

Montgomery County

Municipal Separate Storm Sewer System (MS4)

VPDES Permit No. VAR040134

Annual Report



Reporting Period: July 1, 2023 through June 30, 2024

Prepared by:

Montgomery County
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Date: September 30, 2024

General Information

Montgomery County, Virginia has MS4 coverage under General Permit No. VAR040134, effective November 1, 2023 – October 31, 2028. This document serves as the Montgomery County Municipal Separate Storm Sewer System (MS4) annual report for the reporting period of July 1, 2023 through June 30, 2024.

The permit conditions require that all annual reports submitted under the current permit are to be maintained as separate documents from the Program Plan. In this permit cycle the Program Plan serves as a planning and implementation tool to demonstrate compliance with the permit. The Program Plan includes specific items as set out in the general permit but is not an extension or enforceable part of the permit. The evaluation sections of this report reference components of the Program Plan as a part of the overall evaluation of the MS4 program implementation.

No stormwater discharge monitoring was performed in this permit year.

No Waste Load Allowances (WLAs) are currently assigned to Montgomery County in any TMDL approved by the Environmental Protection Agency prior to June 30, 2018, therefore no action plan status updates are included in this report.

No new MS4 outfalls were added during the permit year. All of the 63 identified outfalls were inspected. No monitoring data was collected during the permit year.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

County Administrator

Date

VAR040134

Montgomery County, VA

Permit Number

MS4 Name

PROGRAM PLAN REVISIONS

The 2023-2028 general permit requires that each annual report shall summarize revisions to the Plan.

- The version and date of all documents incorporated by reference within the Program Plan are provided within the documents.
- The County MS4 Program Plan effective October 2023 contains an updated Appendix A organizational chart reflecting staffing changes and a new position.
- Appendix B is attached and contains the agreement between Montgomery County and the County School Board.
- Measurable Goals for MCM1 and MCM2 were clarified in terms of number of items and the time
 of year for outreach and events. The plan establishes a clear nexus to water quality benefits for
 each of the public education and outreach strategies and participation activities and provides
 clear metrics that are to be reflected in annual reports moving forward.
- The Municipal Training Program is revised for the current permit, version 1.0, dated September 18, 2024. The referenced document updates the training description to include training in standard operating procedures required in the current permit cycle and site specific SWPPP procedures training for personnel at high-priority facilities with a stormwater pollution prevention plan. The following sites require a SWPPP by December 31, 2024
 - Montgomery County Garage, 345 Reading Road
 - o MCPS Wimmer Site, 1521 Radford Road
 - o MCPS Montgomery Central Operations Center
- Written procedures for responding to and documenting public comments, complaints, and concerns regarding stormwater pollution and the MS4 program plan are incorporated.
- Receiving water impairments have been reviewed and updated based on the 2022 305(b)/303(d) Water Quality Assessment Integrated Report.
- MCM 6 written training and housekeeping procedures are included in conformance with the new permit cycle requirements.
- New nutrient management plans valid 7/15/2024 to 7/14/2027 are incorporated by reference. A list of locations that turf and landscape nutrient management plans are required is now provided in the Program Plan as well as previously provided within the nutrient management plans.
- The plan notes the future requirements to develop TMDL action plans by the schedules in Part II.B.2.a. and b.
- The online mechanism for the public to report concerns or complaints on the MS4 webpage is revised to allow for clarification that a concern is specifically related to land disturbing.

MINIMUM CONTROL MEASURE ANNUAL REPORTING

MCM 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

The program's three high priority issues were addressed in the public outreach and education program for the 2023-2024 permit year, water quality issue #1, pet waste, water quality issue #2, sediment, nutrients and trash/refuse, and water quality issue #3, Stream and Watershed Education.

