



**TOWN OF BLACKSBURG STORMWATER  
MANAGEMENT PROGRAM  
VPDES PERMIT NO. VAR 040019  
(Effective November 1, 2018)**

**Municipal Separate Storm Sewer System (MS4) Annual  
Report for the reporting period:  
July 1, 2020 to June 30, 2021**

**Date Submitted: October 1, 2021**

*"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."*

Marc Verniel, Town Manager

Date

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## Introduction

Regulatory compliance related to stormwater 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, 2020** through **June 30, 2021** for the **Town of Blacksburg** (TOB), General Permit No. **VAR040019** (effective November 1, 2018 – October 31, 2023). In this past permit year each department's roles and responsibilities has been described in the 2018 TOB Program Plan. All of the policies and procedures referenced in this annual report support the new Program Plan. In the future, minor revisions to BMPs will be described in the body of the annual report based upon evaluations made upon the end of each reporting period.

## Annual Report Requirements, General

- 1) Permittee, system name and permit number; **(Coversheet)**
- 2) The reporting period for which the annual report is being submitted; **(Coversheet)**
- 3) Signed Certification as per Part III K; **(Coversheet)**
- 4) Each annual reporting item as specified in the MCMs in Part I E; and **(body)**
- 5) An evaluation of the MS4 program implementation, including a review of each MCM to determine the MS4 program's effectiveness and whether or not changes to the MS4 program plan are necessary. **(body)**

## MCM 1: Public Education & Outreach

The goals of the Public Education and Outreach Minimum Control Measure (MCM) are (1) To increase public knowledge of how to reduce pollution with a focus on the specific water quality issues of our local waters, (2) To increase public knowledge of hazards associated with illegal discharges and improper disposal of waste, and (3) To implement a diverse program with strategies that target those groups most likely to have stormwater impacts. Measures described below are intended to meet the public outreach and outreach goals as described in the Program Plan.

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

- A. Storm Drain Marking Program
- B. Illicit Discharge Education for Commercial Businesses
- C. Town Stormwater Webpage and Digital Media
- D. Outreach Targeting School Aged Children and University Students

The high priority stormwater issues listed below are identified in the Town of Blacksburg Program Plan. The public education and outreach best management practices focus on these issues as is described in the section below.

### High Priority Stormwater Issues:

- Local TMDLs
- Illicit Discharges from Commercial Sites
- Pet Wastes

### 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 high-priority water quality issues listed in the Program Plan.

Evaluation of Consistency with High Priority Stormwater Issues			
MINIMUM CONTROL MEASURE ONE BMPs	<i>Local TMDLs</i>	<i>Illicit/Commercial</i>	<i>Pet Wastes</i>
BMP 1.A (Storm Drain Marking Program)	✓	✓	
BMP 1.B (Illicit Discharge Education for Commercial Businesses)	✓	✓	
BMP 1.C (Town Stormwater Webpage and Digital Media)	✓	✓	✓
BMP 1.D (Outreach Targeting School Aged Children and University Students)	✓	✓	✓

### Annual Report Required Documentation:

- A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program; **(this page)** and
- A list of the strategies used to communicate each high-priority stormwater issue. **(below)**

Strategies from Table 1							
MCM1 BMPs	Written	Alternative	Signage	Media	Speaking	Curriculum	Training
BMP 1.A (Storm Drain Marking Program)	✓		✓	✓			
BMP 1.B (Illicit Discharge Education for Commercial Businesses)	✓						
BMP 1.C (Town Stormwater Webpage and Digital Media)				✓			
BMP 1.D (Outreach Targeting School Aged Children and University Students)						✓	

### A. Storm Drain Marking Program Implementation

The town plans to mark storm drains in high pedestrian areas with information that identifies that the waters go to local streams. This may be done with a stamp or marker, or alternative messages such as art work and other high profile method. The goal is to draw attention to the storm drain network and educate citizens that these waters are not treated prior to discharge to local waters.

Measurable Goals Identified and Achieved:	Years Achieved			
	2018	2019		
Sponsor Local Artists to Paint Storm Drains			-	
Mark Storm Drains with Metal Marker ( <i>alternative</i> )			<i>not achieved</i>	
Progress Toward Meeting Objectives of Permit				
This activity was not continued during the second year of the COVID-19 Pandemic. The scheduled locations for paintings were planned for high visibility public school properties. Unfortunately, due to the administrative challenges that the public schools were facing to manage student enrollment and student health management this past year, there was no interest to set aside time for coordination with the storm drain painting campaign. The Town will return to these locations when the School System is less overwhelmed with the global pandemic.				
Proposed Changes to BMP or Measurable Goals				
Due to the impracticality of installing a storm drain painting campaign at public school locations, the Town will focus on other areas.				
Next Reporting Period Activities Planned (YEAR 4)				
This next reporting year the Town will again focus on Downtown Storm Drain painting areas. We will choose local artists to paint three storm drains in the Downtown area. They will have the following themes:				
<ul style="list-style-type: none"> <li>• The Town of Blacksburg’s Freshwater Heritage</li> <li>• The Protection of Stroubles Creek</li> <li>• New River Watershed’s Natural Beauty: local wildlife, healthy habitat &amp; natural beauty</li> </ul>				

### B. Illicit Discharge Education for Commercial Businesses

The Town continues to research and update the commercial best management practices, alternative treatment and storage options, and proper disposal techniques for non-stormwater discharges to better educate the commercial business community. This information will be sent to businesses annually. Additionally, the Town will continue to send out a survey asking businesses about non-stormwater discharges specific to their business every five years.

Responses to the survey will allow the Town to evaluate the existing program and prioritize potential hazards for the future.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Send out Non-stormwater discharger survey	2018				
Send Illicit Discharge Educational Info to Businesses and Residents		2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town sent out an Illicit Discharge Flyer to Commercial businesses. This mailer was sent out to all contractors that provide construction services within Town. The Town continues to develop material that addresses on-going illicit discharge issues here in the Town of Blacksburg.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Next Reporting Period Activities Planned (YEAR 4)</b>					
In the next reporting period, the Town's goal is to reach out to all commercial businesses and provide literature regarding illicit discharges and proper waste disposal.					

