

**TOWN OF BLACKSBURG STORMWATER  
MANAGEMENT PROGRAM  
VPDES PERMIT NO. VAR 040019  
(Effective July 1, 2013)**

**Municipal Separate Storm Sewer  
System (MS4)  
YEAR 1 ANNUAL REPORT**



**Coverage Issued: July 1, 2013  
Reporting Period: July 1, 2013 through June 30, 2014**

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Date: October 1, 2014**

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## Introduction

Regulatory compliance related to storm water management and the Municipal Separate Storm Sewer System (MS4) program is part of a town wide program. This document serves as the annual report for the reporting period of **July 1, 2013 through June 30, 2014** for the **Town of Blacksburg** (TOB), General Permit No. **VAR040019** (effective July 1, 2013 – June 30, 2018). In this past permit year there have been no significant modifications to any department's roles and responsibilities as described in the TOB Program Plan (latest revision, September 2013). Minor revisions to BMPs are described in the body of the annual report based upon evaluations made upon the end of the first reporting year.

## Compliance with Objectives of General Permit

In review of this stormwater program, the Town finds itself in compliance with the objectives of the General Permit. The Town review finds the identified best management practices (BMPs) successful in achieving the measurable goals for each of the minimum control measures (MCMs) as outlined in the Program Plan. The BMPs are found to be appropriate for addressing the discharges to impaired waterways and for meeting the objectives of the permit. The documentation to support this review is more specifically identified in the “Minimum Control Measure” section of this report for each BMP as:

- Measurable Goals Identified and Achieved,
- Appropriateness of BMP for Addressing Impaired Discharges,
- Progress Towards Meeting Objectives of the Permit, and
- Proposed Changes to the BMP or Measurable Goals

## TMDL Special Condition Requirements

TMDLs for both the Stroubles Creek and Upper Roanoke River watersheds were approved prior to the July 9, 2008 effective date of the General Permit. Therefore, special condition requirements (Section 1 B) apply to the Town during the current permit cycle. The Town is accountable for specific pollutant reductions through the assignment of a waste load allocation (WLA). The TOB currently has the following WLAs associated with a TMDL:

- 211 tons/year sediment to Stroubles Creek
- 102 tons/year sediment to Upper Roanoke River watershed
- 3.15E+09 cfu/year bacteria (E coli) to Wilson Creek/ Upper Roanoke River watershed

### List of TMDL Special Condition BMP's:

- A. Maintain an Updated Program Plan that includes a TMDL Action Plan.
- B. Maintain a List of Legal Authorities, Permits, and Agreements Applicable to Reducing the WLA.
- C. Maintain a List of Additional Management Practices & Methods Beyond MCMs 1-6 Applicable to Reduce WLA.
- D. Enhance the PEOP and Employee Training to Address Reducing WLA.
- E. Assess all Significant Sources of Pollutants from Municipal Facilities.
- F. Develop a Method to Assess TMDL Action Plans for Effectiveness in Reducing WLAs

### A. Maintain an Updated Program Plan that includes a TMDL Action Plan

The Town of Blacksburg will maintain an updated MS4 Program Plan that includes a specific TMDL Action Plan for pollutants associated to the MS4 in approved TMDLs. The TMDL Action Plans may be implemented in multiple phases over more than one permit cycle using the adaptive iterative approach provided adequate progress to reduce the pollutant discharge in a manner consistent with the assumptions and requirements of the specific TMDL WLA is demonstrated in accordance with the General Permit.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Development of TMDL Action Plan	2014	2015	2016	2017	2018	-
Evaluate TMDL Action Plan		2015	2016	2017	2018	
<b>Progress Toward Meeting Objectives of Permit</b>						
TMDL Action Plan will be completed in 2015 as outlined in General Permit Table 1: Schedule of MS4 Plan Updates Required in this Permit.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
No changes proposed.						

### B. Maintain a List of Legal Authorities and Agreements Applicable to Reducing the WLA

The Town of Blacksburg will maintain a list of its legal authorities such as ordinances, state and other permits, orders, specific contract language, and inter-jurisdictional agreements applicable to reducing the pollutant identified in each applicable waste load allocation.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Development of List of Legal Authorities	2014	2015	2016	2017	2018	2014
Evaluate List of Legal Authorities		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The current list is located in the Program Plan document. The Town will update list of legal authorities as needed when additional legal authorities become available.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

### C. Maintain a List of Additional Methods Beyond MCMs 1-6 Applicable to Reduce WLA

The Town of Blacksburg will maintain a list of additional management practices, control techniques and system design and engineering methods, beyond those included in the Minimum Control Measures 1-6 that are being implemented as part of the Program Plan, but are still applicable in reducing the pollutant identified in each waste load allocation

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Develop a List of Supplemental Methods beyond BMPs	2014	2015	2016	2017	2018	2014
Evaluate List of Supplemental Methods		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
Currently all methods used to reducing the WLA are included in the MCM measures. If additional opportunities for management practices, techniques or design & engineering methods are incorporated, they will be included .						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

### D. Enhance the PEOP and Employee Training to Address Reducing WLA

The Town of Blacksburg will enhance its public education and outreach and employee training programs to also promote methods to eliminate and reduce discharges of the pollutants identified in the WLA.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Enhance PEOP to Address WLA	2014	2015	2016	2017	2018	2014
Enhance Employee Training to Address WLA	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
Currently the Public Education and Outreach Program has identified the pollutant of concern listed in the local TMDLs as two of the three water quality issues that will be addressed in the PEOP. The Town plans to incorporate WLA reduction and elimination methods in the employee training beginning in 2015 reporting year.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

