depending upon the number of months of participation by that MS4, except that any additional payments made by a member beyond its $5,000 annual payments shall be first refunded in full, except for payments made in lieu of performance of Minimum Measure #2.

f. **In-Kind Services** – Program Services (as defined in Section 5) that are provided by a member may be used to offset the Participating MS4 Costs and Payment of that member by such amount as may be determined by a majority of the voting members of the Steering Committee.

7. **Contracts Required** – All contracts with Contractors to provide Program Services shall be conditioned upon approval by a 2/3^{rds} majority of the voting members of the Steering Committee.

8. **Withdrawal Prohibited** – No MS4 that is a party to this MOU may withdraw from this MOU, except for early termination as defined in Section 9 of this MOU. Early termination of a signatory may be considered by the Steering Committee with 12 months' notice of withdrawal for cause and with a 2/3^{rds} majority approval of the voting members of the Steering Committee

9. **Early Termination** – This MOU shall become null and void with no further obligation of the parties if:
   a. a majority of the voting members of the Steering Committee does not approve one or more contracts for the provision of Program Services within 90 days after execution of this MOU or

b. VTDEC determines that the Program outlined in this MOU does not meet the requirements for minimum control measure #1 ("Public Education and Outreach") of the Phase II NPDES Permit for Programs Years 2013 – 2018) and the parties to this MOU are unable to craft a Program to satisfy VTDEC.
c. alternate contractual arrangements for MM1 compliance are developed and a vote to dissolve this MOU is approved by a 2/3rds majority approval of the voting members of the Steering Committee.

10. **Automatic Termination** – This MOU will terminate at the end of Program Year 2018.

11. **Amendment** – Unless a specific section of this MOU provides otherwise, this MOU may be amended only upon the unanimous consent of all of the Parties.

12. **Adding New MS4 Entities** – New MS4 entities shall be allowed to become party to this MOU with a 2/3rds majority approval of the voting members of the Steering Committee. The new party agrees to:
    a. pay for costs directly associated with re-evaluation and reconfiguration of the Program's existing Communications Plan to ensure that planned media advertising purchases appropriately cover the geographic area served by their MS4, unless waived by a 2/3rds majority approval of the voting members of the Steering Committee. The new MS4 shall coordinate this work with the Lead Agency and RSEP Chair using existing RESP program contractors.
    b. The new MS4 obtains approval from the permitting agency indicating that their participation in the established Program would satisfy their requirements under minimum control measure #1 ("Public Education and Outreach") of the Phase II NPDES Permit for Programs Years 2013 – 2018)
    c. The new MS4 makes five additional annual payments of $ 500.00 to the Program in recognition of Program development costs incurred since the program's inception.

13. **Counterparts** – This MOU may be executed in multiple counterparts, each of which is deemed an original and all of which constitute one and the same document. Each such counterpart may be a facsimile copy and such facsimile copy shall be deemed an original.

Signature of Lead Agency

Charles Baker, Executive Director
Chittenden County Regional Planning Commission

5/1/13
Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	3-26-13 Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	3/27/13 Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	4/23/13 Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	4/18/13 Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Susan McNamara-Hill, Interim Co Mgr. Authorized Signer The Village of Essex Junction	4/24/13 Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	3/27/13 Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Paul W. Bohne III Paul Bohne, Town Manager The Town of Shelburne	3/28/13 Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	4/1/13 Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	03/29/13 Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey Linda Seavey, Director, Campus Planning Services The University of Vermont	3.26.13 Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	4/3/13 Date
Katherine Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Gene Richards, Interim Director of Aviation Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
Authorized Signer The Village of Essex Junction	Date
Brian M. Palaia, Town Manager The Town of Milton	Date
Dean Pierce, Director of Planning and Zoning The Town of Shelburne	Date
Bob Rusten, Interim Temporary City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation The Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine Decarreau, City Manager The City of Winooski	4.11.13 Date

Appendix B – CCST MOU

CHITTENDEN COUNTY
REGIONAL STORMWATER PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM
MEMORANDUM OF UNDERSTANDING
FOR THE PERIOD JULY 2011 THROUGH JUNE 2016

This Memorandum of Understanding ("MOU") establishes an agreement among the Parties (as specified in Section 1) for a group of Municipal Separate Storm Sewer Systems ("MS4s") to contract to operate a Regional Stormwater Public Involvement and Participation Program ("Program") that conforms with and satisfies the relevant requirements regarding Minimum Control Measure Two ("Public Involvement and Participation) of the Phase II NPDES Permit for Program Years 2011 -2016), as established in General Permit 3-9014 (MS4 Permit") as continued or renewed by the Vermont Department of Environmental Conservation ("VTDEC").