The following strategies were employed:

The following strategie		Dotaile and	1 Evaluation	
Category Madia materials	Strategy	Details and Evaluation		
Media materials	Social media messaging	Facebook and Twitter social media posts were generated. The messaging and outreach summary are provided in the appendix under BMP 1-1, 1-2, 1-3. (WQ Issue #1, #2, and #3). The posts will be evaluated based on a revised social media messaging schedule in the Program Plan to be used moving forward in the 2024-2025 permit year. This schedule was created in response to the May 2024 DEQ audit of the County program.		
		WQ Issue # / Target # of posts #1 Pet Waste/ 3 total	Posts Achieved 0	
		#2 Sediment, Nutrients and Trash/Refuse/4 total	9	
		#3 Stream and Watershed 14 Education/4		
		Evaluation: The new messaging targets were achieved for two of three water quality issues. Four messages addressed both water quality issues 2 and 3. No pet waste messaging were posted during the permit year. Summary tables of outreaches categorized by water quality issue number are provided in the Appendix. 11 Facebook and 8 Twitter social media postings were made in the permit year compared with a minimum of 11 messages outlined in the revised Program Plan. 13,359 reaches/impressions and 1,313 engagements were registered. Conclusion: Pet waste messaging needs to be included during the 24-25 permit year. The Program Plan schedule for posting needs to be followed. Continued engagement with this media will encourage activities that provide direct water quality benefits.		
		Images of the postings and an contained in an Appendix.	n engagement summary are	

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Category	Strategy	Details and Evaluation	
Media	"Watersheds of	405 views of the "Watersheds of Montgomery County" ESRI	
Materials	Montgomery	StoryMap were captured in viewing statistics and presented in	
	County" ESRI	Appendix BMP 1-3.	
	StoryMap	Evaluation: The StoryMap provides an educational platform for	
		residents to learn about the region's watersheds, impairments,	
		and promotes citizen actions to improve watershed health.	
		Conclusion: Continuing views demonstrate that the messaging	
		remains effective. The link to this StoryMap will be included in	
		future social media messaging. Continued engagement with this	
		media will encourage activities that provide direct water quality	
		benefits.	
Media	"Scoop the Poop"	270 views of the "Scoop the Poop" ESRI StoryMap were	
Materials	ESRI StoryMap	captured in viewing statistics and presented in Appendix BMP 1-3.	
		Evaluation: The StoryMap provides an educational platform for	
		residents to learn about the region's watersheds, impairments,	
		and promotes citizen actions to collect pet waste.	
		Conclusion: Social media messaging is needed to boost viewing.	
		The link to this StoryMap will be included in future social media	
		messaging. Continued engagement with this media will	
		encourage pet waste collection that provides direct water	
		quality benefits.	
Traditional	Water Quality &	(WQ Issue #1, #2, and #3) A flyer that encouraged citizens to	
Written	Watershed	Dispose of Pet Waste, Plant Pollinators, engage in Litter	
Materials	Health Flyer	Prevention and Collection, and Advertising the ReNew the New	
		and Broomin' and Bloomin' collection events was handed out at	
		the Homebuilders show in April. Approximately 1,000 copies	
		were distributed.	
		Evaluation: The number of flyers distributed is considered successful in informing citizens about upcoming participation	
		events and promoting public participation. Adaptation of any of	
		the strategies of picking up litter, planting pollinators, and	
		picking up pet waste that are encouraged in the flyer will	
		provide direct water quality benefits.	
		Conclusion: Adaptation of any of the strategies of picking up	
		litter, planting pollinators, and picking up pet waste that are	
		encouraged in the flyer will provide direct water quality	
		benefits. Participation in the two advertised cleanup events will	
		have direct water quality benefits.	
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Traditional	Real estate tax	The insert contained messaging explaining the MS4 permit, the		
Written	bill insert	three water quality issues and their importance, and promotes		
Materials		specific participation events. 37,601 inserts were printed and a		
		copy is provided in the appendix. (WQ Issue #1, #2, & #3)		
		Evaluation: The mailing is numerically the biggest MCM1		
		outreach effort.		
		Conclusion: Adaptation of any of the strategies of picking up		
		litter, planting pollinators, and picking up pet waste that are		
		encouraged in the flyer will provide direct water quality benefits.		
Media	County webpage	(WQ Issue #2) The County website provides a list of recyclable		
materials	posting for	materials allowed at the County Consolidated Sites. In this permit		
	recycling and	year the website included advertisement of the Montgomery		
	hazardous waste	County Regional Solid Waste Authority (MRSWA) 11/11/2023		
	collection	event.		
		Evaluation: The MRSWA reported participation of 59 vehicles in		
		April 2023. The NRRA reported 174 vehicles in August 2023. The		
		NRRA and MCSWA hazardous waste days provide an opportunity		
		to dispose of hazardous waste and these notifications are		
		considered to provide a positive impact on watershed health.		