### E. Assess all Significant Sources of Pollutants from Municipal Facilities

The Town of Blacksburg will assess all significant sources of pollutant(s) from facilities of concern owned or operated by the Town of Blacksburg that are not covered under a separate VPDES permit. The Town will identify all municipal facilities that may be a significant source of the identified pollutant.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Identify Facilities of Concern	2014	2015	2016	2017	2018	2014
Assess Facilities Potential Sources of Pollutants	2015	2016	2017	2018		
<b>Progress Toward Meeting Objectives of Permit</b>						
Currently the Town has completed the list of facilities of concern. The Town plans to perform detailed inspections of these facilities for evidence of pollutants beginning in the 2015 reporting year.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

### F. Develop a Method to Assess TMDL Action Plans for Effectiveness in Reducing WLAs

The Town of Blacksburg will develop and implement a method to assess TMDL Action Plans for their effectiveness in reducing the pollutants identified in the WLAs. The evaluation shall use any newly available information, representative and adequate water monitoring results, or modeling tools to estimate pollutant reductions for the pollutants of concern from implementation of the MS4 Program Plan. The methodology used for assessment shall be described in the TMDL Action Plan.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>				<b>Years Achieved</b>
Develop Evaluation Method	2015	2016	2017	2018	-
Implement Evaluation Method	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>					
TMDL Action Plan evaluation methods will be completed in 2015 as part of the TMDL Action Plan document.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					

## MCM 1: Public Education & Outreach on Stormwater Impacts

Continue to implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. Measures described below are intended to meet public outreach and measurable goals as described 9VAC25-890-40, Section II B (1) and Section I B (2) C.

### List of Minimum Control Measure #1 BMP's:

- A. Public Education and Outreach Plan (PEOP) Development.
- B. Storm Drain Marking Program Implementation.
- C. Demonstration Projects Enhancement.
- D. Household Waste, Business Waste, Universal and Hazardous Waste Education and Minimization.
- E. Grease Program Enforcement.
- F. Illicit Discharge Education.
- G. Town Stormwater Page Maintenance.

### **Appropriateness of the Minimum Control Measure One BMPs:**

These BMPs increase awareness of the Town's local water quality issues by engaging the public in a variety of formats, introducing them to local impairments and ways in which they may be able to have some positive effect on the discharge to the Town's impaired waters. In the chart below, it illustrates how each of our BMPs addresses the specific impairments of our local waters.

2010 305(b)/303(d) Water Quality Assessment Report - Impairments			
MINIMUM CONTROL MEASURE ONE BMPs	<i>Sediment</i>	<i>Bacteria</i>	<i>Temperature</i>
BMP 1.A (Public Education and Outreach Plan Development)	✓	✓	✓
BMP 1.B (Storm Drain Marking Program)	✓	✓	
BMP 1.C (Demonstration Projects Enhancement)	✓	✓	✓
BMP 1.D (Household, Business and Hazardous Waste Education)		✓	
BMP 1.E (Grease Program Enforcement)		✓	
BMP 1.F ( Illicit Discharge Education)	✓	✓	✓
BMP 1.G (Town Stormwater Page Maintenance)	✓	✓	✓

### **A. Public Education and Outreach Plan (PEOP) Development**

The Town will develop a public education and outreach plan (PEOP) to coordinate all outreach efforts into one campaign.

Measurable Goals Identified and Achieved:	Years Planned				Years Achieved
Identify three high-priority Issues	2014				2014
Identify population size of the Target Audience	2014				2014
Develop a Relevant Message	2014				2014
Conduct Activities to Reach 20% of Target Audience	2015	2016	2017	2018	-
Evaluate Plan for Appropriateness and Effectiveness	2015	2016	2017	2018	-
Evaluate Audience Selection and High Priority Issues	2015	2016	2017	2018	-
Provide Participation Opportunities	2015			20108	-

<b>Progress Toward Meeting Objectives of Permit</b>
The Town completed a draft Public Education and Outreach Plan on June 17, 2014. This plan is awaiting public comment and input and will be finalized after input is received and incorporated. The Town plans to begin conducting activities as well as evaluating the program in year 2.
<b>Proposed Changes to BMP or Measurable Goals</b>
None proposed.

## B. Storm Drain Marking Program Implementation

The town plans to mark all storm drains within town limits with information regarding the storm drain system. A combination of painted storm drain stencils and the placement of permanent storm drain curb markers will be utilized for this program. Painted storm drain stencils will be used in areas where high traffic could dislodge a permanent curb marker. A permanent high visibility curb marker will be used in more pedestrian areas.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Create Storm Drain Marking Inventory	2014	2015	2016	2017	2018	2014
Mark Storm Drains with Faded Markings	2014	2015	2016	2017	2018	2014
Mark Storm Drains with Permanent Marker	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town completed the marking of 190 high visibility metal markers on the highly pedestrian streets of downtown, Main Street and Prices Fork Road. A GIS map is being used to inventory marked locations and plan for future marking areas.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## C. Demonstration Projects Enhancement

The town will continue utilizing Demonstration Projects on Town property as examples and educational resources for citizens:

- Wong Park Bioretention and Urban Forestry Area
- Recreation Building Bioretention (research partnership with Virginia Tech)
- Aquatic Center Bioretention (Bioretention retrofit)
- Blacksburg Motor Company (Bioretention, porous concrete, rain gardens, and rain barrels)
- South End Fire Station LID practices
- Farmer’s Market (Redevelopment, reduction of impervious cover, Urban beautification)
- College Avenue Promenade (Urban streetscape Bioretention)