1. **Parties to the MOU** – The parties to this agreement are:

   a. **MS4s** – the undersigned municipal MS4s and non-traditional MS4s and any other MS4 that may execute this agreement following approval of that MS4's inclusion as a party to this MOU by a majority of the voting members of the Stream Team Steering Committee as defined in Section 2.a. below and

   b. **Lead Agency** – the Chittenden County Regional Planning Commission ("CCRPC"), unless a majority of the Steering Committee favors a different lead agency or the CCRPC no longer wishes to act as the Lead Agency and withdraws it services pursuant to Section 9 below.

2. Steering Committee

   a. **Composition** – The voting members of the Steering Committee shall consist of one representative from each of the MS4s who are full level signatory members to this Agreement as designated by each MS4. The voting members may, by a majority vote, invite organizations to appoint a representative to serve as a non-voting, advisory member of the Steering Committee.

   b. **Duties** – The voting members of the Steering Committee shall advise the Lead Agency on the development and performance of Program Services and on matters bearing on the administration of this agreement. The Steering Committee will attempt to meet quarterly or more often as needed.

3. **Lead Agency**

   a. **Duties** – The Lead Agency will provide Services in terms of administering this MOU and agreements with contractors (including executing contracts, receiving and disbursing funds, and monitoring the provision of services) on behalf of the MS4s. The Lead Agency may also provide other Services (including, but not limited to, public involvement and participation activities, public relations, grant writing, etc.) as directed by the Steering Committee and at a level consistent with each year's Program Budget as described in Section 6.a.

b. **Compensation** – The MS4s agree to compensate the Lead Agency for the actual costs of performing Duties defined in Section 3.a. Compensation for Duties shall not exceed ten (10%) percent of the Program Budget as specified in Section 6 without prior approval of a majority of the Steering Committee. Personnel charges for Lead Agency staff shall be calculated at a rate of salary plus fringe.

4. **Selection of Primary and Sub-Contractors** – In general, the Steering Committee shall competitively bid for contract(s) for Program Services that collectively satisfy the requirements for Minimum Control Measure Two ("Public Involvement and Participation) of the Phase II NPDES Permit for Program Years 2011 – 2016 as established by the MS4 Permit and as defined in Section 5. All contracts shall be awarded based on qualifications, price, and the ability of the entity to provide services that meet the relevant MS4 Permit requirements. Contracts may be up to 5 years in length and shall include, but not be limited to, language specifying the right of the Committee to cancel a contract if services are not being adequately provided and language specifying that payments to contractors shall be made only for services rendered.

   Contracting for services under this MOU will comply with the Fair Employment Practices and Americans with Disabilities Act: the Steering Committee agree to comply with the requirement of Title 21 V.S.A Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. The Steering Committee shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990 that qualified individuals with disabilities receive equitable access to the services, programs,and activities provided by the Steering Committee under this MOU. This provision will also be included in all contracts and subcontracts executed under this MOU involving state or federal funds.

   The Steering Committee recognizes the important contribution and vital impact which small businesses have on the state's economy. In this regard, the Steering Committee will ensure a free and open bidding process that affords all businesses equal access and opportunity to compete. The Steering Committee also recognizes the existence of businesses owned by minorities and women and will make a good faith effort to encourage these firms to compete for contracts involving state or federal funds.