### C. Town Stormwater Page Educational Information and Digital Media

Stormwater related information is available on the Town's website for the general public. The site contains links to DEQ, DCR, and EPA web pages related to stormwater pollution, MS4, and TMDLs. The Town's stormwater management ordinance, MS4 Program plan and annual reports, and local TMDLs are also posted on the website. The Town will continue to provide digital content relating to local stormwater issues.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Update Stormwater webpage	2018	2019	2020		
Review Alternative Digital Media Sources for Outreach		2019	2020		
Implement Alternative Digital Media Sources for Outreach			2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
This past year the webpage was updated with the most current MS4 Program Plan information and alternative sources of digital media were researched and implemented this year. The Town collaborated with the New River Land Trust organization to develop three informational videos that address local water quality from different perspectives. These videos are listed below and can be viewed through YouTube website. <ul style="list-style-type: none"> <li>• Stream Conservation in Montgomery County Virginia – Agricultural Perspective</li> <li>• Stream Conservation in Montgomery County Virginia – Childrens Perspective</li> <li>• Stream Conservation in Montgomery County Virginia – Endangered Species (Logperch) Perspective</li> </ul>					
<b>Proposed Changes to BMP or Measurable Goals</b>					
Due to the ongoing limitations of Covid-19, the Town is continuing to look into alternative methods of providing digital media for outreach due to fewer in-person activities.					
<b>Next Reporting Period Activities Planned (YEAR 4)</b>					
In the next reporting period, the Town's goal is to find alternative methods for Outreach. These are desirable to continue to have a diverse program to continue to target a diverse audience.					

### D. Outreach Targeting School Aged Children and University Students

The Town will continue to develop and implement a public education program specifically targeting school-age children and university students. This plan will cover stream and watershed education, information regarding local TMDLs and impairments and impacts of uncollected pet waste. School-age content will be consistent with the Virginia Science Standards of Learning

(SOL) curriculum. University education will be tailored to be relevant to the course and incorporate the high-priority stormwater issues as appropriate.

Measurable Goals Identified and Achieved:	Years Achieved				
Provide Curriculum Materials for 4 <sup>th</sup> Grade Stream Field Trips	2018	2019	Cancelled		
Provide Curriculum Materials for 6 <sup>th</sup> Grade Stormwater Day	2018	2019	Cancelled		
Oral Presentation to University Undergraduate Student Classes: CEE 4304 Hydrology, CEE 4274 Land Development, CEE 4254 Municipal Engineering or NR 4444 Practicing Sustainability	2018	Cancelled	Cancelled		
Oral Presentation to University Graduate Classes: CEE 5734 Urban Hydrology, CEE 5324 Advanced Hydrology		Cancelled	Cancelled		
Stream Exploration Backpack Kits (Blacksburg Library)			2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
<p>This past year no Stream Field Trips or Stormwater Day events occurred due to Covid-19 cancellations. All in-person presentations for University Students were also cancelled.</p> <p>As an outreach alternative, the Town began evaluating a partnership with the Montgomery-Floyd Regional Library system to implement a program for students to “check-out” educational material and perform independent activities with similar content as the large group school programs such as the Stormwater Day and the Stream Class.</p> <p>A Stream Exploration Backpack kit that includes necessary materials and instructions for stream sampling as well as educational resources highlighting stormwater and watershed education was developed and distributed to the Blacksburg Library.</p>					
<b>Proposed Changes to BMP or Measurable Goals</b>					
<p>The Town plans to continue to look for a variety of ways to address the measurable goals of this BMP. The global pandemic has taught us that variety in educational methods is an important way to reach school-aged children of all socio-economic backgrounds.</p>					
<b>Next Reporting Period Activities Planned (YEAR 4)</b>					
<p>In-person classes have returned at the University and public schools for the 2021-22 reporting year. The Town already has plans to attend in-person University events as well as support the “remote learning” programs that we have developed during the pandemic. We will continue to work with the public schools as they work towards returning to their full educational curriculum.</p>					

## MCM 2: Public Involvement and Participation

The goal of the Public Involvement and Participation measure is to increase public notice, involvement and participation in the Town’s stormwater program by providing diverse avenues for public input and reporting. The general permit requires that the Town have procedures for reporting spills or illicit discharges, providing input on the MS4 Program Plan, receiving complaints and documenting all responses.

### Program Plan Goals:

- To provide diverse avenues for public input and reporting
- To provide citizen input on the MS4 Program Plan
- To provide and avenue for receiving complaints and documenting response

Measures described below are intended to meet these goals as described in the Program Plan.

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

- A. Conduct Stakeholder Meetings for Watershed Management and Stormwater Quality Improvement and Comprehensive Planning
- B. Online Reporting Portal for Public
- C. Stormwater Webpage
- D. Stormwater Activities

### Annual Report Required Documentation:

- A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded; (**Appendix A**)
- A webpage address to the permittee’s MS4 program and stormwater website; (**see BMP 2-C**)
- A description of the public involvement activities implemented by the permittee; (**see BMP 2-D**)
- A description of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; (**see BMP 2-D**) and
- The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities. (**see BMP 2-D**)

### **A. Conduct Stakeholder Meetings for Watershed Management, Stormwater Quality Improvement and Comprehensive Planning**

Measurable Goals Identified and Achieved:	Years Achieved				
Staff attends community meetings and public hearings for new projects with stormwater concerns & documents citizens’ concerns	2018	2019	2020		
Attend Meetings for Local Stream TMDL Implementation					
Meet w/ Local Stormwater Interest Groups and HOAs					
Update Stormwater Goals in Comprehensive Plan					
Progress Toward Meeting Objectives of Permit					
The Town had 4 community meetings and 6 public hearings in which stormwater issues were discussed. There were no stormwater stakeholders interest groups that met this reporting year. Updates to the Blacksburg Comprehensive Plan are complete until 2022. The Town received individual comments/input regarding stormwater at these meetings. All input has been summarized in Appendix A.					



<b>Proposed Changes to BMP or Measurable Goals</b>
None proposed.
<b>Program Plan Goal Addressed by this BMP</b>
To provide diverse avenues for public input and reporting.
<b>Next Reporting Period Activities Planned (YEAR 3)</b>
In the next reporting period, the Town's goal is to continue to attend community meetings and public hearings. While these were paused earlier this year, they have been reinstated with social distancing and mask wearing. There is lower attendance, but they are still being attended. The Town is actively involved in discussions on how to continue the TMDL and stormwater Interest group meetings.

## B. Online Reporting Portal for Public

The Town has a system named "At Your Request" which is designed to provide our residents, businesses and visitors access to staff 24-hours a day, 7-days a week. This system allows residents to contact staff via email regarding input, complaints, and reports of illicit discharges or dumping. Each request is sent directly to a designated staff and must be responded to in 5 days. The Town will maintain this system or a comparable system to provide this service. The portal can be found at <http://www.tobweb.org/ayr/>.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Provide At-Your-Request Portal for 24-7 Reporting	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
There were 15 issues identified through the "At Your Request" system. These reports were a mixture of illicit discharges, stormwater complaints or general stormwater questions submitted to the system by citizens during this reporting period.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
To provide and avenue for receiving complaints and documenting response					

## C. Stormwater Webpage

As discussed in MCM1-C, Stormwater related information is available on the Town's website for the general public. In addition to general outreach and educational information, the Town will also provide opportunity for the public to view and comment on all stormwater permit information. The stormwater webpage is located at [www.blacksburg.gov/stormwater](http://www.blacksburg.gov/stormwater).