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Conduct tour(s) of Stormwater Demonstration Projects	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
Construct New Demonstration Projects					2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
Three tours were provided this reporting year utilizing Town Demonstration Projects as educational resources:						
<ul style="list-style-type: none"> <li>• College Avenue Promenade Bioretention facilities (7/5/2013) – University Students</li> <li>• College Avenue Promenade and Blacksburg Motor Company (7/20/2013) – Master Gardeners</li> <li>• Blacksburg Motor Company Building (10/3/2013) – Regional Planning Commission</li> </ul>						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## D. Household Waste, Business Waste, Universal and Hazardous Waste Education and Minimization

The Town's Office of Waste Minimization and Recycling employs two full time positions dedicated to addressing municipal solid waste, universal waste, and hazardous waste issues. Staff also addresses employee awareness and community education regarding these topics.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Conduct Annual Household Hazardous Waste Day	2014	2015	2016	2017	2018	2014
Record HHHW date, attendance & weight of collection.	2014	2015	2016	2017	2018	2014
Town Sponsored Electronics Recycling	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Household Hazardous Waste Day was held in October 2013. Three hundred fifty (350) cars were served, 0.65 tons of non-hazardous waste and 13.69 tons of hazardous waste were collected. The Town continues to sponsor recycling of community electronics.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## E. Grease Program Enforcement

The Town "grease program" has established education, inspection, and enforcement guidelines. The Town has identified gas station and food service businesses that use or generate grease and/or oils. The businesses are targeted for education and outreach concerning BMPs that address the storage, disposal, and spills annually. The Town also sends an annual reminder to all historic violators. The Town maintains a database of violations that is utilized in the geographical informational systems to track trends in the system.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Send Educational Brochures to Restaurants	2014		2016		2018	2014
Send Educational Brochures to Fuel Centers		2015		2017		-
Send a reminder to businesses historic violations	2014	2015	2016	2017	2018	2014
Maintain database of oil & grease violators	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town distributed 41 grease and illicit discharge informational letters to local restaurants. Three violations were added to the database for tracking purposes.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## F. Illicit Discharge Education

The Town continues to research and update the BMPs, alternative options, and proper disposal techniques for non-storm water discharges.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Send Illicit Discharge Educational Information to Businesses	2014	2015	2016	2017	2018	2014
Send out Non-stormwater discharger survey	2015					-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town mailed out 182 of illicit discharge informational letters to businesses in the Town.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## G. Town Stormwater Page Maintenance

Stormwater related information is available on the Town's website for the general public.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Update Stormwater webpage	2014	2015	2016	2017	2018	2014
Review Stormwater webpage for Appropriate Content	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town Stormwater page was updated to include information regarding the new Stormwater Utility ordinance, the Stormwater VSMP Program ordinance, and associated documents such as: the construction general permit, registration statement, termination form, fee table, single family SWPPP, and link to the BMP Clearinghouse. All listed updates were made prior to July 1, 2014.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## MCM 2: Public Involvement and Participation

The Town must, at a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program. The goal is to increase public notice, involvement and participation in the Town’s stormwater program. Measures described below are intended to meet these goals as described 9VAC25-890-40, Section II B (2).

### List of Minimum Control Measure #2 BMP’s:

- A. Conduct Stakeholder Meetings for Watershed Management and Stormwater Quality Improvement.
- B. TMDL Implementation Planning and Participation.
- C. Participate and Support Stream Clean-up Efforts.
- D. Posting of Program Plan and Annual Reports Online for General Public.
- E. Outreach Event Participation.

### Appropriateness of the BMPs:

These BMPs in conjunction succeed in increasing public involvement and participation in the Town’s stormwater program. Participation and citizen support for stormwater measures increases citizen advocacy and provides for more successful stormwater program. Below shows how each of our program plan BMPs addresses the specific impairments of our local waters.

2010 305(b)/303(d) Water Quality Assessment Report - Impairments			
MINIMUM CONTROL MEASURE TWO BMPs	<i>Sediment</i>	<i>Bacteria</i>	<i>Temperature</i>
BMP 2.A (Stakeholder Meetings)	✓	✓	✓
BMP 2.B (TMDL Implementation Planning and Participation)	✓	✓	✓
BMP 2.C (Participate and support stream clean-up efforts)	✓	✓	✓
BMP 2.D (Posting of Program Plan and Annual Reports online)	✓	✓	
BMP 2.E (Outreach Event Participation)	✓	✓	✓

### A. Conduct Stakeholder Meetings for Watershed Management and Stormwater Quality Improvement

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Attend community meetings and public hearings for new projects with stormwater concerns.	2014	2015	2016	2017	2018	2014
Document Citizen Comments	2014	2015	2016	2017	2018	2014
Update Stormwater Goals in Comprehensive Plan		2015		2017		-
Meet w/ Local Watershed Groups		2015	2016	2017	2018	-
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town had 12 community meetings and 5 public hearings in which stormwater issues were discussed. A total of 285 citizens attended these meetings. No updates were made to the comprehensive plan regarding stormwater and no watershed interest groups met this reporting year.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## B. TMDL Implementation Planning and Participation

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Attend Stroubles Creek TMDL IP Meetings	2014	2015	2016	2017	2018	2014
Attend Roanoke River TMDL IP Meetings	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
Town staff attended 4 meetings concerning the planning or implementation of TMDLs for the Stroubles Creek and Roanoke River watersheds.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## C. Participate and Support Stream Clean-up Efforts