5. **Program Services** – The Steering Committee, assisted by the Lead Agency and contractor(s), will implement a public involvement and participation campaign known as the Chittenden Country Stream Team (CCST) that satisfies the relevant requirements of Minimum Control Measure Two ("Public Involvement and Participation) of the Phase II NPDES Permit for Program Years 2011 – 2016), as established by the MS4 Permit, in accordance with Section 5.a.

   a. Program Content – The Program Content for each Program Year will be as approved by a majority of the Steering Committee. Annual Program elements will include, at a minimum:
      i. operation of the Program's website www.ccstreamteam.org or its equivalent.
      ii. the hosting and/or organization of workshops, projects and other events to engage the public.

iii. the recruitment of volunteers to engage in and promote public involvement and participation.
iv. end of MS4 permit year annual reporting on Minimim Control Measure 2 compliance efforts to the MS4s for inclusion in MS4 annual reports to ANR.

6. **Program Budget, Costs, and Payments**

a. **Program Budget**

1. The annual Program Budget shall consist of the sum of the annual $1,800 payment for each Program Year made by participating MS4s plus any other funds available to the Program by majority vote of the Steering Committee as specified in Section 6.c below. Prior to February of every year, the Steering Committee shall adopt a Program Budget governing expenditures for the subsequent program year. Budget categories shall include, but not be limited to: Lead Agency Duties, Contractual Services and Expenses.

b. **Participating MS4 Maximum Annual Costs and Payments** – Except as otherwise provided for in this section, each MS4 that is a party to this MOU shall by July 30 of each program year make a single annual payment of $1,800 to pay for Program Services (as defined in Section 5) and Lead Agency Services (as defined in Section 3.a.). In the event that costs are less than anticipated or that grants or other funding sources become available, a majority of the voting members of the Steering Committee may decide to reduce each MS4's payment by an equal amount or to credit the following Program Year assessment to each MS4. Any MS4 is allowed to join in prior to April 1, 2012 without penalty. The Steering Committee may require additional dues from new members joining on or after April 1, 2012 to help defray program development costs incurred since the Program's inception.

c. **Other Funds** – Any funds made available to the Program shall be dedicated to reducing the annual costs of each MS4 participating in the Program, except as a majority of the voting members of the Steering Committee may decide.

d. **Excess Funds** – Any funds remaining at the end of a Program Year shall be carried over to the next Program Year, unless a majority of the voting members of the Steering Committee decides otherwise. Following the payment for all Program Services and Lead Agency Services at the end of Program Year 2016, any funds remaining shall be carried forward for successive years where Program Services continue under successive agreements. Any funds refunded to the MS4s participating in this MOU shall be refunded based upon a prorated portion depending upon the number of months of participation by that MS4, except that any additional payments made by a member beyond its $1,800 annual payment shall be first refunded in full.

7. **Contracts Required** – All contracts with Contractors to provide Program Services shall be conditioned upon approval by a majority of the voting members of the Steering Committee and consistent with Section 4 above.

8. **MS4 Withdrawal Prohibited** – No MS4 that is a party to this MOU may withdraw from this MOU, except for early termination as defined in Section 10 of this MOU.

9. **Termination of Lead Agency**
   The CCRPC or the Steering Committee by a majority vote of its full membership may elect to terminate the Agreement for Lead Agency Services by providing 90 days written notice to the other party.

10. **Early Termination** – This MOU shall become null and void with no further obligation of the parties if:
    a. a majority of the voting members of the Steering Committee does not approve one or more contracts for the provision of Program Services within 120 days after execution of this MOU or
    b. VTDEC determines that the Program outlined in this MOU does not meet the relevant requirements for Minimum Control Measure Two ("Public Involvement and Participation") of the Phase II NPDES Permit for Programs Years 2011 – 2016) and the parties to this MOU are unable to craft a Program to satisfy VTDEC.

11. **Automatic Termination** – This MOU will terminate at the end of Program Year 2016.

12. **Amendment** – Unless a specific section of this MOU provides otherwise, this MOU may be amended only upon the unanimous consent of all of the Parties.

13. **Counterparts** – This MOU may be executed in multiple counterparts, each of which is deemed an original and all of which constitute one and the same document. Each such counterpart may be a facsimile or PDF copy and such facsimile or PDF copy shall be deemed an original.

