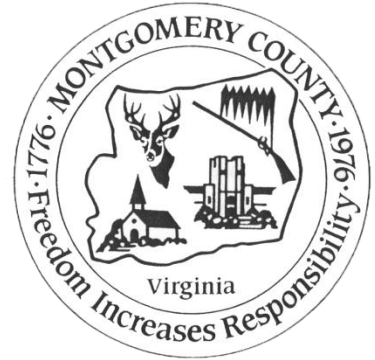
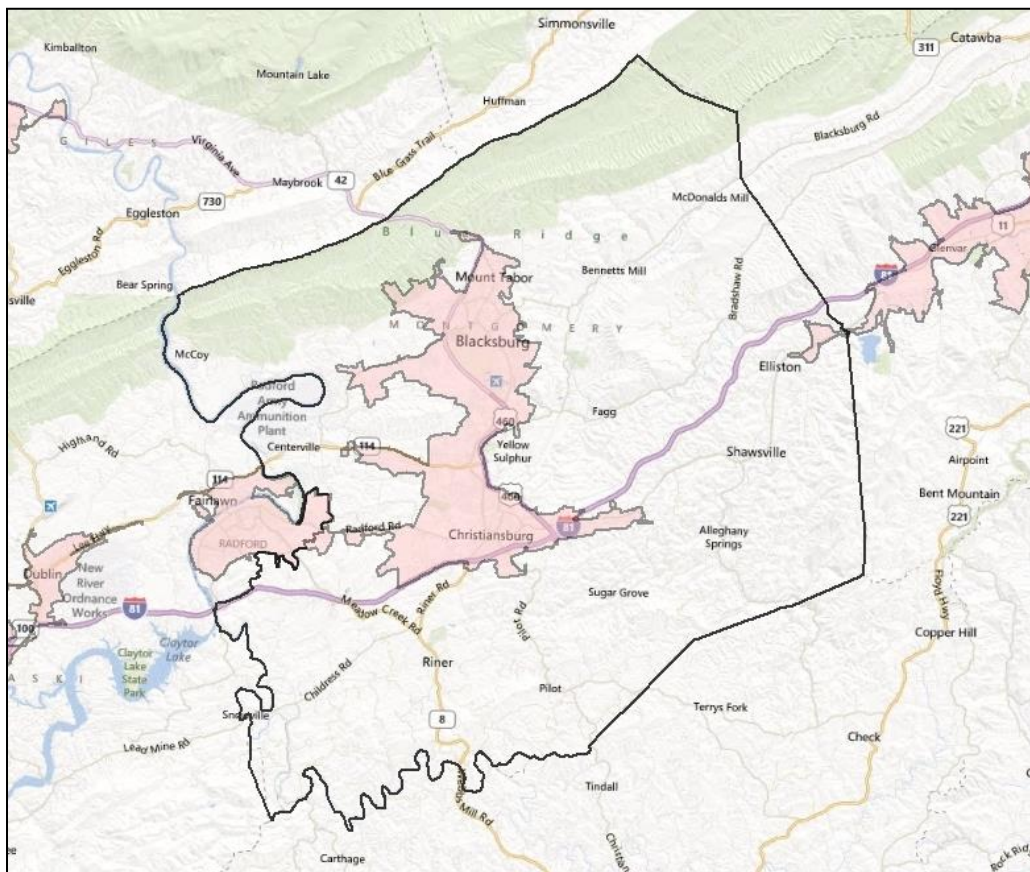


Montgomery County Municipal Separate Storm Sewer System (MS4)



Program Development Plan



Updated October 2018

Executive Summary

Montgomery County is committed to the development, implementation, and enforcement of a Municipal Separate Storm Sewer System (MS4) Program Plan (Plan) to reduce the discharge of pollutants from the regulated MS4 (urbanized areas of the county) to the maximum extent practicable (MEP), as per VPDES Permit No. VAR040134. The focus of the proposed program will be to 1) protect water quality, 2) improve waters into which the regulated small MS4 discharges, and 3) meet the requirements of state and federal regulations.

The Montgomery County MS4 Program Plan includes and addresses the following minimum control measures (MCMs) and schedule for implementation:

- (1) Public Education and Outreach on Stormwater Impacts
- (2) Public Involvement and Participation
- (3) Illicit Discharge Detection and Elimination
- (4) Construction Site Stormwater Runoff Control
- (5) Post-Construction Runoff Control Management
- (6) Pollution Prevention and Good Housekeeping for Municipal Operations

Additionally, the Plan will also address special conditions for approved total maximum daily loads (TMDL), when a wasteload allocation (WLA) is assigned to Montgomery County. Currently, there are no applicable WLAs assigned to the county. Any modifications to this Program Plan will be documented as part of the annual report submittals.

Included with this document is a summary of the MCMs and proposed BMPs; a list of supporting documents, existing policies, ordinances, schedules, inspection forms, written procedures, and other documents necessary for BMP implementation; the objectives and expected results of each BMP; implementation schedule of each BMP; and a method that will be utilized to determine the effectiveness of each BMP. Appendix A provides an Organizational Chart. A copy of a written agreement between Montgomery County and Montgomery County Public Schools (MCPS) is provided in Appendix B.

Program Plan supporting documents that are available on the County website are hyperlinked in this Program plan and are incorporated by reference into the Program Plan. Additional supporting documents are attached in appendices in this document.

Publication Data

Original Publication: April 2014

Update No. 1: September 2015 - Update No. 2: September 2016, Revised January 2017

Update No. 3: September 2017 - Update No. 4 September 2018

Update No. 5 October 2018

MCM 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

This minimum control measure is intended to implement a diverse public education program to increase target audience knowledge about the steps that can be taken to reduce stormwater pollution and hazards associated with illegal discharges and improper disposal of waste.

The Montgomery County MS4 Program Plan for MCM 1 will be developed to meet the following criteria:

- (1) Identify, at a minimum, three high-priority water quality issues that contribute to the discharge of stormwater and a rationale for the selection of the three high-priority water quality issues;
- (2) Identify and estimate the population size of the target audience or audiences who is most likely to have significant impacts for each high-priority water quality issue;
- (3) Develop relevant message or messages and associated educational and outreach materials for message distribution to the selected target audiences while considering the viewpoints and concerns of the target audiences including minorities, disadvantaged audiences, and minors;
- (4) Provide for public participation during public education and outreach program development;
- (5) Annually conduct sufficient education and outreach activities designed to reach an equivalent 20% of each high-priority issue target audience; and
- (6) Provide for the adjustment of target audiences and messages including educational materials and delivery mechanisms to reach target audiences in order to address any observed weaknesses or shortcomings.

Montgomery County Population and Household Distribution

Identifying and estimating the population size of appropriate target audiences within the Montgomery County MS4 regulated area is challenging. Montgomery County is unique as a regulated small municipal separate storm sewer system (MS4) permittee in that the county's urbanized area contains the incorporated towns of Blacksburg and Christiansburg that are respectively the second and fourth largest towns in Virginia. The unincorporated area of the county that is also an urbanized area as defined by census represents 3.3% of the total County area. In identifying a target audience a required consideration is whether or not the audience is "likely to have significant impacts for each high-priority water quality issue". The incorporated urbanized areas of both towns contain headwaters of multiple streams that flow to the county unincorporated urbanized areas, therefore the actions of the town's residents will have impacts on water quality in the remainder of the county.

The US Census Bureau reports a 2016 population estimate of 98,602 persons and 35,199 households. <https://www.census.gov/quickfacts/fact/table/montgomerycountyvirginia/VET605215#viewtop> The county data includes the population and households in the incorporated towns of Blacksburg and Christiansburg. 30,731 residents in approximately 12,400 households are estimated to live in the unincorporated area of the county. The population and households in the actual MS4 regulated areas of the unincorporated area is a further subset of the county population figures.

An additional consideration for this program in selecting appropriate target audiences is the fact that the Montgomery County Public Schools (MCPS) is now participating in the County MS4 program. The effective date of MS4 coverage for the county was May 21, 2014. A memorandum of agreement between Montgomery County and the County School Board of Montgomery County to conduct the school's MS4 operations under the county permit was signed on February 17, 2016.

The sixth grade science curriculum of MCPS has a focus on water quality, the water cycle, and water conservation that are also components of the standards of learning testing for that student population. The education of the youth of the county on water quality issues has the potential for significant future impacts on water quality. The school system 6 year plan estimates the sixth grade population to vary from 750 to 850 students over the 2014-2020 time period.

http://www.mcps.org/UserFiles/Servers/Server_92164/File/AboutUs/MCPSSixYearPlan1420.pdf

Based on the considerations outlined; that the county is in its initial permit cycle, that the MCPS and the county are collaborating in the MS4 program, and that the town incorporated areas and the unincorporated, non-urban areas represent 96.7% of the geographic area, the outreach efforts of the MS4 program will be oriented towards two populations: County-wide population outreach to an estimated 98,602 persons and 35,199 households and outreach to the sixth grade student population estimated to vary from 750-850 students annually.

Water Quality Issue Number 1: Bacteria

Bacteria is a pollutant of concern in two TMDLs that include streams and watersheds of Montgomery County. Specifically, the *Wilson Creek, Ore Branch and Roanoke River Watersheds, Virginia* TMDL and the *Fecal Bacteria and General Standard Total Maximum Daily Load Development for Crab Creek*. Additionally, the following streams have segments that are listed as impaired, with the 6th order hydrologic unit watershed code provided in parenthesis: Little River (NE55), Meadow Creek (NE 56), Brush Creek (NE 52), and Tom's Creek (NE60). Public education and outreach in the areas of pet waste management and other typical sources of bacteria can be expected to have an impact on bacteria transport to waterways through MS4 stormwater conveyance systems.

