



National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit

Montgomery County, Maryland

FY24 Annual Report
July 1, 2023 to June 30, 2024



*Published by the Montgomery County, Maryland,
Department of Environmental Protection for the Maryland
Department of the Environment*

Contents

EXECUTIVE SUMMARY	1
1. INTRODUCTION	1
2. STANDARD PERMIT CONDITIONS	2
2.A Permit Administration	2
2.B Legal Authority	5
2.B.1 Montgomery County Code	5
2.B.2 Co-permittees	6
2.C Source Identification	7
2.C.1 Storm Drain System	7
2.C.2 Industrial and Commercial Sources	7
2.C.3 Urban Best Management Practices	8
2.C.4 Impervious Surfaces	9
2.C.5 Monitoring Locations	9
2.C.6 Water Quality Improvement Projects	9
2.C.7 Other Data Gaps	11
2.D Management Programs	13
2.D.1 Stormwater Management	13
2.D.1.a Implementing Stormwater Management Design	14
2.D.1.b Program Implementation	14
2.D.1.c Construction Inspections	14
2.D.1.d Best Management Practice Documentation, Maintenance, and Inspections	15
2.D.2 Erosion and Sediment Control	19
2.D.2.a Improvements Required by Maryland Department of the Environment	20
2.D.2.b Responsible Personnel Certification	20
2.D.2.c Quarterly Reporting of Grading Permits	20
2.D.3 Illicit Discharge Detection and Elimination	21
2.D.3.a Selection Process	21
2.D.3.b Plan, Schedule, and Outfall Screening Results	22
2.D.3.c Commercial and Industrial Areas Visual Surveys	23
2.D.3.d Standard Operation Procedures	24
2.D.3.e Ordinance and Regulatory Means	24
2.D.3.f Illegal Discharges, Dumping, and Spills	25
2.D.3.g Enforcement	25
2.D.4 Property Management and Maintenance	26
2.D.4.a Industrial Stormwater Permit	28
2.D.4.b Good Housekeeping Plan	28
2.D.4.c Maintenance Program of County Properties	28
2.D.4.d Street-sweeping Program	30
2.D.4.e Inlet and Conveyance System Inspection and Cleaning	30
2.D.4.f Pollutants Associated with Vegetation Management	31
2.D.4.g Salt Management Plan	31

2.D.4.h	Litter Control Evaluation.....	32
2.D.4.i	Direct Litter Removal.....	32
2.D.4.j	Litter Reduction Programs.....	32
2.D.4.k	Changes in the Property Management and Maintenance Programs.....	33
2.D.5	Public Education.....	34
2.D.5.a	Montgomery County Department of Environmental Protection Website.....	34
2.D.5.b	Compliance Hotline.....	35
2.D.5.c	Public Education and Outreach Program Efforts.....	35
2.E	Stormwater Restoration.....	38
2.E.1	2021 MS4 Permit Impervious Restoration Goal.....	39
2.E.2	Progress towards 2021 Permit Impervious Restoration Goal.....	40
2.F	Countywide Total Maximum Daily Load Stormwater Implementation Plan.....	49
2.F.1	Total Maximum Daily Load Stormwater Implementation Plan Updates.....	50
2.F.2	New Total Maximum Daily Load Stormwater Implementation Plans.....	51
2.F.3	Countywide Stormwater Total Maximum Daily Load Implementation Plan.....	51
2.F.4	Public and Stakeholder Outreach.....	51
2.G	Assessment of Controls.....	52
2.G.1	Best Management Practice Effectiveness Monitoring.....	54
2.G.2	Watershed Assessment Monitoring.....	54
2.G.2.a	Biological and Habitat Assessment Monitoring.....	55
2.G.2.b	Bacteria Monitoring.....	55
2.G.2.c	Chloride Assessments.....	55
2.G.3	PCB Source Tracking.....	55
2.H	Program Funding.....	56
2.H.1	Expenditures and Appropriated Budget.....	56
2.H.2	Financial Assurance Plan.....	57
3.	REFERENCES.....	58

List of Figures

Figure 2.D-1.	Triennial Stormwater Inspection Regions and Subregions.....	16
Figure 2.D-2.	Locations of the FY24 IDDE Screening Targeted Outfalls and Targeted Hotspots.....	22
Figure 2.D-3.	Montgomery County Arterial Street-sweeping Routes during FY24.....	30
Figure 2.E-1.	Existing and Expected Progress of Meeting the 2021 Permit Restoration Goal.....	41

List of Tables

Table 2.A-1. Organization Chart for Montgomery County Permit-required Programs.....	3
Table 2.B-1. MS4 Permit Requirements and Established Legal Authority	5
Table 2.B-2. List of Contacts for Co-permittees.....	6
Table 2.C-1. Impervious Surfaces by Maryland HUC-8 Sub-basins	9
Table 2.D-1. MS4 Permit and Plan Reviews during FY24	14
Table 2.D-2. SWM BMP Inspections and Enforcement Completed during FY24.....	15
Table 2.D-3. BMPs that Failed Inspection	18
Table 2.D-4. BMPs that Failed Inspection in Previous Reporting Year.....	18
Table 2.D-5. ESC Program Inspection and Enforcement Summary during FY24	19
Table 2.D-6. Investigation Results of Suspected Illicit Discharges During FY24	23
Table 2.D-7. Stormwater Discharge Enforcement Cases Based on Commercial and Industrial Survey Results for FY24	23
Table 2.D-8. Stormwater Discharge Enforcement Cases Based on Commercial and Industrial Survey Results and Outfall Screening for FY23 – Updated Status of Ongoing Issues	24
Table 2.D-9. County and Co-permittee Facilities Covered under the Industrial Stormwater Permit.....	29
Table 2.D-10. Material Removed or Prevented from Entering Storm Drain System during FY24.....	33
Table 2.D-11. Public Outreach Efforts during FY24.....	35
Table 2.D-12. Public Education Delivery Methods during FY24	36
Table 2.D-13. Social Media Efforts During FY24	36
Table 2.E-1. Actual Annual Restoration Benchmark Schedule	40
Table 2.E-2. Restoration Implementation Completed through FY24.....	41
Table 2.E-3. Year 1 Completed Projects for the 2021 Permit.....	43
Table 2.E-4. Year 2 Completed Projects for the 2021 Permit.....	46
Table 2.E-5. Year 3 Completed Projects for the 2021 Permit.....	47
Table 2.E-6. Proposed Projects to be Completed in Year 4 of the 2021 Permit.....	48
Table 2.H-1. FY24 Operating and Capital Expenditures	56
Table 2.H-2. FY25 Appropriated Budget.....	57

List of Appendixes

- A Illicit Discharge Detection and Elimination
 - A1 Annual Illicit Discharge Detection and Elimination Standard Operating Procedures
 - A2 Investigated Water Quality Issues

Acronyms and Abbreviations

Act	Stormwater Management Act of 2007
BMP	best management practice
CA	community/condo association
CBT	Chesapeake Bay Trust
CIP	capital improvement program
County	Montgomery County
CY	calendar year
DEP	Montgomery County Department of Environmental Protection
DFM	Montgomery County Division of Facility Management
DGS	Montgomery County Department of General Services
DHCA	Montgomery County Department of Housing and Community Affairs
DPS	Montgomery County Department of Permitting Services
ECCD	Energy, Climate, and Compliance Division
EPA	U.S. Environmental Protection Agency
ESC	erosion and sediment control
ESD	environmental site design
FAP	financial assurance plan
FY	fiscal year
GHP	Good Housekeeping Plan
GIS	geographic information system
HOA	homeowners association
IA	impervious area/acreage
ID	identification
IDDE	illicit discharge detection and elimination
ISR	impervious surface restoration
KCI	KCI Technologies, Inc.
MCDOT	Montgomery County Department of Transportation
MCPS	Montgomery County Public Schools
MDE	Maryland Department of the Environment
MEP	maximum extent practicable
M-NCPPC	Maryland-National Capital Park and Planning Commission
MS4	Municipal Separate Storm Sewer System
MS4 Permit	Municipal Separate Storm Sewer System Permit Number 06-DP-3320 MD0068349
N/A	not applicable
NOI	notice of intent
NOV	notice of violation
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
Permit	Municipal Separate Storm Sewer System Permit Number 06-DP-3320 MD0068349
ROE	right of entry
ROW	right-of-way
RPC	responsible personnel certification
SFR	single-family residence or residential
SMP	Salt Management Plan

SOP	standard operating procedure
SR	stream restoration
SSO	sanitary sewer overflow
SVP	Stream Valley Park
SW Industrial GP	General Permit for Discharges of Stormwater Associated with Industrial Activity
SWIM	stormwater inspection and maintenance program
SWM	stormwater management
TMDL	total maximum daily load
WLA	wasteload allocation
WQPC	water quality protection charge
WSSC	Washington Sanitary Sewer Commission
WWTP	wastewater treatment plant



National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System

Executive Summary of Accomplishments
July 1, 2023, to June 30, 2024

Montgomery County (the County) manages multiple programs that assess and address impacts from stormwater and surface water pollution. By implementing a comprehensive stormwater management program, the County staff and partners work to protect and improve water quality in the County’s streams and waterways.

A significant component of the County’s stormwater program is its Municipal Separate Storm Sewer System (MS4) Permit, a 5-year permit issued by the Maryland Department of the Environment (MDE) on November 5, 2021 (the 2021 MS4 Permit).

For most urban and suburban areas like Montgomery County, what goes into our storm drains makes its way into our local streams. Those streams are part of larger watersheds that lead to major rivers, like the Potomac River, and eventually the Chesapeake Bay. Because our waters are interconnected and not confined by county or state lines, MDE regulates everything that goes through the storm drain systems by issuing the County an MS4 permit. The reason for the permit is to protect water quality and ensure the County is meeting the requirements of the Clean Water Act.

WHAT’S THE PROBLEM?

As the County has become more developed, its natural landscapes have been replaced with impervious areas such as asphalt, concrete, buildings, and roadways.

Before development, water from rain or snow melt was absorbed naturally into the soil or flowed over the ground to a nearby stream. Development has disrupted this natural water flow cycle.

Currently during rain and snow melt, this stormwater runoff flows across paved surfaces and picks up whatever is in its path – oil, litter, pesticides, fertilizer, leaves, animal waste, and more.

Instead of filtering into the ground, stormwater runoff can also cause flash flooding and significant erosion, as well as damage to properties and infrastructure, as it flows over land or through storm drains to local streams.

WHAT’S THE SOLUTION?

Effective stormwater management:

- Improves the **quality** of stormwater runoff, by reducing the pollutants it carries to local waterways.
- Reduces the **quantity** of stormwater, by helping more of it soak into the ground.

■ Permit Reporting Structure

Stormwater management involves several methods to address the quality and quantity of stormwater runoff at several points between when the rainfall hits impervious surfaces and becomes stormwater runoff and when the stormwater runoff is discharged into the County's streams:

1. Using stormwater BMPs to control and reduce pollution in stormwater runoff before it enters the County's stormwater system.
2. Maintaining the County's storm drains, pipes, and other stormwater infrastructure.
3. Reducing the amount of polluted stormwater runoff discharging into the County's streams.

Elements of the 2021 MS4 Permit require efforts to improve stormwater management at each of these points. Other permit elements include increasing public education, implementing plans to control the quantity of pollutants that can enter watersheds, and ensuring the County's stormwater programs have adequate funding.

This executive summary of accomplishments follows the structure of the 2021 MS4 Permit, and provides the County's FY24 accomplishments, progress, and compliance with meeting the requirements in the permit.

A Best Management Practice (BMP) is a device designed to temporarily store or treat runoff to reduce pollution, and provide other amenities. BMPs include structural practices such as constructed stormwater retention ponds, and nonstructural Environmental Site Design (ESD) practices such as micro-bioreentions.



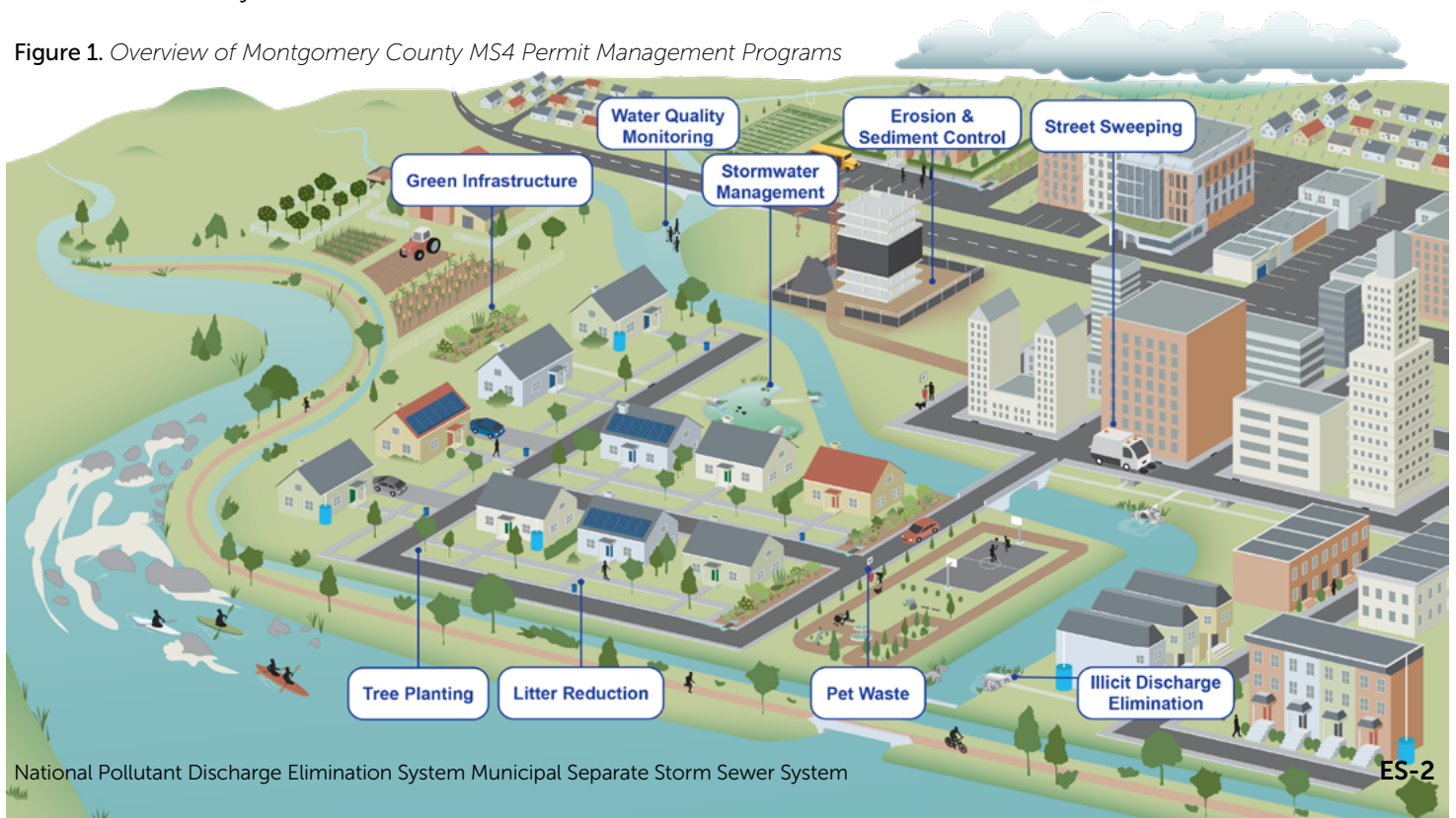
Fallsreach Stormwater Pond, October 2023

■ Management Programs

To control stormwater quantity and quality, the County implements a diverse set of management programs that target stormwater facility maintenance and inspections, erosion and sediment control (ESC), the detection and elimination of illicit discharges of pollutants, management of pollutants from County property, and public outreach and education. More detail on each of these programs is found in the FY24 MS4 Annual Report and the National Pollutant Discharge Elimination System (NPDES) MS4 Geodatabase.

Figure 1 illustrates the variety of Best Management Practices (BMPs) the County is implementing in support of its MS4 Permit in the county's urban, suburban, and rural areas.

Figure 1. Overview of Montgomery County MS4 Permit Management Programs



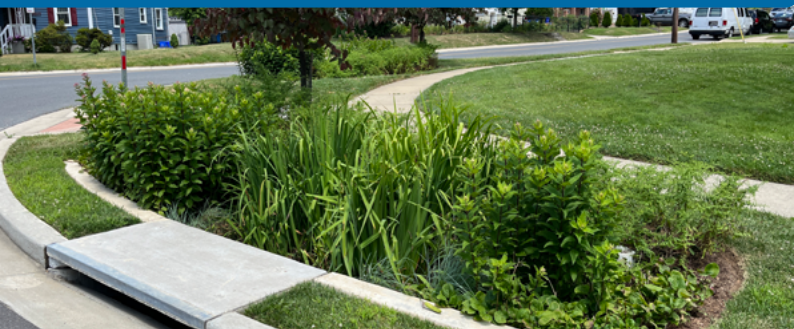
Stormwater Management Program Inspection and Maintenance

All new development and redevelopment in the County must comply with MDE stormwater design standards. In some cases, the County's requirements are stricter than state standards. Examples include requiring sediment control and stormwater management to be addressed for any new home or commercial building construction, regardless of how much ground is disturbed. The County's Department of Permitting Services (DPS) is responsible for implementing the programmatic requirements for stormwater management plan review and permitting.

During FY24, DPS approved 87 concept designs, 514 final plans, 29 redevelopments, and 267 waivers.

The County's Department of Environmental Protection (DEP) is responsible for the triennial inspection and preventative maintenance of stormwater management facilities under the County's jurisdiction. These facilities include BMPs owned by the County, Montgomery County Public Schools, and the Maryland-National Capital Park and Planning Commission, as well as environmental site design (ESD) practices located on County property and rights-of-way. In addition to inspections, the DEP stormwater facility maintenance program oversees structural and nonstructural maintenance of all facilities under the County's jurisdiction

Environmental Site Design (ESD) is a design strategy for maintaining pre-development runoff characteristics and protecting natural resources. ESD BMPs integrate site design, natural hydrology, and smaller controls to capture and treat runoff. These practices include micro-bioretenion, rain gardens, permeable pavement, and green roofs.



Rain garden in Glenmont Forest neighborhood, Summer 2024

DEP also conducts maintenance follow-up inspections outside of the triennial inspection program. These inspections verify completed maintenance work, confirm compliance, and investigate public complaints. The stormwater inspection and maintenance group issues notices of violation (NOVs) or citations to property owners responsible for noncompliant structural and/or nonstructural BMPs. The total number of inspections completed in FY24 is provided in Figure 2.

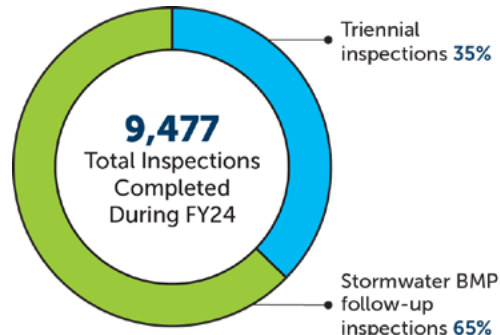


Figure 2. Total Inspections Completed

Erosion and Sediment Control

DPS implements an ESC program designed to reduce pollutants during construction of new development and redevelopment. County staff review permit applications, inspect ESC practices, issue NOVs, and collect fines. Figure 3 provides the number of ESC enforcement actions taken during FY24.

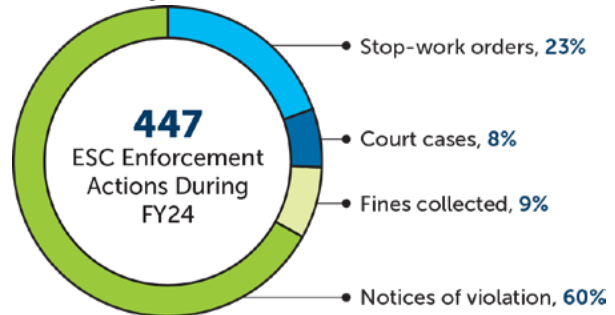


Figure 3. ESC Enforcement Actions During FY24

Illicit Discharge Detection and Elimination

The County implements an inspection and enforcement program to ensure that pollutants are found and prevented from entering the storm drain system and our streams. This program includes the following actions:

- Inspecting storm drain outfalls and looking for pollutants in stormwater (Figure 4).
- Conducting surveys of properties in different commercial and industrial areas of the County (Figure 5).
- Implementing an enforcement program by investigating water quality and illegal dumping complaints and issuing citations, NOVs, and warnings as appropriate.