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Post Program Plan Online for comment	2018	2019	2020		
Post Annual Reports Online for comment	2018	2019	2020		
Post MS4 Permit and Coverage Letter	2018	2019	2020		
Provide an email address for comment	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
There were 4 individual comments/input or complaints submitted via email or phone to the Town of Blacksburg. All input has been summarized in Appendix A.					
<b>Program Plan Goal Addressed by this BMP</b>					
To provide and avenue for receiving complaints and documenting response					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					

**D. Stormwater Activities**

The Town will participate in a minimum of four activities per year to provide an opportunity for public input to improve water quality and support local restoration and clean-up projects.

Activities will consist of:

Education Events:

- Steppin’ Out (Fall 2020) was cancelled due to the COVID-19 pandemic.
- Stormwater Day (Fall 2020) was cancelled due to the COVID-19 pandemic.
- Stormwater Day (Spring 2021) was cancelled due to the COVID-19 pandemic.
- The Big Event (Spring 2021) was cancelled due to the COVID-19 pandemic.
- The New River Home Show (Spring 2021) was cancelled due to the COVID-19 pandemic.

*Although these events were cancelled this past reporting year, the collaborations are still intact for when these events occur again. Below are a summary of the other MS4s that collaborate with the Town of Blacksburg to provide regional support for these activities.*

Collaborations:

- Steppin’ Out – Virginia Tech (VAR040049) & Montgomery County (VAR040134)
- Stormwater Day (Spring and Fall) – Virginia Tech (VAR040049), Town of Christiansburg (VAR040025) & Montgomery County (VAR040134)
- The Big Event (Spring) – Virginia Tech (VAR040049)
- The New River Home Show (Spring) – Virginia Tech (VAR040049), Town of Christiansburg (VAR040025) & Montgomery County (VAR040134)

Disposal or Collection Events: Household Hazardous Waste Days – *These events that used to be held at the Montgomery Regional Solid Waste Authority has now been sourced out to the New River Regional Waste Authority in Dublin, VA due to budgeting challenges. This event will no longer be included in the Town of Blacksburg MS4 Program Plan.*

Measurable Goals Identified and Achieved:	Years Achieved				
	2018	2019	2020	2021	2022
Participate in a minimum of four activities	Yes	Not Achieved	Not Achieved		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town did not participate in stormwater events this reporting year. All options were cancelled due to the COVID-19 Pandemic.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
To provide diverse avenues for public input and reporting.					

## **MCM3: 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 these goals as defined in the Program Plan.

### Program Plan Goals:

- To develop and maintain an accurate MS4 map.
- To provide notification to any downstream MS4 of physical interconnections.
- To enforce illicit discharges.

Measures described below are intended to meet these goals as described in the Program Plan.

### Control Measure #3 BMP's:

- A. Storm Drain System Map
- B. Physical Interconnections
- C. Illicit Discharge Ordinance and Procedures

### Annual Report Required Documentation:

- A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year; **(BMP 3-A)**
- The total number of outfalls screened during the reporting period as part of the dry weather screening program; **(BMP 3-A)** and
- A list of illicit discharges to the MS4 including spills reaching the MS4. **(Appendix B)**

### **A. Storm drain system map**

The Town has been working with the Virginia Tech Civil Engineering Department to employ GIS and GPS technology to inventory the complete storm sewer system within the Town, including stormwater management facilities. This map is complete and needs updates as new development is underway. This map includes the following:

- MS4 Outfalls
- A unique identifier for each mapped item
- MS4 Regulated Service Area
- Stormwater Management facilities (operated by the Town & private entities)
- Acreage to Outfall
- Name of Receiving Water
- 6<sup>th</sup> Order HUC of the Receiving Water
- Impaired status
- Predominant Land Use
- TMDL Name

Measurable Goals Identified and Achieved:	Years Achieved				
	2018	2019	2020	2021	2021
Confirmation that MS4 map and information table have been updated to reflect any known changes prior to July 1 of this reporting period.	Yes	Yes	Yes		
Report the number of outfalls screened.	Yes	Yes	Yes		
List of Illicit Discharges	Yes	Yes	Yes		
<b>Progress Toward Meeting Objectives of Permit</b>					
<b>CONFIRMATION STATEMENT:</b> <i>The Town of Blacksburg has updated the MS4 map and information table to reflect all known changes prior to July 1, 2021.</i>					
In this reporting period <b>56</b> MS4 outfalls were screened. There were <b>22</b> reported illicit discharges during this reporting period. They are included in the Illicit Discharges Table in Appendix B.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
To develop and maintain and accurate MS4 map.					

## B. Physical Interconnections

The Town will also provide written notification to adjacent MS4s of any known physical interconnections.

Measurable Goals Identified and Achieved:	Years Achieved				
	2018	2019	2020		
Provide written notification to adjacent MS4s of interconnections					
<b>Progress Toward Meeting Objectives of Permit</b>					
No new physical interconnections were discovered or constructed during this permit cycle.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
To provide notification to any downstream MS4 of physical interconnections					

## C. Illicit Discharge Ordinance and Procedures

The Town continues to prohibit, through ordinance unauthorized non-stormwater discharges into the storm sewer system. The Town maintains written procedures designed to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the Town's MS4 system.

Measurable Goals Identified and Achieved:	Years Achieved				
	2018	2019	2020		
Adopt an Illicit Discharge Ordinance					
Maintain written procedures for Illicit Discharge and Detection					
Record all illicit discharges and report in Annual Report					
<b>Progress Toward Meeting Objectives of Permit</b>					
<ul style="list-style-type: none"> <li>The Town adopted an Illicit Discharge Ordinance Section 18-604 of the Town Code. It was last updated in July 1, 2014.</li> <li>A list of illicit discharges that occurred during the last reporting period is included in Appendix B.</li> </ul>					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
To enforce illicit discharges					

## MCM4: Construction Site Runoff Control

In efforts to 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, the Town will provide a consistent program to address these issues. This program will establish the Town’s authority to enforce erosion and sediment control violations and document a pattern of consistent protocol of enforcement.

### Program Plan Goals:

- Address sediment discharges entering the MS4 from regulated construction activities.
- Provide appropriate controls to prevent non-stormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils and other illicit discharges from construction activities.

Measures described below are intended to meet these goals as described in the Program Plan.