Target Audience: The 2010 US census reports a US average of 48.4% of households having at least one pet.

<https://www.census.gov/programs-surveys/ahs/visualizations/where-are-the-animal-companions-.html>

Applying this statistic to the entire county yields approximately 17,040 County wide households with pets. The selected target audience for this water quality issue is the general population of the entire County, 98,602 persons and 35,199 households.

Relevant Message: Inform pet owners about the effects of pet waste on water quality and encourage pet owners to pick up and properly dispose of pet waste.

Outreach Materials to Convey the Relevant Message: Create a mailer carrying the relevant message to be mailed to addresses selected from the county personal property tax rolls. Mailer distribution was selected as the appropriate outreach mechanism since distribution in property tax bills will allow the County to reach almost the entirety of its residents on a rolling basis.

Include messaging in the Parks and Recreation Department 'Go Play' program catalogs.

Encourage news media coverage of MS4 public participation events. Post news media article and story coverage of MS4 public participation events.

Post social media notices of printed materials and outreach events, and other relevant media stories that can increase messaging on MS4 water quality issues.

Create brochure for distribution at events and at locations around county offices.

Distribute pet waste bag holders at public events along with handouts that link to county websites for more information.

Discuss the issue of excess bacteria levels at public participation events

Schedule: Outreach material will be distributed a minimum of once a year with the combined outreach goal to reach at least 20% of each target audience.

Method to Determine Effectiveness: Document the number of printed and promotional materials distributed and circulation of media outlets reporting on County MS4 activities. Track social media outreach efforts through viewing statistics.

Water Quality Issue Number 2: Nutrients (Nitrogen and Phosphorous)

Elevated levels of nutrients in streams can affect aquatic ecosystems as well as humans and livestock. Eutrophication can result in unhealthy dissolved oxygen and pH levels, odors, and aesthetic issues. High levels of nitrate in drinking water can be harmful or even fatal to infants and to livestock.

Target Audience: The selected target audience for this water quality issue is the general population of the entire County, 98,602 persons and 35,199 households.

Relevant Message: Inform residents about the effects of excess nutrients on water quality and encourage residents to mow lawns and mulch trees, and water lawns properly, apply fertilizers and lawn chemicals properly, and use commercial car washes to minimize the transport of nutrients to streams.

Outreach Materials to Convey the Relevant Message: Create a mailer carrying the relevant message to be mailed to addresses selected from the county personal property tax rolls. Mailer distribution was selected as the appropriate outreach mechanism since distribution in property tax bills will allow the County to reach almost the entirety of its residents on a rolling basis.

Include messaging in the Parks and Recreation Department 'Go Play' program catalogs.

Encourage news media coverage of MS4 public participation events. Post news media article and story coverage of MS4 public participation events.

Post social media notices of printed materials and outreach events, and other relevant media stories that can increase messaging on MS4 water quality issues.

Create brochures for distribution at events and at locations around county offices.

Discuss the issue of excess nutrients at public participation events.

Schedule: Outreach material will be distributed a minimum of once a year with the combined outreach goal to reach at least 20% of each target audience.

Method to Determine Effectiveness: Document the number of printed materials distributed and circulation of media outlets reporting on County MS4 activities. Track social media outreach efforts through viewing statistics.

Water Quality Issue Number 3: Sediment

Sediment is listed as a primary stressor for benthic impairments and is a pollutant of concern in three TMDLs that include streams and watersheds of Montgomery County. Specifically, the *Benthic TMDL for Stroubles Creek in Montgomery County, Virginia*, the *Wilson Creek, Ore Branch and Roanoke River Watersheds, Virginia* TMDL and the *Fecal Bacteria and General Standard Total Maximum Daily Load Development for Crab Creek*.

Target Audience: The MCPS sixth grade student population, estimated to vary from 750-850 students annually.

Relevant Message: Focus on water quality, the water cycle, and water conservation. Include instruction on stormwater runoff and watersheds, types of pollution, stream table demonstrations of bank instability, karst conditions in our area, erosion and sediment controls, explanations of how different land conditions effect runoff.

Outreach Materials to Convey the Relevant Message: MCPS staff will continue written evaluation and educational materials, while the collaborating MS4 permittees will schedule and organize volunteer associations and man stations on the public participation and outreach days.

Schedule: Stormwater Education days for all MPCS 6th graders are tentatively scheduled for November 2, 2018, and two days in April, 2019, to be determined.

Method to Determine Effectiveness: Document completion of listed activities. Meet with MCPS staff to evaluate effectiveness of the event education and discuss possible improvements.

BMP 1-1: Montgomery County Stormwater Management Website

Develop a Montgomery County Stormwater Management website, where citizens can obtain information regarding the County's Stormwater Management Program, ordinances, design guidelines, general information, contact information, pollution prevention information, educational programs and links to other organizations and sites. The website will also inform the citizens about on-going community based projects.

Supporting Documents: [Stormwater Management](#) website link
Website statistics provided in the Annual Report available on the [Stormwater Resources](#) webpage

Responsible Party: Director of Environmental Services/County Engineer

Objective & Expected Results: Provide an accessible, central location for information related to Montgomery County’s Stormwater Management Program. Promotion of the redesigned site through the efforts of the Public Information Office and references in printed outreach materials are expected to increase website traffic and exposure to MS4 program educational outreach.

Implementation Schedule: Launched the website by March 1, 2015. Latest revision September, 2018

Measurement of Effectiveness: Webpage statistics, including the most and least popular material, will be analyzed for effectiveness of the website.

Annual Reporting Requirements: Provide website statistics including the estimated number of views and most and least popular material.

BMP 1-2: Stormwater Education Program

Develop a stormwater educational program for Montgomery County school age children to address the sediment impairment water quality issue. County staff will provide or coordinate with educators to provide program materials addressing storm water and related water quality issues. The stormwater education materials will target the 6th grade level and will be SOL correlated.

Supporting Documents: ~~Previous permit year attendance figures, volunteer lists, and~~ MCPS Documents will be referenced in Annual Reports and will be made available for viewing under “Education and Outreach Library” on the website [Stormwater Resources](#) page.

Responsible Party: Director of Environmental Services/County Engineer, coordinating with MCPS Christiansburg, Virginia Tech, and Blacksburg MS4 staff.

Objective & Expected Results: Educate children about stormwater issues and the impacts of our daily lives on the quality of stormwater. This outreach is expected to be effective due to the fact that it will be tied to the sixth grade educational curriculum goals.

Implementation Schedule: Launched program during the 2015/2016 academic year.

Measurement of Effectiveness: The number of programs provided and the number of children reached.

Annual Reporting Requirements: Provide information regarding the number, location, and date of and the estimated number and ages of children reached per program, and a summary of future program goals.

BMP 1-3: Bacteria and Nutrients Education and Outreach

Develop printed educational materials for Montgomery County residents. Discuss water quality issues at scheduled public events. Provide giveaways to include educational messaging. Link stormwater education to the development of a “Go Green MC” program to be developed as a part of the County goal of participating in the Virginia Municipal League’s (VML) Green Government Challenge.

Supporting Documents:

Documents will be referenced in Annual Reports and will be made available for viewing under “Education and Outreach Library” on the website [Stormwater Resources](#) page.

The following documents are currently available:

“Wonderful Water Conservation. Protection. Quality” Newsletter

“Help Protect our Stormwater” brochure

“Scoop the Poop!” magnets with link to the www.montva.com/gogreenmc green government campaign.

“Scoop the Poop!” 4.25x5.5 quarter page information sheets that discusses the hazards of pet waste and encourages clean up. For distribution with pet waste bag dispensers.

Parks and recreation Go Play catalog winter “Keep our water resources clean” insert.

Parks and recreation Go Play catalog summer “Scoop the poop” insert.

June 2018 real estate billing newsletter combination “wonderful water/scoop the poop” message

March 2018 NRVHBA “Scoop the poop” insert.

Responsible Party:

Director of Environmental Services/County Engineer

Objective & Expected Results:

Provide printed educational materials about the importance of controlling bacteria and nutrient discharges and the impacts of our daily lives on the quality of stormwater.

Implementation Schedule:

Launched program during the 2016/2017 academic year and continued in 2017/2018 through 2018/2019.

Measurement of Effectiveness:

The number of printed educational materials provided and the estimated number of people reached during participation events.

Annual Reporting Requirements:

Provide information regarding the number of printed materials distributed and the number, location, and date of the target audience for any outreach events, and a summary of future program goals. Post printed materials on the website [Stormwater Resources](#) page.

MCM 2: PUBLIC INVOLVEMENT/PARTICIPATION

This minimum control measure is intended to implement a program that helps to inform and educate County residents about the Montgomery County Stormwater Program.

The Montgomery County MS4 Program Plan for MCM 2 will be developed to meet the following criteria:

- (1) Post copies of the annual report on the website;
- (2) Notify the public and provide for receipt of comment of the proposed MS4 Program Plan;
- (3) Participate in a minimum of four (4) local activities annually; and
- (4) Develop written procedures for implementing the program.

BMP 2-1: Montgomery County MS4 Program Plan and Annual Reports Posted to Stormwater Website

Once developed, the Montgomery County's MS4 Program Plan and annual reports will be posted to the Stormwater Management website, where citizens can provide review and comment.

Supporting Documents:	The current Program Plan and current and previous Annual Reports are available at the website Stormwater Resources page. The Stormwater MS4 Permit page contains an invitation to comment on the Program Plan as follows: "The County would like to hear from residents with comments or suggestions on the MS4 Program Plan or other aspects of the program. Contact Stormwater Specialist John Burke at burkejw@montgomerycountyva.gov
Responsible Party:	Director of Environmental Services/County Engineer
Objective & Expected Results:	Provide an accessible, central location for information related to Montgomery County's MS4 Program.
Implementation Schedule:	Included information with the website launch on March 1, 2015, and provide continual updates.
Measurement of Effectiveness:	Successful posting of the MS4 Program Plan, permit, and annual report within the required 30 day period.
Annual Reporting Requirements:	Provide a web link to the MS4 Program plan and annual report.