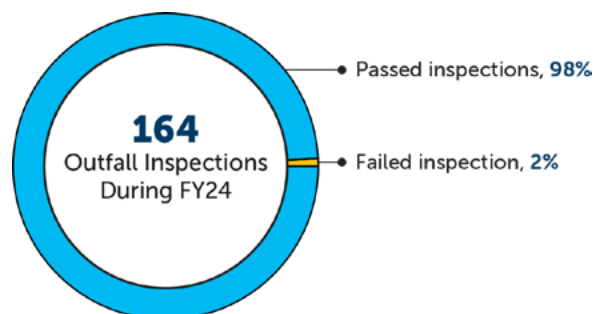


Figure 4. Summary of FY24 Outfall Inspections

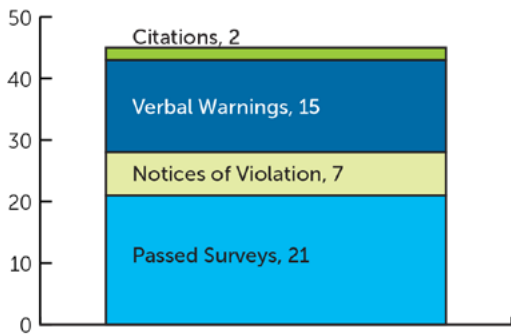


Figure 5. Summary of FY24 Commercial and Industrial Surveys



Storm drain outfall inspected in 2024

Property Management and Maintenance

All County agencies that operate maintenance facilities must comply with the General Permit for Industrial Activities. Eleven County facilities, the Town of Poolesville, and six Montgomery County Public Schools facilities maintain a stormwater pollution prevention plan. County facilities are inspected monthly, and stormwater outfalls on the sites are inspected quarterly. Annual training, including ways to minimize the use of hazardous substances, pollutants, and contaminants and prevent their exposure to precipitation and stormwater runoff, is delivered to all facility operation employees. Additionally, as part of the permit requirement, the County submitted a Good Housekeeping Plan (GHP) to MDE in December 2024 – over 500 county facilities were assessed to determine if a GHP was required based on the activities at the facilities such as car washing. In accordance with the 2021 Permit requirements, the County also submitted a Salt Management Plan to MDE in December 2024. The plan details the County’s public road salt application strategies. In addition, the County administers a street sweeping program that prevents tons of pollutants from entering the County’s streams. The County’s Department

of Transportation removes material from clogged inlets, storm drains, drainage ditches, and adjacent drainage areas. The County also implements several programs to reduce trash and litter that may enter streams. These programs focus on direct litter removal and litter reduction. Direct litter removal involves removing litter and debris from our streets, sidewalks, and communities before it enters the storm drain or ends up in our streams. Litter reduction programs help reduce the sources of litter. Several programs run by the County provide enforcement and compliance of our laws and outreach and education to prevent and stop littering. During FY24, the County’s street sweeping, inlet cleaning and litter removal programs removed 565 tons of debris and litter.

Public Education and Outreach

The County continues to implement a robust public education and outreach program designed not only to meet Permit requirements, but also to increase local awareness of stormwater management benefits and bring associated behavior changes to protect the County’s water quality.

The My Green Montgomery (<https://mygreenmontgomery.org/>) online education portal continued as the news and communication arm of the DEP. The public education programming provided social media posts on Facebook, Instagram, X, YouTube, and Nextdoor.

DEP events continued to focus on targeting specific audiences, increasing stormwater and water quality awareness, and encouraging residents to take specific environmentally friendly actions. Figure 6 provides a breakdown of the public education and outreach efforts conducted in FY24.



Tree planting event at S. Christa McAuliffe Elementary School, November 30, 2023

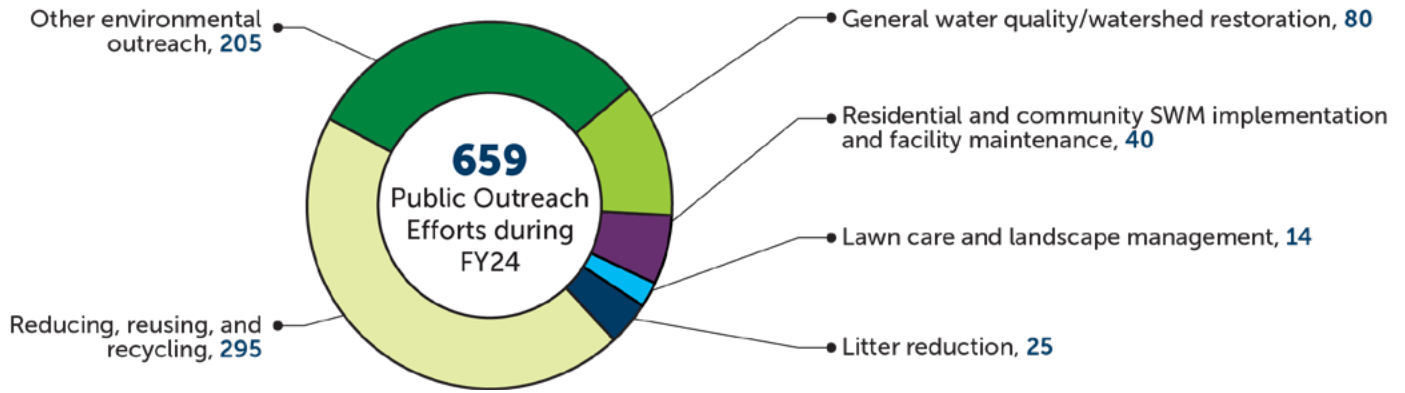


Figure 6. Public Outreach Efforts during FY24

Stormwater Restoration

Watershed restoration work performed in the County is implemented to improve water quality under the guidelines set by MDE in the MS4 Permit. The work is funded primarily through the County's Water Quality Protection Charge. The permit requires the County complete restoration of 1,814 impervious acres by November 4, 2026. The County is making tremendous progress toward meeting this goal. In FY24, the County has completed 66 percent of the restoration goal. Figure 7 shows the County's current progress, as well as the yearly restoration benchmarks from the Permit.



Clearspring Manor stream restoration completed in FY24

The restoration work the County does to improve water quality includes street sweeping, inlet cleaning, outfall stabilization and stream restoration, planting of street trees and canopy trees through Tree Montgomery, installation of small scale BMPs funded by RainScapes and Clean Water Montgomery Grants, and capital program funded ESD and stormwater pond retrofits. Figure 7 is a summary of the work completed in FY24. Figure 8 shows the percent of impervious acres treated by BMP type, and Figure 9 shows the associated number of projects per BMP type for the County's restoration work completed through FY24.

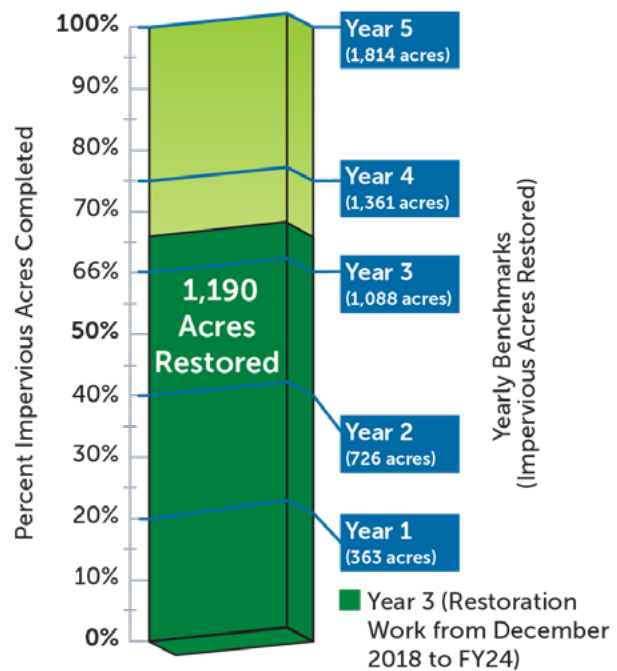


Figure 7. Annual Restoration Progress

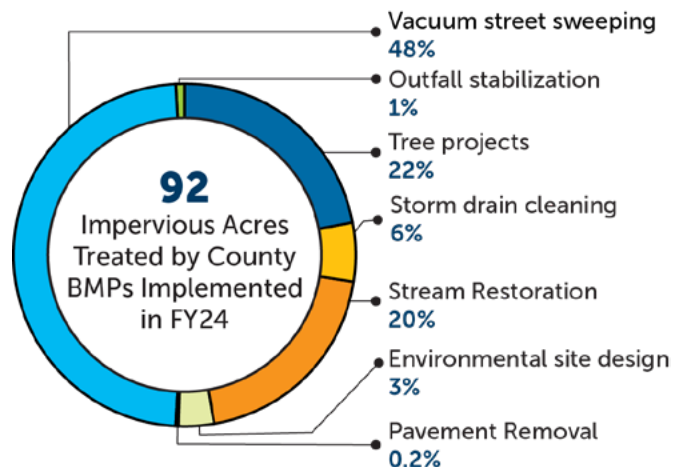


Figure 8. Summary of Stormwater Restoration Projects and Alternate BMPs Implemented during FY24

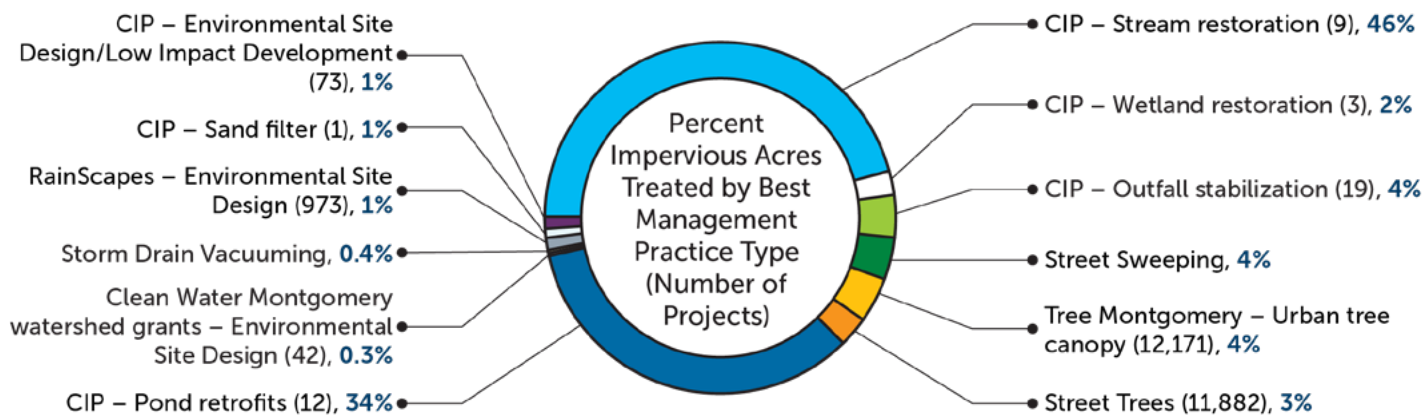


Figure 9. Number of Projects and % Acres Treated by BMP Type in FY24

■ Assessment of Controls

The County is responsible for fulfilling the 2021 MS4 Permit BMP effectiveness and watershed assessment requirements. To meet the Permit requirements for BMP effectiveness monitoring, the County entered into the Pooled Monitoring Program administered by the Chesapeake Bay Trust (CBT) on October 13, 2023. The watershed assessment monitoring requires the County to conduct chloride monitoring of two sites, bacteria monitoring in watersheds with a TMDL, and maintain a Countywide benthic macroinvertebrate monitoring program. The County's watershed assessment monitoring plan was approved by MDE in July 2022.

In 2024, the County began chloride monitoring at two sites, engaged contractual support to perform bacteria monitoring in four watersheds, and continued Countywide biological and habitat monitoring. This included sampling watersheds for physical chemistry, qualitative habitat, and benthic macroinvertebrates following Maryland Biological Stream Survey protocols. The County finalized their bacteria monitoring plan in FY24 to sample sites in four watersheds and deployed two continuous conductivity loggers to monitor water quality in the Watts Branch watershed. Data and results from all of these activities will be reported in FY25.



The margined madtom is a type of catfish local to Maryland

Water Quality Protection Charge (WQPC) funds the County's stormwater management programs. The WQPC is assessed based on how much impervious area is on an owner's property, thereby contributing to stormwater runoff. WQPC credits are granted to property owners who install and maintain stormwater facilities on their properties to reduce and/or treat stormwater runoff.

Program Funding

During FY24, reported expenditures associated with all MS4 Permit requirements were \$80,190,495, which is an increase of 14 percent over FY23 MS4 Permit expenditures. The increase in expenditures is due to winter weather in FY24 and increased watershed restoration capital expenditures to help the County to meet its Permit goals.

The County has demonstrated its commitment to meet stormwater initiatives by budgeting \$92.5 million for FY25. The program funding includes revenue generated from the WQPC, BMP monitoring fee, tree canopy fee, stormwater waivers fee, and bag tax.

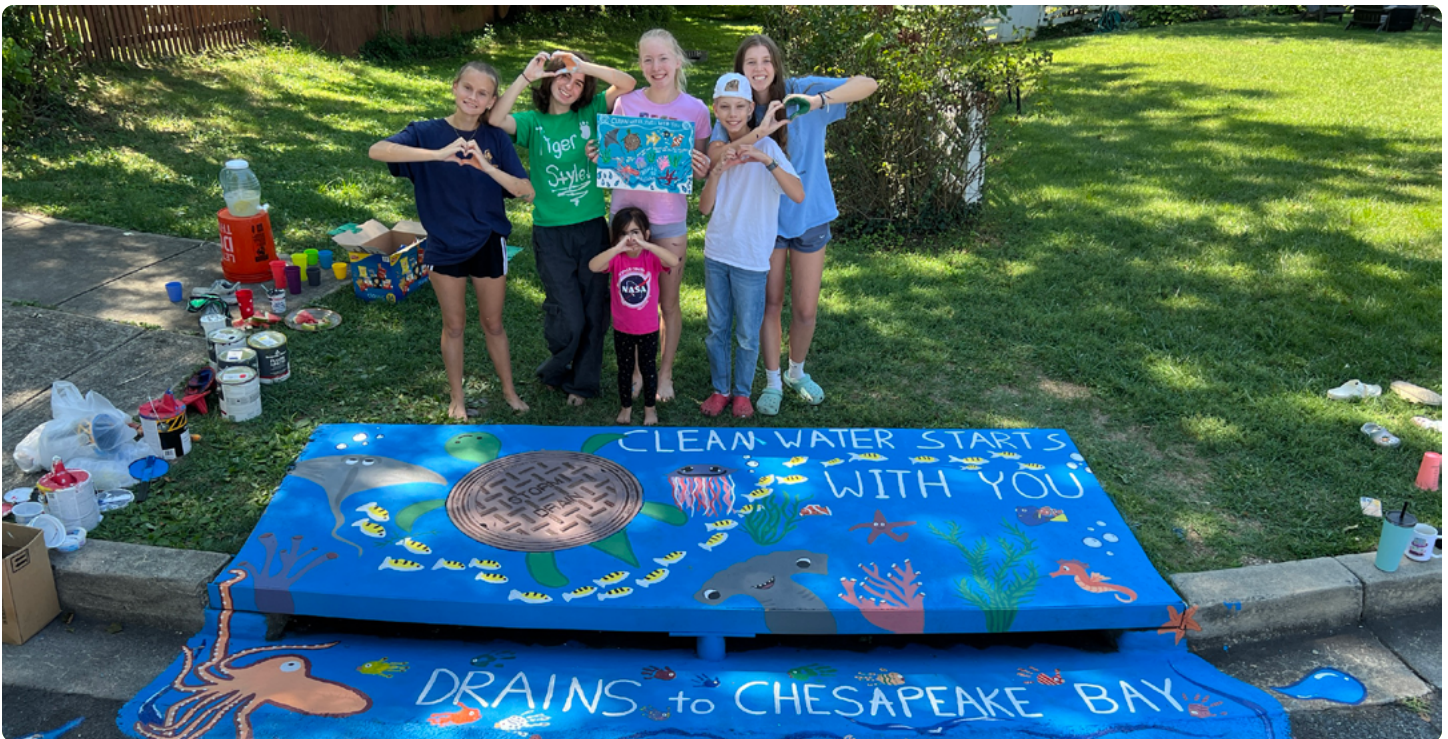
Highlights of the budget include continuing the planning and implementation of stormwater management projects, public outreach, stream monitoring, and other actions needed to continue to comply with the County's MS4 Permit. Expanding the use of contracts and partnerships through a new Capital Improvement Program continues to help the County meet Permit goals in a more cost-effective manner.



Dionna Bucci (DEP Staff) at Rockville Science Day showing attendees some of the macroinvertebrates collected from a stream on April 12, 2024

Total Maximum Daily Load

The County has 23 local TMDLs for bacteria, nitrogen, phosphorus, sediment, trash, and PCBs. A TMDL is a regulatory term that describes the maximum amount of pollutants that a water body can receive while still meeting water quality standards. The County received approval for all submitted TMDL Implementation Plans with the exception of the Anacostia River, which was under review by MDE in FY24. The updated PCB Implementation Plans were submitted to MDE in August 2024. The Permit also requires the County to develop a Countywide Stormwater TMDL Implementation Plan for each fiscal year. The FY24 plan was provided to MDE in December 2024 and covers the County's progress for FY24.



Storm drain painting

1. Introduction

This submission by the Montgomery County (the County) Department of Environmental Protection (DEP) to the Maryland Department of the Environment (MDE) fulfills the annual progress report requirement as specified in Part V of the Municipal Separate Storm Sewer System (MS4) Permit Number 20-DP-3320 MD0068349 (MS4 Permit or the Permit). DEP is submitting its third report in this current permit cycle (November 5, 2021, through November 4, 2026), the georeferenced database, referred to in this report as the National Pollutant Discharge Elimination System (NPDES) MS4 Geodatabase, and supplemental databases (MDE 2017, 2021). The NPDES MS4 Geodatabase has been developed in accordance with MDE’s NPDES MS4 Geodatabase Design and User’s Guide (Version 1.2; MDE 2017) and Draft Supplement to the Geodatabase Design and User’s Guide (Version 1.2 Draft Updates; MDE 2021). This report highlights the progress the County has made between July 1, 2023, and June 30, 2024.

The County continues to implement restoration projects required to meet the current permit restoration goal and local total maximum daily loads (TMDLs). As of fiscal year 2024 (FY24), the County has achieved 66 percent of its restoration goal by deploying street-sweeping and catch basin cleaning programs, installing environmental site design (ESD) projects, constructing stream restorations, constructing pond retrofits and outfall stabilization projects, and volunteer programs such as RainScapes and Tree Montgomery.

The County continues to maintain adequate legal authority, conduct illicit discharge detection and elimination (IDDE) inspections, implement a best management practice (BMP) inspection and maintenance program, enhance property management programs to reduce stormwater pollution, expand water quality pollution awareness outreach programs, and assure adequate funding for Permit-required programs.

In December 2024, the County submitted a Countywide TMDL stormwater implementation plan to MDE. The Countywide TMDL stormwater implementation plan shows the County’s progress toward meeting wasteload allocations (WLAs) for approved local TMDLs and Chesapeake Bay TMDLs. The County also submitted Good Housekeeping Plans (GHPs) for 100 county facilities and a Salt Management Plan (SMP) in December 2024 in compliance with permit requirements.

This FY24 MS4 Annual Report has been organized based on the headings in Permit Part IV (Standard Permit Conditions) to document the implementation of required elements. Required elements of the Permit are presented in a box format at the beginning of each main section.