MCM1 Evaluation:

Each item in the outreach is individually evaluated in the information table above. The County employed two types of the strategies listed and six total effective outreach elements, with the 19 total social media messaging items grouped as a single element. Overall outreach numbers indicate a robust outreach strategy.

Changes to the Program Plan included a schedule for each element. Messaging will be spaced across the permit year.

MCM 2: PUBLIC INVOLVEMENT/PARTICIPATION

Montgomery County collaborates with the following MS4 permittees without formal agreement:

Town of Blacksburg VAR040019
Town of Christiansburg VAR040025
Virginia Tech VAR040049
Virginia Department of Transportation VA0092975

A total of 26 occurrences of public input related to stormwater were received during the permit year.

Public input resulted in 4 IDDE investigations that are reported in the MCM3 section of this report.

Three webpage generated emails were received and are detailed in the BMP 2-2 Public Participation section of the report appendix.

The county stormwater and MS4 webpage can be accessed at: https://montva.com/departments/stormwater

Website viewing statistics for the County stormwater pages presented in Appendix BMP 2-2. 2,021 page views are documented. The stormwater webpage meets permit requirements.

Evaluation: Phone and email contact directly to county Planning, Building, and Environmental Services departments remain the primary form of contact, with only three contacts in the permit year through the website, the same number as in the previous permit year. The county will continue to maintain the website and will promote viewing of the site link through social media outreach.

The public involvement activities were implemented in the permit year are summarized in a table below.

Category	Activity	Event Metrics and Evaluation
Educational event	Steppin' Out Street	Attendance estimates by the Town of Blacksburg is 30,000
	Festival Booth	to 40,000. 30 medication disposal pouches and
	2023/08/04 and	approximately 120 pet waste bag rolls or dispensers with
	2023/08/05	rolls were distributed. Approximately 70 Water Quality &
		Watershed Health Flyers were distributed.
		Evaluation: The event is beneficial for our four regional
		MS4s in hosting a booth at this event to provide
		information, answer questions, and invite input from area
		residents about the area MS4 programs.
		Conclusion: Continued engagement with the public and
		distribution of pet waste bags will encourage activities that
		provide direct water quality benefits.
Restoration	'ReNew the New'	Metrics: 82 volunteers, 34 tires, and 2,741 total pounds of
	river cleanup	trash were collected. See the MCM 2 appendix for related
	2023/08/26	documentation.
		Evaluation and conclusion: The event is beneficial to water
		quality through direct removal of gross pollutants, through
		the stormwater messaging conveyed to the public as a part
Ed and and E	N. B. Wille	of the event promotion.
Educational Event	New River Valley	The attendance was approximately 1,400.
	Homebuilders	Evaluation and conclusion: The event is beneficial for our
	Show Booth 2024/03/23 and	four regional MS4s in hosting a booth at this event to
	2024/03/23 and 2024/03/24	provide information, answer questions, and invite input
	2024/03/24	from area residents about the area MS4 programs. The
		appendix summarizes the distribution of the 80 persons that had significant interactions with staff at the booth. Over
		30% of those persons stated residence in the
		unincorporated parts of Montgomery County. Continued
		engagement with the public and distribution of pet waste
		bags will encourage activities that provide direct water
		quality benefits.
Restoration	Broomin' and	Metrics: 181 volunteers participated in an annual cleanup
	Bloomin' cleanup	event. 1.22 tons of trash were collected.
	2023/04/24	Evaluation and conclusion: The event is beneficial to water
	, ,	quality through direct removal of gross pollutants and
		through the stormwater messaging conveyed to the public
		as a part of the event promotion.
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Category	Activity	Event Metrics and Evaluation
Educational Event	MCPS Stormwater	Approximately 750 7 th grade students from the Montgomery
	Days	County Public School (MCPS) system attended the two-day
	2024/04/15 and	event . The Stormwater Days provides students an
	2024/04/16	opportunity to participate in a series of interactive
		watershed education stations in coordination with the
		middle school curriculum goals for watershed education.
		The event summary in the appendix describes the stations
		Evaluation: The event improves awareness of aspects of
		watershed health. The station descriptions provided in the
		appendix document the broad range of topics covered. The
		educational experience is expected to result in increased
		awareness and promote actions to improve watershed
		health.
		Conclusion: Continued engagement with and education of
		the students will encourage activities that provide direct water quality benefits.