BMP 2-2: Annual Local Outreach Activities

Participate in up to four (4) local outreach activities. Montgomery County may coordinate with the Town of Blacksburg, Town of Christiansburg, City of Radford, Radford University, and/or Virginia Tech in outreach activities but shall be individually responsible for meeting all of the permit requirements.

Supporting Documents:	Current and Archived Annual Reports are provided on the website Stormwater Resources page.
Responsible Party:	Director of Environmental Services/County Engineer and County Administrator
Objective & Expected Results:	Provide routine exposure and education to citizens and elected officials regarding the Montgomery County’s MS4 Program and local TMDLs.
Implementation Schedule:	June 2017: Completed four (4) activities with adjoining agencies. June 2018: Complete participation in a minimum three (3) activities from July 2017 through June 2018. Annually: Provide program updates to the Board of Supervisors
Measurement of Effectiveness:	Completion of the number of programs provided and document the estimated number of citizens reached per event.
Annual Reporting Requirements:	Provide information regarding the three (3) events beyond the Supervisor’s update including the means of advertisement, location of the event, and the approximate number of citizens reached.

MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

This minimum control measure is intended to detect and eliminate illicit discharges to the MS4 storm system.

The Montgomery County MS4 Program Plan for MCM 3 will be developed to meet the following criteria:

- (1) Identify MS4 Outfalls and develop a storm sewer system map and associated table of information for each outfall;
- (2) Effectively prohibit, through ordinance or other legal mechanism, non-stormwater discharges into the storm sewer system;
- (3) Develop, implement, and update, when appropriate, written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping; and
- (4) Promote, publicize, and facilitate public reporting, inspections, and corrective measures of illicit discharges into or from any MS4.

BMP 3-1: Storm Sewer and Outfall Map and Database

Develop, maintain, and update a Storm Sewer and Outfall Map and Database to include the following information as required by the MS4 General Permit (9VAC25-890-40).

1. The name and location of all waters receiving discharges from the MS4 outfalls and the associated HUC;
2. The location of all MS4 outfalls with unique identifier; and
3. An information table for each outfall to include the unique identifier, the estimated MS4 acreage served, the name of the receiving surface water, a note whether the receiving water is listed as impaired, and the name of any applicable TMDL or TMDLs.

Supporting Documents:	Outfall mapping application: The County MS4 Outfall Map contains the all outfall information required under the permit as well as inspections results presented electronically from the 2017-2018 permit year and onward.
Responsible Party:	Director of Environmental Services/County Engineer
Objective & Expected Results:	Provide map and documentation of the MS4 outfalls for reference when responding to illicit discharges. Public access to the outfall location and inspection information can be expected to increase program awareness.
Implementation Schedule:	June 2016: 50% of service area mapped June 2017: 100 % of service area mapped June 2018: GIS Staff assume database maintenance
Measurement of Effectiveness:	Completion of the map and database within the proposed timeframe. Maintain and update the database as necessary.
Annual Reporting Requirements:	Summarize the status of the outfall map and database development, including any schedule updates and

documentation of property transfers that may have occurred since the prior annual report. Update the [MS4 Outfall Map](#) with new inspections and updated outfall information.

BMP 3-2: Illicit Discharge Ordinance

Establish a program to detect and eliminate illicit discharges in to the Municipal Separate Storm Sewer System by developing and adopting regulations and an enforcement program to prevent illegal discharges into the MS4 storm drain system.

Supporting Documents: The County [Illicit Discharge Ordinance](#) is located in chapter 8, Article III, Division 3 of the Montgomery County, VA Code of Ordinances. The County [MS4 Illicit Discharge Program](#) guidance document is available on the website in MCM3 of the Stormwater MS4 Permit page, and an [IDDE Field Guide](#) used in training and by County staff is available at the same location. The County [MS4 Outfall Map](#) contains the required outfall information for reference in performing and responding to illicit discharge incidents.

Responsible Party: Director of Environmental Services/County Engineer

Objective & Expected Results: Adopt an ordinance prohibiting illegal discharges into the MS4 storm system and routinely update and evaluate the ordinance to maintain compliance with state and federal regulations.

Implementation Schedule: Adopted an ordinance on June 22, 2015.

Measurement of Effectiveness: Compliance of the Montgomery County codes and ordinances with the rules and regulations of the state and federal governments.

Annual Reporting Requirements: Provide an update on the status of ordinance development and adoption - completed.

BMP 3-3: Illicit Discharge Program

Develop, implement, and enforce a program to detect and eliminate illicit discharges, as defined in the MS4 General Permit (9VAC25-890-40). The Illicit Discharge Program will include the following components:

1. Written dry weather field screening methodologies to detect and eliminate illicit discharges to the MS4 that include field observations and field screening monitoring and that provide:
 - a. A prioritized schedule of field screening activities;
 - b. A determination of the minimum number of field screening activities the operator shall complete annually;
 - c. Methodologies to collect the general information such as time since the last rain, the quantity of the last rain, site descriptions, estimated discharge rate, and visual observations;
 - d. A time frame and priority listing upon which to conduct an investigation or investigations to identify and locate the source of any observed continuous or intermittent non-stormwater discharge;
 - e. Methodologies to determine the source of all illicit discharges shall be conducted;
 - f. Mechanisms to eliminate identified sources of illicit discharges including a description of the policies and procedures for when and how to use legal authorities;
 - g. Methods for conducting a follow-up investigation in order to verify that the discharge has been eliminated; and
 - h. A mechanism to track all investigations and document (i) the date or dates that the illicit discharge was observed and reported; (ii) the results of the investigation; (iii) any follow-up to the investigation; (iv) resolution of the investigation; and (v) the date that the investigation was closed.
2. Public reporting and inspections of reported illicit discharges into or from MS4s.

Supporting Documents:

The County [MS4 Outfall Map](#) contains the all outfall information required under the permit as well as inspections results presented electronically from the 2017-2018 permit year and onward. The County [MS4 Illicit Discharge Program](#) guidance document is available on the website in MCM3 of the Stormwater [MS4 Permit](#) page, and an [IDDE Field Guide](#) used in training and by County staff is available at the same location. The [Center for Watershed Protection IDDE Manual](#) - provides additional guidance for county staff inspections The County [Illicit Discharge Ordinance](#) is located in chapter 8, Article III, Division 3 of the Montgomery County, VA Code of Ordinances.

Responsible Party:

Director of Environmental Services/County Engineer

Objective & Expected Results:

Develop a program that efficiently and effectively meets the MS4 General Permit Requirements. Document routine and suspected illicit discharge investigations. Public posting of the materials is expected to increase public awareness and reporting.

Implementation Schedule:

Completed development of the program in June 2015.
Completed online mapping application in August 2018

Measurement of Effectiveness:

Completion of the illicit discharge program for implementation within the required timeframes and compliance of the Montgomery County codes and ordinances with the rules and regulations of the state and federal governments.

Annual Reporting Requirements:

Summarize the status of the illicit discharge program development, including any schedule updates and a list of physical interconnection given by the operator to other MS4s. Subsequent annual reports shall provide a total number of outfalls screened during the reporting period the screening results, and detail of any follow-up actions required; and a summary of each investigation conducted by the operator of any suspected illicit discharge.

MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

This minimum control measure is intended to reduce pollutants in stormwater runoff from land disturbing activities to the MS4 storm system.

The following programs were previously established by Montgomery County to help meet the requirements of the MCM are as follows:

1. An Erosion and Sediment Control Ordinance to require erosion and sediment controls, as well as sanctions to ensure compliance, under local law for all land disturbances of 10,000 square feet or more.
2. Ordinance requirements for plan approval prior to land disturbance and construction site operators to implement appropriate erosion and sediment control best management practices.
3. Erosion and Sediment Control inspection procedures as required by the MS4 General Permit.

The Montgomery County MS4 Program Plan for MCM 4 will be developed to meet the following criteria:

- (1) Provide a description of the legal authorities utilized to ensure compliance with the minimum control measures in Section II related to construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements;
- (2) Develop written plan review procedures and all associated documents utilized in plan review;
- (3) Develop written inspection procedures and all associated documents utilized during inspection including the inspection schedule;
- (4) Develop written procedures for compliance and enforcement, including a progressive compliance and enforcement strategy, where appropriate;
- (5) Define the roles and responsibilities of each of the operator's departments, divisions, or subdivisions; and
- (6) Develop a tracking and reporting mechanism for regulated land-disturbing activities to provide the required reporting in all subsequent annual reports.

BMP 4-1: Erosion and Sediment Control Program Update

Update the existing Erosion and Sediment Control Ordinance and associated documents including written plan review procedures, written inspection procedures and schedule, written compliance and enforcement, certification of staff, and definition of roles and responsibilities procedures to comply with the requirements of the MS4 General Permit.

Supporting Documents:

The [Montgomery County Erosion and Sediment Control Ordinance](#).

The following [Administrative Guidance Manual](#) sections are relevant to this BMP:

- Section 5.1 and manual Appendix G for written Erosion and Sediment Control (ESC) plan submittal procedures
- Section 7.0, and manual appendices D and N for written ESC inspection procedures
- Section 11 for written ESC procedures for compliance and enforcement
- Erosion and Sediment Control Certifications are maintained for personnel that conduct inspections and are available for DEQ review.