The Town will participate and assist local groups for stream clean-up efforts, including assistance with funding, trash collection, mapping and documentation for determining stream stretches, drainage ways, channels and other areas in need of clean-up and record keeping of these activities.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Participate Local Stream Clean-up Efforts	2014	2015	2016	2017	2018	2014
Assist in Local Stream Clean-up Efforts		2015	2016	2017	2018	-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town participated in two stream clean-up events in November 2013 and January 2014 in the Stroubles Creek and Cedar Run Watersheds. The Town plans on assisting in more stream clean-up efforts with citizen groups in the following reporting years.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## D. Posting of Program Plan and Annual Reports Online for General Public

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Post Program Plan or Updates on Website	2014	2015	2016	2017	2018	2014
Post Annual Report on Website by November 1	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town posted the 2013 Program Plan and Year 5 Annual report on the <a href="http://www.blacksburg.gov/stormwater">www.blacksburg.gov/stormwater</a> webpage on October 4, 2013.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## E. Outreach Event Participation

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Sponsor or Participate in at least 4 Outreach Events	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
Town staff participated in "Steppin' Out", Sustainability Week, The Big Event, and a general membership meeting of the New River Valley Homebuilders Association. These events occurred on 8/2/13, 9/18/13, 4/7/14 and 6/18/14, and Town staff had direct engagement with approximately 490 people.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

### MCM 3: Illicit Discharge Detection and Elimination

Develop a comprehensive map of the storm drain system, establish and carry out procedures to identify and remove illicit discharges, establish legal authority for enforcement actions, and encourage public education and involvement in eliminating illicit discharges. Measures described below are intended to meet public outreach and measurable goals as described 9VAC25-890-40, Section II B (3).

List of Minimum Control Measure #3 BMP's:

- A. Develop a Storm Drain System Map
- B. Develop Procedures for Identifying Areas with High Potential for Introducing Illicit Discharges to the Storm System
- C. Enforce an Ordinance Prohibiting Illegal Dumping and Non-storm Water Discharges
- D. Enforce an Ordinance Prohibiting Diverted Stream Flows in Environmentally Sensitive Areas and Encouraging Buffering Around Creeks
- E. Establish a Plan to Identify and Remove Illicit Discharges by Utilizing Public Involvement, Education, and Enforcement of Illicit Discharge Ordinance.
- F. Estimate Volume of Stormwater Discharged and Quantity of WLA Pollutant.
- G. Develop Written Procedures to Detect, Identify, and Address Discharges Including Illegal Dumping
- H. Notify, in Writing, any Downstream Regulated MS4 to which the Small Regulated MS4 is Physically Interconnected of the Small Regulated MS4's Connection to that System.

### Appropriateness of the BMPs:

These BMPs in conjunction succeed in establish legal authority for enforcement actions, and encourage public education and involvement in eliminating illicit discharges. Enforcement and awareness are critical to identify and eliminate illicit discharged to the storm drain network. Below shows how each of our BMPs addresses the specific impairments of our local waters.

2010 305(b)/303(d) Water Quality Assessment Report - Impairments			
MINIMUM CONTROL MEASURE THREE BMPs	<i>Sediment</i>	<i>Bacteria</i>	<i>Temp.</i>
BMP 3.A (Develop a Storm Drain System Map)	✓	✓	✓
BMP 3.B (Procedures for Identifying Illicit Discharge Potential)	✓	✓	✓
BMP 3.C (Enforce Non-Stormwater Discharge Ordinance)	✓	✓	✓
BMP 3.D (Enforce Ordinance Preventing Diverted Streams/Overlays)	✓	✓	✓
BMP 3.E (Plan to Identify and Remove Illicit Discharge)	✓	✓	✓
BMP 3.F (Estimate Volume discharged and quantity of WLA pollutant)	✓	✓	
BMP 3.G (Develop written procedures to detect, identify, and address stormwater discharges including illegal dumping)	✓	✓	✓
BMP 3.H (Notification of Downstream Regulated MS4)	✓	✓	

## A. Develop a Storm Drain System Map

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Storm Sewer Inventory Update	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
In the past year the Town has mapped 2,239 new structures and 2,198 new channels.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## B. Develop Procedures for Identifying Areas with High Potential for Illicit Discharge

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Develop Illicit Discharge Potential Assessment	2014	2015	2016	2017	2018	2014
Develop Outfall Reconnaissance Inventory	2015	2016	2017	2018		-
Perform screening for 20% of Outfalls	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has completed its Discharge Potential assessment and Outfall Reconnaissance Inventory as part of the Comprehensive Illicit Discharge Detection and Elimination Program (revised June 17, 2014) which outlines all details of the program. The Town has also screened 30 outfalls which is 20% of the total number of outfalls within the Town.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## C. Enforce an Ordinance Prohibiting Illegal Dumping and Illicit Discharges

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Enforce Illicit Discharge Ordinance	2014	2015	2016	2017	2018	2014
Track all known illicit discharges and illegal dumping	2015	2016	2017	2018		-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has adopted the Illicit Discharges ordinance (sec. 18-624) of the new stormwater ordinance on June 10, 2014. This ordinance is an update to the previous Illicit Discharges section 18-622 of the stormwater ordinance. The Town recorded 7 illicit discharge complaints last reporting year, 3 of which were determined to be true illicit discharges. These incidents were tracked and eliminated according to the program procedures.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## D. Enforce an Ordinance Prohibiting Diverted Stream Flows and Encouraging Buffering Around Creeks