2. Standard Permit Conditions

2.A Permit Administration

The Permit language of the County's MS4 Permit Part IV.A, Permit Administration, is provided as follows:

<< Montgomery County shall designate an individual to act as a liaison with the MDE (Department) for the implementation of this Permit. The County shall provide the coordinator's name, title, address, phone number, and email address. Additionally, the County shall submit in its annual reports to the Department an organizational chart detailing personnel and groups responsible for major NPDES program tasks in this Permit. The Department shall be notified in annual reports of any changes in personnel or organization relative to NPDES program tasks. >>

The designated individual to act as a liaison with the MDE is as follows:

Amy Stevens, Chief
Watershed Restoration Division
Department of Environmental Protection
2425 Reddie Drive, 4th Floor
Wheaton, Maryland 20902
240-777-7766
Amy.Stevens@montgomerycountymd.gov

Table 2.A-1 lists County personnel responsible for major NPDES program tasks and their contact information (as of September 2024).

Table 2.A-1. Organization Chart for Montgomery County Permit-required Programs

Permit Section	Permit Section Description	Department	Name	Title	Telephone
Part IV.A	Organization Chart—Liaison with MDE for Permit Implementation	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV.B	Legal Authority	OCA	Walter Wilson	Associate County Attorney	240-777-6759
Part IV.C	Source Identification	DEP	Vicky Wan	Chief, Strategic Services Division	240-777-7722
Part IV. D.1	SWM (Implementation, Information, and Construction Inspections)	DPS	Linda Kobylski	Chief, Land Development Division	240-777-6346
Part IV. D.1	SWM Facility Inspections and Maintenance	DEP	Pam Parker	Chief, Stormwater BMP Inspection and Maintenance Section	240-777-7758
Part IV. D.2	Erosion and Sediment Control	DPS	Linda Kobylski	Chief, Land Development Division	240-777-6346
Part IV. D.3	IDDE (Outfall Inspection and Commercial and Industrial Surveys)	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV. D.3	IDDE (Compliance and Enforcement)	DEP	Steve Martin	Supervisor, Environmental Compliance Group	240-777-7746
Part IV. D.4	Property Management and Maintenance	DGS	David E. Dise	Director	240-777-6191
Part IV. D.4	Property Management and Maintenance	MCDOT	Richard Dorsey	Chief, Division of Highway Services	240-777-7600
Part IV.D.4	Property Management and Maintenance	DEP	Willie Wainer	Chief, Recycling and Resource Management Division	240-777-6402
Part IV.D.4	Property Management and Maintenance (Trash and Litter Control Efforts)	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV.D.5	Public Education	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV.E	Stormwater Restoration	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV.E	Stormwater Restoration	MCDOT	Dan Sheridan	Chief, Transportation Planning and Design Section	240-777-7283

Permit Section	Permit Section Description	Department	Name	Title	Telephone
Part IV.F	Countywide TMDL Stormwater Implementation Plan	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV.G	Assessment of Controls	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part IV.H	Program Funding	DEP	Anthony Skinner	Chief Business Operations	240-777-6438
Part V.	Program Review and Annual Progress Reporting	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766
Part VI.	Special Programmatic Conditions	DEP	Amy Stevens	Chief, Watershed Restoration Division	240-777-7766

Notes:

DEP = Montgomery County Department of Environmental Protection, 2425 Reedie Drive, 4th Floor, Wheaton, Maryland 2090

DGS = Montgomery County Department of General Services, 101 Monroe Street, 9th Floor, Rockville, Maryland 20850

DPS = Montgomery County Department of Permitting Services, Division of Land Development Services, 2425 Reedie Drive, 4th Floor, Wheaton, Maryland 20902

MCDOT = Montgomery County Department of Transportation, Division of Highway Services, 101 Orchard Ridge Drive, 2nd Floor, Gaithersburg Maryland 20878

OCA = Office of the County Attorney, 101 Monroe Street, 3rd Floor, Rockville, Maryland 20850

SWM = stormwater management

2.B Legal Authority

The Permit language of the County’s MS4 Permit Part IV.B, Legal Authority, is provided as follows:

<< Montgomery County shall maintain adequate legal authority to meet this Permit’s requirements in accordance with NPDES regulations at 40 CFR §122.26 throughout the term of this Permit. In the event that any provision of its legal authority is found to be invalid, the County shall notify the Department in writing within 30 days and make the necessary changes to maintain adequate legal authority within one year of notification. All changes shall be included in the County’s annual report. >>

2.B.1 Montgomery County Code

County laws in Montgomery County Code Chapter 19, Erosion, Sediment Control, and SWM, provide sufficient legal authority to enable the County to meet the MS4 Permit requirements. Beyond Chapter 19, other legislation has been enacted to support water quality protection programs required under the Permit. The laws are as described in Table 2.B-1.

Table 2.B-1. MS4 Permit Requirements and Established Legal Authority

MS4 Permit Section	Montgomery County Code	Authority Description
IV.D.1. Stormwater Management	Chapter 19, Article II: Storm Water Management	Governs County SWM program, including BMP inspection and maintenance requirements
IV.D.2. Erosion and Sediment Control	Chapter 19, Article I: Erosion and Sediment Control	Establishes countywide erosion and sediment control requirements
IV.D.3. Illicit Discharge Detection and Elimination	Chapter 19, Article IV: Water Quality Control	Prohibits non-permitted pollutant discharge to waterbodies and establishes an inspection and enforcement regime
IV.D.4.c.iii. Reduce pollutants associated with the maintenance of County-owned properties	Chapter 19, Chapter 33B: Pesticides	Restricts using certain substances on lawns, places notification requirements on pesticide retailers and applicators, and requires the Montgomery County Parks Department to implement a pesticide -free program
IV.D.4.e. Evaluate current litter -control problems	Chapter 48, Article VI: Solid Waste, Disposable Food Service Products and Packaging Materials Chapter 52, Article IX: Taxation, Carryout Bag Tax	Requires disposable food service ware purchased and used in the County to be either recyclable or compostable Generates revenue for the County’s SWM programs and reduces paper or plastic bags provided at point of sale
IV.D.3.f. and g. Respond to illegal discharges, dumping, and spills	Chapter 48, Article I: Solid Waste, In General	Prohibits disposing of garbage and other solid waste on certain public and private properties

2.B.2 Co-permittees

The County continues its oversight, inspection, and enforcement authority over the Towns of Chevy Chase, Kensington, Poolesville, and Somerset; Chevy Chase Village; and one special tax district, the Village of Friendship Heights. The Town of Somerset is not listed under Part I.B Permit Area of the 2021 Permit but continues to be overseen by the County following Part I.B Permit Area of the 2010 Permit. Municipality contacts are shown in Table 2.B-2.

Montgomery County Public Schools (MCPS) designated Brian Mullikin, Division of Maintenance Environmental Team Leader, and Agustin Diaz, Environmental Specialist, as staff responsible for implementing SWM programs and coordinating Permit issues.

Table 2.B-2. List of Contacts for Co-permittees

Co-permittee	Contact Name and Title	Address	Telephone
MCPS	Brian Mullikin, MHS Environmental Team Leader	8301 Turkey Thicket Drive, Building A, 1st Floor Gaithersburg, Maryland 20879	240-740-2324
Chevy Chase Village	Shana R. Davis-Cook, Village Manager Jacqueline Parker, Director of Municipal Operations	Chevy Chase Village Hall 5906 Connecticut Avenue Chevy Chase, Maryland 20815	301-654-7300
Village of Friendship Heights	Julian Mansfield, Village Manager	4433 South Park Avenue Chevy Chase, Maryland 20815	301-656-2797
Town of Chevy Chase	Todd Hoffman, Town Manager	4301 Willow Lane Chevy Chase, Maryland 20815	301-654-7144
Town of Kensington	Matthew J. Hoffman, Town Manager	3710 Mitchell Street Kensington, Maryland 20895	301-949-2424
Town of Poolesville	Wade Yost, Town Manager	P.O. Box 158 Poolesville, Maryland 20837	301-428-8927
Town of Somerset ^[1]	Matthew Trollinger, Town Manager	4510 Cumberland Avenue Chevy Chase, Maryland 20815	301-657-3211

^[1] The Town of Somerset is not listed under Part I.B Permit Area of the 2021 Permit but continues to be overseen by the County under Part I.B Permit Area of the 2010 Permit.

MHS = Master of Health Science

2.C Source Identification

The Permit language of the County's MS4 Permit Part IV.C, Source Identification, is provided as follows:

<< Sources of pollutants in stormwater runoff jurisdiction-wide shall be identified by Montgomery County and linked to specific water quality impacts on a watershed basis. A georeferenced database shall be submitted annually in accordance with *Maryland Department of the Environment, National Pollutant Discharge Elimination System, Municipal Separate Storm Sewer System, Geodatabase Design and User's Guide (Version 1.2, May 2017)*, (hereafter MS4 Geodatabase) or as noted below that includes information on the following:

1. Storm drain system: all infrastructure, major outfalls, inlets, and associated drainage areas delineated (to be submitted as a supplemental geodatabase);
2. Industrial and commercial sources: industrial and commercial land uses and sites that the County has determined have the potential to contribute significant pollutants (to be submitted as a supplemental geodatabase);
3. Urban best management practices (BMPs): stormwater management facility data for new and redevelopment, including outfall locations and delineated drainage areas;
4. Impervious surfaces: public and private land cover delineated, controlled and uncontrolled impervious areas based on, at a minimum, Maryland's hierarchical eight-digit sub-basins;
5. Monitoring locations: locations established by Montgomery County for chemical, biological, and physical monitoring of watershed restoration efforts and the 2000 Maryland Stormwater Design Manual, unless participating in the pooled monitoring program, as described in PART IV.G; and
6. Water quality improvement projects: Restoration projects implemented in accordance with PART IV.E.3 including stormwater BMPs, programmatic initiatives, and alternative control practices in accordance with the *Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated Guidance for National Pollutant Discharge Elimination System Stormwater Permits (2021)*, hereafter (2021 Accounting Guidance), including projects proposed, under construction, and completed with associated drainage areas delineated. >>

The County has transitioned the MS4 Permit data into the required MDE NPDES MS4 Geodatabase (Version 1.2, May 2017). Due to the complexity of transitioning the data, the County has identified several gaps in the data and continues to work toward bridging these data gaps.

2.C.1 Storm Drain System

The County's storm drain system data are provided in the Supplemental Geodatabase. This data set contains the known storm drain infrastructure, major outfalls, and inlets. The NPDES MS4 Geodatabase includes the outfall feature class and outfall drainage area feature class.

2.C.2 Industrial and Commercial Sources

The industrial and commercial land uses and sites that the County has determined to have the potential to contribute significant pollutants are submitted in the Supplemental Geodatabase.

2.C.3 Urban Best Management Practices

SWM facility data, outfalls, and associated drainage area data can be found in the BMP Feature Class, BMP Drainage Area Feature Class, Outfall Feature Class, and Outfall Drainage Area Feature Class of the NPDES MS4 Geodatabase.

The County continued to identify and close data gaps for urban BMPs that were previously not collected or collected in a format that does not meet the requirements of the NPDES MS4 Geodatabase. A description of those data gaps for each feature class follows:

- BMP Feature Class:
 - QUAN_MGMT, PE-REQ, and PE_ADR – These data are not available for most of the records because the County did not track this information in a database format. The County is working on gathering these data for permits issued after FY22 and will populate new BMPs added to the NPDES MS4 Geodatabase with this data, if available. BMPs with a 2022 or earlier built date will not have these data.
 - IMP_ACRES – A few records do not have impervious acres (IAs) calculated. The County will populate these data after the IAs are calculated.
 - PE_PRE_CONV and PE_TOTAL_STORAGE – These data are not available for some restoration BMPs. The County is working on gathering this information and will populate the NPDES MS4 Geodatabase with these data after they are available.
 - WQT_IMP_ACR_CREDIT, TN_REDUCTION, TP_REDUCTION, and TSS_REDUCTION – Most of the BMPs from new and redevelopment and past restoration projects do not have this calculated. The County will populate these data after they are calculated.
 - WM_IMP_ACR_CREDIT and GSI_IMP_ACR_CREDIT – These data for extra credit are not being claimed for some BMPs, therefore, the data are not populated.
 - TOT_IMP_ACR_CREDIT – These data have not been calculated for some BMPs. The County will populate these data after they are calculated.
 - IMPL_COST – Cost data were not available for the individual BMPs for some past restoration projects. The County is gathering the restoration project cost data and will populate the NPDES MS4 Geodatabase with these data after they are available.
- BMP Drainage Area Feature Class:
 - The County has not delineated drainage areas for 126 BMPs. The County will continue to work on delineating these drainage areas.
- Outfall Feature Class:
 - SIZE_OUTFALL – These data are not available. The County will continue to work on gathering and populating these data.
 - OUT_YEAR – These data are not available. Because this field cannot be null, a placeholder date of January 1, 1900, is provided. The County will continue to work on gathering and populating these data.
- Outfall Drainage Area Feature Class:
 - Currently the County has not delineated drainage areas for 10,828 outfalls. The County will continue to work on delineating these drainage areas.

2.C.4 Impervious Surfaces

The Impervious Surface Associated Table of the NPDES MS4 Geodatabase summarizes the County’s impervious surfaces. The controlled and uncontrolled impervious surface within the County’s permit area by Maryland’s hierarchical eight-digit sub-basins are summarized below in Table 2.C-1.

Table 2.C-1. Impervious Surfaces by Maryland HUC-8 Sub-basins

MD HUC-8 Sub-basins	Impervious Surface within the County’s Permit Area (acres)	Impervious Surface Controlled (acres)	Impervious Surface Uncontrolled (acres)
Anacostia River	7,886.22	3,411.29	4,474.93
Cabin John Creek	3,534.91	572.72	2,962.19
Lower Monocacy River	257.90	44.28	213.62
Potomac Direct	6,041.24	1,377.65	4,663.59
Rock Creek	8,329.02	2,074.43	6,254.59
Rocky Gorge Dam	1,536.39	468.02	1,068.37
Seneca Creek	7,407.04	3,872.11	3,534.93
Upper Patuxent River	202.37	16.90	185.48
Total:	35,195.09	11,837.39	23,357.70

2.C.5 Monitoring Locations

The County concluded the Breewood Tributary monitoring at the end of calendar year (CY) 2022 and entered into the Pool Monitoring Program administered by the Chesapeake Bay Trust (CBT) on October 13, 2023. No data are reported for this feature class.

2.C.6 Water Quality Improvement Projects

The NPDES MS4 Geodatabase contains the geographic information system (GIS) coverage and associated attribute information for watershed restoration projects completed, under construction, and under design. As mentioned, the County invested a considerable effort over the last year to transition the MS4 data to the NPDES MS4 Geodatabase format. As part of this effort, the County discovered data gaps for water quality improvement projects data that were previously not collected or were collected in a format that does not meet requirements for the NPDES MS4 Geodatabase. Following are descriptions of those data gaps for each feature class:

- Alternative BMP Line Feature Class:
 - IMPL_COST – Cost data were not available for individual BMPs for some past restoration projects. The County is working on gathering the restoration project cost data and will populate the NPDES MS4 Geodatabase with these data after they are available.
- Stream Restoration Protocols Associated Table:
 - Projects credited using the planning rate are noted in the general comments field in the Alternative BMP Polyline feature class. Protocol calculation will not be provided for these

- records. A total of 84 completed projects do not have a protocol populated because they were either one of the following:
- Credited toward the FY2002 Permit (issued July 5, 2001)
 - Credited toward the FY2010 Permit (issued February 16, 2010)
 - Constructed or under construction before the finalization of the accounting guidance
 - Currently in design or under construction
- MDE requested the following items be addressed in the County’s FY24 MS4 Annual Report:
- “The Department requests that the County provide calculations for the two outfall stabilization projects totaling ~11 acres for confirmation.
 - The Chesapeake Bay Program (CBP) expert panels recommend that an extensive project file be maintained for each stream restoration project. Specifically:
 - This should include as-built drawings, credit calculations, photos, post-construction monitoring, inspection records, maintenance agreement, and relevant data for all protocol calculations. This information is necessary for local jurisdictions to verify credit calculations, and noted in Appendix C of the Department’s 2023 Draft Supplement to Geodatabase Design and User's Guide
 - For the first year, a new stream restoration project is reported in the MS4 Geodatabase, the Department requests that the County include more specific information describing pre- and post-site conditions, project design and all credit calculations.”
- The County maintains extensive documentation on completed projects in its inventory for monitoring, inspection, and maintenance purposes.
- The geodatabase includes documents for completed stream restoration and outfall stabilization projects credited using restoration protocols, including the two outfall stabilization projects previously noted. Moving forward, the County will provide documentation for completed projects as they are completed and reported in the geodatabase.
- Alternative BMP Point Feature Class:
 - IMPL_COST – Cost data were not available for wastewater treatment plant (WWTP) connections and septic denitrification points because this work was completed by the private owner. This gap will not be filled and remain as \$0.
 - BUILT_DATE – Built date information for WWTP connections is not available. The County is working on gathering these data and will populate the database, if available.
 - Alternative BMP Polygon Feature Class:
 - TN_REDUCTION, TP_REDUCTION, and TSS_REDUCTION – These data have not been calculated for projects credited towards the 2010 Permit. The County will populate these data after they are calculated.
 - IMPL_COST – Cost data were not available for individual BMPs for some past restoration projects. The County is working on gathering the restoration project cost data and will populate the NPDES MS4 Geodatabase with these data after they are available.

2.C.7 Other Data Gaps

Data gaps for other feature classes and associated tables that are not included in the prior sections are listed below. These data gaps are because the data were not previously collected or were collected in a format that does not meet the requirements of the NPDES MS4 Geodatabase. Following are descriptions of those data gaps for each feature class:

- BMP Inspections Associated Table:
 - INSP_STATUS – The County’s asset maintenance management system incorporated a pass/fail inspection status field in FY24. The inspection status field was populated for the BMPs inspected during the CY. All other BMPs will be assigned an inspection status as it gets inspected in the future.
 - INSP_DATE – Approximately 43 percent of the County’s BMP inspection data do not have a valid inspection date. A small percentage of these BMPs were voluntarily installed as part of the County’s RainScapes and Watershed Restoration Grant programs. The County started an inspection program for these BMPs and will continue populating the inspection date as the BMPs are inspected. The County also has several thousand single-family residential (SFR) BMPs installed on private property through the new development and redevelopment permit process. Most of these BMPs were permitted without an easement. The County has an inspection program specific for these BMPs and continues to work on conducting the inspection, however, several thousand BMPs do not have a valid inspection date. More information is provided on these SFR BMPs in Section 2.D.1.d of this report.
- Alternative BMP Inspections Associated Table:
 - INSP_DATE and ALTBMP_STATUS – The County data provided for Alternative BMP Inspections Associated Table has known data gaps for inspection date and status for streams, outfalls, RainScapes impervious surface removal, trees, and septic systems. The County is working on developing a program to ensure all trees are inspected and inspection data and status are tracked. The County has a contractor performing stream and outfall inspection and will close this gap for this data over the next 2 years. The County is working on addressing the data gaps for inspection data of best available technology septic systems, street sweeping, and inlet cleaning.
 - MDE noted the following in the County’s FY23 MS4 Annual Report:
 - “There are 673 BMPs listed with a fail status; the County should work to bring these BMPS into compliance.”
 - The 673 BMPs with a failed inspection status are Urban Tree Canopy BMPs that were incorrectly reported. The BMP status has been updated to “Removed” and the inspection status to “Pass,” which signifies that the BMP is no longer online and will not be accounted for impervious restoration and TMDL accounting.
 - WWTP connection records do not have inspection dates and statuses. The septic systems have been retired, and sewer system inspection is handled by Washington Sanitary Sewer Commission (WSSC). The County believes these records should not require inspection data and inspection status.

- SWM Associated Table:
 - PLAN_EXPT – This information is not tracked. The County does not issue SWM exemptions. If a project is exempt from SWM requirements, then no application is required.
 - WAIV_REQ, WAIV_REQ_QT, COMB_REQ, and TOTAL_REQ – This information is not tracked by the County. Each project is reviewed on its' merits and full stormwater compliance is required by the County where feasible.
- Erosion Sediment Control Associated Table:
 - OTHER_ISSUED, OTHER_ACTIVE, and DIST_ACTIVE_OTH – This information is not available.
- Municipal Facilities Feature Class:
 - The County will populate the data field for GHPs and SMPs in accordance with the MS4 Permit schedule.