### Control Measure #4 BMP’s:

- Maintain Enforcement Authority for Runoff Control Through ESC Ordinance
- Stormwater Pollution Prevention Controls during Construction
- Reporting of Inspections and Enforcement Actions

### Annual Report Requirements:

- Total number of inspections conducted; (*BMP 4-A*) and
- The total number and type of enforcement actions implemented. (*BMP 4-C*)

### **A. Maintain Enforcement Authority for Runoff Control through SWM & ESC Ordinance**

The Town will utilize the Erosion and Sediment Control and Stormwater ordinances to address discharges entering the MS4 from regulated construction site stormwater runoff. The Stormwater Ordinance is consistent with the state regulations and the VSMP Permit regulations. We are in the process of adopting a Virginia Erosion and Sediment Control Program (VESCP) consistent with State code. Our ESC Programmatical components are consistent with the state VESCP program, but the ESC Ordinance refers to out of date State regulatory codes.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Adopt a Stormwater Ordinance consistent with State Requirements	2018	2019	2020		
Adopt an Erosion and Sediment Control Ordinance referring to the correct State Code Sections	<b>*Not Achieved</b>	<b>*Not Achieved</b>	<b>*Not Achieved</b>		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town has an ESC ordinance that was codified in 2007. It still references the states code from that time. It is our goal to update the ESC Ordinance to be consistent with current state code.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
<i>Schedule for Adoption of Erosion and Sediment Control Ordinance: (Revised for COVID-19 Delays that prevented the initiation of the ordinance language work.)</i>					

*Due to the upcoming regulation change due to the ESC/SWM Consolidation bill, we would like to request to implement the update to the ESC ordinance in conjunction with this legal process that is already underway. This would be our tentative schedule for a revised ESC Ordinance:  
We will begin this fall to draft the new ESC/SWM Ordinance based on the draft Consolidation bill language. This should be publicly available and in public comment period until December 2020. As the legislative session begins in March 2021, we will begin our public hearing process, which lasts 4 months, at a minimum. This would allow any changes that could occur in the legislative session to be incorporated into the language of our ordinance. This would put us on a schedule to adopt a new ESC/SWM Consolidated Ordinance on July 1, 2021, at the same time that the State code revision goes into effect. The Town would not request the use of the grace period that will be likely provided for localities, since we are currently out of compliance.*

## **B. Stormwater Pollution Prevention Controls during Construction**

The Town implements controls to prevent non-stormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections of the MS4. The discharge of non-stormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Perform SWPPP Inspections in compliance with the Pollution Prevention Plan Protocol	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Pollution Prevention Plan Enforcement Protocol was completed in the 2014 permit cycle. This protocol requires the implementation of controls to prevent non-stormwater discharges to the MS4 such as wastewater, concrete washout, fuels and oils or other illicit discharges. As part of this protocol, the Town has created several guidance documents regarding spill prevention kits and concrete washout areas that are required to be included in every approved SWPPP document. Inspections and results from the program are documented in the Town of Blacksburg MS4 Program Plan. The Town also performs SWPPP Inspections to confirm that construction sites are in conformance with their SWPPP and Town protocols. The Town completed <b>501</b> SWPPP inspections during this permit cycle.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
None proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
Provide appropriate controls to prevent non-stormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils and other illicit discharges from construction activities					

## **C. Reporting of Inspections and Enforcement Actions**

The Town will include in the Annual Report a summary of the total number of inspections conducted and the total number and type of enforcement actions implemented and the type. This reporting shows that the Town of Blacksburg is utilizing a consistent protocol of enforcement.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Total ESC Inspections	2018	2019	2020		
Enforcement Actions	2018	2019	2020		
Stop Work Orders	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
In the past reporting period, the Town has performed <b>1007</b> inspections, <b>171</b> Notices to Comply, <b>53</b> Letters of Violation and <b>0</b> Stop Work Orders.					
<b>Proposed Changes to BMP or Measurable Goals</b>					

None proposed.

**Program Plan Goal Addressed by this BMP**

Address sediment discharges entering the MS4 from regulated construction activities.

## **MCM5: Post Construction Stormwater Management**

The Town of Blacksburg has an approved Virginia Stormwater Management Program (VSMP) program in accordance with Part I E 5 a (1) and (2). The Town will continue to address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as continue our inspection and maintenance program in accordance with Parts I E 5 b and c.

### Program Plan Goals:

- To maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of stormwater facilities;
- To inspect facilities owned by private operators every five years, at a minimum.
- To inspect facilities owned/operated by the Town, once a year.
- To provide necessary maintenance for facilities owned by the Town, when needed.

Measures described below are intended to meet these goals as described in the Program Plan.

### Control Measure #5 BMP's:

- A. Stormwater Facility Inspection Program
- B. Stormwater Facility Database

### Annual Report Requirements:

- The number of privately owned stormwater management facility inspections conducted; **(BMP 5-A)**
- The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action; **(BMP 5-A)**
- Total number of inspections conducted on stormwater management facilities owned or operated by the Town of Blacksburg; **(BMP 5-A)**
- A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee; **(Appendix C)**
- A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database; **(BMP 5-B)** and
- A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse. **(BMP 5-B)**

## **A. Stormwater Program**

The Town of Blacksburg relies on its Stormwater Management Program as regulated under the Virginia Stormwater Management Regulations and attendant regulations. The Storm Water Management Program has procedures for plan review, inspection, enforcement, and penalties.



The Town has filled a full time Stormwater Engineer position that is responsible for administering the Storm Water Management Program.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Report number of privately owned stormwater facility inspections completed	2018	2019	2020		
Report number of enforcement actions initiated to ensure long-term maintenance of privately owned facilities	2018	2019	2020		
Report number of inspections conducted on facilities owned by the Town	2018	2019	2020		
Description of maintenance, repair & retrofit of publicly owned facilities	2018	2019	2020		
Confirmation of Construction General Permit and BMP Warehouse reporting	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
<ul style="list-style-type: none"> <li>• A total of <b>192</b> privately owned facilities were inspected this permit year.</li> <li>• There were no enforcement actions initiated to ensure long-term maintenance of private facilities, all inspections that resulted in a maintenance action was completed or a schedule for completion was provided. All facility maintenance is proceeding in compliance with our program.</li> <li>• Sixty-two (<b>62</b>) of the sixty-two (62) Town owned facilities were inspected this reporting year.</li> <li>• None (<b>0</b>) of the 62 town facilities needed non-routine maintenance upon inspection. The only maintenance activities needed was routing vegetative maintenance, trash removal and stabilization of minor bare areas.</li> </ul>					
<b>Proposed Changes to BMP or Measurable Goals</b>					
No changes are proposed.					
<b>Program Plan Goal(s) Addressed by this BMP</b>					
<ul style="list-style-type: none"> <li>• To inspect facilities owned by private operators every five years, at a minimum.</li> <li>• To inspect facilities owned/operated by the Town, once a year.</li> <li>• To provide necessary maintenance for facilities owned by the Town, when needed.</li> </ul>					

## **B. Stormwater Facility Databases**

The Town of Blacksburg commits to using the DEQ Construction Stormwater Database to report each stormwater facility installed after July 1, 2014 to address the control of post-construction runoff from land disturbances for which the Town is required to obtain a stormwater general permit.