MCM2 Overall Evaluation:

The permit requirements were met and exceeded with five events in two categories. No Modifications to public participation events in the 2024-2025 permit year are anticipated, with the note that weather events may impact outdoor events in the future.

The two cleanup restoration events provide the physical parameters of trash collected as an evaluation metric as well as communicating messaging that is expected to result in benefits to water quality through increased awareness and modified behaviors. Booth participation and the student stormwater days are beneficial in providing information, answering questions, and inviting input from area residents and students about the area MS4 programs. These activities rely on communicating messages that will increase awareness and participation and are expected to lead to benefits to water quality through modified behaviors.

MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

The online MS4 Outfall Map and information table contained in the map attribute table have been maintained and reflect no changes to the MS4 outfalls during the permit year.

No new outfalls were added in the permit year. 62 identified MS4 outfalls were inspected during the permit year. Inspection results may be viewed in the online outfall map.

Three illicit discharge investigations were conducted during the permit year. All investigations provide the six required information items prescribed by the permit and are contained in the BMP 3-3 Public Participation section, page 55 of the report appendix.

Investigation	Blacksburg school strand and Kipps Farm HOA SWM Facility.	North Fork and South Fork of the Roanoke River	2546 Fire Tower Road
Dates Observed, Reported	Reported 2023/09/15 and again on 2023/10/05	Reported 2023/09/14 through DEQ.	Reported 2024/01/05
Results of the Investigation	A citizen reported red algal growth in a SWM pond.	A citizen reported that soil stabilization matting was observed on both the North Fork and South Fork Roanoke River. The observations occurred over years.	A citizen concern about sediment transport from a lumber yard operation onto public roads was reported.
Follow Up	Corresponded with Blacksburg Town staff and obtained SWM agreement documents, and school staff on shared agreement with County and community HOA for this facility located within the Town of Blacksburg.	A site visit to a sod farm along the North Fork confirmed that sod farms employ the soil stabilization matting. The matting is secured using manufacturers recommendations. Site staff reported that in times of high flood waters there are losses of matting as soil erosion occurs.	A site visit was performed and it was determined that VDOT had jurisdiction over the road tracking. Contacted VDOT staff that indicated there would be outreach to the Owner.
Resolution	The investigation and discussion on a resolution to the stagnation and low water elevations observed continue into the 24-25 permit year.	The investigation determined that best management practices are employed and matting losses are attributed to extreme events rather than routing river flows.	a 2024/01/24 site visit confirmed that no sediment was present on the road.
Date Closed	Ongoing	2024/09/18	2024/01/24

MCM3 Overall Evaluation:

The following items demonstrate permit compliance:

- No new interconnection notices were required.
- The inspection of all 63 known MS4 outfalls was completed.
- The IDDE ordinance as available online and linked in the Program Plan.
- The written IDDE procedures and dry weather screening protocols are available online and linked in the Program Plan.
- Completion or continuing investigation of IDDE investigations as detailed in the annual report appendix.