2.D Management Programs

2.D.1 Stormwater Management

The Permit language of the County's MS4 Permit Part IV.D.1, Stormwater Management, is provided as follows:

- << An acceptable stormwater management program will be maintained by the County in accordance with the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland. Activities to be undertaken by the County shall include, but not be limited to, the following:
- a. Implementing the stormwater management design policies, principles, methods, and practices found in the latest version of the *2000 Maryland Stormwater Design Manual*. This includes the following:
 - i. Complying with the Stormwater Management Act of 2007 (Act) by implementing environmental site design (ESD) to the maximum extent practicable (MEP) for all new and redevelopment projects
 - ii. Tracking the progress toward satisfying the requirements of the Act and annually identifying and reporting the problems and modifications necessary to implement ESD to the MEP
 - iii. Reporting annually the modifications that have been or need to be made to all ordinances, regulations, and new development plan review and approval processes to comply with the requirements of the Act
 - b. Maintaining programmatic and implementation information related to the stormwater management program including, but not limited to, the following:
 - i. Number of Concept, Site Development, and Final plans received and number of those approved (plans that are resubmitted as a result of a revision or in response to comments should not be considered as a separate project)
 - ii. Number of redevelopment projects received and number of those approved
 - iii. Number of stormwater exemptions issued
 - iv. Number and type of waivers received and issued, including those for quantity control, quality control, or both (multiple requests for waivers may be received for a single project and each should be counted separately, whether part of the same project or plan)
 - c. Maintaining construction inspection information according to COMAR 26.17.02 for all ESD treatment practices, structural stormwater management facilities, and stable stormwater conveyance and capacity to receiving waters, including the number of inspections conducted and violation notices issued by the County.
 - d. Conducting preventative maintenance inspections, according to COMAR 26.17.02, of all ESD treatment systems, structural stormwater management facilities, and stable stormwater conveyance and capacity to receiving waters, at least on a triennial basis. Documentation identifying the ESD systems and structural stormwater management facilities inspected, the number of maintenance inspections, follow-up inspections, the enforcement actions used to ensure compliance, the maintenance inspection schedules, and any other relevant information will be submitted in the County's annual reports. >>

2.D.1.a Implementing Stormwater Management Design

DPS administers SWM design policies, principles, methods, and practices found in the latest version of the *2000 Maryland Stormwater Design Manual* in the County (MDE 2000). DPS also has additional requirements for some SWM practices. New development and redevelopment in the County complies with or exceeds the requirements of the Stormwater Management Act of 2007 (Act).

Local SWM requirements are stricter than state minimum standards. MDE standards include a SWM exemption for projects that disturb fewer than 5,000 square feet, while DPS requires sediment control and SWM to be addressed for any new home or commercial building construction regardless of the disturbance area. This requirement accounts for many SWM waivers issued by DPS during FY24 because single-family residential teardown projects would not have been required to address SWM by the state minimum standards. DPS also exceeded the state standard for SWM compliance for redevelopment projects when it incorporated ESD into the Montgomery County Code. DPS requires all redevelopment projects to address ESD to the maximum extent practicable (MEP). This approach, while generally successful in obtaining ESD compliance on most projects, can be expected to generate additional waivers due to limitations of existing site conditions, such as poor soils and shallow receiving storm drain systems.

DPS tracks progress on satisfying Act requirements. During FY24, no problems or modifications were identified, and no modifications were made to ordinances, regulations, or approval processes.

2.D.1.b Program Implementation

DPS is responsible for implementing programmatic requirements for SWM plan review and permitting. Table 2.D-1 summarizes reviews and approvals during FY24. A full list of all SWM plans is provided in NPDES MS4 Geodatabase, SWM Associated Table.

Table 2.D-1. MS4 Permit and Plan Reviews during FY24

MS4 Permit Requirement	Quantity
Approved concept designs	87
Site development	2
Final plans ^[1]	514
Redevelopment	29
Waivers ^[2]	267

^[1] Total sediment control plan approvals within FY24 are based on unique grading permit numbers and includes permits issued for SWM concept applications submitted in previous years, multiple permits under the same concept file number, and projects for which a separate stormwater conceptual submission is not required.

^[2] Total includes full and partial waivers for residential and nonresidential projects, including teardown and rebuild of existing SFR homes on existing recorded lots for which a separate stormwater conceptual submission is not required. Many residential rebuilds require at least a partial waiver of stormwater requirements. Whether or not a waiver is granted, all must provide ESD to the MEP on the lot. Teardown and rebuild on existing SFR lots accounted for all but 29 waivers issued during FY24.

2.D.1.c Construction Inspections

Section 2.D.2 provides details for the County’s erosion and sediment control (ESC) program and inspections during construction. Data for construction inspections are provided in NPDES MS4 Geodatabase, Erosion Sediment Control Associated Table.

2.D.1.d Best Management Practice Documentation, Maintenance, and Inspections

Inventory and Maintenance Responsibilities

The DEP Stormwater BMP Inspection and Maintenance (SWIM) Program oversees inspection and maintenance of all SWM BMPs under County jurisdiction. DEP performs all triennial preventative maintenance inspections on SWM BMPs to identify maintenance needs. DEP performs structural maintenance on BMPs owned by the County, MCPS, and the Maryland-National Capital Park and Planning Commission (M-NCPPC), as well as structural and nonstructural maintenance on ESD BMPs located on County property and rights-of-way (ROWs). DEP is also responsible for performing structural maintenance of BMPs on residential properties where maintenance responsibility has been transferred to the County (the private property owner remains responsible for nonstructural maintenance). Property owners are responsible for all maintenance on ESD BMPs on their property. SWM BMPs are also in place for private commercial and residential properties where all structural and nonstructural maintenance is the responsibility of the property owner.

The data reported for FY24 represent DEP’s inspection and maintenance responsibilities as defined in Montgomery County Code (Chapter 19) and Part IV.D.1.d of the 2021 MS4 Permit. Data for all inspections are provided in NPDES MS4 Geodatabase, BMP Inspections Associated Table.

Stormwater Management Best Management Practice: Inspections and Enforcement

DEP conducts, tracks, and reports all SWM BMP inspections, including the following:

- Triennial preventative maintenance inspections, which also includes water quality protection charge (WQPC) inspections by SFR property owners for WQPC credit.
- Maintenance follow-up inspections, which also include unscheduled inspections for compliance, enforcement, and responses to complaints.

DEP also annually inspects County-owned property and maintained high and significant hazard dams and levees. To enforce SWM BMP maintenance, DEP issues notices of violation (NOVs). The number of FY24 SWM BMP triennial inspections, follow-up inspections, and NOVs are summarized in Table 2.D-2.

Table 2.D-2. SWM BMP Inspections and Enforcement Completed during FY24

Inspection Type	Quantity
SWM BMP Triennial Inspections	3,316
SWM BMP Follow-up Inspections	6,161
SWM BMP Maintenance NOV	594

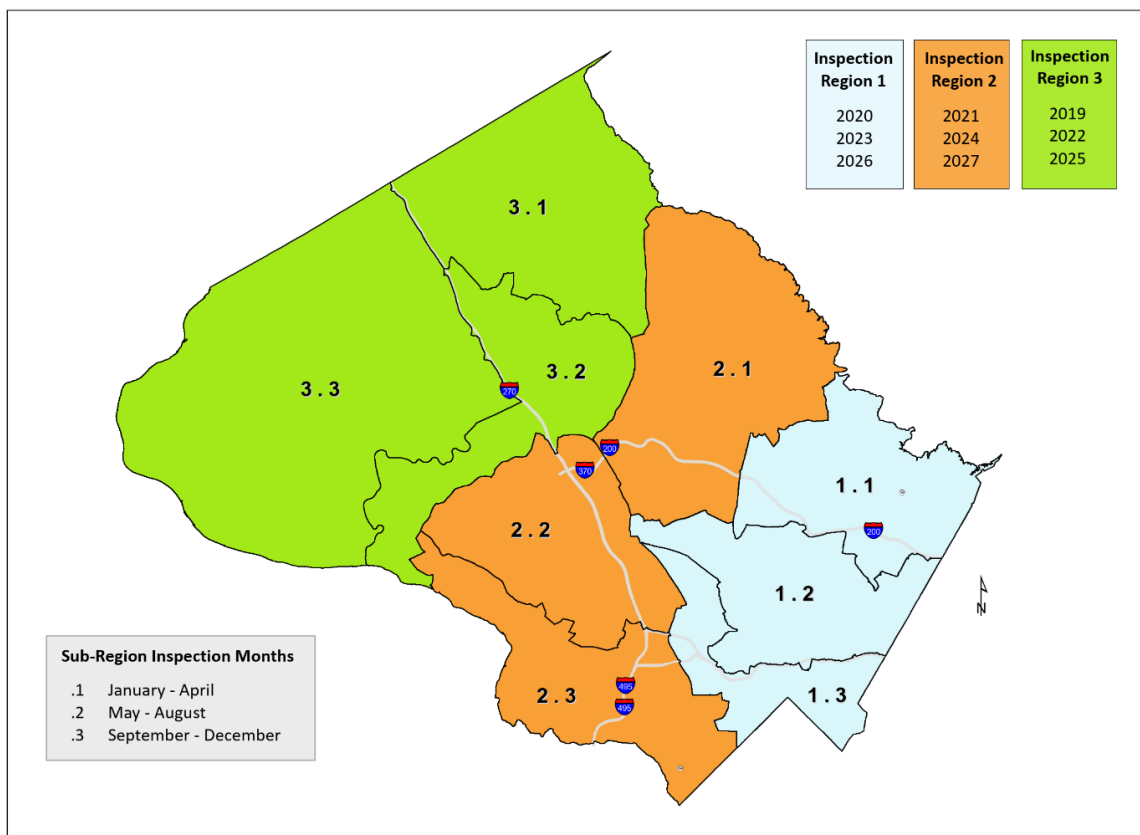
Stormwater Management Best Management Practice: Triennial Inspections

The purpose of the triennial inspections, which are conducted under DEP’s triennial inspection contract, is to identify repairs and maintenance needs. The County is divided into three geographical regions for triennial inspections, and each geographical region is divided into three subregions, as depicted on Figure 2.D-1. Figure 2.D-1 also shows the CY that the triennial inspections will be performed for any given inspection region, through 2027. Fiscal reports will always include inspection and maintenance information for two regions because DEP schedules work on CY. The number of triennial inspections conducted in FY24 are listed in Table 2.D-2.

DEP inspects ESD BMPs located primarily on nonresidential and public property where the County has a SWM easement and maintenance agreement. ESD BMPs on SFR properties are inspected under a different program. Where DEP has right of entry (ROE) to perform inspections, DEP makes additional efforts to contact the private residents to inform them of the inspection and provide information on the practice, its function, and maintenance.

When ESD BMPs were first required by Montgomery County Code (beginning July 2010), the County did not require easements on SFR properties that would allow the County access to inspect permitted ESD BMPs. The County began requiring easements for ESD on SFR properties on January 1, 2017. However, many permits were approved before January 1, 2017, including a large number (more than 5,800) of existing ESD BMPs on SFR lots where DEP has no legal access via an easement to conduct inspections. Thus, the County continues to have thousands of SFR BMPs where DEP cannot perform inspections.

Figure 2.D-1. Triennial Stormwater Inspection Regions and Subregions



As MDE noted in the comments on the FY22 MS4 Annual Report, SFR ESD BMPs “remain the County’s largest hurdle to ramping up its triennial inspections. The County should continue these efforts to fulfill its triennial inspection requirement.”

To address MDE’s comment, DEP has taken the following actions to increase the number of triennial inspections of ESD BMPs on SFR properties:

- DEP continues to promote the online self-inspection approach that allows property owners to claim credit against their WQPC for any ESD BMPs on their property. DEP considers self-certification to be equivalent to a triennial inspection. The online inspection form provides ESD BMP maintenance information, and DEP continues to work with private property owners to provide resources to help

them perform yearly inspections and required maintenance on the ESD BMPs on their property. DEP recommends owners inspect their ESD BMPs annually and perform maintenance as necessary.

- DEP sends postcards with WQPC credit program information to SFR property owners with ESD BMPs. DEP then approves compliant self-inspections. In FY24, DEP has continued outreach and education efforts to reach SFR property owners where no ROE is provided.
- DEP conducts site visits to verify asset maintenance conditions reported by SFR property owners who participate in the WQPC self-inspection program. The goal of this effort is to conduct annual audits of 10 percent of the approved applications for the credits granted in the prior levy year. This goal was accomplished for FY24. Audits verify that the actual field conditions of the BMPs are accurately self-reported by the property owners in their online WQPC credit application.
- During FY22, a partnership was launched with the Alliance for the Chesapeake Bay and surrounding jurisdictions through a National Fish and Wildlife Foundation grant to develop a residential SWIM Program for Private Property Owners in the Anacostia Watershed. The inspections and outreach through this program began in FY24 and currently covers RainScapes rebate projects and Clean Water Montgomery grant projects. Plans for FY25 include expanding a cost-share maintenance element of the grant to property owners with MS4 permit ESD practices on lots with ROE.
- In FY24, DEP developed a contractual mechanism to perform inspections of properties containing SFR assets with ROE agreements. These inspections are getting underway in FY25 and are anticipated to cover all assets with ROE in Region 1 by the end of CY24. DEP has developed an approach to conduct inspections as a “system” on SFR lots, since the majority of these properties with ROE contain multiple ESD BMPs.

Stormwater Management Best Management Practice: Follow-up Inspections

DEP conducts maintenance follow-up inspections outside of the triennial inspection program. These inspections verify completed work, confirm compliance, and investigate public complaints. Table 2.D-2 summarizes the completed follow-up inspections. The number of all enforcement actions is provided in NPDES MS4 Geodatabase, SWM Associated Table.

Stormwater Management Best Management Practice: Maintenance Enforcement

DEP issues NOVs to enforce SWM BMP Maintenance. The number of NOVs issued in FY24 are included in Table 2.D-2. During FY24, no maintenance violations required issuance of citations or additional enforcement actions outside of the NOVs. However, three BMPs failed inspection. For BMPs that failed inspection, DEP takes action to resolve the issue. Table 2.D-3 lists BMPs that failed inspection and how the issue is being resolved.

Table 2.D-3. BMPs that Failed Inspection

BMP Identification	Location	Year Failed	Reason Failed	Resolution
12866	Rock Spring Park	FY24	Corroded corrugated metal pipe	Property owner working with DEP to repair SWM Facility.
11040	Highlands of Darnestown	FY24	Void in dam and corroded corrugated metal pipe riser	This SWM facility is under enforcement action.
11152	Brighton Knolls	FY24	Erosion, corroded corrugated metal pipe, and trees on dam	SWM facility is owned by a defunct HOA. There is no property owner to hold accountable. DEP will schedule abandonment or repair subject to Council appropriation of funding.

HOA = homeowners association

In the FY23 MS4 Annual Report, 2 BMPs were reported as failing inspection. Status updates on the two BMPs are provided in Table 2.D-4.

Table 2.D-4. BMPs that Failed Inspection in Previous Reporting Year

BMP Identification	Location	Year Failed	Reason Failed	Update
15564	Montgomery County Airpark	FY23	High-hazard dam does not meet MDE 378 standards	Retrofit is under construction in FY24. Retrofit will be completed in FY25.
11025	Montgomery Village Golf Course	FY23	Privately owned SWM pond built before 1971. Corroded barrel and riser and serious erosion of dam embankment. MDE Dam Safety Division issued NOV to property owner on November 26, 2019. There has been no further action on the part of the property owner to do repairs.	Under enforcement action: Upon the initial failed inspection, the matter was referred to MDE Dam Safety. MDE issued a Notice of Unsafe Condition to the owner. The County continues to work with MDE and the property owner to resolve the issue.

2.D.2 Erosion and Sediment Control

The Permit language of the County’s MS4 Permit Part IV.D.2, Erosion and Sediment Control, is provided as follows:

<p><< An acceptable erosion and sediment control program shall be maintained by the County and implemented in accordance with the Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland. Activities to be undertaken by the County shall include, but not be limited to:</p> <ol style="list-style-type: none"> a. Implementing program improvements identified in any Department evaluation of the County’s erosion and sediment control enforcement authority; b. Ensuring that construction site operators have received training regarding erosion and sediment control compliance and hold a valid Responsible Personnel Certification as required by the Department; and c. Reporting quarterly, information regarding earth disturbances exceeding one acre or more. Quarters shall be based on calendar year and submittals shall be made within 30 days following each quarter. The information submitted shall cover permitting activity for the preceding three months. >>

DPS is responsible for implementing the County’s ESC program. The ESC program goal is designed to reduce pollutant loads from new development and redevelopment during construction. The County employs inspection and enforcement actions by issuing violation notices and stop-work orders to enforce compliance with the ESC program. The following are elements of the County’s ESC program:

- Reviewing the grading permit applications for earth disturbance
- Inspecting and enforcing grading and ESC regulations
- Inspecting all ESD treatment practices, structural SWM facilities, and stable stormwater conveyance and capacity during and on completion of construction
- Conducting compliance investigations
- Reporting earth disturbances exceeding 1 acre

ESC program implementation information is provided in NPDES MS4 Geodatabase Erosion Sediment Control Associate Table and Quarterly Grading Permit Feature Class. Table 2.D-5 summarizes the ESC enforcement actions taken by DPS during FY24.

Table 2.D-5. ESC Program Inspection and Enforcement Summary during FY24

ESC Program Element	Quantity
ESC inspections	19,550
NOV	266
Stop-work orders	104
Number of court cases	36
Number of fines collected	41
Amount of fines collected	\$32,850

2.D.2.a Improvements Required by Maryland Department of the Environment

MDE’s biennial evaluation of the County’s ESC program, as part of its review of the County’s application for the delegation of ESC enforcement authority, started on September 2023. Continued delegation was granted through June 30, 2026 (end of FY26), by a letter from Stewart Comstock, P.E., Chief of the MDE Stormwater, Dam Safety, and Flood Management Program. In the letter dated February 6, 2024, Comstock stated the following: “[MDE] also determined the County’s program is in compliance with the ESC program requirements of its (MS4) permit (20-DP-3320, MD0068349).” MDE encouraged the County to set deadlines and conduct reinspections in a timeframe based on severity of the issue and what is realistic for the County and responsible personnel at each site. MDE recommended guidance on required information on inspection reports. DPS made several changes to its inspection report to align with MDE guidance.

2.D.2.b Responsible Personnel Certification

MDE offers an online responsible personnel certification (RPC) program that provides personnel with convenient training that can be scheduled by the individual staff member. Because MDE conducts RPC training online according to its own correspondence, training-related data is not provided in this report. DPS verifies that personnel have attended training and hold a valid certification.

2.D.2.c Quarterly Reporting of Grading Permits

The County does not provide MDE the grading permits on a quarterly basis because MDE has strengthened their notice of intent (NOI) process and receives this information via that process. The County provides FY24 grading permit data for earth disturbances in the County measuring greater than 1 acre in the NPDES MS4 Geodatabase.

2.D.3 Illicit Discharge Detection and Elimination

The County's MS4 Permit Part IV.D.3, IDDE, is as follows:

<< The County shall implement an inspection and enforcement program to ensure that all discharges into, through, or from the MS4 that are not composed entirely of stormwater are either issued a permit by the Department or eliminated. Activities shall include, but not be limited to:

- a. Reviewing all County outfalls to prioritize field screening efforts in areas with the greatest potential for polluted discharges. The County must submit the process developed to prioritize outfall screenings to the Department for approval with the first year annual report;
- b. Submitting a plan and schedule for field screening the prioritized outfalls for the Department's approval with the first year annual report. The plan and schedule shall include the annual screening of at least 150 outfalls. Each outfall having a dry weather discharge shall be sampled at the time of screening using a chemical test kit. An alternative program may be submitted by the County for the Department's approval that methodically identifies, investigates, and eliminates illegal discharges into, through, or from the County's MS4;
- c. Conducting annual visual surveys of commercial and industrial areas as identified in PART IV.C.2 above for discovering, documenting, and eliminating pollutant sources. Areas surveyed and the results of the surveys shall be reported annually;
- d. Maintaining written standard operating procedures for outfall screenings, illicit discharge investigations, annual visual surveys of commercial and industrial areas, responding to illicit discharge complaints, and enforcement implementation;
- e. Maintaining an ordinance, or other regulatory means, that prohibits illicit discharges into the storm sewer system;
- f. Maintaining a program to address and respond to illegal discharges, dumping, and spills; and
- g. Using appropriate enforcement procedures for investigating and eliminating illicit discharges, illegal dumping, and spills. When a suspected illicit discharge discovered within the County's jurisdiction is either originating from or discharging to an adjacent MS4, the County must coordinate with that MS4 to resolve the investigation. Significant discharges shall be reported to the Department for enforcement and/or permitting. >>

The MS4 Permit requires the County to implement an inspection and enforcement program to ensure all discharges to and from the MS4 that are not comprised entirely of stormwater are either permitted by MDE or eliminated. The NPDES MS4 Geodatabase includes all outfalls used to identify sites for IDDE screening (Outfall Feature Class) and a list summarizing the results of the FY24 IDDE outfall screening (IDDE Screening Feature Class).