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Confirmation of Construction General Permit and BMP Warehouse reporting	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
<ul style="list-style-type: none"> <li>• The Town of Blacksburg confirms that for all projects that submitted a Termination form, all stormwater management facility information has been submitted to DEQ through the Virginia Construction Stormwater General Permit database.</li> <li>• The Town of Blacksburg confirms that we have electronically reported BMPs to the DEQ BMP Warehouse in accordance with Part I E 5 g on September 17, 2020.</li> </ul>					
<b>Proposed Changes to BMP or Measurable Goals</b>					
No changes are proposed.					
<b>Program Plan Goal(s) Addressed by this BMP</b>					
<ul style="list-style-type: none"> <li>• To inspect facilities owned by private operators every five years, at a minimum.</li> <li>• To inspect facilities owned/operated by the Town, once a year.</li> <li>• To provide necessary maintenance for facilities owned by the Town, when needed.</li> </ul>					

## MCM6: Pollution Prevention and Good Housekeeping for Facilities Operated by the Permittee within the MS4 Service Area

The Town of Blacksburg will maintain and implement written procedures for all activities performed, such as road, street, and parking lot maintenance; equipment maintenance, and the application, storage, transport and disposal of pesticides, herbicides, and fertilizers so that the Town can do the following:

### Program Plan Goals:

- Prevent illicit discharges,
- Ensure the proper disposal of waste materials, including landscape wastes,
- Prevent the discharge of wastewater or permittee vehicle wash water or both into the MS4 without authorization under a separate VPDES permit,
- Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities,
- Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices,
- Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and
- Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.

Measures described below are intended to meet these goals as described in the Program Plan.

### Control Measure #6 BMP's:

- A. Standard Operating Procedures for Town Operations
- B. SWPPPs for Town Facilities
- C. Nutrient Management Plans for Town Sites
- D. Town Contractor Pollution Prevention Methods
- E. Training Plan for Town Staff

### Annual Report Requirements:

- A summary of any operational procedures developed during the reporting period; **(BMP 6-A)**
- A summary of any new SWPPPs developed during the reporting period; **(BMP 6-B)**
- A summary of any SWPPPs modified during the reporting period; **(BMP 6-B)**
- A summary of any new turf and landscape nutrient management plans developed; **(BMP 6-C)** and
- A list of the training events conducted in accordance with Part I E 6 m. **(BMP 6-E)**

### **A. Standard Operating Procedures for Town Operations**

Measurable Goals Identified and Achieved:	Years Achieved				
Prepare operational procedures for Town Practices	2018	2019	2020		
Update operational procedures to reflect better practices					

<b>Progress Toward Meeting Objectives of Permit</b>
<p>The Town has prepared Standard Operating Procedures for the following activities:</p> <ul style="list-style-type: none"> <li>• Stormwater Collection and Conveyance System Maintenance,</li> <li>• De-icing and Snow Removal,</li> <li>• Storage, washing and maintenance of vehicle fleets and fueling facilities,</li> <li>• External building maintenance, including cleaning and painting.</li> <li>• Proper application of fertilizer, pesticides and herbicides on municipal land as well as sediment and erosion control, landscape maintenance and vegetation disposal, and trash management for those areas.</li> <li>• Stormwater protection at material storage areas, heavy equipment storage areas and maintenance areas not covered under other permits.</li> <li>• Any other facilities that would reasonably be expected to discharge contaminated runoff.</li> </ul> <p>This Operating Procedures Plan was approved in 2015. It was updated in 2017 and it applies to all Town employees, interns, contractors and subcontractors providing service and support for the Town’s municipal operations. This plan is periodically reviewed for effectiveness, appropriateness and updated as new practices become available.</p>
<b>Proposed Changes to BMP or Measurable Goals</b>
No changes are proposed.
<b>Program Plan Goal Addressed by this BMP</b>
All goals addressed by this BMP.

## B. SWPPPs for Town Facilities

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Maintain SWPPPs for all areas developed in accordance with Part I E 6 c.	2018	2019	2020		
Review Town owned & operated sites for changes that would require new SWPPPs	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town requires a SWPPP at the Public Works Facility in accordance with Part I E 6 c. This SWPPP was developed in 2017 and is maintained on site. No changes to other Town owned and operated sites has triggered the need for additional site SWPPPs.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
No changes are proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
All goals addressed by this BMP.					

## C. Nutrient Management Plans (NMPs) for Town Sites

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>				
Maintain DCR-approved NMPs for all Town lands developed.	2018	2019	2020		
Review Town owned & operated lands for changes that would require new NMPs	2018	2019	2020		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town has approved Nutrient Management Plans that were updated on <b>January 1, 2020</b> for the following sites:					
<ul style="list-style-type: none"> <li>• Blacksburg Municipal Golf Course</li> <li>• Municipal Park Complex</li> <li>• Seneca Drive Park</li> <li>• Winfrey Fields</li> <li>• Primrose park</li> <li>• Toms Creek Park</li> </ul>					
There are no changes to Town owned and operated lands that would require new Nutrient Management Plans. The Town has acquired two new parks, the Municipal Bike park and the Meadows park. Neither of these pars has nutrients applied; therefore they do not require NMPs.					

<b>Proposed Changes to BMP or Measurable Goals</b>
No changes are proposed.
<b>Program Plan Goal Addressed by this BMP</b>
Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.

#### D. Town Contractor Pollution Prevention Methods

Measurable Goals Identified and Achieved:	Years Achieved				
	2018	2019	2020	2021	2022
Provide a summary of mechanisms the Town uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention.	<b>*Not Achieved</b>	<b>*Not Achieved</b>	<b>*Not Achieved</b>		
<b>Progress Toward Meeting Objectives of Permit</b>					
The Town is currently working on additional legal and programmatic mechanisms that would ensure contractors working on behalf of the Town that necessary good housekeeping and pollution preventions are being followed. Currently this is being conveyed to them verbally, but the legal mechanisms have not been put in place.					
<b>Proposed Changes to BMP or Measurable Goals</b>					
No changes are proposed.					
<b>Program Plan Goal Addressed by this BMP</b>					
All goals addressed by this BMP.					