Responsible Party:

Director of Environmental Services/County Engineer

Objective & Expected Results:

Develop a program that efficiently and effectively meets the MS4 General Permit Requirements.

The program is expected to provide clear guidance to Operators and consistency in plan review, inspection and enforcement activities.

Implementation Schedule:

Completed development of the program in September 2016.

Measurement of Effectiveness:

Completion of the Erosion and Sediment Control program update for compliance with regulations.

Annual Reporting Requirements:

Provide a summary of tasks completed to date and updated schedule, as needed, for the erosion and sediment control program update.

BMP 4-2: Erosion and Sediment Control Tracking and Reporting

Develop a tracking and reporting mechanism for regulated land-disturbing activities to provide the required reporting in all subsequent annual reports.

Supporting Documents:

The current Annual Report section MCM 4 provides the required reporting of land disturbance activities and enforcement statistics and is available on the [Stormwater Resources](#) webpage. The County LDO Management Systems software provides a system for tracking the status and

inspection requirements for regulated land disturbance activities

Responsible Party:

Director of Environmental Services/County Engineer

Objective & Expected Results:

Develop a program that efficiently tracks and reports regulated land-disturbing activities.
Accurate tracking and reporting of regulated land-disturbing activities is expected.

Implementation Schedule:

Completed development of the program in 2015.

Measurement of Effectiveness:

Develop and maintain current and accurate database of land-disturbing activities.

Annual Reporting Requirements:

Summarize the status of the tracking and reporting program development including tasks completed to date and schedule updates.
Upon completion of the program development, provide information regarding the total number of regulated land-disturbing activities, total number of acres disturbed, total number of inspections completed; and summary of enforcement actions taken, including the total number and type of enforcement actions taken during a reporting period in the MCM4 section of the Annual Report available on the [Stormwater Resources](#) webpage.

MCM 5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND DEVELOPMENT ON PRIOR DEVELOPED LANDS

This minimum control measure is intended to reduce pollutants in stormwater runoff from developed properties to the MS4 storm system. The post-construction stormwater management program will include the following elements:

- (1) A Stormwater Management Ordinance;
- (2) Written policies and procedures utilized to ensure that stormwater management facilities are designed and installed in accordance with Section II B 5 b of the MS4 General Permit;
- (3) Written inspection policies and procedures utilized in conducting inspections;
- (4) Written procedures for inspection, compliance and enforcement to ensure maintenance is conducted on private stormwater facilities to ensure long-term operation in accordance with approved design;
- (5) Written procedures for inspection and maintenance of operator-owned stormwater management facilities;
- (6) Roles and responsibilities for implementing MCM 5; and
- (7) A stormwater management facility tracking and reporting mechanism.

BMP 5-1: Stormwater Management Ordinance and Manual

Develop, adopt, and enforce an ordinance and policies and a procedures manual requiring stormwater quality and quantity controls for applicable land-disturbing activities in compliance with state and federal regulations and with the requirements of the MS4 General Permit. The policies and procedures manual will cover items 2 through 5 listed above.

Montgomery County is currently working with the New River Valley Planning District Commission to develop the stormwater management ordinance and policies and procedures manual.

Supporting Documents:

The County [Stormwater Management Ordinance](#) is located in chapter 8, Article III, Division 2 of the Montgomery County, VA Code of Ordinances.

The following [Administrative Guidance Manual](#) sections and supporting documents are relevant to this BMP:

- Section 4.0 and 5.0 for written stormwater plan submittal procedures
- Section 8.0 for written inspection procedures for stormwater management facilities (SMFs) construction inspections
- Sections 6.1 and 9, section 8-79 of the [Stormwater Management Ordinance](#), and the Stormwater Facilities Inspections and Maintenance Manual located in Appendix C for written procedures to ensure SMF maintenance
- Section 7.0 and manual Appendix D and the Inspections and Maintenance Manual located in this Program Plan

in Appendix C for written procedures to ensure SMFs are designed and installed as required.

- Stormwater Certifications are maintained for personnel that conduct inspections and are available for DEQ review.

Responsible Party:	Director of Environmental Services/County Engineer
Objective & Expected Results:	Develop an ordinance and a policies and procedures manual to prevent or minimize water quality and quantity impacts from new or re-developments.
Implementation Schedule:	June 2014: Adopted stormwater management ordinance. June 2014: Finalized policies and procedures manual. July 2014: Implemented stormwater program and policies and procedures manual, including maintenance agreements for privately owned stormwater facilities.
Measurement of Effectiveness:	Annual evaluation of the Stormwater Management ordinance and manual and continued compliance with state and federal regulations.
Annual Reporting Requirements:	Summarize the status of the ordinance and manual development including tasks completed to date and schedule updates. - completed

BMP 5-2: Stormwater Management Tracking and Reporting System

Develop and maintain a database of all known operator-owned and privately-owned stormwater management facilities that discharge into the MS4 storm system for tracking and reporting. Database attributes for each stormwater management facility shall include the following:

1. Facility type and BMP Clearinghouse specification reference number;
2. Location (address or latitude and longitude);
3. Total area treated, including delineation of pervious and impervious area;
4. Completion date; if unknown, assume June 30, 2005;
5. The sixth order hydrologic unit code (HUC) where the facility is located;
6. Name of any impaired water segments within each HUC listed in the 2010 §305(b)/303(d) Water Quality Assessment Integrated Report to which the facility discharges;
7. Ownership information (private or public); and
8. Date of most recent inspection and name of inspector.

Supporting Documents: New stormwater management facilities added in a permit year are reported in an Annual Report available on the website [Stormwater Resources](#) page. All public and private facilities located within the County unincorporated urbanized area are provided in Appendix D of this Program Plan

Responsible Party: Director of Environmental Services/County Engineer

Objective & Expected Results: Develop a system to meet the requirements of the MS4 General Permit.

Implementation Schedule:

July 2014:	Developed an inspection schedule for new privately-owned BMPs for once every 5 years.
June 2017:	Complete inventory of and schedule for inspecting all county owned stormwater facilities annually.
June 2018:	Complete operator owned facility inspections
June 2019:	Continue annual operator owned facility inspections. Complete five (5) year cycle private owned facility inspections.

Measurement of Effectiveness: Use of electronic database of all stormwater management facilities for tracking and reporting with the annual report.

Annual Reporting Requirements: Submit an electronic database of all stormwater management facilities, including those completed during each reporting year, with the annual report.

BMP 5-3: Individual Lot Special Criteria

Develop and implement strategies other than maintenance agreements such as periodic inspections, homeowner outreach and education, and other methods targeted at promoting the long-term maintenance of stormwater control measures that are designed to treat stormwater runoff solely from the individual residential lot.

Supporting Documents: None – All currently completed single Family Detached Residential projects eligible for CGP coverage have recorded Maintenance Agreements on file.

Responsible Party: Director of Environmental Services/County Engineer

Objective & Expected Results: Increase homeowner awareness of the purpose and long-term maintenance of stormwater control measures that are designed to treat stormwater runoff solely from the individual residential lot.

Implementation Schedule: June 2017: Adopt and implement strategies.

Measurement of Effectiveness: The number of strategies used and the number of citizens reached.

Annual Reporting Requirements: Provide information regarding strategies employed, the means of advertisement, location of the event, and the number of citizens reached.

MCM 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

This minimum control measure is intended to reduce pollutants in stormwater from daily operations and maintenance activities and municipal facilities, and from turf and landscape areas. The pollution prevention/good housekeeping plan will include the following elements:

- (1) Written protocols being used to comply with the MS4 General Permit the daily operations and maintenance requirements;
- (2) A list of all municipal high-priority facilities that identifies those facilities that have a high potential for chemicals or other materials to be discharged in stormwater and a schedule that identifies the year in which an individual stormwater pollution prevention plan (SWPPP) will be developed for those facilities required to have a SWPPP;
- (3) A list of lands where nutrients are applied to a contiguous area of more than one acre;
- (4) A turf and landscape nutrient management plan; and
- (5) A written training plan for the next reporting cycle.

BMP 6-1: Household Hazardous Waste Event

Expand current program and encourage citizen participation in events to dispose of household materials that could be hazardous to dispose of in bulk landfills.

Supporting Documents:	The County Single Stream Recycling webpage provides Hazardous waste recycling information and a direct link to the Montgomery County Regional Solid Waste Authority permanent household hazardous waste disposal procedures.
Responsible Party:	Waste Management Department
Objective & Expected Results:	Advertise the Montgomery Regional Solid Waste Authority (MRSWA) Household Hazardous Waste Collection Days http://www.mrswa.com/household-hazardous-waste.html on the County website.
Implementation Schedule:	Implemented December 2014.
Measurement of Effectiveness:	Maintenance of current hazardous waste disposal instructions.
Annual Reporting Requirements:	Report the presence of recycling information on the County website and maintenance of active links to the Montgomery Regional Solid Waste Authority hazardous waste disposal information

BMP 6-2: Municipal Good Housekeeping Procedures

Develop and implement written procedures designed to minimize or prevent pollutant discharge from: (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers. The written procedures shall be utilized as part of the employee training. At a minimum, the written procedures shall be designed to:

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

Supporting Documents:	Daily Good Housekeeping Procedures provide guidance to municipal staff operations and contracted work. The IDDE Field Guide provides guidance in understanding allowable and illicit discharges as well as investigation and reporting guidance.
Responsible Party:	Director of Environmental Services/County Engineer
Objective & Expected Results:	Reduce the number of non-stormwater discharges in the MS4 storm system from municipal facilities.
Implementation Schedule:	May 2016: Completed written procedures. July 2018: Initiate staff training and distribute written procedures for Good Housekeeping.
Measurement of Effectiveness:	Reduction of pollutant discharge from (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers.
Annual Reporting Requirements:	Summarize the status of the good housekeeping procedures development including tasks completed to date and schedule updates.