The evaluation concludes that no changes to the MCM3 procedures and protocols are required.

MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

County staff conducted 1,456 inspections during the permit year. Inspections are documented in a permitting software application and included in the appendix..

5 enforcement actions were taken in the permit year and are summarized in the BMP 4-2 section of the appendix on page 55; 2 Notices of Corrective Action and 3 Stop Work Orders.

The following ESC Variances were approved:

Project Name	Permit Number	Date of	Description	Date of
		Submittal		Approval
Loves Travel Stops	ES-2023-25891	2024/03/07	A variance to the maximum slope length to silt fence in	2024/04/05
			areas of flat grade.	
Raju Medical Site	ES-2024-26083	2024/03/07	A variance to the allowable drainage area to culvert inlet protection based on the location in a major road ROW.	2024/03/07

The following VSMP Exceptions were approved:

Project Name	Permit Number	Date of Submittal	Description	Date of Approval
New River	ES-2021-19724	2023/09/13	Water quantity	2023/10/11
Recycling Inert			exception due to the	
Debris Fill Site			preconstruction forested	
Phase 2A			condition and intent to	
			return the fill site to a	
			forested condition, a	
			minimal orifice size	
			would result in extensive	
			detention times.	
Walnut Creek	ES-2024-27570	2024/03/22	Water quantity	2024/04/01
Phase III			exception due to a	
			minimal orifice size	
			would result in extensive	
			detention times.	

MCM4 Overall Evaluation:

The following items demonstrate permit compliance:

- The County has an adopted Virginia Erosion and Sediment Control Program (VESCP) as documented in the County Program Plan available online. Projects granted variances are listed in a table below.
- The County maintains an Illicit Discharge Ordinance as available online and linked in the Program Plan that provides an enforceable mechanism to meet the permit requirements to prevent nonstormwater discharges on permitted projects not covered under the Construction general permit.
- Written erosion and sediment control (ESC) inspection procedures are established as documented in the County Program Plan available online.
- Written enforcement action procedures to require compliance with ESC regulations are established as documented in the County Program Plan available online.
- The roles and responsibilities of staff for MCM4 compliance are outlined in the county organizational chart and specific Best Management Practices (BMPs) within the plan may also identify responsible parties in additional detail.

The evaluation concludes that no changes to the MCM4 procedures and protocols are required.

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

The County implements an approved Virginia Stormwater Management Program (VSMP) consistent with the Virginia Stormwater Management Act and VSMP regulations.

No privately owned stormwater facilities were inspected in the permit year.

The County has identified 21 publicly owned stormwater facilities that lie within the MS4 regulated area. All 21 facilities were inspected in the permit year. No significant, non-routine repair or retrofit activities were performed in the permit year.

Montgomery County submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the County was required to obtain coverage under the General VPDES CGP.

Montgomery County had no stormwater management facility or practice completed that required reporting using the DEQ BMP Warehouse between July 1, 2023 and June 30, 2024.

MCM5 Overall Evaluation:

The following items demonstrate permit compliance:

- The County maintains a stormwater management facility inspection and maintenance program
 for facilities owned and operated by the permittee in accordance with the permit, and conducts
 inspections and maintenance in accordance with written procedures and as outlined in the
 Program Plan and available online at the County stormwater webpage.
- The County implements an established stormwater management facility inspection and
 enforcement program for facilities not owned and operated by the permittee in accordance
 with the permit, and has legal authority for enforcement of maintenance responsibilities if
 maintenance is neglected as outlined in the program Plan and available online at the County
 stormwater webpage.
- The county maintains spreadsheets online for <u>Public Stormwater Facilities</u> and <u>Private</u>
 <u>Stormwater Facilities</u> in conformance with the permit requirement to maintain information on these facilities. The County will notify private stormwater facilities to provide inspection reports at the frequency required by the approved plans and by County ordinance.

The evaluation concludes that the County will notify private stormwater facilities to provide inspection reports at the frequency required by the approved plans and by County ordinance and review and retain these records.