2.D.3.a Selection Process

DEP uses a comprehensive approach to outfall screening that includes screening outfalls each year in a different region of the County, with regions rotating every year. Outfalls near commercial and industrial properties are targeted because these areas have the greatest potential for polluted discharges. The County selects specific outfalls to be screened for illicit discharge using an iterative process. First, watersheds are selected for screening on a rotational basis. Outfalls from the selected watersheds that had pollution issues during a previous screening cycle are the first additions to the yearly list. Outfalls

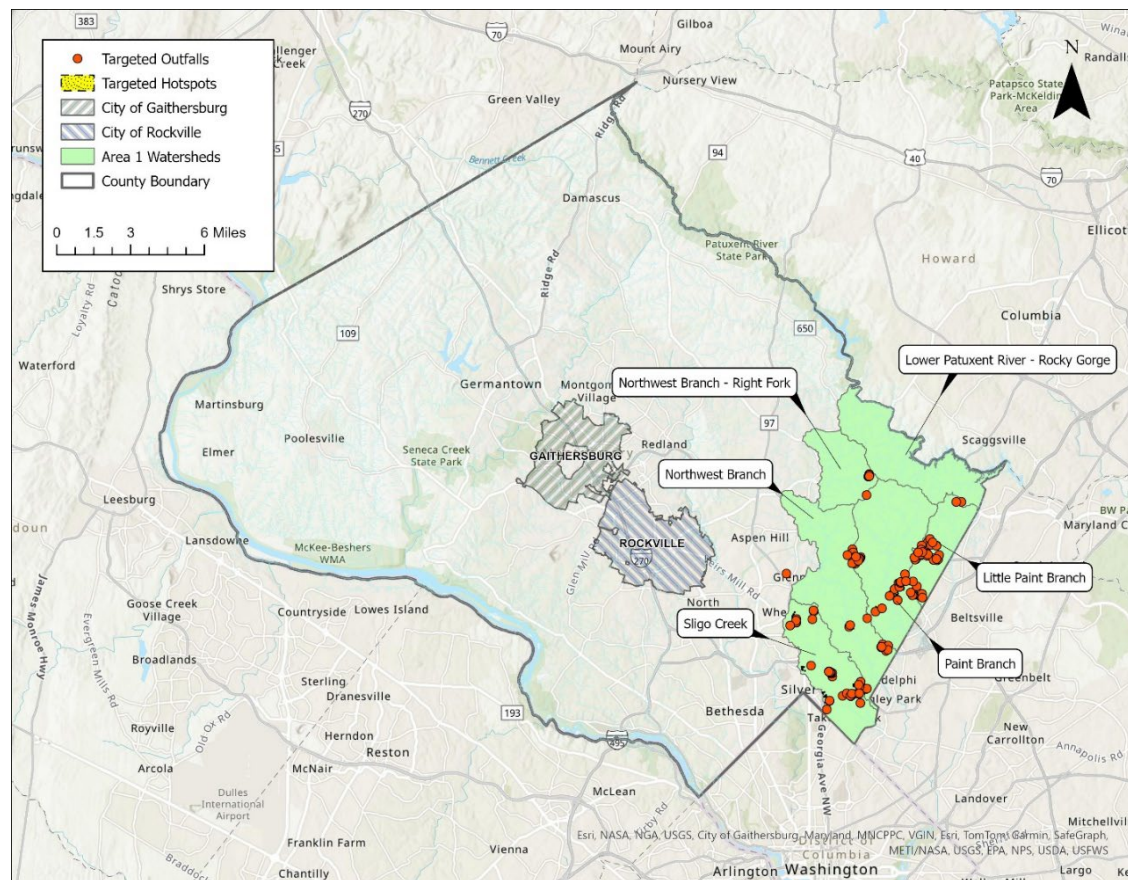
are then added by proximity to commercial and industrial properties, inlets, and streams. Beginning with the closest outfalls, the distance is gradually increased until at least 150 total outfalls have been selected. The standard operating procedures (SOPs) in Appendix A1 provide the annual procedures for identifying and selecting outfalls.

2.D.3.b Plan, Schedule, and Outfall Screening Results

The areas screened during FY24 are in the southeastern region of the County, predominantly in Silver Spring. NPDES MS4 Geodatabase, IDDE Screening Feature Class, provides all outfalls screened during FY24. All outfalls encountered are categorized, documented, and sampled when dry weather flow is found. Outfalls with no flow are assessed for physical indicators such as pipe benthic growth, corrosion, algae, and structural issues. Outfalls found not currently listed in the County’s inventory are assigned identification (ID) numbers in the field, photographed, and their location is marked with a global positioning system point. The ID numbers and pertinent data are forwarded to the DEP GIS team for inclusion in the storm drain inventory. Structures, such as road and driveway culverts, that are mistakenly identified in the system as outfalls, are corrected. The SOPs (Appendix A1) detail the annual procedures for performing the outfall screening.

DEP contracted with KCI Technologies, Inc. (KCI) to perform outfall field screening for FY24. During May 2024, KCI screened outfalls near commercial and industrial areas in Silver Spring. These areas are located within the Sligo Creek, Northwest Branch, and Paint Branch watersheds (Figure 2.D-2).

Figure 2.D-2. Locations of the FY24 IDDE Screening Targeted Outfalls and Targeted Hotspots



DEP does not screen outfalls in the cities of Rockville and Gaithersburg.

KCI screened 164 outfalls; no new outfalls were identified during the screening process. Of the 164 outfalls screened, 86 outfalls were found with dry-weather flows and tested. Of the 86 outfalls with dry-weather flows sampled, 4 outfalls had a suspicious discharge. The results of the investigations are provided in Table 2.D-6.

Table 2.D-6. Investigation Results of Suspected Illicit Discharges During FY24

Outfall ID	Location	Problem Found	Resolution
{D9D781F8-4762-	10214 Royal Road, Silver Spring, MD	Elevated chlorine and detergents	No suspicious discharge was found during several follow-up site visits.
JP561P0053	8712 Piney Branch Rd, Silver Spring, MD	Odors present and elevated ammonia	No suspicious discharge was found during several follow-up site visits. Warned adjacent community pool of issue.
JS563P9053	16603 Medinah Ct., Silver Spring, MD	Elevated chlorine	Discharge tracked to Hampshire Greens golf course from golf cart washing. NOV was issued and no further issues were observed.
JP122P0188	Flora Lane, Silver Spring, MD	Elevated chlorine and discoloration	Discharge tracked to Washington Metropolitan Area Transit Authority tunnel maintenance. After a warning, no further issues were observed.

2.D.3.c Commercial and Industrial Areas Visual Surveys

The MS4 Permit requires the County to conduct annual surveys of commercial and industrial areas to assess the potential for, and eliminate if discovered, pollutant sources. DEP conducted 45 surveys of commercial and industrial sites primarily in Silver Spring. In addition, DEP selected areas for outfall screening near the commercial and industrial areas, which are detailed in the following subsections.

Based on the surveys, DEP investigated water quality, grease, and solid waste issues, which resulted in 2 citations, 7 NOVs, and 15 verbal warnings. The formal enforcement actions are summarized in Table 2.D-7, and the entire list of 45 surveyed properties is provided in Appendix A2.

Table 2.D-7. Stormwater Discharge Enforcement Cases Based on Commercial and Industrial Survey Results for FY24

Case No.	Location Description	Issue	Enforcement Action	Resolved
20241242	City Place Mall	Water Quality	Verbal warning	Yes
20241253	Peterson's Properties, 8500 Colesville Rd	Grease	Verbal warning	Yes
20241358	13440 New Hampshire Ave	Grease	NOV	Yes
20241366	906 Ellsworth Dr	Grease	NOV	Yes
20241368	919 Gist Ave	Water Quality	Verbal warning	Yes
20241450	BP Gas, 10226 New Hampshire Ave	Solid Waste	Verbal warning	Yes
20241476	Giant Food, 12028 Cherry Hill Rd	Grease	Verbal warning	Yes

Case No.	Location Description	Issue	Enforcement Action	Resolved
20241478	Target, 12000 Cherry Hill Rd	Solid Waste	Verbal warning	Yes
20241480	DARCARS Collision Center	Water Quality	NOV	Yes
20241485	Briggs Chaney Exxon	Water Quality	NOV	Yes
20241629	CMI Moulding	Water Quality	NOV	Yes
20241630	15408 Old Columbia Pike	Water Quality	Verbal warning	Yes
20241646	Sport Chevrolet-Cadillac Dealership	Solid Waste	Verbal warning	Yes
20241674	Jim Coleman Nissan	Water Quality	Verbal warning	Yes
20241686	DARCARS Toyota, 12210 Cherry Hill Rd	Water Quality	NOV, Citation	Yes
20241688	Percontee, Inc.	Water Quality	NOV, Citation	Yes
20241700	Shops of Burtonsville	Water Quality	Verbal warning	Yes
20241928	8107 Fenton Street	Solid Waste	Verbal warning	Yes
20241932	Exxon Gas, 9331 Georgia Ave	Water Quality	Verbal warning	Yes
20241917	Sniders Super Foods	Water Quality	Verbal warning	Yes
20241914	Shell Gas, 9510 Georgia Ave	Solid Waste	Verbal warning	Yes
20241915	CVS, 9520 Georgia Ave	Solid Waste	Verbal warning	Yes

In the FY23 MS4 Annual Report, one issue observed during commercial and industrial survey inspections and outfall screening was not resolved before the end of FY23. Information on the case and the resolution date that took place in FY24 is provided in Table 2.D-8.

Table 2.D-8. Stormwater Discharge Enforcement Cases Based on Commercial and Industrial Survey Results and Outfall Screening for FY23 – Updated Status of Ongoing Issues

Case Number	Location Description	Issue	Enforcement Action	Date Resolved
CT122P0082	20151 Fisher Ave, Poolesville, MD	Elevated chlorine	Verbal warning. Source tracked to Western County Outdoor Pool. Repairs to leaking pipes were completed.	9/28/23

2.D.3.d Standard Operation Procedures

DEP maintains a set of SOPs for IDDE efforts. These procedures cover outfall screenings, illicit discharge investigations, annual visual surveys of commercial and industrial areas, responding to illicit discharge complaints, and enforcement implementation. These procedures are stored as computer files and can be readily accessed by all personnel involved with IDDE efforts. The County’s SOPs is provided in Appendix A1.

2.D.3.e Ordinance and Regulatory Means

DEP addresses water quality issues through the Montgomery County Water Quality Ordinance, Montgomery County Code Chapter 19, Article IV, Section 19-50, subsections (a), (b), and (c).

2.D.3.f Illegal Discharges, Dumping, and Spills

During FY24, the County met MS4 Permit requirements to maintain a program to address and respond to illegal discharges, dumping, and spills. Information on illegal dumping can be found on the County's website (DEP n.d.[c]). Illicit discharge issues tracked to sources outside the County are coordinated with the source location jurisdiction. Illicit discharge sources identified as coming from a state-permitted facility are reported to MDE. The County maintains a 311-call service center that citizens can use to report environmental concerns. DEP is responsible for investigating and enforcing the cleanup of nonemergency small quantity fuel, oil, or chemical spills that do not pose an immediate risk to public health or safety. The County's fire and rescue service responds to emergencies and large quantity spills.

DEP works with WSSC by performing follow-up site visits for reported sanitary sewer overflows (SSOs) in the County and performed 32 site visits during FY24. These follow-up site visits verify that SSOs have been corrected, demonstrate a reasonable effort to confirm all affected areas have been adequately treated and cleaned up and ensure adequate public notice signage has been posted in affected areas. Moreover, DEP is continuing to work with WSSC's fats, oils, and grease program regarding restaurant grease issues, which directly affect stormwater quality in the County.

2.D.3.g Enforcement

During FY24, 336 complaints were made concerning the illegal dumping of solid waste. The DEP Energy, Climate, and Compliance Division (ECCD) investigated illegal dumping complaints and issued 20 formal enforcement actions (6 civil citations with fines totaling \$3,000 and 40 NOVs) and numerous warning letters. Most complaints concerned bags of trash, vegetation (leaves and brush), or other unwanted materials either dumped or being stored on private or public property. Only a small percentage of these cases represented a potential for direct runoff of contaminated material into storm drains or receiving systems. Complaint resolution invariably involved removal and proper disposal of trash and debris and proper storage of other materials (for example, under cover).

During FY24, the ECCD investigated 237 water quality issues: 180 complaints, 32 SSOs, and 25 hazardous materials-related cases. These investigations resulted in 42 formal enforcement actions (13 civil citations with fines totaling \$7,000 and 29 NOVs), and numerous warning letters.

During FY23, DEP began investigating an issue in Willet Branch. Since summer 2020, the Little Falls Watershed Alliance (LFWA) has been collecting samples of fecal indicator bacteria (FIB) E. coli (funded by DEP) at several sites throughout the Little Falls Watershed. During summer 2021, LFWA reached out to the County and WSSC with data showing high levels of FIB coming from an outfall in the Willet Branch tributary. Due to the high FIB, they worked with a private laboratory to collect microbial source information. The information indicated very high levels of human-derived bacteria.

Using the information provided by LFWA and WSSC, the County engaged a contractor to perform a bacteria source track down in the storm drain network upstream of Willet Branch. During the investigation, 16 locations throughout the storm drain network have been sampled and analyzed for signs of illicit discharge including E. coli and Enterococcus bacteria. Results indicate elevated levels of bacteria in portions of the storm drain network.

In FY24, a significant sewage discharge was tracked to a storm drain line on North Lane in Bethesda. Continued investigations by DEP tracked the source of sewage discharges to the Hyatt Bethesda. DEP engaged with the property owner and building engineers to identify the source; however, due to the complicated construction of the site, professional plumbing assistance is needed to pinpoint the source. An update on this investigation will be provided in the FY25 MS4 Annual Report.

2.D.4 Property Management and Maintenance

The Permit language of the County's MS4 Permit Part IV.D.4, Property Management and Maintenance, is provided as follows:

- << a. Coverage under Maryland's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity (SW Industrial GP) is typically required at facilities where the following activities are performed: maintenance or storage of vehicles or equipment; storage of fertilizers, pesticides, landscaping materials, hazardous materials, or other materials that could pollute stormwater runoff. The County shall:
- i. Ensure that a Notice of Intent (NOI) has been submitted to the Department for each County-owned industrial facility requiring coverage under the SW Industrial GP; and
 - ii. Submit with the annual report a list of County properties currently covered under the industrial stormwater permit.
- b. The County shall develop, implement, and maintain a good housekeeping plan (GHP) for County-owned properties not required to be covered under Maryland's SW Industrial GP where the activities listed in PART IV.D.4.a are performed. The GHP shall be submitted to the Department by the County in its third year annual report and implemented thereafter. A standard GHP may be developed for all County-owned property or separate GHPs may be developed for properties with similar use (e.g., recreation and parks properties, school properties). The GHP shall include, but not be limited to:
- i. A description of property management activities;
 - ii. A map of the locations of properties covered by the GHP;
 - iii. A list of potential pollutants and their sources that result from facility activities;
 - iv. Written procedures designed to reduce the potential for stormwater pollution from property activities, including illicit discharges, dumping, and spills;
 - v. Written procedures for annually assessing County properties in order to prevent the discharge of pollutants, spills, and leaks into its municipal separate storm sewer system;
 - vi. Written procedures for performing stormwater conveyance system inspections for removing debris that may cause clogging, backups, and flooding; and
 - vii. Annual training for all appropriate County staff and contractors regarding best practices for preventing, reducing, and eliminating the discharge of pollutants during property activities.
- c. The County shall continue to implement a program to reduce pollutants associated with the maintenance of County-owned properties including, but not limited to, local roads and parks. The maintenance program shall include the following activities where applicable:
- i. Street sweeping in the amount identified in Appendix B and annually updated thereafter in accordance with PART IV.E.6;
 - ii. Inlet and conveyance system inspection and cleaning in the amount identified in Appendix B and annually updated thereafter in accordance with PART IV.E.6; and
 - iii. Reducing the use of pesticides, herbicides, fertilizers, and other pollutants associated with vegetation management. This can include, but is not limited to:
 - Developing and implementing an Integrated Pest Management Plan according to EPA guidelines;

- Custom fertilizer property management plans based on soil testing;
 - Targeted application or “spot application” of pesticides;
 - Alternative and organic fertilizers;
 - Manual weed removal, mowing, and trimming;
 - Annual training and applicator certification and licensing as required by Maryland Department of Agriculture to ensure accurate application of chemicals according to manufacturer’s recommendations;
 - Subcontracting to a certified pest control applicator licensed business for some or all of properties;
 - Piloting biological pest control programs; and
 - Establishing “no mow” areas.
- d. The County shall reduce the use of winter weather deicing and anti-icing materials, without compromising public safety, by developing a County Salt Management Plan (SMP) to be submitted to the Department in its third year annual report and implemented thereafter. The SMP shall be based on the guidance provided on best road salt management practices described in the Maryland Department of Transportation, State Highway Administration’s Maryland Statewide Salt Management Plan, developed and updated annually as required by the Maryland Code, Transportation §8-602.1. The County’s SMP shall include, but not be limited to:
- i. A plan for evaluation of new equipment and methods, and other strategies for continual program improvement;
 - ii. Training and outreach:
 - Creating a local “Salt Academy” that annually provides County winter weather operator personnel and contractors with the latest training in deicer and anti-icer management, or the participation of County personnel and contractors in a “Salt Academy” administered by another MS4 permittee or State agency; and
 - Developing and distributing best salt management practices outreach for educating residents within the County.
 - iii. Tracking and reporting:
 - Starting with the fourth year annual report, during storm events where deicing or anti-icing materials are applied to County roads, track and record the amount of materials used, and snowfall in inches per event, if applicable; and
 - Report the deicing or anti-icing application by event or date, and the monthly and annual pounds used per lane mile per inch of snow.
- e. The County shall evaluate current litter control problems associated with discharges into, through, or from portions of its MS4 that are not already addressed under the TMDL implementation plan for trash (litter and floatables) (see Appendix A). Additionally, the County shall continue to remove from or prevent from entering its storm drain system 225 tons of litter and debris in the first year of permit issuance or as updated annually thereafter in accordance with PART IV.E.6.
- f. The County shall report annually on the changes in its Property Management and Maintenance programs and the overall pollutant reductions resulting from implementation of the components of the programs listed in this section. >>

2.D.4.a Industrial Stormwater Permit

The County has 11 facilities covered under the General Permit for Discharges of Stormwater Associated with Industrial Activity (SW Industrial GP), MCPS has 6 facilities, and the Town of Poolesville has 1 facility. Table 2.D-9 lists the County, MCPS, and Town of Poolesville facilities currently covered under the industrial stormwater permit.

MDE accepted NOIs for these facilities in August 2024 for coverage until January 31, 2028.

2.D.4.b Good Housekeeping Plan

The GHP requirement requires the County to identify County-owned properties that meet the following criteria: (1) is not required to be covered under the SW Industrial GP and (2) performs activities listed in Part IV.D.4.a of the 2021 Permit (that is, “maintenance or storage of vehicles or equipment; storage of fertilizers, pesticides, landscaping materials, hazardous materials, or other materials that could pollute stormwater runoff”). The County collaborated with other MS4 jurisdictions and MDE on developing the GHP template and identifying County-owned properties that require a GHP. Site assessments were conducted for over 500 County facilities to determine if a GHP is needed. The GHPs were created for 100 facilities and the plans will be submitted in December 2024 and implemented thereafter.