#### E. Training Plan for Town Staff

Measurable Goals Identified and Achieved:	Years Achieved		
	2018	2019	2020
Report a list of training events including the following: <ul style="list-style-type: none"> <li>The date of the training event;</li> <li>The number of employees who attended the training event; and</li> <li>The objective of the training event.</li> </ul>			
<b>Progress Toward Meeting Objectives of Permit</b>			
The Training plan for Town Staff is included in Appendix D. New training protocols are being created for Public Works, Parks and Recreation and Emergency Services staffs. The Engineering Department and Landscaping staff have continued with their current training programs.			
<b>Proposed Changes to BMP or Measurable Goals</b>			
No changes are proposed.			
<b>Program Plan Goal Addressed by this BMP</b>			
All goals addressed by this BMP.			

## TMDL Special Conditions

TMDLs for both the Stroubles Creek and Upper Roanoke River watersheds were approved prior to the July 1, 2013 effective date of the prior General Permit. No new TMDLs have been approved between 2013 and 2018. The TOB currently has the following WLAs associated with a TMDL:

- 211 tons/year sediment to Stroubles Creek (aggregate WLA)
- 102 tons/year sediment to Upper Roanoke River watershed
- 3.15E+09 cfu/year bacteria (E coli) to Wilson Creek/ Upper Roanoke River watershed
- 7.8 mg/yr of polychlorinated biphenyl to the Roanoke River watershed

The Town of Blacksburg has implemented a local TMDL Action Plan designed to reduce loadings for the specific pollutants of concern listed in each impaired watershed.

### Program Plan Goals:

- Maintain a local TMDL Action Plan for waters with approved TMDLs prior to June 30, 2018.
- Complete implementation of the TMDL Action Plans.

Measures described below are intended to meet these goals as described in the Program Plan.

### BMPs for TMDL Special Conditions:

#### A. TMDL Action Plan Actions

### Annual Report Required Items:

- Summary of actions conducted to implement the local TMDL Action Plan. **(BMP TMDL-A)**

## A. TMDL Action Plan Actions

<b>Measurable Goals Identified and Achieved:</b>	<b>Years Achieved</b>		
Provide a summary of actions completed as part of the TMDL Action Plan.	2018	2019	2020
<b>Progress Toward Meeting Objectives of Permit</b>			
The following activities were completed as part of the TMDL Action Plan: <ul style="list-style-type: none"> <li>• MS4 Program Plan Implementation</li> <li>• Confirmed funding for a Stream Restoration Project. The design will occur in reporting year 2021.</li> <li>• Street sweeper AS-606 ran 1,230 miles. This corresponds to 42.42 tons of sediment removed. (See Appendix E for details)</li> <li>• Incorporated additional controls for hydraulic fluid containment on active construction sites.</li> </ul>			
<b>Proposed Changes to BMP or Measurable Goals</b>			
No changes are proposed.			
<b>Program Plan Goal Addressed by this BMP</b>			
Implementation of the TMDL Action Plans.			

## Appendix A: Summary of Stormwater Complaints & Other Public Input (2020-21)

#	Contact Date	Name	Street Name	Phone #	Email	Summary of Concern	Resolution	Resolution Date
1	14-Jul-20	DEQ - Referral - Don Packard	S. Main St.	(540) 553-6871	donald.packard@deq.virginia.gov	Good Afternoon Kafi, Our office has received another complaint related to the Old Blacksburg Middle School site. The nature of the complaint is similar to those that have previously been reported and it is also from the Coalition to Protect Blacksburg W	DEQ and TOB joint site visit on 7/16/2020. Level 1 inspection report was sent to Blacksburg and Developer on 7/21/20. A follow-up inspection performed by the TOB on 7/31/20 resulted in a corrective action continued violation. A notice of violation was issued.	8/11/2020
2	08-Jan-21	Javad Torabinejad	Patrick Henry Drive	(540) 961-1735	jtorabinejad@yahoo.com	EMAIL: Good morning Kafi, I hope you are doing well. How are your parents doing? Well, I hope. Attached are a couple of images I took yesterday from Patrick Henry Dr showing mud/dirt on the street due to the Terrace View construction activity.	EMAIL: We are well, thank you. Thanks also for the photos, Javad. Our Engineering Field Supervisor is aware of this and is actively working with the Terrace View/Hub contractors to eliminate this sediment staining. Thanks	1/8/2021
3	22-Jan-21	Javad Torabinejad	Patrick Henry	(540) 961-1735	jtorabinejad@yahoo.com	EMAIL: Dear Kafi, Hello; I hope you are doing well. Please find attached a couple of pictures taken a couple of days ago from the entrance to the new development on upper Giles Rd by the Green Valley Builders. I do not think proper sediment control measures are being used.	EMAIL: Javad, Thank you. Our inspector has had the Flats contractor clean it all up. It should be resolved now. Thanks,	1/22/2021
4	31-Mar-21	DEQ - Referral - Don Packard	S. Main St	(540) 553-6871	donald.packard@deq.virginia.gov	Good afternoon, Kafi. Thank you for meeting with me on February 13, 2020 to inspect this site and the Town's more recent follow up related to that inspection. We have received a third complaint from Mr. Torabinejad regarding the Old Blacksburg Middle School.	DEQ, Town and Developers met onsite on 4/20/21. DEQ issued a Level 1 inspection report with items in non-compliance.	4/20/2021

## Appendix B: List of Illicit Discharges

### Illicit Discharges for 2020-21 Permit Year

The Town has established an ordinance to prohibit illicit discharges that was adopted by Town Council in spring of 2008 and again in 2014 as part of a Comprehensive Stormwater Ordinance. The Town will track and enforce all known instances of illegal dumping and illicit discharges in a GIS database. The GIS database will be used to detect trends and identify repeat offenders.

Last reporting period, the Town had **17** confirmed illicit discharges and 1 unconfirmed discharge. The standardization of the illicit discharge protocol has established a guideline for scheduling, identifying and eliminating illicit discharges. All actions have been in conformance with this protocol.