MCM 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

BMP 6-1: Household Hazardous Waste Event Notice

Encourage citizen participation in events to dispose of household materials that could be hazardous to dispose of in bulk landfills.

Measureable Goals Achieved in Reporting Year

Four social media postings promoting hazardous waste collection days are documented in the appendix.

The County website posts Consolidated Site <u>Recycling Information</u> and advertised the Montgomery Regional Solid Waste Authority hazardous waste collection event.

Annual Reporting Requirements

Document the social media or other advertisement of the New River Resource Authority (NRRA) and Montgomery Regional Solid Waste Authority (MRSWA) hazardous waste collection events. Seek documentation for the participation in the NRRA and MRSWA events and report the information provided.

New operational procedures were developed to conform with the current MS4 permit requirements in the permit year.

All county owned facilities were inspected and evaluated for high priority/ high potential status in the permit year. Three Good Housekeeping Stormwater Pollution Prevention Plans (SWPPPs) are required to be developed by December 31, 2024 in the 24-25 permit year.

New Nutrient Management Plans were developed during the permit year. The approved plans are posted and available at the County website.

A revised Municipal Training Program was developed to meet the requirements of the 2023-2028 MS4 permit. Training events will be conducted in the 2024-2025 permit year for the applicable staff in accordance with the required frequency.

MCM6 Overall Evaluation:

The following items demonstrate permit compliance:

- The County completed a review of all County owned facilities to re-evaluate each facility as high-priority or low-priority and subsequently evaluate any high-priority site for any high potential to discharge pollutants.
- The County will develop Good Housekeeping SWPPPs where appropriate by December 31, 2024, and has developed Good Housekeeping procedures for use.
- The County engaged a certified planner has developed all required turf and landscape Nutrient Management Plans and provided the plans to appropriate personnel.
- No deicing agents containing urea or other forms of nitrogen are employed for deicing application.
- The County maintains a training program and training documentation in accordance with the permit.
- Employees or contractors hired by the County to apply pesticides and herbicides are trained or certified in accordance with appropriate regulations.
- Employees serving as plan reviewers, inspectors, program administrators for ESC or SWM program implementation are appropriately certified.
- Emergency response personnel are trained in spill response.

The evaluation concludes that no changes to the MCM6 procedures and protocols are required.

APPENDIX INDEX

- BMP 1-1, 1-2, 1-3 Public Education and Outreach Program Documentation
- BMP 1-1, 1-2, 1-3 Social Media Posts and Viewing Documentation
- BMP 1-1, 1-2, 1-3 MCM1 Water Quality & Watershed Health Flyer
- BMP 1-2: County Website Consolidated Site Recycling Information
- BMP 1-1, 1-2, 1-3 Montgomery County Atlas Impaired Waters Map and Scoop the Poop Inserts
- BMP 1-3 "Watersheds of Montgomery County" ESRI StoryMap Viewing Statistics
- BMP 1-1 "Scoop the Poop" ESRI StoryMap Viewing Statistics
- BMP 1-1, 1-2, 1-3 Public Participation QR Code Flyer
- BMP 1-1, 1-2, 1-3 Real Estate Billing Insert
- BMP 2-1: MS4 Webpage Statistics Report
- BMP 2-1: Public Input, Concern, and Complaint Summary (includes BMP 3-3 IDDE Documentation)
- BMP 2-2 Public Participation Documentation
- BMP 2-2 ReNew the New Trash and Litter Collection Event Statistics
- BMP 2-2 New River Valley Homebuilders Show Statistics
- BMP 2-2 Broomin' and Bloomin' Cleanup Statistics
- BMP 2-2 MCPS Stormwater Days Statistics
- BMP 2-2 Junior Hokie Showcase Event
- BMP 3-3 Illicit Discharge Investigations
- BMP 4-2 Enforcement Action Summary
- **BMP 4-2 VESCP Inspection Tracking**
- BMP 5-2 CGP Comprehensive Inspection Tracking
- BMP 6-5 Biennial Training Documentation