2.D.4.c Maintenance Program of County Properties

The Permit requires the County to reduce pollutants associated with County properties by implementing a maintenance program that includes the following: sweeping streets; cleaning inlets; reducing the use of pesticides, herbicides, fertilizers, and other pollutants associated with roadway vegetation management; and controlling the overuse of winter weather deicing materials. This section describes pollutant reduction methodologies related to the County’s ongoing maintenance programs. The overall goal of these activities is to reduce the amount of trash and sediment from entering streams and waterways, improve aesthetics, and aid in meeting Maryland environmental goals.

Table 2.D-9. County and Co-permittee Facilities Covered under the Industrial Stormwater Permit

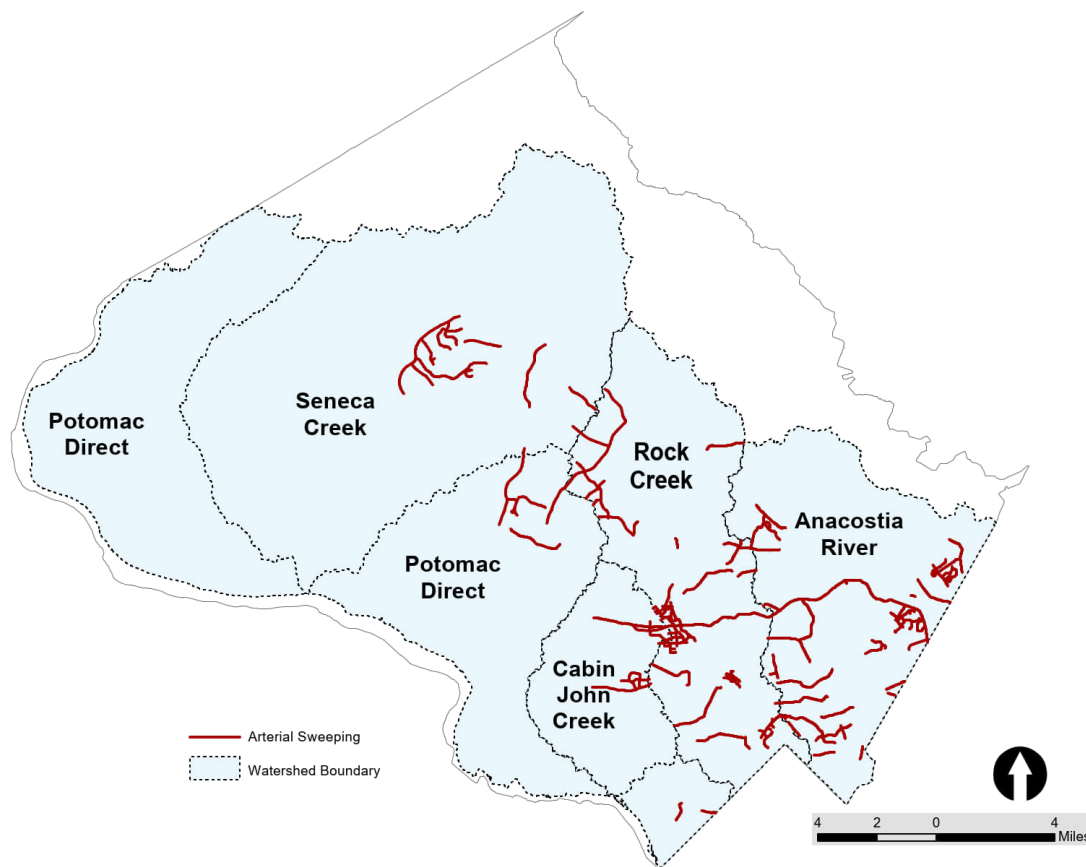
County or Co-permittee	Lead Agency	Facility Name	Facility Type (Category)	State Permit Number
Montgomery County	DGS	Equipment Maintenance and Transit Operation Center	Transportation (viii)	20SW0277
Montgomery County	DGS	Kensington Small Transit Shop	Transportation (viii)	20SW2311
Montgomery County	DGS	Seven Locks Automotive Equipment Section and Bethesda Depot	Transportation (viii)	20SW0265
Montgomery County	DGS	Brooksville Maintenance Facility Transit Shop and Silver Spring Depot	Transportation (viii)	20SW0278
Montgomery County	MCDOT	Colesville Depot	Transportation (viii)	20SW0267
Montgomery County	MCDOT	Poolesville Depot	Transportation (viii)	20SW0268
Montgomery County	MCDOT	Damascus Depot	Transportation (viii)	20SW0269
Montgomery County	MCDOT	Gaithersburg Depot	Transportation (viii)	20SW2487
Montgomery County	DEP	Shady Grove Processing Facility	Recycling/Salvage (vi)	20SW0262
Montgomery County	DEP	Gude Landfill	Landfills (v)	20SW0263A
Montgomery County	DEP	Oaks Landfill	Landfills (v)	20SW0264
MCPS	DFM	Randolph Depot	Transportation (viii)	20SW0522
MCPS	DFM	Shady Grove Depot	Transportation (viii)	20SW0523A
MCPS	DFM	Bethesda Depot	Transportation (viii)	20SW0524
MCPS	DFM	Clarksburg Depot	Transportation (viii)	20SW0525
MCPS	DFM	West Farm Depot	Transportation (viii)	20SW1258
MCPS	DFM	Central Facilities Maintenance Depot	Transportation (viii)	20SW3325
Town of Poolesville	WWTP	Poolesville WWTP	Treatment Works (ix)	20SW1790

DFM = Montgomery County Division of Facility Management

2.D.4.d Street-sweeping Program

DEP administers an arterial street-sweeping program. Arterial routes are larger roads with more commercial activity, traffic, and observed trash. The arterial routes are swept at night when traffic volumes are low to reduce traffic impacts, promote safety, avoid parked cars, and reduce energy consumption. The sweeping is regularly inspected to ensure consistent quality. In FY24, the County continued to sweep one cycle monthly, except for spring and fall when a cycle is swept every 1 to 2 weeks at 335.2 lane miles per cycle. A total of 453 tons of debris and trash were collected. Figure 2.D-3 shows the arterial routes swept in FY24.

Figure 2.D-3. Montgomery County Arterial Street-sweeping Routes during FY24



2.D.4.e Inlet and Conveyance System Inspection and Cleaning

MCDOT’s inlet cleaning program includes removing materials from clogged inlets, storm drains, drainage ditches, outfalls, and adjacent drainage areas. This is performed by using a vacuum truck, excavators, and manual labor. Material removed via vacuum truck is disposed of at the Oaks Landfill Leachate Pre-treatment Facility. Other organic and inorganic materials are disposed of at the Shady Grove Transfer Station.

During FY24, MCDOT used a pump truck to remove predominantly organic materials from 30 inlets. This totaled 25.42 tons of material deposited at the Oaks Landfill Leachate Pre-treatment Facility. The inlets are located in Bethesda, Colesville, and Silver Spring. MCDOT’s storm water maintenance program maintains thousands of miles of drainage ditches as part of the storm water conveyance system.

The drainage ditches normally flow stormwater directly into inlets, basins, or outfalls before entering streams and rivers. Each year, MCDOT receives numerous service requests of clogged and silted drainage ditches and swales. In FY24, MCDOT removed 7,845 tons of silt, dirt from eroded areas, and other organic materials.

2.D.4.f Pollutants Associated with Vegetation Management

Montgomery Weed Control, Inc. conducts the County's state required roadside weed spraying program for noxious weeds. The County has an integrated pest management plan, which includes specialized spray equipment and targeted application that achieves cost-efficient control using minimum herbicides. Operational BMPs are always followed, and all personnel employed by Montgomery Weed Control, Inc. are registered with the County as pesticide applicators and trained in compliance with the state Pesticide Applicator's Law. During FY24, the County applied 4.39 gallons of clopyralid and 2.56 gallons of glyphosate. Other than for noxious weed control, the County uses no other pesticides and no fertilizers for roadside vegetation management.

2.D.4.g Salt Management Plan

MCDOT plows and salts roads as part of its winter-weather roadway treatment program. Since 2009, MCDOT has continued to improve its salt management with practices and procedures adapted from Snow College and Maryland Department of Transportation (MDOT) State Highway Administration's (SHA's) SMP (MDOT n.d.). These BMPs for salt applications can be found in MCDOT's SMP. In accordance with the Permit, the SMP obligates the County to reduce the use of winter-weather deicing and anti-icing materials without compromising public safety. The plan is based on the guidance provided on best road salt management practices described in the MDOT SHA SMP (MDOT n.d.), which is developed and updated annually as required by the Maryland Code, Transportation Section 8-602.1. The plan will be submitted to MDE in December 2024 and implemented thereafter.

All application equipment is calibrated once a year. MCDOT has an online system to track the status and progress of roadway treatment and plowing during winter-weather events. The County is responsible for applying winter-weather treatment for approximately 5,400 miles. During a typical winter, the County applies sodium chloride salt brine, an anti-icing technique, to approximately 1,600 lane miles of emergency roads.

During FY24, the County encountered eight winter events that consisted of snow, ice, and freezing rain. MCDOT's anti-icing application of salt brine totaled 288,000 gallons. MCDOT's deicing application of sodium chloride salt totaled 26,461 tons.

Due to the significant difference in number of winter events between FY23 and FY24, both salt brine and salt applications increased in FY24. By comparison, FY23 had mild weather with no reported snow accumulations so salt brine was not used, and only 504 tons of salt were applied. For comparison with similar winter seasons, during FY22, approximately 200,000 gallons of salt brine and 30,071 tons of salt were applied.

The County strives to minimize the use of salt in its winter-weather roadway treatment program. In addition to annual trainings and the use of salt brine to minimize salt use, MCDOT inspects all roads during and after winter events to determine areas where any salt spills or over applications occurred. Prompt cleaning of these areas minimizes the impact that salt use can have on the surrounding environment.

2.D.4.h Litter Control Evaluation

The Permit requires the County to evaluate current trash and litter control efforts; develop strategies to reduce trash, floatables, and debris in its watersheds that are not already addressed under the Anacostia Trash TMDL; and provide public education to aid these efforts (refer to Section 2.D.5, Public Outreach). The County implements several programs throughout the County to reduce trash and litter on County land and waterways. These programs and efforts conducted by the County and described in this section of the report provide information on the trash and litter reduction in areas outside the Anacostia Watershed. The County uses the following two categories of programming to remove litter from our waterways: direct litter removal and litter reduction programs.

2.D.4.i Direct Litter Removal

Direct litter removal removes litter and debris from streets, sidewalks, and communities before it enters the storm drain or ends up in County streams; this removal includes similar programs that address the Anacostia Trash TMDL found in Section 2.D.4.c of this report.

DEP and MCDOT programs that remove trash includes arterial street sweeping, inlet conveyance cleaning, and roadside litter cleanup. DEP and MCDOT provide two types of programming that offer volunteers an opportunity to remove trash and litter from their communities. DEP Stream Stewards volunteer program provides cleanup supplies to groups who want to do a community cleanup; individuals who join the plogging program can also clean trash on their own time. MCDOT's Adopt-A-Road Program supplies community groups with equipment in exchange for their voluntary services of picking up trash and litter along roadways. Volunteers are asked to hold two cleanups a year along their designated road.

2.D.4.j Litter Reduction Programs

Litter reduction programs target reducing the source of litter by combining the enforcement of County laws with public outreach and education. These efforts are intended to change residents and businesses behavior.

The County has several different agencies that enforce solid waste laws that prohibit littering and dumping of trash. The Department of Housing and Community Affairs Enforcement Division investigates and enforces violations of litter on private property as part of their Clean and Lien Program. DEP has an Illegal Dumping Enforcement Program where resident complaints concerning illegal dumping are investigated and enforcement actions taken. The DEP Recycling and Resource Management Division manages the education and enforcement of the County's solid waste laws and recycling regulations for single-family residents, multi-family properties and businesses, organizations, and local, state, and federal government facilities, as they are all required to recycle and reduce waste and aim for Zero Waste.

The County has also passed several pieces of legislation that specifically target the use of certain plastic products. These bills include a carryout bag tax of 5 cents for each disposable bag provided at the point of sale, a ban on the use and sale of all number 6 polystyrene food service ware and packaging peanuts, and a law requiring that restaurants and food service businesses provide straws to dine-in customers only upon request and be reusable or made of marine degradable or home compostable materials. Plastic straws must always be made available upon request to comply with disability rights laws.

The County provides outreach and education on recycling and litter reduction through a variety of methods, including virtual training, social media, in-person trainings, attending events, volunteers, and printed educational and instructional materials. Some campaigns are more general, such as the

“Reduce, Reuse, and Recycle Right” campaign, which aims to educate residents, multi-family properties and businesses, and organizations on how to reduce waste and recycle properly. Other campaigns are more specific to certain types of materials, such as the Skip the Straw and Switch from number 6 Plastics campaigns, which are focused on straws and number 6 polystyrene food service ware, respectively.

The County continued its social media plogging promotion and challenge issued to County residents to pick up litter while walking, jogging, or running in local neighborhoods in FY24. Annually, the County holds a holiday campaign, which includes social media, bus advertisements, and events to encourage residents to have more environmentally friendly holiday practices, including using reusable shopping bags. More information about DEP’s public education program is available in Section 2.D.5 of this report.

Table 2.D-10 summarizes the County’s work towards the required removal and prevention of 225 tons of litter and debris from entering the storm drain system outside the Anacostia Watershed. This table also outlines both the removal and prevention of litter and debris Countywide and from the Anacostia Watershed. More detail about trash and litter reduction in the Anacostia Watershed is provided in the FY24 Countywide Stormwater TMDL Implementation Plan.

Table 2.D-10. Material Removed or Prevented from Entering Storm Drain System during FY24

Program	Tons Removed from Outside Anacostia Watershed	Tons Removed from Anacostia Watershed	Total Tons Removed from the County
Adopt-a-Road	21.89	2.93	24.81
Arterial street sweeping	309.42	143.70	453.12
DHCA Clean and Lien ^[1]	N/A	N/A	47.00
Illegal dumping enforcement	N/A	N/A	N/A
Inlet and conveyance system cleaning	7.66	17.80	25.46
Litter collected along roadside drainage areas	1.50	8.63	10.13
Trash Trap	N/A	0.01	0.01
Stream Steward volunteer cleanup program	3.19	1.31	4.50
Total removed:	390.66	174.37	565.02

^[1] This number includes trash removed from the Anacostia Watershed. The County is working with DHCA to separate out the totals by watershed for FY25.

DHCA = Montgomery County Department of Housing and Community Affairs

N/A = not applicable

2.D.4.k Changes in the Property Management and Maintenance Programs

During FY24, the County did not make changes to its Property Management and Maintenance programs affecting the overall pollutant reductions resulting from implementation of these programs.

2.D.5 Public Education

The Permit language of the County's MS4 Permit Part IV.D.5 Public Education is provided as follows:

<< The County shall continue to implement a public education and outreach program to reduce stormwater pollution and flooding. Education and outreach efforts may be integrated with other aspects of the County's activities. These efforts are to be documented and summarized in each annual report, with details on resources (e.g., personnel and financial) expended and method of delivery for education and outreach. The County shall implement a public outreach and education campaign that includes, but is not limited to:

- a. Maintaining a website with locally relevant stormwater management information and promoting its existence and use;
- b. Maintaining a compliance hotline or similar mechanism for public reporting of water quality complaints, including suspected illicit discharges, illegal dumping, spills, and flooding problems;
- c. Providing information to inform the general public about the benefits of:
 - i. Increasing water conservation;
 - ii. Residential and community stormwater management implementation and facility maintenance;
 - iii. Proper erosion and sediment control practices;
 - iv. Removing debris from storm drain inlets to prevent flooding;
 - v. Increasing proper disposal of household hazardous waste;
 - vi. Improving lawn care and landscape management (e.g., the proper use of herbicides, pesticides, and fertilizers, ice control and snow removal);
 - vii. Proper residential car care and washing;
 - viii. Litter reduction;
 - ix. Reducing, reusing, and recycling solid waste; and
 - x. Proper pet waste management.

The County shall conduct a minimum of 130 outreach efforts per year. These efforts may include distributing printed materials such as brochures or newsletters; electronic materials such as website pages mass media such as newspaper articles or public service announcements (radio or television); and conducting targeted workshops on stormwater management for the public. >>

The County maintains a robust public education program to reduce stormwater pollution and continues to operate and expand those program activities. This section provides a summary on the status of the County's MS4 Permit public education efforts. Public education program funding is provided in the NPDES MS4 Geodatabase, Fiscal Analysis Associated Table (MDE 2017; MDE 2021).

2.D.5.a Montgomery County Department of Environmental Protection Website

The Permit requires the County to maintain a website with locally relevant SWM information and promote its existence. The County's Clean Water Montgomery website has several pages dedicated to providing information on watershed restoration, stormwater, RainScapes, stream monitoring, and WQPC (DEP n.d.[a]). The DEP general website, which includes pages on watershed restoration,

sustainability, trash and recycling, and water supply and wastewater, had over 637,000 views in FY24 (DEP n.d.[b]). The My Green Montgomery online education portal continued as the news and communication arm of the DEP (My Green Montgomery n.d.).

DEP’s social media platforms continued to gain popularity during FY24, and water quality and recycling focused content was featured on all platforms throughout FY24. DEP’s public education programming provided social media posts on Facebook, Instagram, Twitter, YouTube, and Nextdoor.

2.D.5.b Compliance Hotline

The Permit requires the County to maintain a compliance hotline for public reporting of water quality complaints, including suspected illicit discharges, illegal dumping, spills, and flooding problems. The County meets this requirement by maintaining a call center that allows residents to call one number (311) for all concerns in the County, including surface water quality concerns. More information can be found on the 311 homepage (Montgomery County Public Information Office n.d.)

2.D.5.c Public Education and Outreach Program Efforts

The Permit requires that the County conduct a minimum of 130 outreach efforts per year. During FY24, the County conducted 659 of outreach efforts. These outreach efforts were provided by DEP, DPS, and MCDOT. Table 2.D-11 summarizes the County’s outreach efforts by the subjects listed in Part IV.D.5.c of the Permit, and Table 2.D-12 summarizes the delivery method of those outreach efforts. During FY24, DEP also released 1,122 social media posts, and Table 2.D-13 summarizes those by subject.