Signature of Lead Agency

Charles L Baker

Charles Baker, Executive Director
Chittenden County Regional Planning Commission

5/1/2011
Date

Signatures of Members

Robert McEwing, Interim Director of Aviation The Burlington International Airport	5/3/11 Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
David Crawford, Village Manager The Village of Essex Junction	Date
Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine R. Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Robert McEwing, Interim Director of Aviation The Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	4/15/11 Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
David Crawford, Village Manager The Village of Essex Junction	Date
Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine R. Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Robert McEwing, Interim Director of Aviation The Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	24 March 2011 Date
David Crawford, Village Manager The Village of Essex Junction	Date
Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine R. Decarreau, City Manager The City of Winooski	Date

Signatures of Members

Robert McEwing, Interim Director of Aviation The Burlington International Airport	Date
Steven Goodkind, Director of Public Works The City of Burlington Department of Public Works	Date
Bryan K. Osborne, Director of Public Works The Town of Colchester	Date
Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
David Crawford, Village Manager The Village of Essex Junction	3/27/2011 Date
Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
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Dennis E. Lutz, PE, Public Works Dir. / Town Engineer The Town of Essex	Date
David Crawford, Village Manager The Village of Essex Junction	Date
Brian Palaia, Town Manager The Town of Milton	4-5-11 Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
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David Crawford, Village Manager The Village of Essex Junction	Date
Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	3/31/11 Date
Sanford I. Miller, City Manager The City of South Burlington	Date
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Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	3·22·11 Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
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Brian Palaia, Town Manager The Town of Milton	Date
Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	3/23/2011 Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine R. Decarreau, City Manager The City of Winooski	Date

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Bernard T. Gagnon, Public Works Director The Town of Shelburne	Date
Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
Linda Seavey Linda Seavey, Director, Campus Planning Services The University of Vermont	4.20.11 Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine R. Decarreau, City Manager The City of Winooski	Date

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Sanford I. Miller, City Manager The City of South Burlington	Date
Brian Searles, Secretary of Transportation Vermont Agency of Transportation	Date
Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	4/4/11 Date
Katherine R. Decarreau, City Manager The City of Winooski	Date

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Linda Seavey, Director, Campus Planning Services The University of Vermont	Date
Richard McGuire, Town Manager The Town of Williston	Date
Katherine R. Decarreau, City Manager The City of Winooski	3.29.11 Date

Appendix C – Procedure for Handling Material Collected During Street Sweeping, Catch Basin and Stormwater Pipe Cleaning, and Stormwater Pond Maintenance

Procedure for Handling Material Collected During Street Sweeping, Catch Basin and Stormwater Pipe Cleaning, and Stormwater Pond Maintenance

City of South Burlington Department of Public Works
Prepared on May 10, 2011

Introduction

The City of South Burlington Department of Public Works (DPW) regularly uses a vacuum assisted street sweeper to remove sediment and debris from all curbed streets in the City. The DPW also uses a vacuum truck to clean stormwater drainage pipes and remove accumulated sediment from catch basin (a.k.a. storm drain) sumps. In addition, DPW staff is responsible for maintaining stormwater detention ponds on City property. Pond maintenance includes the removal of accumulated sediment from these ponds and their associated forebays.

Regular completion of these activities is a requirement of the City's Municipal Separate Storm Sewer System (MS4) permit, which is administered by the State of Vermont Agency of Natural Resources (ANR) Department of Environmental Conservation (DEC). Once collected, materials removed from streets and catch basin sumps are regulated under the Solid Waste Management Rules promulgated by the Vermont ANR DEC. Materials removed from stormwater treatment ponds are not regulated by the Vermont ANR DEC. This procedure provides South Burlington DPW employees with guidelines for the storage, handling, testing, and disposal of these materials.

Storage

All materials collected during street sweeping, stormwater pipe cleaning, catch basin cleaning, and pond maintenance activities will be stored at the DPW facility at 104 Landfill Road. Materials collected during street sweeping will be stored in a separate pile from materials collected during stormwater pipe and catch basin cleaning activities. Materials collected during pond maintenance will also be stored in a separate pile. Any collected material that shows obvious signs of pollution will be stored in a separate pile so that it does not contaminate the presumably "clean" piles collected during normal maintenance activities. These materials will also be tested separately from the presumably "clean" materials.

The material storage area will be maintained to ensure that collected materials do not become a source of pollution. Piles will be confined using concrete barriers, silt fence, and hay bails to ensure that sediment laden runoff does not leave the storage area.