Date	Type	Severity	Notification	Contact List	Response	Enforcement	Actions	Status	Site Name
8/25/2020	SSO	Minor - no impact to MS4	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 8/25/2020	1217 Village Way S.
9/22/2020	SSO	Minor - no impact to MS4	Reported to TOB PW	TOB Public Works	Contractor cleaned up	None	Clean-up. Area Sanitized.	Closed. Date Unknown.	Yale Rd & Tech Ct
9/23/2020	SSO	Major - surface waters impacted	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 9/23/2020	Blacksburg Estates Trailer Park
10/14/2020	SSO	Major - surface waters impacted	Reported to DEQ	DEQ, TOB Public Works, Engineering	Site visit; Repair broken terra cotta sewer; clean-up	None	Clean-up. Area Sanitized.	Closed 10/15/2020	Highland Park Subdivision
11/13/2020	SSO	Minor - no impact to MS4	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 11/13/2020	712 Progress St
11/16/2020	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 11/16/2020	322 N Main St

11/23/2020	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 11/23/2020	Sturbridge Square Pump Station
12/7/2020	Fuel Spill	Minor - no impact to MS4	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 12/7/2020	Moonstone Car Wash
1/6/2021	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 1/6/2020	Northside Park Subdivision
1/6/2021	ESC Discharge	Major - surface waters impacted	Reported to DEQ	DEQ, TOB Public Works, Engineering	Construction site inspection	Inspection Report	ESC Measures inspected and restored	Closed 1/6/2021	The Hub Development
1/26/2021	ESC Discharge	Major - surface waters impacted	Reported to DEQ	DEQ, TOB Public Works, Engineering	Construction site inspection	Inspection Report	ESC Measures inspected	Closed 2/3/2021	Midtown Development
2/8/2021	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 2/8/2020	504 Draper Rd
2/11/2021	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 2/11/2020	202 Watson Ave
2/22/2021	Unknown Discharge	Major - surface waters impacted	Reported to TOB Engineering	TOB Engineering	Site visit; no visual evidence of chemicals	None	Monitor area for potentially hazardous runoff	Closed after 2 subsequent visits and no additional information.	Woodbine Park (Christopher Drive)



2/23/2021	SSO	Major - surface waters impacted	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 2/23/2020	Owens Park
3/1/2021	ESC Discharge	Major - surface waters impacted	Reported to TOB Engineering	DEQ, TOB Public Works, Engineering	Construction site inspection	Inspection Report	ESC Measures inspected and restored	Closed 3/1/2021	TOB Police Station
3/3/2021	ESC Discharge	Major - surface waters impacted	Reported to TOB Engineering	DEQ, TOB Public Works, Engineering	Construction site inspection	Inspection Report	ESC Measures inspected and restored	Closed 3/4/2021	Northside Park Subdivision, Phase 12
3/11/2021	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 3/11/2021	306 Dunton Dr.
3/25/2021	SSO	Moderate - Reached MS4 System	Reported to TOB PW	TOB Public Works	Site visit; clean-up	None	Clean-up. Area Sanitized.	Closed 3/26/2021	1405 Gladewood Dr.
3/28/2021	ESC Discharge	Major - surface waters impacted	Reported to TOB Engineering	DEQ, TOB Public Works, Engineering	Construction site inspection	Inspection Report	ESC Measures inspected and restored	Closed 3/28/2021	Midtown Development
4/11/2021	ESC Discharge	Major - surface waters impacted	Reported to TOB Engineering	DEQ, TOB Public Works, Engineering	Construction site inspection	Inspection Report	ESC Measures inspected and restored	Closed 5/14/2021	Midtown Development
6/14/2021	Unknown Discharge	Major - surface waters impacted	Reported to TOB Engineering	Virginia Tech & TOB Engineering	Site visit	None	Monitor area for potentially hazardous runoff	Closed after 2 subsequent visits and no discharge.	Virginia Tech Campus

### Appendix C: Maintenance Performed on Town-Owned/Operated Stormwater Facilities

#	Type	Owner	Location	Inspected	Maintenance Needed
6	Dry Detention Pond	Town of Blacksburg	Maple Ridge Phase 3	1/25/2021	Routine: Mowing, Trash removal, Minor stabilization
12	Dry Detention Pond	Town of Blacksburg	Northside (undeveloped park)	1/7/2021	Routine: Mowing, Trash removal
15	Dry Detention Pond	Town of Blacksburg	Shenandoah	9/23/2020	Routine: Mowing
16	Dry Detention Pond	Town of Blacksburg	Shenandoah	2/9/2021	Routine: Mowing
21	Dry Detention Pond	Town of Blacksburg	Collegiate Suites	8/5/2020	None
22	Dry Detention Pond	Town of Blacksburg	Owens Street Park	2/8/2021	None
24	Dry Detention Pond	Town of Blacksburg	Francis Lane Lower	2/9/2021	Routine: Minor stabilization
24	Dry Detention Pond	Town of Blacksburg	Francis Lane Upper	2/9/2021	Routine: Minor stabilization
32	Dry Detention Pond	Town of Blacksburg	Golf Course (graves ave)	1/25/2021	None
37	Dry Detention Pond	Town of Blacksburg	Village at Toms Creek No. 2	1/26/2021	Routine: Mowing
41	Bioretention	Town of Blacksburg	Wilson Ave.	5/25/2021	None
41	Infiltration Practices	Town of Blacksburg	Wong Park - Wilson Avenue	5/25/2021	Routine: Minor stabilization
49	Dry Detention Pond	Town of Blacksburg	Trillium Place No. 1	1/26/2021	Routine: Mowing
49	Dry Detention Pond	Town of Blacksburg	Trillium Place No. 2	1/26/2021	Routine: Mowing
79	Dry Detention Pond	Town of Blacksburg	Blacksburg Transit	2/9/2021	Routine: Mowing

#	Type	Owner	Location	Inspected	Maintenance Needed
81	Underground Detention	Town of Blacksburg	Turner Street Improvements	9/1/2020	None
81	Manufactured Treatment Device	Town of Blacksburg	Turner Street Improvements - Contech Hydro Sep	9/1/2020	None
108	Bioretention	Town of Blacksburg	Community Center Patrick Henry Drive	5/4/2021	None
108	Bioretention	Town of Blacksburg	Community Center Patrick Henry Drive	5/4/2021	None
108	Dry Detention Pond	Town of Blacksburg	Community Center Patrick Henry Drive	12/15/2020	None
109	Dry Detention Pond	Town of Blacksburg	Public Works Inert Debris Site	9/23/2020	Routine: Trash removal
127	Dry Detention Pond	Town of Blacksburg	Interchange 3A - 21D-1	9/28/2020	Routine: Mowing
136	Dry Detention Pond	Town of Blacksburg	Gardenspring SUBDV - 1800 Gardenspring	5/30/2019	Routine: Mowing
140	Extended Detention	Town of Blacksburg	Progress/Givens Extension Project	6/10/2021	Routine: Trash removal
140	Wet Pond	Town of Blacksburg	Progress/Givens Extension Project	6/10/2021	Routine: Trash removal
141	Underground Detention	Town of Blacksburg	Floyd - Montgomery Regional Library	10/27/2020	Routine: Trash removal
143	Bioretention	Town of Blacksburg	407 Hubbard St - Fire Station South	5/4/2021	Routine: Trash removal
144	Extended Detention Basin	Town of Blacksburg	Blacksburg UCB Improvements and SWM retrofit	9/27/2020	Routine: Mowing, Trash removal
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None