Table 2.D-11. Public Outreach Efforts during FY24

Public Education Topics	MS4 Permit Section	Number of Efforts
General water quality and watershed restoration	Part IV.D.5.c	80
Residential and community SWM implementation and facility maintenance	Part IV.D.5.c.ii	40
Improving lawn care and landscape management, including winter salt education	Part IV.D.5.c.vi	14
Litter reduction	Part IV.D.5.c.viii	25
Reducing, reusing, and recycling solid waste	Part IV.D.5.c.ix	295
Other environmental outreach	Not applicable	205
	Total:	659

Table 2.D-12. Public Education Delivery Methods during FY24

Delivery Method	Number of Outreach Efforts
Blog post	15
Compact fluorescent lamp exchange	90
E-newsletter	16
Fair and festivals	35
Giveaway (for example, reusable bag, plants, or tchotchke)	9
In-person presentation	203
Mailer	6
Media Press Event	1
Meeting (for example, public, board)	8
One-on-One discussion	2
Radio and TV	6
School	71
Tabling event	90
Training workshop	43
Virtual event	29
Volunteer event	10
Webinar	10
Other	15
Total:	659

Table 2.D-13. Social Media Efforts During FY24

Public Education Topics	MS4 Permit Section	Number of Posts
General water quality and watershed restoration	Part IV.D.5.c	130
Residential and community SWM implementation and facility maintenance	Part IV.D.5.c.ii	155
Proper disposal of household hazardous waste	Part IV.D.5.c.v	17
Lawn care and landscape management, including winter salt education	Part IV.D.5.c.vi	112
Proper residential car care and washing	Part IV.D.5.c.vii	3
Litter reduction	Part IV.D.5.c.viii	32
Solid waste reduction, reuse, and recycling	Part IV.D.5.c.ix	657
Proper pet waste management	Part IV.D.5.c.x	16
Total:		1,122

During FY24, the DEP continued to be the primary agency that provided environmental education and outreach to the County. The DEP events continued to focus on targeting specific audiences, increasing stormwater and water quality awareness, and encouraging residents to take specific environmentally friendly actions. Highlights from FY24 DEP public education events are listed as follows:

- **Tree Montgomery** – DEP’s Tree Montgomery program partnered with MCPS to plant nearly 1,400 shade trees at 27 schools in underserved communities throughout the County. One of the participating schools was S. Christa McAuliffe Elementary School. Over 500 students attended the school, and 73.5% have been eligible for Free and Reduced-price Meals at one time or another. Principal Wanda Coates shared her enthusiasm about the project at planting day, which was reported by MyMCMedia: “For a long time we have not had any shade...so they [the trees] are going to provide shade to our students who get extremely hot in the summertime and in the warmer months. So, we’re very excited!” (Shahzad 2023). The Live Infrastructure Manager for MCPS, Mr. Harris Trobman, reflected on his excitement about the partnership: “The partnership with Tree Montgomery has been transformative for MCPS to implement comprehensive and accessible tree planting that equips our schoolyards to be more equitable and resilient to climate change. While implementing these plantings, we have engaged hundreds of MCPS students at over 30 schools in climate actions that help foster future environmental stewards. We are excited to continue this impactful work with Tree Montgomery” (The MoCo Show 2023).
- **Resilience, Education, Action, Climate, Habitat (REACH) Hub** – DEP’s Tree Montgomery, RainScapes, outreach programs provided technical assistance to help establish the new REACH Hub and Urban Farm at A. Mario Loiederman Middle School in Wheaton.
- **School Cleanups** – In FY24, DEP partnered with MCPS in conjunction with the Anacostia Litter Reduction campaign for the first time to conduct school campus cleanups at 20 different schools.
- **Expanded Food Scraps Recycling** – In May 2024, DEP launched food scraps recycling drop-off locations at four existing farmers markets, which were intentionally selected to provide residents greater opportunities to bring their food scraps to DEP for recycling. These locations are in Bethesda, Derwood, Olney, and Silver Spring; three of these locations operate year-round, and the Derwood location operates between April to October.
- **Properly Manage Batteries to Reduce the Risk of Trash Fires Campaign** – In late 2023 and early 2024, DEP developed and continues its broad-based, multimedia education campaign designed to increase awareness that improperly disposed batteries can cause trash fires and should be recycled instead. This campaign, provided in English, Spanish, and Mandarin, began placements in Spring 2024 and is ongoing, and includes the following: 30- and 60-second cable television and web streaming public service announcements (PSAs); 30-second radio PSAs; print and out-of-home ads throughout the County; social media posts (Facebook, Instagram, and X); web-based media; added value placements and components; signage for placement on single-family recycling collection truck services the entire County; information in the Recycling and Refuse Collection Handbook distributed to single-family homes; electronic signage in County ABS stores; and more.

2.E Stormwater Restoration

The language of the County’s MS4 Permit Part IV. E, Stormwater Restoration, is provided as follows:

<< In compliance with §402(p)(3)(B)(iii) of the CWA, MS4 permits must require stormwater controls to reduce the discharge of pollutants to the MEP and such other provisions as the Department determines appropriate for the control of such pollutants. Additionally, by regulation at 40 CFR §122.44, BMPs and programs implemented pursuant to this permit must be consistent with applicable stormwater WLAs developed under EPA established or approved TMDLs (see list of EPA established or approved TMDLs attached and incorporated as Appendix A). The impervious acre restoration requirements and associated pollutant reductions described below for Montgomery County are consistent with Maryland’s Phase III Watershed Implementation Plan (WIP) for the Chesapeake Bay TMDL and 2025 nutrient load targets, and for local TMDL implementation targets described by the County in its TMDL Watershed Implementation Plans.

1. By November 4, 2026, Montgomery County shall commence and complete the restoration of 1,814 impervious acres that have not been treated to the MEP by implementing stormwater BMPs, programmatic initiatives, or alternative control practices in accordance with the 2021 Accounting Guidance.
2. By November 4, 2022, Montgomery County shall complete the stormwater BMPs, programmatic initiatives, or alternative control practices listed in the Year 1 BMP Portfolio provided in Appendix B. Montgomery County may replace individual practices listed in Appendix B with others that meet the requirements of the 2021 Accounting Guidance as long as the total restoration at the end of year one meets the implementation benchmark schedule in Table 1.

“Benchmark” as used in this permit is a quantifiable goal or target to be used to assess progress toward the impervious acre restoration requirement or WLAs, such as a numeric goal for stormwater control measure implementation. If a benchmark is not met, the County should take appropriate corrective action to improve progress toward meeting permit objectives. Benchmarks are intended as an adaptive management aid and generally are not considered to be enforceable.

3. Montgomery County may acquire Nutrient Credits for Total Nitrogen (TN), Total Phosphorus (TP), and Total Suspended Solids (TSS) in accordance with COMAR 26.08.11 to meet its impervious acre restoration requirement in PART IV.E.3 of this permit. For acquiring Nutrient Credits in place of impervious acre restoration, an equivalent impervious acre shall be based on reducing 18.08 pounds of TN, 2.23 pounds of TP, and 8,046 pounds of TSS. The maximum allowable credits obtained from trades with wastewater treatment plants shall not exceed 330 equivalent impervious acres restored.
4. Any Nutrient Credits acquired by Montgomery County for meeting the restoration requirements of this permit shall be maintained and verified in accordance with COMAR 26.08.11 and reported to the Department in annual reports unless they are replaced at a one to one acre ratio by local stormwater management BMPs, programmatic initiatives, or alternative control practices in accordance with the 2021 Accounting Guidance.
5. Montgomery County shall use the annual restoration benchmark schedule provided in Table 1 below to achieve its impervious acre implementation requirement by the end of the permit term.

Metric	Year 1	Year 2	Year 3	Year 4	Year 5
Cumulative Percent Impervious Acre Restoration Completed	20%	40%	60%	75%	100%

6. In each year’s annual report, Montgomery County shall:
- a. Submit to the Department a list of BMPs, programmatic initiatives, and alternative control practices to be completed in the following year to work toward meeting its impervious acre restoration benchmark:
 - i. The list of BMPs, programmatic initiatives, or alternative control practices shall be submitted in the Year 1 BMP Portfolio format provided in Appendix B; and
 - ii. Montgomery County may replace individual practices listed in its annual BMP Portfolio as long as the total implementation rate at the end of each year meets the annual restoration benchmark schedule in Table 1.
 - b. Evaluate progress toward meeting its annual restoration benchmark according to the schedule in Table 1 and adjust the benchmark appropriately based upon:
 - i. Actual BMP implementation rates; and
 - ii. Anticipated implementation rates and annual restoration benchmark schedule needed in the remaining years of this permit for meeting the final impervious acre restoration requirement by November 4, 2026. >>

2.E.1 2021 MS4 Permit Impervious Restoration Goal

The County’s MS4 Permit issued on November 5, 2021, requires the County to implement restoration practices in accordance with MDE’s 2021 accounting guidance, *Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated* (MDE 2021), to meet the allocated 1,814 IAs restoration goal by November 4, 2026. The County has various programs and initiatives to meet the restoration goal.

- **Capital improvement program (CIP)** – The DEP CIP program installs new BMPs, retrofits existing BMPs, and applies alternative practices such as stream restoration. New BMPs installations are typically constructed on public properties (for example, schools) or within public ROWs (Green Streets) in neighborhoods where space is limited. Existing BMPs are upgraded by increasing their capacity to trap and reduce stormwater pollution during storms to provide more water quality treatment. Stream restoration projects are often sited in areas where SWM is already in place or restoration projects are planned. Restoration techniques typically use natural materials such as rock, logs, and native plants to help slow stormwater flow. DEP includes native planting, wetland planting, and native trees where appropriate to maximize restoration benefits (DEP 2021).
- **Outfall stabilization** – MCDOT is responsible for maintaining the County’s storm drain system. MCDOT repairs and stabilizes County-owned storm drain outfalls using stream restoration techniques. While some sites are stabilized in response to public requests, MCDOT often partners with other agencies, such as DEP and M-NCPPC, to repair outfalls on public land.
- **Street trees** – MCDOT is charged with planting and maintaining trees planted in public ROWs. Residents can contact the County’s 311 call center to request tree planting and maintenance.

Maintenance activities include pruning, tree removal, stump removal, and tree preservation (MCDOT n.d.[a]).

- **RainScapes** – The DEP’s RainScapes program promotes and implements environmentally friendly landscaping and small-scale ESD projects on residential, institutional, and commercial properties. The program offers technical and financial assistance to encourage property owners to implement eligible RainScapes techniques, such as rain gardens, rain barrels or cisterns, conservation landscaping, pavement removal, or replacement with permeable pavements (DEP n.d.[d]).
- **Tree Montgomery** – Tree Montgomery is a program developed and implemented by DEP to plant large shade trees throughout the County. The program increases canopy cover and helps raise awareness of the benefits of trees. Trees planted under this program are funded by the Tree Canopy Law that was introduced by County Executive Isiah Leggett and passed in 2013 by the County Council (DEP n.d.[e]).
- **Clean Water Montgomery Watershed grants** – Since 2015, DEP has administered a watershed grant program through the CBT. The grant program funds projects that reduce pollutants through community-based restoration practices, as well as projects focused on public engagement through education, outreach, and stewardship (DEP n.d.[f]).
- **Street sweeping** – DEP administers an arterial street sweeping program in the County. The sweeping routes under this program are typically larger roads with more commercial activity and high traffic. The routes are swept once monthly, except for the spring and fall when a cycle is swept every 1 to 2 weeks.
- **Storm drain cleaning** – MCDOT maintains the County’s stormwater conveyance system. As a part of their stormwater maintenance program, MCDOT removes material from clogged inlets, storm drains, drainage ditches, and adjacent drainage areas. Material is typically removed by using a vacuum truck or by manual labor. Residents can report drainage concerns or request for maintenance through the County’s 311 call center (MCDOT n.d.[b]).

2.E.2 Progress towards 2021 Permit Impervious Restoration Goal

The County has continued to implement restoration projects since the 2010 restoration goal was met in anticipation of the Permit being reissued with a new restoration goal. All projects completed since the 2010 Permit impervious surface restoration (ISR) requirement was met in December 2018 can be credited towards the 2021 Permit restoration goal. By November 4, 2024, the County had completed restoration of 1,190 of the 1,814 acres restoration goal and report a completion rate of 66 percent for the Year 3 benchmark. The acres include projects carried over from 2018 and all work completed between FY19 and up to FY24. Table 2.E-1 reports the County’s restoration benchmark schedule. Table 2.E-2 provides the implementation by program and BMP type completed through FY24.

Table 2.E-1. Actual Annual Restoration Benchmark Schedule

Metric	Year 1 (Actual)	Year 2 (Actual)	Year 3 (Actual)	Year 4 (Anticipated)	Year 5 (Anticipated)
Cumulative percent IA restoration completed	60% ^[1]	63%	66%	73%	100%

^[1] Year 1’s IA restoration credit includes six carryover projects from 2018 and all restoration efforts between FY19 and FY22.

Figure 2.E-1. Existing and Expected Progress of Meeting the 2021 Permit Restoration Goal

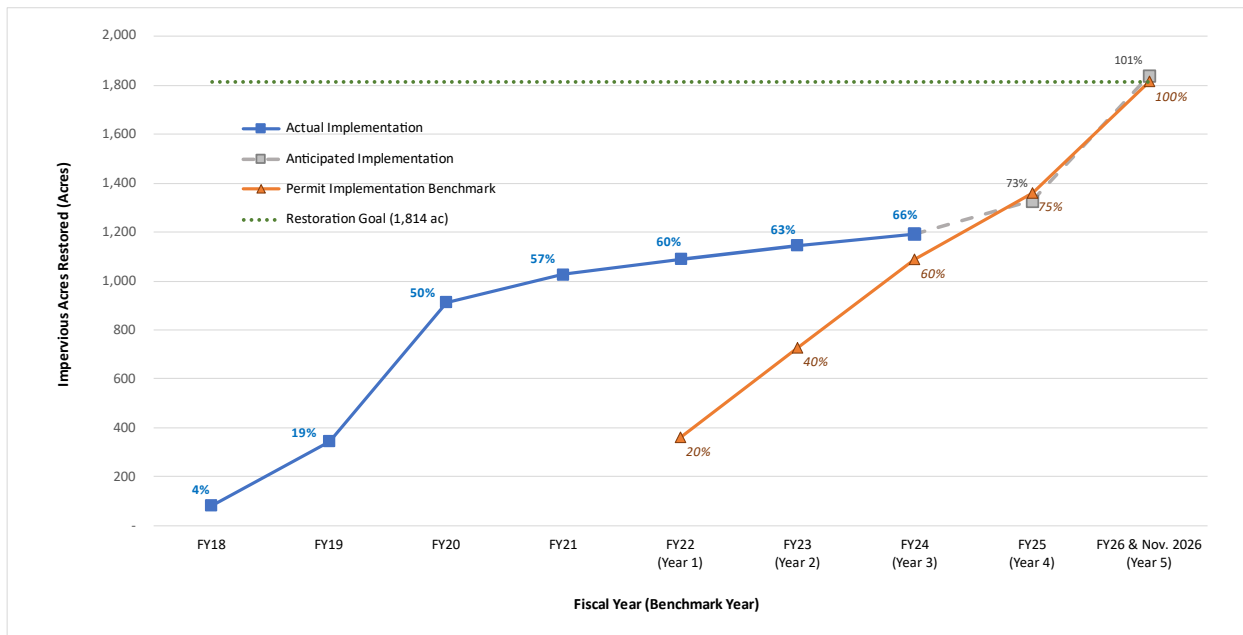


Table 2.E-2. Restoration Implementation Completed through FY24

Restoration Program Practices and BMPs	Number	Impervious Acres Treated
Street Sweeping ^[1]	Not applicable	44
Storm Drain Vacuuming ^[1]	Not applicable	5
CWM Watershed Grants – ESD	42	3
RainScapes – ESD	973	13
Tree Montgomery and RainScapes – Urban Tree Canopy	12,171	34
Street Trees	11,882	48
CIP – ESD/Low-impact Development	73	15
CIP – Pond Retrofits	12	408
CIP – Outfall Stabilization	19	44
CIP – Sand Filter	1	6
CIP – Stream Restoration	9	548
CIP – Wetland Restoration	3	22
Total	25,185	1,190

^[1] Street sweeping and storm drain vacuuming is an annual practice that is averaged over the 5-year Permit term. This level of effort will need to continue in Years 3 through 5 to maintain the restoration reported in Year 2.

MDE requested the following items be addressed in the County’s FY23 MS4 Annual Report:

“After review, the Department has determined that the County:

- Provide calculations for the two outfall stabilization projects totaling ~11 acres for confirmation.
- The Chesapeake Bay Program (CBP) expert panels recommend that an extensive project file be maintained for each stream restoration project. Specifically:
 - This should include as-built drawings, credit calculations, photos, post-construction monitoring, inspection records, maintenance agreement, and relevant data for all protocol calculations. This information is necessary for local jurisdictions to verify credit calculations, and noted in Appendix C of the Department’s 2023 Draft Supplement to Geodatabase Design and User’s Guide
 - For the first year, a new stream restoration project is reported in the MS4 Geodatabase, the Department requests that the County include more specific information describing pre- and post- site conditions, project design, and all credit calculations.”

The County has compiled documentation for the two outfall stabilization projects reported in the FY23 annual report and all completed outfall stabilization and restoration projects credited using the stream restoration protocol in the geodatabase.

The County continue to make progress towards meeting the restoration goal in FY24. Table 2.E-5 summarizes projects completed during FY24, Year 3 of the Permit, and Table 2.E-6 summarizes projects to be completed in FY25, Year 4 of the Permit. Details of all completed, under construction, and planned projects can be found in the NPDES MS4 Geodatabase. Structural and ESD BMPs are reported in the BMP and BMPDrainageArea feature classes. Stream restoration and outfall stabilization projects are reported in AltBMPLine feature class. Alternative BMPs with a point location (such as septic system pumping) are reported in AltBMPPoint feature class. Land use change alternative BMPs (such as tree planting) are reported in AltBMPPoly feature class.

Table 2.E-3. Year 1 Completed Projects for the 2021 Permit

BMP Name	BMP Type	Number of BMPs	Impervious Acres Treated	Length Restored (feet)/Lane Miles (miles)/Mass Loading (pounds) ^[1]
Annual BMP – Street sweeping ^[2]	Vacuum street sweeping	Not applicable	34.61 ^[2]	221.85 miles
Annual BMP – Storm drain cleaning	Storm drain vacuuming	Not applicable	3.90 ^[2]	45,920 pounds
Avenel Golf Course (TPC at Avenel)	Extended detention structure, wet	1	86.10	Not applicable
Bedfordshire	Extended detention structure, wet	1	25.44	Not applicable
B’Nai Israel Regional Pond	Retention pond (wet pond)	1	88.90	Not applicable
Derwood Station (Crabbs Branch SVP)	Extended detention wetland	1	5.26	Not applicable
Derwood Station (Crabbs Branch SVP)	Extended detention wetland	1	4.98	Not applicable
Fallsreach HOA	Extended detention structure, wet	1	25.44	Not applicable
Flints Grove HOA	Extended detention structure, wet	1	31.73	Not applicable
Greencastle Lakes (CA)	Retention pond (wet pond)	1	33.88	Not applicable
Hunters Woods III SWM (Cabin Branch SVP)	Retention pond (wet pond)	1	11.39	Not applicable
Kemp Mill Forest (Ravenswood HOA)	Shallow marsh	1	12.16	Not applicable
Little Falls Library	Bioretention	1	0.80	Not applicable
Montgomery Village (Horizon Run Condominium)	Extended detention structure, wet	1	10.97	Not applicable
Northwood Presbyterian Church	Micro-bioretention	1	0.52	Not applicable
Potomac Chase (Muddy Branch SVU)	Extended detention structure, wet	1	36.65	Not applicable
Quail Valley #2 (Cabin Branch SVP)	Sand filter	1	6.29	Not applicable
The Plantations (Plantations Two CA)	Extended detention structure, wet	1	33.77	Not applicable
Watkins Meadow	Extended detention structure, wet	1	18.55	Not applicable
Sherwood Elementary School	Bio-swale	1	0.23	Not applicable
Sherwood Elementary School	Micro-bioretention	1	0.18	Not applicable
University Towers	ESD	12	4.12	Not applicable

BMP Name	BMP Type	Number of BMPs	Impervious Acres Treated	Length Restored (feet)/Lane Miles (miles)/Mass Loading (pounds) ^[1]
Broad Run SR	Stream restoration	1	217.00	11,785 feet
Fallsreach SR	Stream restoration	1	20.00	1,000 feet
Flints Grove SR	Stream restoration	1	24.00	1,200 feet
Glenstone SR – Greenbriar Branch (Phase 2)	Stream restoration	1	157.30	7,865 feet
Glenstone SR – Sandy Branch (Phase 3)	Stream restoration	1	84.78	4,119 feet
Grosvenor Tributary – Luxmanor SR (M-NCPPC)	Stream restoration	1	12.85	500 feet
Quail Valley 2 SR	Stream restoration	1	3.60	180 feet
Stoneybrook Tributary SR (M-NCPPC)	Stream restoration	1	10.10	2,525 feet
10205 Hatherleigh Drive	Outfall stabilization	1	1.10	55 feet
10617 Stable Lane	Outfall stabilization	1	2.60	130 feet
614 Bennington Drive	Outfall stabilization	1	1.40	70 feet
9100 Charred Oak Drive (Site 2)	Outfall stabilization	1	2.00	100 feet
9124 Charred Oak Drive (Site 1)	Outfall stabilization	1	2.94	147 feet
928 Windmill Lane	Outfall stabilization	1	0.38	19 feet
Berkshire Drive at Aubinoe Farm Drive	Outfall stabilization	1	0.80	40 feet
Glen Road	Outfall stabilization	1	4.00	200 feet
Hampden Street	Outfall stabilization	1	4.00	200 feet
Kemp Mill Road	Outfall stabilization	1	2.00	100 feet
Lockridge Drive	Outfall stabilization	1	2.68	134 feet
Margate Road	Outfall stabilization	1	2.72	136 feet
Whisperwood Lane	Outfall stabilization	1	2.84	142 feet
Woodbine Drive at Beach Drive	Outfall stabilization	1	3.60	180 feet
Tree Montgomery (FY19)	Urban tree canopy	531	1.49	Not applicable

BMP Name	BMP Type	Number of BMPs	Impervious Acres Treated	Length Restored (feet)/Lane Miles (miles)/Mass Loading (pounds) ^[1]
Tree Montgomery (FY20)	Urban tree canopy	986	2.76	Not applicable
Tree Montgomery (FY21)	Urban tree canopy	1,900	5.33	Not applicable
Tree Montgomery (FY22)	Urban tree canopy	1,578	4.42	Not applicable
Street Trees (FY19)	Street tree	1,948	7.79	Not applicable
Street Trees (FY20)	Street tree	1,823	7.29	Not applicable
Street Trees (FY21)	Street tree	1,709	6.84	Not applicable
Street Trees (FY22)	Street tree	1,668	6.67	Not applicable
RainScapes (FY19)	ESD	53	0.24	Not applicable
RainScapes (FY20)	ESD	151	1.94	Not applicable
RainScapes (FY21)	ESD	200	2.00	Not applicable
RainScapes (FY22)	ESD	197	3.94	Not applicable
Clean Water Montgomery Watershed Grants (FY19)	ESD	4	0.21	Not applicable
Clean Water Montgomery Watershed Grants (FY20)	ESD	15	0.90	Not applicable
Clean Water Montgomery Watershed Grants (FY21)	ESD	2	0.22	Not applicable
Clean Water Montgomery Watershed Grants (FY22)	ESD	8	0.05	Not applicable
Total:		12,723	1,091	

^[1] These include operation and maintenance BMPs and upland BMPs with no associated length, lane miles, or mass loading metric.