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Enforce Creek Valley Overlay and Floodplain Districts	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town continues to enforce the Creek Valley and Floodplain overlay districts. The Town reviewed two (2) subdivision/site plans where the Creek/Valley Overlay was enforced and two (2) site plans/subdivisions where the Floodplain Overlay was enforced.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## E. Establish an Illicit Discharge Plan to Eliminate Discharges through Outreach

Measurable Goals Identified and Achieved:	Years Planned				Years Achieved
Develop a Public Involvement Plan for Illicit Discharges	2014				2014
Outline Public Involvement and Education for Illicit Discharges	2014				2014
Outline the enforcement methodology	2014				2014
Document the methods used in outfall screening	2014				2014
Identify the frequency with which to perform outfall reconnaissance	2014				2014
Detail the actions required if a suspected discharge is found	2014				2014
Identify source identification protocols, enforcement methods and reporting requirements.	2014				2014
Attend citizen event & distribute Information	2015	2016	2017	2018	-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town has completed the Comprehensive Illicit Discharge Detection and Elimination Program (revised June 17, 2014) which outlines all details of the program.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					

## F. Estimate Volume of Stormwater discharged and Quantity of WLA Pollutant

The TOB currently has the following WLAs associated with a TMDL:

- 211 tons/year sediment to Stroubles Creek
- 102 tons/year sediment to Upper Roanoke River watershed
- 3.15E+09 cfu/year bacteria (E coli) to Wilson Creek

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Estimate Volume of Water Discharged from each watershed	2014	2015	2016	2017	2018	2014
Estimate Amounts of WLA pollutants	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015, 2016, 2017, 2018					-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has estimated the volume and quantity of pollutants using the LTHIA Basic Spreadsheet. This program inputs the state and county, soil type and land use to estimate the values. The Town discharged 68.30 tons of sediment to Stroubles Creek, 23.71 tons of sediment to the N. Fork Roanoke River, and 1.03E+10 colony forming units of bacteria (E coli) to Wilson Creek.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## G. Develop Written Procedures to Detect, Identify, and Address Illegal Stormwater Discharges

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Identify and document written dry weather screening methodologies.	2014	2015	2016	2017	2018	2014
Develop a prioritized schedule of field screening.	2014	2015	2016	2017	2018	2014
Describe how discharge rate and visual observations will be described.	2014	2015	2016	2017	2018	2014
Identify a timeframe for follow-up.	2014	2015	2016	2017	2018	2014
Establish a database for tracking.	2014	2015	2016	2017	2018	2014
Expand outreach methods for public reporting.	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has completed the Comprehensive Illicit Discharge Detection and Elimination Program (revised June 17, 2014) which outlines all details of the program.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## H. Notify in Writing all Downstream MS4 of any Known Physical Interconnections

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Notify All Downstream MS4s of Interconnections	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has notified Virginia Tech and VDOT of all known physical interconnections. In year two (2), the Town will also begin notifying Montgomery County (a new MS4 entity) of its known physical interconnections.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## MCM 4: Construction Site Runoff Control

Develop, implement, and enforce a program to reduce pollutants in storm water runoff to the MS4 from construction activities that is compliant with the Virginia Erosion and Sediment Control program administered by the Department of Environmental Quality. Additionally, reduction of stormwater discharges from construction activity disturbing less than 5000 feet must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb 5000 square feet or more. Measures described below are intended to meet public outreach and measurable goals as described 9VAC25-890-40, Section II B (4).

The operator shall track regulated land-disturbance activities and submit the following information annually in accordance to Section II (E) (3) of 4VAC50-60

1. Total number of regulated land disturbing activities
2. Total disturbed acreage

### List of Minimum Control Measure #4 BMP's:

- A. Erosion and Sediment Control Ordinance, Certification and Land Disturbing Activities.
- B. Respond To Erosion and Sediment Control Complaints.
- C. Require construction site operators to control waste.
- D. Require acknowledgement from agent (design engineer) or owner when a VSMP permit is needed for a plan under review.
- E. E&S Inspection Protocol (July 2014)
- F. Pollution Prevention Plan Enforcement Protocol (July 2015)

### Appropriateness of the BMPs:

These BMPs provide the Town with an E&S program that can successfully reduce pollutants in storm water runoff to the MS4 from construction. Sediment from construction sites can act as a vehicle for bacteria and sediment transport into the regulated MS4. The chart below shows how each BMP successfully targets the impairments of the Town's local streams.

2010 305(b)/303(d) Water Quality Assessment Report - Impairments			
MINIMUM CONTROL MEASURE ONE BMPs	<i>Sediment</i>	<i>Bacteria</i>	<i>Temperature</i>
BMP 4.A (Erosion and Sediment Control Ordinance)	✓	✓	
BMP 4.B (Respond To Erosion and Sediment Control Complaints)	✓	✓	
BMP 4.C (Require Construction Site Operators to Control Waste)		✓	
BMP 4.D (Measures to Assure Owners Acquire VSMP Permit)	✓	✓	✓
BMP 4.E (E&S Inspection Protocol)	✓	✓	
BMP 4.F (Pollution Prevention Plan Enforcement Protocol)	✓	✓	✓