BMP 6-3: Municipal SWPPPS

Develop and update SWPPPs for high-priority municipal facilities, including a training program. Each facility will be evaluated for the potential of illicit discharges from storage yards, outdoor storage areas, waste transfer stations, fleet or maintenance shops and other municipal facilities. The disposal method for waste materials will be evaluated. Any operation that has potential to discharge material into the municipal separate storm sewer system will be examined for potential for unwanted discharge.

Supporting Documents: Stormwater Pollution Prevention Plans (SWPPP) documents are developed for the following sites and accessed by the hyperlinked text below:

- [Montgomery County Public Schools Facilities Site](#)
- [Christiansburg High School](#)
- [Christiansburg Middle School](#)

The [Good Housekeeping Procedures](#) and [IDDE Field Guide](#) documents linked in BMP 6-3 and the Annual Training Plan in Appendix E are also supporting documents for this BMP

Responsible Party: Director of Environmental Services/County Engineer

Objective & Expected Results: Reduce the number of non-stormwater discharges in the MS4 storm system from municipal facilities.

Implementation Schedule:

June 2015:	Identified municipal high-priority facilities.
June 2016:	Developed and implemented SWPPPs for 20% of high-priority facilities-completed. MCPS Facilities SWPP completed.
June 2017:	Develop and implement SWPPPs for 60% of high-priority facilities. Christiansburg HS and Christiansburg MS SWPPPs completed.
June 2018:	Develop and implement SWPPPs for 100% of high-priority facilities.

Measurement of Effectiveness: Number of SWPPPs completed each year.

Annual Reporting Requirements: Summarize the status of the SWPPP development, including name and location of facilities where the plans are completed, in progress, and yet to be started, and schedule updates.

BMP 6-4: Municipal Nutrient Management Plans

Develop and implement Nutrient Management Plans on all required lands as per the schedule provided in 9VAC25-890-40.

Supporting Documents: 2018 [Nutrient Management Plan](#)
The [Urban Nutrient Management Handbook](#) May 2011 edition
The applicable sites and associated acreage of sites having
Nutrient Management Plans reported in BMP section 6-4 in an
Annual Report available on the website [Stormwater Resources](#)
page

Responsible Party: Director of Environmental Services/County Engineer

Objective & Expected Results: Reduce the amount of pollutants from landscaping treatments from municipal facilities.

Implementation Schedule:

June 2015:	Identified applicable lands.
June 2016:	No nutrient management plans were developed.
June 2017:	No nutrient management plans were developed.
June 2018:	Develop and implement nutrient management plans for 50% of applicable lands.
June 2019:	Develop and implement nutrient management plans for the remaining 50% of applicable lands.

Measurement of Effectiveness: Number of nutrient management plans completed and implemented each year.

Annual Reporting Requirements: Provide a status of the program development and implementation, the total acreage of lands where turf and landscape nutrient management plans are required, and the acreage of lands upon which turf and landscape nutrient management plans have been implemented.

BMP 6-5: Municipal Training Program

Develop an annual written training plan, possibly in conjunction with adjoining jurisdictions via an MOU, if applicable, including a schedule of training events that ensures implementation of the training requirements as follows:

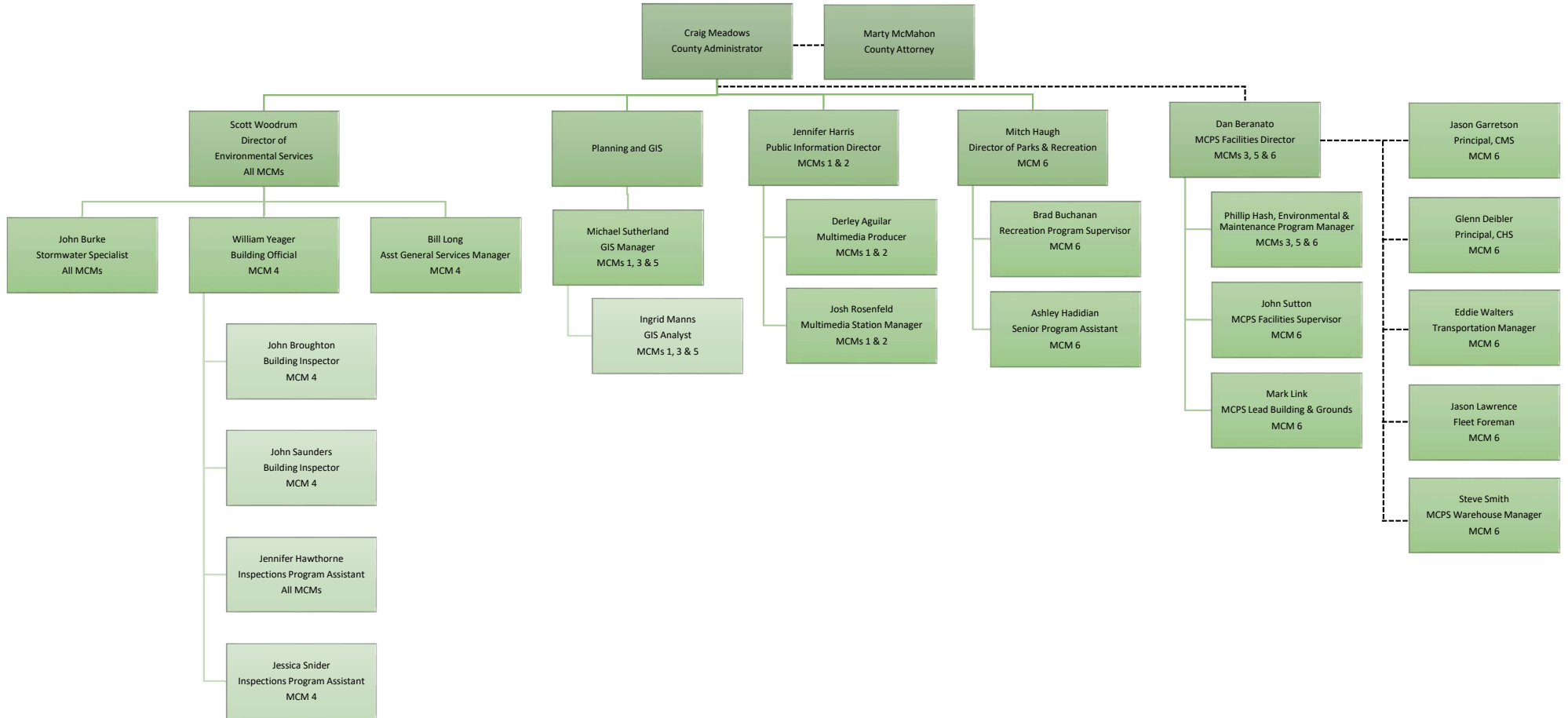
- (1) Biennial training to applicable field personnel in the recognition and reporting of illicit discharges;
- (2) Biennial training to applicable employees in good housekeeping and pollution prevention practices that are to be employed during road, street, and parking lot maintenance;
- (3) Biennial training to applicable employees in good housekeeping and pollution prevention practices that are to be employed in and around maintenance and public works facilities;
- (4) Pesticides and herbicides training or certification in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia);
- (5) Plan reviewers, inspectors, program administrators, and construction site operators training and certification as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;
- (6) Biennial training to applicable employees in good housekeeping and pollution prevention practices that are to be employed in and around recreational facilities;
- (7) Annual training for spill responses for the appropriate emergency response employees; and
- (8) Documentation on each training event including the training date, the number of employees attending the training, and the objective of the training event for a period of three years after each training event.

Supporting Documents:	The Annual Training Plan in Appendix E Training completed in any permit year is reported in an Annual Report available on the website Stormwater Resources page.
Responsible Party:	Director of Environmental Services/County Engineer and County Administrator
Objective & Expected Results:	Increase knowledge of good housekeeping and pollution prevention practices to further prevent pollutant discharges into stormwater.
Implementation Schedule:	Complete the training of the four employee groups by June 2019 and continue on the Training Plan schedule in subsequent years.
Measurement of Effectiveness:	The number of training opportunities provided and the number of employees reached.
Annual Reporting Requirements:	Provide a summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training; a summary of the training or certification program is provided to emergency response employees shall be included in the first annual report.

Appendix A

County MS4 Organizational Chart

Montgomery County, VA MS4 Organization Chart



Appendix B

Stormwater Management Memorandum of Agreement between the County of Montgomery, Virginia and the County School Board of Montgomery County

MEMORANDUM OF AGREEMENT STORMWATER MANAGEMENT

This Memorandum of Agreement by and between the **COUNTY OF MONTGOMERY, VIRGINIA** ("the County") and the **COUNTY SCHOOL BOARD OF MONTGOMERY COUNTY, VIRGINIA**, ("the Public Schools") is made this 17th day of February, 2016, the parties hereto.

I. Background

Discharges from Municipal Separate Storm Sewer Systems (MS4s) are regulated under the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP) Permit regulations, and the Clean Water Act as point source discharges.

The County and the Public Schools both fall under the small MS4 permit requirements. The County and the Public Schools must each be in compliance with the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. The County currently manages an MS4 Program and has an MS4 Program Plan that has been approved by the Commonwealth of Virginia. The County and the Schools agree that it is in each of their respective best interests that the School's facilities and operations be operated by the Public Schools within the County's MS4 and the County's MS4 Program Plan subject to the following terms and conditions.

II. Purpose

This Memorandum of Agreement is made for the purpose of complying with the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems and to provide for discharge authorization, maintenance, and installation of the stormwater and/or storm drainage facilities and operations of the Montgomery County Public Schools. By entering into this Agreement, Montgomery County agrees to accept the Montgomery County Public Schools facilities and operations within its coverage under the General Permit No. VAR040134, which expires on June 30, 2018.