#	Type	Owner	Location	Inspected	Maintenance Needed
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
149	Bioretention	Town of Blacksburg	College Avenue Improvements	9/3/2020	None
153	Dry Detention Pond	Town of Blacksburg	Karr Heights Pump Station	1/25/2021	Routine: Mowing, Trash removal
159	Dry Detention Pond	Town of Blacksburg	Blacksburg Stadium	1/29/2021	Routine: Mowing
162	Underground Detention	Town of Blacksburg	Clay Street Extension Box Culvert	9/3/2020	None
165	Bioretention	Town of Blacksburg	Commerce St Extension	8/27/2020	Routine: Vegetative Maintenance
165	Bioretention	Town of Blacksburg	Commerce St Extension	8/27/2020	Routine: Vegetative Maintenance
165	Bioretention	Town of Blacksburg	Commerce St Extension	8/27/2020	Routine: Vegetative Maintenance
165	Bioretention	Town of Blacksburg	Commerce St Extension	8/27/2020	Routine: Vegetative Maintenance
165	Bioretention	Town of Blacksburg	Commerce St Extension	8/27/2020	Routine: Vegetative Maintenance
165	Bioretention	Town of Blacksburg	Commerce St Extension	8/27/2020	Routine: Vegetative Maintenance
173	Bioretention	Town of Blacksburg	Motor Company Building	9/1/2020	None
173	Bioretention	Town of Blacksburg	Motor Company Building	9/1/2020	None
173	Bioretention	Town of Blacksburg	Motor Company Building	9/1/2020	None
173	Permeable Pavement	Town of Blacksburg	Motor Company Building	9/1/2020	None

#	Type	Owner	Location	Inspected	Maintenance Needed
173	Permeable Pavement	Town of Blacksburg	Motor Company Building	9/1/2020	None
174	Dry Detention Pond	Town of Blacksburg	Community Center Patrick Henry Drive	1/25/2021	None
174	Bioretention	Town of Blacksburg	Community Center - Kaboose Park Entrance Road	5/24/2021	None
214	Water Quality Swale	Town of Blacksburg	Blacksburg Rescue Squad Building	5/4/2021	Routine: Mowing, Trash removal
214	Permeable Pavement	Town of Blacksburg	Blacksburg Rescue Squad Station	5/4/2021	None
214	Permeable Pavement	Town of Blacksburg	Blacksburg Rescue Squad Building	5/4/2021	None
218	Bioretention	Town of Blacksburg	Progress Street Parking Lot	5/24/2021	None
237	Bioretention	Town of Blacksburg	The Park at South Point	9/1/2020	Routine: Vegetative Maintenance
237	Bioretention	Town of Blacksburg	The Park at South Point	9/1/2020	Routine: Vegetative Maintenance
254	Bioretention	Town of Blacksburg	Hand n Hand Park	9/2/2020	Routine: Needs more vegetation
257	Compost Amended Soils	Town of Blacksburg	Huckleberry Trail - Linwood	2/10/2021	Routine: Mowing
260	Dry Detention Pond	Town of Blacksburg	Airport Acres Park	9/29/2020	None

## Appendix D: Schedule of Staff Training

<b>Appendix E: Schedule of Training for 2020-21</b>			
<b>Applicable Staff</b>	<b>Certifications (date)</b>	<b>Training Classes</b>	<b>Attendees</b>
<b>Engineering Staff -</b> Engineer – Stormwater (1) Engineer – Construction (1) Inspector - Utility and ESC (1) Inspector – ESC (1)	Dual ESC/SWM Combined Administrator PE (ESC Plan Reviewer) Dual ESC/SWM Inspector ESC Inspector	<b>ESC/SWM Training</b>	
		Virginia Lakes and Watersheds Conference (3/8 – 3/10/2021)	<b>1</b>
		2021 VWEA Stormwater Seminar (4/21/21)	<b>1</b>
		DEQ Where does the water go? (2pt series) 11/16 and 11/17/2021	<b>1</b>
		DEQ Dealing with difficult sites. (6/30/21)	<b>1</b>
<b>Emergency Services Staff -</b> Fire - 2 employees (56 volunteers) Rescue – no employees (volunteer only) Police Captains (2) Alfa, Bravo, Charlie, Delta Shift(s) – (16) Investigations (8) Community Services (7)	Hazmat Awareness and Operations (online)	<b>Spill Response for Emergency Services</b> Currently 100% of Emergency Services staff currently has had this training.	<b>50</b>
		<b>Scheduled Training for 2020-21</b> The additional (6) trainings were completed this reporting period. (online)	<b>6</b>
Horticulturist (1) Horticulture Crew (3)	Certified Fertilizer Applicator (CFA) Training	Fertilizers, Pesticides and Landscaping Material Waste (online training)	<b>4</b>
<b>Parks Staff –</b> Director & Assistant Director of Parks and Recreation (2) Golf Course Supervisor and staff (4) Community Programs/Special Events Supervisor (1)		<b>Illicit Discharge Prevention</b> <b>Golf Course/Cemetery Maintenance</b>	
<b>Public Works Staff –</b> Sustainability Manager (1) Water & Wastewater Crews (10) Field Operations Crews (24) Fleet Operations Staff (3) Blacksburg Transit Management (8)		<b>Operations and Maintenance Trainings</b>	
		Illicit Discharge Prevention	<b>7</b>
		Wastewater Prevention	<b>2</b>
		Municipal Wash Water	<b>5</b>
		Bulk Storage Area Discharge Prevention	
		Municipal Automobiles & Equipment Discharge Prevention	<b>3</b>

## Appendix E: TMDL Action Plan Activities

### *Street Sweeping for 2020-21*

#### Pollutant Removal Calculation for Street Sweeper

L = Annual Loads (lbs)

R = Annual Runoff (42")

C = Pollutant concentration (54.5 mg/l)

A = Area (1 Acre Impervious)

0.226 = Unit Conversion

Factor

$$L = 0.226 * R * C * A$$

Lane Miles Maintained	<b>1,230</b>	miles
Starting Mileage	4231	
Ending Mileage	6312	
Lane Feet Maintained (mi*5280)	<b>6,494,400</b>	feet
Impervious Acres at 11-ft lane width	<b>1,640</b>	ac
Pre-Sweeping Load (TSS) lbs	<b>848,395</b>	lbs
Street Sweeping Reductions		
Mechanical Removal (0.1 lbs/yr)	84,839	lbs
tons/yr	<b>42.42</b>	tons

TSS Pre-sweeping annual nutrient load calculated using the Simple Method (Schuler 1987)