## A. Erosion and Sediment Control Ordinance, Certification and Land Disturbing Activities

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Erosion and Sediment Control Ordinance Review for State Compliance	2015					-
Document number of E&S Inspections	2014	2015	2016	2017	2018	2014
Document number of enforcement actions	2014	2015	2016	2017	2018	2014
Certify that all staff has appropriate certification(s)	2014	2015	2016	2017	2018	2014
Track the number of land disturbances	2014	2015	2016	2017	2018	2014
Track the total area of disturbed land	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
<ul style="list-style-type: none"> <li>The Erosion and Sediment Control Ordinance will be reviewed for compliance with the most current state Erosion and Sediment Control (FY2014) ordinance if any items are identified, they will be addressed. This ordinance review is scheduled for Year 2 of the permit cycle and the changes should be implemented immediately following the review.</li> <li>A total of 1525 erosion and sediment control inspections were conducted last reporting term, 30 verbal warnings, 0 Notices to Comply and 1 site failed a state VSMP inspection.</li> <li>The Town employs 10 staff members that maintain Erosion and Sediment control certificates. Currently all employees are current on their certifications.</li> <li>In this reporting year, the Town approved 47 single family residences and 21 site plans and subdivisions. A total of 62.47 acres were disturbed.</li> </ul>						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## B. Respond To Erosion and Sediment Control Complaints

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Respond to E&S control complaints	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
All erosion and sediment control complaints were responded to within 24 hours of reporting. All concerns were resolved in a timely manner.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## C. Require Construction Site Operators to Control Waste

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Respond to Trash and Debris complaints	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
All trash and debris control complaints were responded to within 24 hours of reporting. Since all debris was cleared immediately, no trash and debris reports were issued.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## D. Require Acknowledgement when a VSMP Permit is Needed for a Plan under Review

Measurable Goals Identified and Achieved:	Years Planned				Years Achieved
Provide a VSMP comment in site plan review letter to all disturbances >1acre <b>(TO BE ELIMINATED)</b>	2014				2014
Verify VSMP permit coverage at pre-con meeting <b>(TO BE ELIMINATED)</b>	2014				2014
Track all disturbances covered under a VSMP permit <b>(NEW)</b>	2015	2016	2017	2018	-
Track all disturbances covered under a VSMP Authority permit <b>(NEW)</b>	2015	2016	2017	2018	-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>					
This method was performed for all sites that disturbed greater than 1 acre of land between July 1, 2013 and June 30, 2014, a total of <b>21</b> sites.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
In Year two (2), the Town has developed a new protocol as a VSMP Authority. No land disturbances will be authorized without proof of VSMP coverage or coverage under a VSMP Authority permit. Measurable goals tracking site plan review comments and pre-construction meeting will be eliminated and replaced with tracking of VSMP covered permits and VSMP Authority permits					

## E. E&S Inspection Protocol

Measurable Goals Identified and Achieved:	Years Planned				Years Achieved	
Document schedule for E&S inspections	2014				2014	
Adopt a public mechanism for the promotion and receipt of complaints.	2014				2014	
Outline procedures for use of legal authority to require compliance with the approved plan.	2014				2014	
Document that inspections are performed by certified inspectors	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018	-	
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has completed its E&S Inspection Protocol. This plan has been implemented and the frequency for inspections is in compliance with general permit. The plan also outlines our enforcement and plan revision procedures. In addition, the Town has adopted multiple public mechanisms for receipt of complaints regarding regulated land disturbing activities, one is called "At your Request" and another is called "Speakup Blacksburg!" Both strategies are opportunities for citizens to voice complaints regarding any issue within the Town.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## F. Pollution Prevention Plan Enforcement Protocol

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>				<b>Years Achieved</b>
Implement a Pollution Prevention Plan Enforcement Protocol	2015				-
Perform SWPPP Inspections in compliance with the Pollution Prevention Plan Protocol	2015	2016	2017	2018	-
Document number of SWPPP Inspections performed	2015	2016	2017	2018	-
Evaluate BMP for Appropriateness and Effectiveness	2016 2017 2018				-
<b>Progress Toward Meeting Objectives of Permit</b>					
The Pollution Prevention Plan Enforcement Protocol will be drafted in Year 2 of this permit cycle, prior to the July 2015 deadline. This protocol will require the implementation of controls to prevent non-stormwater discharges to the MS4 such as wastewater, concrete washout, fuels and oils or other illicit discharges. Inspections will begin July 1, 2014 and results from the program will be reported in the Year 2 annual report.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					

## MCM 5: Post Construction Stormwater Management

Develop, implement and enforce a program to reduce the volume and improve the quality of storm water runoff from development with a land disturbance of greater than or equal to 5000 square feet. Additionally, reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb 5000 square feet or more. Measures described below are intended to meet public outreach and measurable goals as described 9VAC25-890-40, Section II B (5).

### List of Minimum Control Measure #5 BMP's:

- A. Enforce a storm water ordinance designed to control runoff impacts
- B. Implement a long term stormwater maintenance program.
- C. Tracking of all known stormwater management facilities.
- D. Stormwater Facilities Protocol

### Appropriateness of the BMPs:

These BMPs permanently reduce the volume and improve the quality of storm water runoff from development by enforcing permanent stormwater control facilities for all land disturbances of 5000 square feet and greater. The installation and appropriate maintenance of these facilities will trap sediment and pollutants and prevent sediment and bacteria from being transported through the system. Below shows how each of our program plan BMPs addresses the specific impairments of our local waters.