III. Responsibilities of the Montgomery County School Board

- a. The Public Schools, to include the facilities it controls and its operations, agree to abide by all legal requirements of state and federal law and of the Montgomery County Code. The Public Schools agree to work with the Montgomery County Director of Engineering and Regulatory Compliance or his/her designee for the purposes of being in compliance with the stormwater management program. The Public Schools agree to refrain from all prohibited acts, including but not limited to allowing, putting, pouring or discharging any substances into the stormwater system.

- b. The Public Schools agree to pay all costs for any violation and/or remediation measures including all expenses incurred by the County for Public Schools violations relevant to the provisions of federal and state law pertaining to the Clean Water Act, the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP), the Virginia Erosion and Sediment Control Law and Regulations, and other related regulations regarding proper waste disposal.
- c. The Public Schools and its facilities and operations agree to develop and maintain good housekeeping processes, to include:
 - a) providing Spill Prevention Plans, as directed by the County
 - b) providing proper storage and disposal of all chemicals and substances listed on the EPA list of hazardous and/or toxic substances
 - c) providing proper storage and disposal of any substances which are unlawful or harmful to the storm drainage system and/or the waters of the Commonwealth of Virginia or the United States
- d. The Public Schools is required to and hereby agrees to submit an Annual Report of problems, violations, and solutions or remediation efforts related to stormwater management to the Director of Engineering and Regulatory Compliance with the County no later than August 15th of any year for the preceding fiscal year. Said report shall be submitted in the format required by and provided by the County.
- e. The Public Schools agree to conduct all maintenance, labor, or repairs to storm drainage structures or facilities owned or controlled by the Public Schools. The Public Schools also agree to allow the County routine access for the purposes of inspection of said facilities.
- f. If the Public Schools fail to properly maintain or repair the storm drainage structures or facilities owned or controlled by the Public Schools, the Public Schools authorize the County to conduct the work on its behalf and pay the County for the costs incurred to conduct the maintenance or repair work.
- g. The Public Schools agree to cooperate fully with the County in all permitting processes, including the meeting of all new requirements for the 5-year MS4 permit and any other permits pertaining to the Clean Water Act, and State and County Code provisions for storm water management, drainage, and proper waste disposal.
- h. The Public Schools will designate, by name and position, a responsible agent for this Agreement.

IV. Responsibilities of the County of Montgomery

- a. The County agrees to prepare and submit the required MS4 Permit Annual Report each year for the preceding fiscal year, which shall include the information for the Public Schools.

- b. The County agrees to timely apply for all required federal and state permits and to provide the Public Schools with a copy of the current permit.
- c. The County shall work with the Public Schools to provide education of selected Public Schools staff about the stormwater program, and will specifically provide biennial training in the following categories:
 - I. Pollution prevention and good housekeeping
 - II. Spill prevention
 - III. Illicit discharge detection and elimination
 - IV. Total maximum daily loads
- d. The County shall provide a format for the Annual Report that is to be submitted by the Public Schools to the County's Director of Engineering and Regulatory Compliance.

V. Agreement Termination by Either Party.

- a. The County may terminate this agreement at any time that the Public Schools fail to comply with any provisions of this agreement. Following a written notice of non-compliance by the County, the Public Schools shall have 30 days to completely correct or cure, to the satisfaction of the County, the issue of noncompliance. Should the Public Schools fail to correct the issue within the specified time period, this agreement will be terminated and the Public Schools will be required to obtain separate coverage under the MS4 General Permit.
- b. The Public Schools may terminate this agreement at any time by giving the County written notice that it has received separate coverage under a MS4 General Permit and shall provide a copy of same to the County. The Public Schools further agrees to notify the Director of Engineering and Regulatory Compliance, in writing, of its intent to apply for said permit coverage as soon as it becomes aware of such intention.

VI. Right of Entry.

The Public Schools agree to cooperate and permit County employees or contractors to access its facilities for all purposes under this agreement.

VII. Hold Harmless.

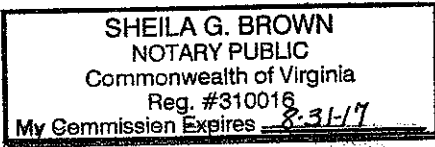
The parties hereto agree to hold each other harmless for all acts or omissions pursuant to this Agreement.

VIII. Additional Obligations.

The parties hereto agree to cooperate fully with all related regulations and the requests of authorized representatives of federal, state, and local authorities for permitting and for purposes of the storm water program.

In Witness Whereof, this agreement has been entered into by the parties on the day and date first above written.

Sheila G. Brown 2-17-16



**County School Board of Montgomery
County, Virginia**

BY:

[Signature]

Superintendent of Schools

County of Montgomery, Virginia

BY:

[Signature]

County Administrator

*Approved as to form
and legal sufficiency*
[Signature]

County Attorney

Appendix C

Stormwater Management facility Inspections and Maintenance Manual

Municipal Separate Storm Sewer System (MS4)

Stormwater Facility Inspection Program Procedures



Introduction

The proper inspection and maintenance of post construction stormwater management facilities (SWMFs or facility) is integral to ensuring each facility operates at its intended level of service and sufficiently protects the surrounding environment. The purpose of this document is to provide written procedures for the inspection and maintenance of any facility, County-owned or private, discharging to the County's municipal separate storm sewer system (MS4).

This manual supplements the County VSMP Administrative Guidance Manual's Post Construction Inspection section by providing basic inspection considerations and procedures leading up to, during, and after an inspection of a facility.

1. Stormwater Facility Inspection Evaluation Strategy

A facility will be evaluated by an overall evaluation for compliance in operating for the intended function with a determination of 'yes', 'no', or 'conditionally' operates as intended. The respective conditions for providing the evaluation are as follows:

- Yes, if the facility is adequately operating. A facility achieving a passing grade should have no structural or operating issues. Minor maintenance requirement observations or concerns may be observed and reported in the inspection as a conditional pass or fail while the overall function of the facility is achieved.
- A conditional pass evaluation will be determined when routine maintenance is recommended. A facility may should have maintenance, structural, or operating issues but is evaluated as currently performing at an acceptable level of service and would be expected to continue to operate effectively based on the completion of the action(s) recommended in the inspection evaluation on a routine basis.
- A no, or fail recommendation if the facility is evaluated as not being in a condition to operate effectively and needs repairs to correct degraded structural or operating conditions, or that conditions at the time of inspection indicate that there is a reasonable expectation of degradation to an extent that the facility will become a physical danger, or repairs are necessary to address significant structural or operating concerns.

2. Pre-Inspection Procedures

- a. Pre-inspection Preparation
 - i. If notification is required, confirm notification letter was sent and received via the delivery receipt if the notification was sent by certified mail or an email response if electronic correspondence was used.
 - ii. Review available information
 1. As-built Drawings
 2. Owner Information (If private)
 3. Site Maps/Aerial Photos
 4. Previous Inspection Report, if applicable
 5. Outstanding Maintenance Work Orders
 6. Proprietary/Non-Proprietary

7. Fill out inspection form background information
8. SWMF Identification Number (ID #)
9. Date/Time
10. Inspection Type
 - a. Routine Inspection
 - b. Follow-up – Inspection follow-up after maintenance request. Previous Inspection date
- b. Personal Protective Equipment (PPE) Check for all inspection personnel.
 - i. Safety Vest
 - ii. Steel Toe Boots
 - iii. Optional: Gloves, Hard Hat, Safety Glasses, etc.

3. Safety

- a. Field activities will be carried out on multiple sites which may include, but are not limited to:
 - i. Sites close to the flow of human and vehicular traffic
 - ii. Sites located next to rivers and creeks
 - iii. Sites prone to flooding
 - iv. Hazards may include physical hazards, biological hazards, and natural phenomena.
- b. Review site access considerations to insure that the site access is lawful
- c. Notify other staff of locations to be inspected and anticipated inspection timeline.

4. Field Inspection

- a. The objective of a SWMF inspection program is to ensure that each facility is adequately operated and maintained throughout the life of each facility. Inspection scheduling and the tracking of required maintenance of each facility is the responsibility of the Environmental Services Department.
- b. Types of inspections - For each SWMF, there are two types of inspections that may be conducted: routine and follow-up. Routine inspections are conducted annually for publicly owned SWMFs, and a minimum of once every five (5) years for privately owned SWMFs. During routine inspections, the Inspector will evaluate a SWMF and determine whether routine maintenance is recommended, or whether repairs to the SWMF are necessary. Follow-up inspections are typically only conducted following routine inspections on privately owned SWMFs that require repairs. If a publicly owned SWMF requires repairs, a service request will be created to address these repairs and the annual inspection process will be followed. Should the service request result in the need for the contracting of outside services, an inspection performed as a part of the contract closeout would be performed to document the completion of contracted repair or maintenance work.
- c. **Inspection and Report Process**
 - i. The County Stormwater Management/BMP Inspection fillable form will be completed as a part of facility inspections. The inspection form is available in Appendix Q of the VSMP Administrative Manual. Each inspection item will be evaluated and assessed as Pass (P), Fail (F), Conditionally Pass (CP),

or not applicable (N/A). An indication that a photograph was taken and relevant if photographs are taken based on a particular inspection item. The inspection form allows for relevant observations and remarks to be added for a particular inspection item.