Testing

Materials collected as part of street sweeping activities do not require testing before they can be used as indicated below. Prior to use, these materials must be screened to remove any trash collected as part of street sweeping. The screen used must be 2" or smaller. After screening, these materials will be moved to a fill pile maintained by the DPW at a separate location. During transport, DPW staff will measure the amount of material collected for reporting in the City's MS4 annual report submitted to Vermont ANR DEC.

Materials collected as part of stormwater drainage pipe and catch basin cleaning must be tested for Volatile Organic Compounds (VOCs) using either EPA method 8021B or 8260B prior to being used as indicated below. A composite sample will be collected from the pile of collected

materials and sent to a lab for analysis. Results will be compared to the Primary Groundwater Quality Standards (enforcement standards) located in Appendix A of the Vermont ANR DEC Groundwater Protection Rule and Strategy. Using the EPA methods described above, the lower detection limits for some of these compounds in soil samples does not reach the levels specified in the Groundwater Rule (e.g. the lower detection limit for benzene in a soil sample is 13 ug/Kg and the Groundwater Standard is 5 ug/L). A sample whose result is at the lower detection limit of the methods specified will be considered a "non-detect".

Materials collected as part of stormwater pond maintenance activities will be tested using the same procedure as specified above for materials collected from catch basin and pipe cleaning. While these materials are not regulated by the Vermont ANR DEC, the City feels that this extra precaution is prudent until such time as we have collected enough data to feel confident that these materials do not pose a significant threat to the environment when used as specified below.

Materials that are below the thresholds identified in the Groundwater Projection Rule will then be screened to remove trash using a 2" or smaller screen. After screening, these materials will be moved to a fill pile maintained by the DPW at a separate location. During transport, DPW staff will estimate the amount of material collected for reporting in the City's MS4 annual report submitted to Vermont ANR DEC.

Materials will be screened, tested, and moved to a separate fill pile as necessary to ensure that the material storage area has enough space for new materials. The storage area is currently able to store about one year's worth of collected materials.

Procedure for Material Containing VOCs

Materials tested using EPA method 8021B or 8260B that show VOC levels exceeding the Groundwater Quality Standards in the Vermont Groundwater Protection Rule will be moved to a separate location for storage. Compost, manure or another material high in organic matter will be blended into collected materials and they will sit for a minimum of 6 months before being re-tested. These piles will be "turned" regularly during this time. If these materials fail a second test they will be turned and blended again. A third test will take place at least a year from the second failed test. If the third fails, these materials will be landfilled.

Use of Collected Material

Once screened and tested, all materials can be used as common fill by the DPW or others who receive permission from the DPW. Alternatively, these materials can be blended with other materials (e.g. compost, manure) to create top soil or tree planting material for use by the DPW or others who receive permission from the DPW.

Policy Review and Schedule for Update

This plan will be updated as necessary to comply with State regulation, or to fit changing circumstances at the DPW facility. At a minimum, this policy will be reviewed once every 5 years when the City's Stormwater Management Plan is revised as part of the MS4 permit application.

Appendix D – Bartlett Brook Flow Restoration Plan

This appendix is reserved for the Bartlett Brook Flow Restoration Plan (FRP). The City's SWMP will be amended to include this FRP when it is completed and approved by the Vermont ANR.

Appendix E – Centennial Brook Flow Restoration Plan

This appendix is reserved for the Centennial Brook Flow Restoration Plan (FRP). The City's SWMP will be amended to include this FRP when it is completed and approved by the Vermont ANR.

Appendix F - Englesby Brook Flow Restoration Plan

This appendix is reserved for the Englesby Brook Flow Restoration Plan (FRP). The City's SWMP will be amended to include this FRP when it is completed and approved by the Vermont ANR.

Appendix G – Munroe Brook Flow Restoration Plan

This appendix is reserved for the Munroe Brook Flow Restoration Plan (FRP). The City's SWMP will be amended to include this FRP when it is completed and approved by the Vermont ANR.

Appendix H – Potash Brook Flow Restoration Plan

This appendix is reserved for the Potash Brook Flow Restoration Plan (FRP). The City's SWMP will be amended to include this FRP when it is completed and approved by the Vermont ANR.