2010 305(b)/303(d) Water Quality Assessment Report - Impairments			
MINIMUM CONTROL MEASURE ONE BMPs	<i>Sediment</i>	<i>Bacteria</i>	<i>Temperature</i>
BMP 5.A (Enforce a Stormwater Ordinance)	✓	✓	✓
BMP 5.B (Implement a SW Maintenance Program)	✓	✓	
BMP 5.C (Tracking of SW Management Facilities)	✓	✓	
BMP 5.D (Stormwater Facilities Protocol)	✓	✓	

### A. Enforce a storm water ordinance designed to control runoff impacts

Measurable Goals Identified and Achieved:	Years Planned				Years Achieved
Adopt a Stormwater Ordinance compliant with State Regulations	2014				2014
Review of ordinance for continued compliance with State regulations	2015	2016	2017	2018	-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018	-
Progress Toward Meeting Objectives of Permit					
A revised Stormwater Ordinance was adopted on June 10th, 2014. This stormwater ordinance is in compliance with all parts of 9VAC25-870 of the State stormwater regulations. In the ordinance, the threshold for stormwater was continued at 5000 square feet instead of adopting the state threshold of 1 acre.					
Proposed Changes to BMP or Measurable Goals					
None proposed.					

## B. Implement a Long Term Stormwater Maintenance Program

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Require a Stormwater covenant prior to plan approval.	2014	2015	2016	2017	2018	2014
Inspect private facilities once every five years.	2014	2015	2016	2017	2018	2014
Inspect Town facilities every year.	2014	2015	2016	2017	2018	2014
Maintain a database of swm facilities with most recent inspection date.	2014	2015	2016	2017	2018	2014
Store inspection and maintenance forms for Town facilities.	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
All new construction stormwater management facilities (59) that have come online in the past reporting year have had recorded stormwater covenants associated with them. They have all been entered into the GIS database and were inspected prior to certificates of occupancy. All (47) Town owned facilities were inspected this reporting year and twenty-nine (29) private facilities were inspected.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## C. Tracking of all Known Stormwater Management Facilities

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Collect GPS coordinate for all stormwater infrastructure	2014	2015	2016	2017	2018	2014
Add new SWM facilities to infrastructure database	2014	2015	2016	2017	2018	2014
Update database with stormwater facility type, latitude and longitude, acres treated, date online, HUC code, impaired stream, public/private, date of last inspection.	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
Through efforts to utilize field collection to map the infrastructure and model the storm drainage network throughout the town, <b>7</b> existing ponds were discovered and <b>59</b> new construction facilities were added to the database						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## D. Develop Stormwater Facilities Protocol

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Adopt written policies and procedures to ensure SWM facilities are designed and constructed properly.	2014					2014
Adopt inspection procedures for conducting all public and private facilities.	2014					2014
Identify roles and responsibilities of each Town departments in the management of the facilities.	2014					2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Stormwater Facilities protocol has been drafted. It includes the policies of plan review, construction and post-construction documentation. Inspection procedures are also included for all public and private facilities. The maintenance of all Town stormwater facilities are the responsibility of Public Works, therefore no formal document was drafted to delineate responsibility.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## MCM 6: Pollution prevention/Good housekeeping

Develop and implement an operation and maintenance program to prevent or reduce pollutant runoff from municipal operations in to the storm sewer system. Measures described below are intended to meet public outreach and measurable goals as described 9VAC25-890-40, Section II B (6).

### List of Minimum Control Measure #6 BMP's:

- A. Maintenance procedure and scheduling for pollutant reduction in roads, parking lots, and storage yards.
- B. Controls for reducing the discharge of pollutants from publicly maintained areas.
- C. Reduce the amount of solid waste from government facilities by encouraging employees to recycle and by implementing source reduction methods.
- D. Reduce the use of hazardous chemicals where practicable and ensure that all chemicals are stored, handled, used, and disposed of properly.
- E. Develop and implement an operation and maintenance program to prevent or reduce the pollutant runoff from municipal operations and train employees on proper procedures to accomplish pollution prevention objectives.
- F. Turf and Landscape Nutrient Management Plans
- G. Regional Solid Waste Authority Hazardous Waste Collection Event

### Appropriateness of the BMPs:

These BMPs serve to reduce the pollutants discharged from municipal areas. Municipalities often have the potential of discharge in their facilities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and MS4 maintenance. This BMP minimizes the likelihood of discharge through education and good housekeeping programs. Below shows how each of our program plan BMPs addresses the specific impairments of our local waters.

2010 305(b)/303(d) Water Quality Assessment Report - Impairments			
MINIMUM CONTROL MEASURE SIX BMPs	<i>Sediment</i>	<i>Bacteria</i>	<i>Temperature</i>
BMP 6.A (Pollution Reduction in Road, Parking and Storage)	✓	✓	
BMP 6.B (Reducing Pollutants from Publicly Maintained Areas)	✓	✓	
BMP 6.C (Reduction of Solid Waste from Municipal Facilities)	✓	✓	
BMP 6.D (Reduction of Hazardous Chemicals)		✓	
BMP 6.E (Developing and Implementing an O&M Program)	✓	✓	
BMP 6.F (Turf and Landscape Nutrient Management Plans)		✓	✓
BMP 6.G (Regional Solid Waste Authority Hazardous Waste Collection)		✓	

## A. Maintenance Actions for Pollutant Reduction in Roads, Parking Lots, and Storage Yards

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Perform leaf and Christmas tree pickup	2014	2015	2016	2017	2018	2014
Perform twice yearly brush and bulk item pickup	2014	2015	2016	2017	2018	2014
Daily removal of trash and litter in the Downtown areas	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
In addition to this routine bulk and brush pickup, the Town is transitioning from an Environmental Management Program to a Virginia Exemplary Environmental Program (SP) Sustainability Partners. This program is a separate but complementary framework to traditional EMS programs, which are better suited to industrial operations. The VEEP SP framework will assist the Town in maintaining high standards for environmental compliance while providing organizational mechanisms for continual, measurable environmental improvements across the municipality – its buildings, operations, and vehicular fleet - while also ensuring the Town will provide leadership by example for citizens, community groups, and local businesses.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
Revisions based upon new direction from the VEEP SP program are anticipated.						