1. Appendix Q also contains the Virginia Stormwater Manual O&M checklists for use as an additional reference in evaluating specific BMPs.
 2. The City of Virginia Beach MS4 Program Plan Appendix D, “SWMF Inspection and Maintenance Guidance Document” may also be used as an additional reference.
- ii. A completed inspection report will consist of the following
1. The notification letter and conformation of delivery, if required.
 2. The completed inspection form with relevant observations and remarks, as well as recommended maintenance or repair actions.
 3. Private facility reports will also include:
 - a. A compliance, first non-compliance letter, or second non-compliance letter, as appropriate. Compliance letters will repeat the recommended maintenance or repair actions provided in the inspection.
 - b. A reference to the location of the long term maintenance responsibilities of the facility owner, if appropriate.



MONTGOMERY COUNTY

DEPARTMENT OF ENVIRONMENTAL SERVICES

755 ROANOKE STREET, SUITE IC, CHRISTIANSBURG, VIRGINIA 24073-3172

[Date]

[CERTIFIED MAIL] or [via Email]

[Owner Name]
[Organization]
[Street Address]
[City][State] [Zip]

Subject: Notice of a Scheduled Stormwater Management Facility Inspection –
[SWMF Name, (County Facility ID)]

Dear [Name],

In accordance with the Virginia Administrative Code, 9VAC25-870-102 & 114 B, and Montgomery County Code, Section 8-79 & 8-80, an on-site inspection of a [SWMF Type] located at [SWMF Address] has been scheduled for [Inspection Month, Date and Year]. The County is required to conduct scheduled inspections for all privately maintained stormwater management facilities (SWMF) at least once every five (5) years.

Stormwater Management Facility Inspection Program

The proper inspection and maintenance of stormwater management facilities is critical to ensuring each facility protects the surrounding environment. The purpose of this scheduled inspection is to ensure that the facility is adequately operating and maintenance is being performed as necessary. The scope of this inspection will include the following:

- Field inspection of the stormwater management facility, including documentation of the physical condition and any structural or operational deficiencies
- Evaluation of current maintenance practices with the owner, if available
- If applicable, obtain and review inspection reports conducted by approved third-party inspectors in accordance with the Virginia Administrative Code 9VAC25-870-114 C and pursuant to Virginia Code Article 1 of Chapter 4 of Title 54.1
- Summary of findings and recommendations for routine maintenance or repairs



MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

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It is requested that you, or your representative, attend the scheduled inspection. If you, or a representative, plan to attend, please confirm at the number below forty-eight (48) hours in advance to the inspection date listed above.

Please email me at [Inspector Email], or the Environmental Services Department at (540) 394-2090.

Respectfully,

[Inspector Name]



MONTGOMERY COUNTY

DEPARTMENT OF ENVIRONMENTAL SERVICES

755 ROANOKE STREET, SUITE IC, CHRISTIANSBURG, VIRGINIA 24073-3172

[Date]

[CERTIFIED MAIL] or [via Email]

[Owner Name]

[Organization]

[Street Address]

[City][State] [Zip]

Subject: Stormwater Management Facility Inspection Results –
[SWMF Name, (County Facility ID)]

Dear [Name],

In accordance with the Virginia Administrative Code, 9VAC25-870-102 & 114 B, and Montgomery County Code, Section 8-79 & 8-80, an on-site inspection of a [SWMF Type] located at [SWMF Address] was conducted on [Inspection Month, Date and Year]. The County is required to conduct scheduled inspections for all privately maintained stormwater management facilities (SWMF) at least once every five (5) years.

SWMF Inspection Results

Based on the findings of the above SWMF inspection, inspected facility was found to be adequately operating and therefore in compliance with State and County Ordinances.

Attached are the results of the referenced inspection. The results of this inspection will be maintained in the County MS4 Program records, in accordance with your current long-term maintenance agreement.

The proper inspection and maintenance of SWMFs is critical to ensuring each facility protects the surrounding environment. We appreciate your commitment and for helping the County meet their mission to enhance the physical quality of the community.



MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

755 ROANOKE STREET, SUITE 1C, CHRISTIANSBURG, VIRGINIA 24073-3172

For all follow-up questions, please email me at [Inspector Email], or the Environmental Services Department at (540) 394-2090.

Respectfully,

[Inspector Name]

Attachments (2)

- Attachment A: Completed Inspection Report
- Attachment B: [Long-term Maintenance Plan information or location reference



MONTGOMERY COUNTY

DEPARTMENT OF ENVIRONMENTAL SERVICES

755 ROANOKE STREET, SUITE IC, CHRISTIANSBURG, VIRGINIA 24073-3172

[Date]

[CERTIFIED MAIL] or [via Email]

[Owner Name]

[Organization]

[Street Address]

[City][State] [Zip]

Subject: Stormwater Management Facility Inspection Results – Notice of Required Corrective Actions for [SWMF Name, (County Facility ID)]

Dear [Name],

In accordance with the Virginia Administrative Code, 9VAC25-870-102 & 114 B, and Montgomery County Code, Section 8-79 & 8-80, an on-site inspection of a [SWMF Type] located at [SWMF Address] was conducted on [Inspection Month, Date and Year]. These inspections provide assurance that each stormwater management facility (SWMF) is adequately operated and maintained.

SWMF Inspection Results

Based on the findings of the above SWMF inspection, the facility inspected was found to not be operating adequately and therefore out of compliance with State and County Ordinances. The table below provides a summary of issues observed and the required corrective actions to ensure compliance. Please complete each of the listed corrective actions by [Required Completion Date – 60-days after date of letter]. The required actions, as outlined in the SWMF inspection report dated [Inspection Month, Date and Year], are as follows:

SWMF Required Routine Maintenance and Repairs	
Maintenance Issue	Corrective Action
[Insert Observed Issue]	[Recommended Routine Maintenance or Repair]
[Insert Observed Issue]	[Recommended Routine Maintenance or Repair]
[Insert Observed Issue]	[Recommended Routine Maintenance or Repair]



MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

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[The recorded stormwater maintenance agreement, recorded [Agreement Month, Date and Year], establishes a covenant for Owner maintenance and inspection of all stormwater management facilities.] If any of the above items cannot be completed by the given date, please contact the Environmental Services at (540) 394-2090.

Respectfully,

[Inspector Name]

Attachments (2)

- Attachment A: Completed Inspection Report
- Attachment B: [Long-term Maintenance Plan information or location reference]



MONTGOMERY COUNTY

DEPARTMENT OF ENVIRONMENTAL SERVICES

755 ROANOKE STREET, SUITE IC, CHRISTIANSBURG, VIRGINIA 24073-3172

[Date]

[CERTIFIED MAIL] or [via Email]

[Owner Name]

[Organization]

[Street Address]

[City][State] [Zip]

Subject: Stormwater Management Facility Inspection Results – Second Notice of Required Corrective Actions for [SWMF Name, (County Facility ID)]

Dear [Name],

In accordance with the Virginia Administrative Code, 9VAC25-870-102 & 114 B, and Montgomery County Code, Section 8-79 & 8-80, a second on-site inspection of a [SWMF Type] located at [SWMF Address] was conducted on [Inspection Month, Date and Year]. During the re-inspection it was found that the above stormwater management facility (SWMF) remains out of compliance.

SWMF Inspection Results

Based on the findings of the above SWMF inspection, the facility inspected was found to not be operating adequately and therefore out of compliance with State and County Ordinances. The table below provides a summary of the remaining issues observed and the required corrective actions to ensure compliance. Please complete each of the listed corrective actions by [Required Completion Date – 60-days after date of letter]. The required actions, as outlined in the SWMF inspection report dated [Inspection Month, Date and Year], are as follows:

SWMF Required Routine Maintenance and Repairs	
Maintenance Issue	Corrective Action
[Insert Observed Issue]	[Recommended Routine Maintenance or Repair]
[Insert Observed Issue]	[Recommended Routine Maintenance or Repair]
[Insert Observed Issue]	[Recommended Routine Maintenance or Repair]



MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

755 ROANOKE STREET, SUITE 1C, CHRISTIANSBURG, VIRGINIA 24073-3172

[The recorded stormwater maintenance agreement, recorded [Agreement Month, Date and Year], establishes a covenant for Owner maintenance and inspection of all stormwater management facilities.] If any of the above items cannot be completed by the given date, please contact the Environmental Services at (540) 394-2090. Failure to complete the required corrective actions by the requested date above may [result in County action to correct defects and/or deficiencies and may result in Landowner obligations for reimbursement of expenditures as provided for in the stormwater maintenance agreement.] [may result in the County pursuing legal remedies to insure public safety and the proper function of the stormwater facility.]

Respectfully,

[Inspector Name]

Attachments (2)

- Attachment A: Completed Inspection Report
- Attachment B: [Long-term Maintenance Plan information or location reference]

Appendix D

Public and Private Stormwater Management Facility Database

GIS OBJECTID	Name ID	BMP ID	BMP Type	Address	Total Drainage Acreage	Imp. Drainage Acreage	Man. Turf Acreage	Open Space /Forest Acreage	Parcel ID	Lat	Long	Project Name	Date Online	VAHU6	HUC code	Main. Agreement?	Date of last Inspection	Impaired Waters Direct Discharge	BMP type
1	PFE DET	2010001	Extended Detention (part 2C)	4201 Princes Fork Road, Blacksburg VA24060	16.55	6.23	9.32	0.00	070916	37.2090	-80.4862	Princes Fork Elem School	11/3/2010	NE59	050500011803	N	6/8/2018	n/a no direct discharge to impaired waters	DryDetPT2C
2	PFE BIO1	2010002	Bioretention (part 2C)	4201 Princes Fork Road, Blacksburg VA24060	5.50	2.75	2.75	0.00	070916	37.2089	-80.4866	Princes Fork Elem School	11/3/2010	NE59	050500011803	N	6/8/2018	n/a no direct discharge to impaired waters	Bioretention
3	PFE Bio 2	2010003	Bioretention (part 2C)	4201 Princes Fork Road, Blacksburg VA24060	6.50	3.25	3.25	0.00	070916	37.2096	-80.4850	Princes Fork Elem School	11/3/2010	NE59	050500011803	N	6/8/2018	n/a no direct discharge to impaired waters	Bioretention
4	CMS DET1	2005001	Dry Detention Pond	1205 Buffalo Drive, Christiansburg VA 24073	16.21	5.30	10.91	0.00	008097	37.1218	-80.4215	Christianburg Mid School	7/31/2003	NE58	050500011802	N	6/6/2018	n/a no direct discharge to impaired waters	DryDetention
5	CMS DET2	2005002	Dry Detention Pond	1205 Buffalo Drive, Christiansburg VA 24073	25.54	5.50	20.04	0.00	008097	37.1232	-80.4269	Christianburg Mid School	7/31/2003	NE58	050500011802	N	6/6/2018	n/a no direct discharge to impaired waters	DryDetention
6	BMS DET1	2005003	Dry Detention Pond	3109 Princes Fork Road, Blacksburg VA 24060	13.91	4.45	9.46	0.00	007502	37.2119	-80.4624	Blacksburg Mid School	6/1/2002	NE59	050500011803	N	6/22/2018	n/a no direct discharge to impaired waters	DryDetention
7	BMS DET2	2005004	Dry Detention Pond	3109 Princes Fork Road, Blacksburg VA 24060	19.33	5.41	13.92	0.00	007502	37.2138	-80.4636	Blacksburg Mid School	6/1/2002	NE59	050500011803	N	6/22/2018	n/a no direct discharge to impaired waters	DryDetention
8	BHS ED	2013001	Extended Detention (part 2C)	3109 Princes Fork Road, Blacksburg VA 24060	20.36	11.79	8.57	0.00	007502	37.2113	-80.4620	Blacksburg High School	7/1/2013	NE58	050500011802	N	6/22/2018	n/a no direct discharge to impaired waters	DryDetPT2C
9	FBE DET	2005005	Dry Detention Pond	735 Falling Branch Road Christiansburg VA	20.40	5.01	15.39	0.00	027061	37.1265	-80.3750	Falling Branch Elem	6/30/2005	NE58	050500011802	N	6/22/2018	n/a no direct discharge to impaired waters	DryDetention
10	CH WQU	2012001	Stormceptor Water Quality Unit	55 E Main St, Christiansburg VA 24073	0.68	0.68	0.00	0.00	071124	37.1298	-80.4075	Mont County Courthouse	10/6/2009	NE58	050500011802	Y	6/29/2018	n/a no direct discharge to impaired waters	Proprietary
11	CH UGD	2012002	Underground Quantity Detention	55 E Main St, Christiansburg VA 24073	0.83	0.83	0.00	0.00	071124	37.1299	-80.4074	Mont County Courthouse	10/6/2009	NE58	050500011802	Y	6/29/2018	n/a no direct discharge to impaired waters	Proprietary

GIS OBJECTID	Name ID	BMP ID	BMP type	Address	Total Drainage Acreage	Imp. Drainage Acreage	Man. Turf Acreage	Space /Forest Acreage	Parcel ID	Lat	Long	Project Name	Date Online	VAHU6	HUC code	Main. Agreement	Date of last Inspection	Impaired Waters Direct Discharge
1	HP DET	2005007	Wet Pond	n/a	241.00	37.00	204.00	0.00	110966	37.1177	-80.4570	Heritage Place	6/30/2005	NE59	050500011802	N		n/a no direct discharge to impaired waters
2	HHH ED2	2018002	Extended Detention (part 2C)	n/a	8.65	3.15	5.50	0.00	190092	37.1871	-80.4223	Highlands at Huckleberry	10/9/2017	NE59	050500011803	Y		n/a no direct discharge to impaired waters
3	HHH ED1	2018003	Extended Detention (part 2C)	n/a	16.89	8.17	8.72	0.00	190092	37.1866	-80.4201	Highlands at Huckleberry	10/9/2017	NE59	050500011803	Y		n/a no direct discharge to impaired waters
4	WH DET	2005009	Dry Detention Pond	1000 LITTON LN Blacksburg VA 24060	10.41	3.50	6.91	0.00	034368	37.1963	-80.4216	Warm Hearth	6/30/2005	NE59	050500011803	N		n/a no direct discharge to impaired waters
5	AEP BIO	2018001	Bioretention Level 2	922 Martin Dr, Blacksburg VA 24060	1.80	1.70	0.00	0.10	032035	37.1920	-80.4192	AEP Merrimac	9/4/2018	NE59	050500011803	Y		n/a no direct discharge to impaired waters
6	WEC DET	2005008	Dry Detention Pond	n/a	17.90	6.40	11.50	0.00	130465	37.1951	-80.4168	Woods Edge Condos	6/30/2005	NE59	050500011803	N		n/a no direct discharge to impaired waters
7	ROW DET	2005006	Dry Detention Pond	2121 Gardner ST	33.00	20.80	12.20	0.00	035142	37.2328	-80.2108	Rowe Furniture	2/24/1999	RU05	030101010105	N		S. Fork Roanoke River VAW-L01R_RSG01A00
8	1203 Brock BIO1	2017002	Bioretention Level 1	1203 Brockton ST, Blacksburg, VA 24060	0.20	0.00	0.20	0.00	130001	37.2344	-80.3945	1203 Brockton	8/17/2016	RU06	030101010101	Y		n/a no direct discharge to impaired waters
9	1203 Brock BIO2	2017001	Bioretention Level 2	1203 Brockton ST, Blacksburg, VA 24060	0.16	0.06	0.10	0.00	130001	37.2342	-80.3944	1203 Brockton	8/17/2016	RU06	030101010201	Y		n/a no direct discharge to impaired waters
10	1209 Brock BIO2	2016001	Bioretention Level 2	1209 Brockton ST, Blacksburg, VA 24060	0.99	0.13	0.67	0.19	130004	37.2343	-80.3932	1209 Brockton	1/27/2017	RU06	030101010201	Y		n/a no direct discharge to impaired waters
11	1211 Brock DET	2017003	Bioretention Level 2	1211 Brockton St Blacksburg VA 24060	0.52	0.11	0.41	0.00	130005	37.2343	-80.3930	1211 Brockton	12/16/2016	RU06	030101010201	Y		n/a no direct discharge to impaired waters
12	OAK DET	2005010	Dry Detention Pond	511 Payne DR Blacksburg VA 24060 VA	44.73	8.10	36.63	0.00	016259	37.1943	-80.4251	Oak Forest MHP	7/1/1987	NE59	050500011803	Y		n/a no direct discharge to impaired waters
13	DGE UG	2016003	Stormtech UG	2221 Green Hill Lane, Elliston, VA 24087	0.45	0.44	0.01	0.00	230021	37.2309	-80.2015	Dollar General Elliston	11/3/2016	RU09	050500011802	Y		n/a no direct discharge to impaired waters
14	DGE SW1	2016002	Dry Swale level 2	2221 Green Hill Lane, Elliston, VA 24087	0.40	0.32	0.08	0.00	230021	37.2312	-80.2019	Dollar General Elliston	11/3/2016	RU09	030101010101	Y		n/a no direct discharge to impaired waters
15	DGE SW2	2016001	Dry Swale level 1	2221 Green Hill Lane, Elliston, VA 24087	2.11	0.13	1.98	0.00	230021	37.2309	-80.2014	Dollar General Elliston	11/3/2016	RU09	030101010101	Y		n/a no direct discharge to impaired waters

Appendix E
Annual Training Plan

1.0 EMPLOYEE TRAINING

1.1 Purpose

Key staff should be aware of pollution prevention goals and be trained to recognize and correct potential sources of pollution.

1.2 Requirements

1.2.1 Biannual Training

The County will maintain a record of training for Montgomery County and Montgomery County Public Schools (MCPS) staff. Training shall be provided on the following topics.

1. Identification and reporting of illicit discharges.
2. Good housekeeping and pollution prevention practices.
3. Spill prevention and response.

Training will be conducted by the Montgomery County Stormwater Compliance Specialist. The Montgomery County Administration Building, Christiansburg High School, Christiansburg Middle School, the MCPS facilities site and Cambria Street are anticipated training locations.

1.2.2 Certifications

The County will maintain a record of certifications for all employees, and require that contractors, who apply pesticides and herbicides are properly trained or certified in accordance with the Virginia Pesticide Control Act.

The County will require and maintain a record of all employees or contractors serving as plan reviewers, inspectors, program administrators, or construction site operators to obtain appropriate certifications under the Virginia Erosion and Sediment Control and Stormwater Management Program Laws and their attendant regulations.

1.3 Training Schedule

Topic	Trainees	Frequency	MS4 Permit Year
Identification and Reporting of Illicit Discharges	<ol style="list-style-type: none"> 1. MCPS Facilities Staff 2. County Inspectors 3. Parks and Recreation Staff 4. Fire and Rescue Departments 	<p>Annually</p> <p>Annually</p> <p>Annually</p> <p>Biannually</p>	Beginning in the 2018-2019 permit year
Good Housekeeping, Pollution Prevention Practices	<ol style="list-style-type: none"> 1. MCPS Facilities Staff 2. County Inspectors 3. Parks and Recreation Staff 4. Fire and Rescue Departments 	<p>Annually</p> <p>Annually</p> <p>Annually</p> <p>Biannually</p>	Beginning in the 2018-2019 permit year
Spill Prevention and Response	<ol style="list-style-type: none"> 1. MCPS Facilities Staff 2. County Inspectors 3. Parks and Recreation Staff 4. Fire and Rescue Departments 	<p>Annually</p> <p>Annually</p> <p>Annually</p> <p>Biannually</p>	Beginning in the 2018-2019 permit year