## B. Controls for Reducing the Discharge of Pollutants from Publicly Managed and Maintained Areas

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Perform Sanitary Sewer Line Maintenance to reduce clogging	2014	2015	2016	2017	2018	2014
Perform Sanitary Sewer Line Upgrades to maintain capacity	2014	2015	2016	2017	2018	2014
Continue Managing the Town-Wide recycling Program	2014	2015	2016	2017	2018	2014
Maintain Spill Prevention Programs for the Facilities at risk	2015	2016	2017	2018		-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town performs annual sanitary sewer line cleaning to reduce the amount of root intrusion into the sewer lines. This allows the sewer line to function without clogging. In addition, the sanitary sewer is continually studied for areas in need of upgrades to maintain capacity with growth in population. The Town also manages a Town-wide recycling program for all residential homes.						
In year 2 (2015), Town facilities that require spill prevention plans will be reviewed and inspected for compliance.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
None proposed.						

## C. Reduce the Amount of Solid Waste from Municipal Facilities

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Continue municipal building recycling of co-mingled containers, mixed paper, toner cartridges, electronics, and rechargeable/alkaline batteries.	2014	2015	2016	2017	2018	2014
Continue the recycling of oil, antifreeze, tires, and metal at the Public Works and Transit garage.	2014	2015	2016	2017	2018	2014
Continue recycling used fluorescent lamps and metal from discarded items.	2014	2015	2016	2017	2018	2014
Continue the recycling of electronic equipment and computers through the Purchasing Division and Technology Department.	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
The Town has continued these programs to reduce the amount of waste from government facilities with recycling and implementing source reduction methods.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
The departments that recycle do not currently track the amount being recycled to identify trends or improvements. In future years, the Town would like to begin tracking the amounts of each type of recycled material to identify if programs are being utilized and if they are necessary.						

## D. Reduce the Use and Discharge Potential of Hazardous Chemicals

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Planned</b>					<b>Years Achieved</b>
Provide training for all Registered Technicians or Certified Applicators through the State	2014	2015	2016	2017	2018	2014
Update the Towns MSDS Management Program	2014	2015	2016	2017	2018	2014
Evaluate BMP for Appropriateness and Effectiveness		2015	2016	2017	2018	-
<b>Progress Toward Meeting Objectives of Permit</b>						
All registered technicians and certified applicators have been trained this reporting year.						
<b>Proposed Changes to BMP or Measurable Goals</b>						
The Universal Waste Policy will be incorporated into this BMP next year.						

## E. Develop and Implement an O&M and Training Program to Prevent or Reduce the Pollutant Runoff from Municipal Operations

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Develop a Pollution Prevention Program for Municipal Operations	2014	2015	2016	2017	2018	2014
Implement the Pollution Prevention Program	2015	2016	2017	2018		-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
Progress Toward Meeting Objectives of Permit						
Outlines for training programs have been developed for the Town Police Department, Fire and Rescue, Public Works Grounds and Fueling and Vehicle Maintenance staff. Training programs will begin in Year 2 of the permit cycle.						
Proposed Changes to BMP or Measurable Goals						
None proposed.						

## F. Turf and Landscape Nutrient Management Plans

The operator shall implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the MS4 operator where nutrients are applied to a contiguous area greater than one acre.

Measurable Goals Identified and Achieved:	Years Planned					Years Achieved
Identify all Applicable Lands where Nutrients are Applied – Latitude and Longitude	2014	2015	2016	2017	2018	2014
Implement Turf Management Plans to 15% of Lands	2015	2016	2017	2018		-
Implement Turf Management Plans to 40% of Lands		2016	2017	2018		-
Implement Turf Management Plans to 75% of Lands			2017	2018		-
Evaluate BMP for Appropriateness and Effectiveness	2015	2016	2017	2018		-
Progress Toward Meeting Objectives of Permit						
The Town has completed its identification of lands requiring Turf and Landscape Nutrient Management Plans. A total of six sites meet this description.						
Proposed Changes to BMP or Measurable Goals						
None proposed.						

## G. Regional Solid Waste Authority Hazardous Waste Collection

The Town's Office of Waste Minimization and Recycling employs two full time positions dedicated to addressing municipal solid waste, universal waste, and hazardous waste issues. Staff also addresses employee awareness and community education regarding these topics.

**This BMP has been re-numbered as BMP 1-E.**

**CERTIFICATION STATEMENT AND SIGNATORY REQUIREMENTS  
FOR MS4 PERMIT APPLICATIONS AND REPORTS**

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall, be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

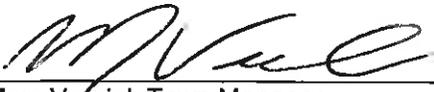
A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
3. The written authorization is submitted to the department.

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**CERTIFICATION**

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 gather and evaluate 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, 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.

 9/30/14  
Marc Verniel, Town Manager Date

VAR040019 Town of BLACKSBURG  
Permit Number MS4 Name