^[2] Street sweeping and Storm drain cleaning is an annual practice that is averaged over the 5-year Permit term. Credit is subjected to change depending on changes in the level of effort.

CA = community/condo association

SR = stream restoration

SVP = Stream Valley Park

SVU = stream valley unit

TPC = Tournament Players Club

Table 2.E-4. Year 2 Completed Projects for the 2021 Permit

BMP Name	BMP Type	Number of BMPs	Impervious Acres Treated	Length Restored (feet)/ Lanes Miles (miles)/ Mass Loading (pounds) ^[1]
Annual BMP – Street sweeping	Vacuum Street Sweeping	Not applicable	42.11 ^[2]	335.20 miles
Annual BMP – Storm drain cleaning	Storm Drain Vacuuming	Not applicable	5.49 ^[2]	83,240 pounds
Glenmont Forest Green Streets	ESD	52	8.10	Not applicable
Quail Valley I	Retention Pond (Wet Pond)	1	5.28	Not applicable
Glenstone SR – Lake Potomac Dr (Phase 4)	Outfall Stabilization	1	8.70	195 feet
9315 Hollyoak Ct Outfall Repair	Outfall Stabilization	1	2.04	169 feet
Tree Montgomery	Urban Tree Canopy	3,932	9.5	Not applicable
Street Trees	Street Tree	2,265	9.06	Not applicable
RainScapes	ESD	208	2.18	Not applicable
Watershed Grants	ESD	7	0.55	Not applicable
Total:		5,927	93	

^[1] These include operation and maintenance BMPs and upland BMPs with no associated length, lane miles, or mass loading metric.

^[2] Street sweeping is an annual practice that is averaged over the 5-year Permit term. Credit is subjected to change depending on changes in the level of effort.

Table 2.E-5. Year 3 Completed Projects for the 2021 Permit

BMP Name	BMP Type	Number of BMPs	Impervious Acres Treated	Length Restored (feet)/ Lane Miles (miles)/ Mass Loading (pounds) ^[1]
Annual BMP – Street sweeping	Vacuum Street Sweeping	Not applicable	44.61 ^[2]	335.20 miles
Annual BMP – Storm drain cleaning	Storm Drain Vacuuming	Not applicable	5.10	50,910 pounds
Clearspring Manor SR	Stream Restoration	1	18.16	580 feet
Daniel Road	Outfall Stabilization	1	0.02	253 feet
Glenallan Ave	Outfall Stabilization	1	0.02	270 feet
Ancient Oak	Outfall Stabilization	1	0.64	84 feet
Fairfax Road	ESD	1	0.11	Not applicable
Fairfax Road	ESD	1	0.21	Not applicable
Spruell Drive Pavement Removal	Pavement Removal	1	0.17	Not applicable
Tree Montgomery	Urban Tree Canopy	3,784	10.60	Not applicable
Street Trees	Street Tree	2,469	9.88	Not applicable
RainScapes	ESD	154	2.52	Not applicable
Watershed Grants	ESD	6	0.15	Not applicable
Total:		6,420	92	

^[1] These include operation and maintenance BMPs and upland BMPs with no associated length, lane miles, or mass loading metric.

^[2] Street sweeping is an annual practice that is averaged over the 5-year Permit term. Credit is subjected to change depending on changes in the level of effort.

Table 2.E-6. Proposed Projects to be Completed in Year 4 of the 2021 Permit

BMP Name	BMP Type	Number of BMPs	Impervious Acres Treated	Length Restored (feet)/ Lane Miles (miles)/ Mass Loading (pounds) ^[1]
Annual BMP – Street sweeping	Vacuum Street Sweeping	Not applicable	44.61 ^[2]	335.20 miles
Annual BMP – Storm drain cleaning	Storm Drain Vacuuming	Not applicable	4.80	Not applicable
Clearspring Manor	Extended Detention Structure, Wet	1	23.73	Not applicable
Montgomery County Airpark	Extended Detention Structure, Wet	1	60.45	Not applicable
Watkins Mill	Retention Pond (Wet Pond)	1	8.39	Not applicable
Glenallan Tributary SR	Stream Restoration	1	17.31	1,725
Oaks Landfill Reforestation (Phase 1 – North Berm - Area 5a)	Reforestation	1	4.40	Not applicable
Oaks Landfill Reforestation (Phase 1 – North Berm - Area 5b)	Reforestation	1	6.60	Not applicable
Tree Montgomery	Urban Tree Canopy	3,000	8.40	Not applicable
Street Trees	Street Tree	1,500	5.90	Not applicable
RainScapes	ESD	TBD	1.60	Not applicable
Total:		4,506	188	

^[1] These include operation and maintenance BMPs and upland BMPs with no associated length, lane miles, or mass loading metric.

^[2] Street sweeping is an annual practice that is averaged over the 5-year Permit term. Credit is subjected to change depending on changes in the level of effort.

2.F Countywide Total Maximum Daily Load Stormwater Implementation Plan

The Permit language of the County's MS4 Permit Part IV.F, Countywide TMDL Stormwater Implementation Plan, is provided as follows:

- <<1. Where Montgomery County has submitted an implementation plan for a TMDL identified in Appendix A and that plan has yet to be approved, the County shall, within one year of the effective date of this permit, address all outstanding comments needed for the Department's approval of the plan.
2. Within one year of EPA's approval or establishment of a new TMDL, Montgomery County shall submit an implementation plan to the Department for approval. The TMDL implementation plan shall be based on the Department's TMDL analyses, or equivalent and comparable Montgomery County water quality analyses, that includes:
 - a. A list of stormwater BMPs, programmatic initiatives, or alternative control practices that will be implemented to reduce pollutants for the TMDL;
 - b. A description of the County's analyses and methods, and how they are comparable with the Department's TMDL analyses; and
 - c. Final implementation dates and benchmarks for meeting the TMDL's applicable stormwater WLA. Once approved by the Department, any new TMDL implementation plan shall be incorporated in the Countywide TMDL Stormwater Implementation Plan and subject to the annual progress report requirements under PART IV.F.3 of this permit.
3. For all TMDLs and WLAs listed in Appendix A, the County shall annually document, in one Countywide Stormwater TMDL Implementation Plan, updated progress toward meeting these TMDL WLAs. This Countywide Stormwater TMDL Implementation Plan shall include:
 - a. A summary of all completed BMPs, programmatic initiatives, alternative control practices, or other actions implemented for each TMDL stormwater WLA;
 - b. An analysis and table summary of the net pollutant reductions achieved annually and cumulatively for each TMDL stormwater WLA;
 - c. An updated list of proposed BMPs, programmatic initiatives, and alternative control practices, as necessary, to demonstrate adequate progress toward meeting the Department's approved benchmarks and final stormwater WLA implementation dates; and
 - d. Updates on the County's efforts to reduce trash, floatables, and debris, and show progress toward achieving the annual trash reduction allocation required by the Anacostia trash TMDL. The updates shall describe the status of trash elimination efforts including resources (e.g., personnel and financial) expended and the effectiveness of all program components including:
 - i. Quantifying annual trash reductions using the Department's TMDL analysis or an equivalent and comparable County trash reduction model;
 - ii. The public education and outreach strategy to initiate or increase residential and commercial recycling rates, improve trash management, and reduce littering; and

- iii. An annual evaluation of the local trash reduction strategy including any modifications necessary to improve source reduction and proper disposal.
4. Montgomery County shall provide continual outreach to the public and other stakeholders, including other jurisdictions or agencies holding stormwater WLAs in the same watersheds, regarding its TMDL stormwater implementation plans. Montgomery County shall solicit input from the public, collaborate with stakeholders, and incorporate any relevant comments that can aid in achieving local stormwater WLAs. To allow for public participation, Montgomery County shall:
 - a. Maintain a list of interested parties for notification of TMDL development actions;
 - b. Provide notice on the County’s webpage outlining how the public may obtain information on the development of TMDL stormwater implementation plans and opportunities for comment;
 - c. Provide copies of TMDL stormwater implementation plans to interested parties upon request;
 - d. Allow a minimum 30-day comment period before finalizing TMDL stormwater implementation plans; and
 - e. Document in final TMDL stormwater implementation plans how the County provided public outreach and adequately addressed all relevant comments. >>

2.F.1 Total Maximum Daily Load Stormwater Implementation Plan Updates

The 2021 Permit requires the County to address all outstanding comments on implementation plans for TMDLs identified in Appendix A of the Permit and to submit updated TMDL Implementation Plans to MDE for approval within one year of the Permit’s effective date. The following updated draft local TMDL Implementation Plans were provided to MDE on December 23, 2022, with the FY22 MS4 Annual Report:

- *Anacostia River Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Nutrients, Sediment, and Trash* (DEP 2022a)
- *Cabin John Creek Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Sediment* (DEP 2022b)
- *Lower Monocacy River Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Phosphorus and Sediment* (DEP 2022c)
- *Potomac River Montgomery County Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Sediment* (DEP 2022d)
- *Rock Creek Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Phosphorus and Sediment* (DEP 2022e)
- *Rocky Gorge Reservoir and Triadelphia Reservoir Watersheds TMDL Stormwater Wasteload Allocation Implementation Plan for Phosphorus and Sediment* (DEP 2022f)
- *Seneca Creek Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Sediment* (DEP 2022g)

The County received approval for all submitted TMDL Implementation Plans on December 28, 2023, except for the Anacostia River Watershed TMDL Implementation Plan. The updated polychlorinated biphenyl (PCB) TMDL implementation plans were submitted to MDE in August 2024. The County is also working on updating TMDL implementation plans for bacteria which are being prepared in accordance with *Guidance for Developing Bacteria TMDL (Total Maximum Daily Load) Stormwater Wasteload*

Allocation (SW-WLA) Watershed Implementation Plans (WIPs) (MDE 2022a). The County expects the updated plans will be provided to MDE in early 2025.

2.F.2 New Total Maximum Daily Load Stormwater Implementation Plans

The 2021 Permit requires the County to develop and submit an implementation plan to MDE for approval within 1 year of the U.S. Environmental Protection Agency's (EPA's) approval or establishment of a new TMDL. No TMDLs assigning stormwater WLAs to the County's MS4 were approved by the EPA during FY24.

2.F.3 Countywide Stormwater Total Maximum Daily Load Implementation Plan

The County submitted the FY24 Countywide Stormwater TMDL Implementation Plan to MDE in December 2024.

2.F.4 Public and Stakeholder Outreach

Public outreach and stewardship play an important role in improving water quality conditions. The County is committed to continuing and expanding programs and activities to educate and involve the community, with focused efforts to provide outreach to culturally diverse communities. The County will provide notice on the County's website, as well as to interested parties on the final updated local TMDL Implementation Plans once MDE has approved the Plans.

2.G Assessment of Controls

The Permit language of the County's MS4 Permit Part IV.G, Assessment of Controls, is provided as follows:

<<Montgomery County shall conduct BMP effectiveness and watershed assessment monitoring, and polychlorinated biphenyls (PCB) source tracking for assessing progress toward improving local water quality and restoring the Chesapeake Bay. The *2021 MS4 Monitoring Guidelines: BMP Effectiveness and Watershed Assessments*, (hereafter 2021 Monitoring Guidelines) shall be referenced for addressing the technical guidelines and requirements outlined below.

1. BMP Effectiveness Monitoring: By March 5, 2022, or by July 1 of each year, the County shall notify the Department which option it chooses for BMP effectiveness monitoring. The two options are:
 - a. The County shall collaborate with the Department in a Pooled Monitoring Advisory Committee administered by the Chesapeake Bay Trust (CBT) for determining monitoring needs and selecting appropriate monitoring studies. To implement the required monitoring, the County shall pay \$100,000, or an amount to be proposed by the jurisdiction based on demonstrated past permit monitoring expenditures, annually into a pooled monitoring CBT fund. Enrollment in the program shall be demonstrated through a memorandum of understanding (MOU) between the County CBT by September 1 of each year. The terms of the BMP effectiveness MOU are described in the 2021 Monitoring Guidelines. The County shall remain in the program for the duration of this permit term; or
 - b. The County shall continue monitoring the Breewood Tributary or select and submit for the Department's approval a new BMP effectiveness study for monitoring by March 5, 2022. Monitoring activities shall occur where the cumulative effects of watershed restoration activities, performed in compliance with this permit, can be assessed. The minimum criteria for chemical, biological, and physical monitoring are as follows:
 - i. Chemical Monitoring:
 - Twelve (12) storm events shall be monitored per year at each monitoring location with at least two occurring per quarter. Quarters shall be based on the calendar year. If exceptional weather patterns (e.g., dry weather periods) or other circumstances (e.g., equipment failures) occur during the reporting year, the County shall provide documentation of such circumstance(s);
 - Discrete samples of stormwater flow shall be collected at the monitoring stations using automated or manual sampling methods;
 - At least three (3) samples determined to be representative of each storm event shall be submitted to a laboratory for analysis according to methods listed under 40 CFR Part 136, and event mean concentrations (EMCs) shall be calculated;
 - Baseflow sampling shall occur quarterly at the mid-point of each season (e.g., February 15 for the first quarter, May 15 for the second quarter);
 - Stormwater flow and baseflow measurements shall be recorded at the outfall and in-stream stations for the following parameters:
 - Total Suspended Solids (TSS)
 - Bacteria (*E.coli* or *Enterococcus* spp.)
 - Chloride

- Discharge (flow)
 - Biochemical Oxygen Demand (BOD₅) or Total Organic Carbon (TOC)
 - Orthophosphate
 - Total Nitrogen (TN)
 - Nitrate + Nitrite
 - Total Ammonia (sewer signal)
 - Total Phosphorus (TP)
- Continuous measurements shall be recorded for the parameters listed below at the in-stream monitoring station or other practical location based on the approved study design:
 - Temperature
 - pH
 - Discharge (flow)
 - Turbidity
 - Conductivity
 - Data collected from stormwater, baseflow, and continuous monitoring shall be used to estimate annual and seasonal pollutant loads and reductions, and for the calibration of watershed assessment models; and
 - If the County elects to continue monitoring the Breewood Tributary, or selects a new BMP effectiveness study for monitoring, the County shall submit a revised sampling plan for approval to address the new monitoring parameters provided above with the first annual report. An approved sampling plan under a prior MS4 permit for the County shall continue until the Department approves a new sampling plan proposed under this permit.
- ii. Biological Monitoring:
- Benthic macroinvertebrate samples shall be gathered each spring between the outfall and in-stream stations or other practical locations based on a Department approved study design; and
 - The County shall use the Maryland Biological Stream Survey (MBSS) sampling protocols for biological and stream habitat assessment.
- iii. Physical Monitoring
- A geomorphologic stream assessment shall be conducted between the outfall and in-stream monitoring locations or in a reasonable area based on the approved monitoring design. This assessment shall include annual comparison of permanently monumented stream channel cross-sections and the stream profile; and
 - A hydrologic and/or hydraulic model shall be used (e.g., TR-20, HEC-2, HEC-RAS, HSPF, SWMM) in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.
- iv. Annual Data Submittal: The County shall describe in detail its monitoring activities for the previous year and include the following:
- EMCs submitted on the Department’s long-term monitoring MS4 Geodatabase as specified in PART V below;

- Chemical, biological, and physical monitoring results and a combined analysis for the approved monitoring locations;
 - Any available analysis of surrogate relationships with the above monitoring parameters; and
 - Any requests and accompanying justifications for proposed modifications to the monitoring program.
2. Watershed Assessment Monitoring: By March 5, 2022, or by July 1 of each year, the County shall notify the Department which option it chooses for watershed assessment monitoring. The County must implement one of the two options as follows:
- a. The County shall collaborate with the Department in a Pooled Monitoring Advisory Committee administered by CBT for determining appropriate watershed assessment monitoring. To implement the required monitoring, the County shall pay up to \$197,968 annually into a pooled monitoring CBT fund. The final cost will be dictated by the chosen proposal. Enrollment in the program shall be demonstrated through an MOU between the County and CBT to be signed by September 1 of each year. The terms of the Watershed Assessment Monitoring MOU are described in the 2021 Monitoring Guidelines. The County shall remain in the program for the duration of this permit term; or
 - b. The County shall submit a comprehensive plan for watershed assessment and trend monitoring by March 5, 2023 related to stream biology and habitat, bacteria, and chlorides and commence monitoring upon the Department’s approval. The plan shall follow the 2021 Monitoring Guidelines and include:
 - i. Biological and habitat assessment monitoring at randomly selected stream sites using MBSS protocols;
 - ii. Bacteria (i.e., *E.coli*, *Enterococcus* spp., or fecal coliform) monitoring; and
 - iii. Chloride assessments at two locations.
3. PCB Source Tracking: Within one year of permit issuance, Montgomery County shall develop a PCB source tracking monitoring plan for all applicable TMDL WLAs where watershed reductions are required to meet water quality standards. Montgomery County shall submit results and provide updates annually on the monitoring efforts.>>

The 2021 Permit requires the County to notify MDE on a selected option for BMP Effectiveness and Watershed Assessment Monitoring. A letter to Lee Currey, director of MDE’s Science Services Administration informed MDE on March 4, 2022, that the County will continue to monitor the Breewood Tributary through the end of CY22 and then will enter into a pooled monitoring agreement with CBT on July 1, 2023. The letter also stated that the County will conduct the required watershed assessment and trend monitoring. MDE approved this plan in their July 22, 2022, letter.

2.G.1 Best Management Practice Effectiveness Monitoring

The County concluded the Breewood Tributary monitoring at the end of CY22 and entered into the Pooled Monitoring Committee administered by the CBT on October 13, 2023.

2.G.2 Watershed Assessment Monitoring

The County is responsible for fulfilling the 2021 MS4 Permit watershed assessment and trend monitoring requirements. The County provided MDE with a comprehensive plan for watershed

assessment and trend monitoring in February 2023. DEP addressed MDE’s comments and submitted a revised plan on December 21, 2023. The plan was approved by MDE on January 24, 2024, while in CY2024, the County began chloride monitoring at two sites, engaged contractual support to perform bacteria monitoring in four watersheds, and continued Countywide biological and habitat monitoring.

2.G.2.a Biological and Habitat Assessment Monitoring

In FY24, DEP monitored benthic macroinvertebrates across County watersheds. FY24 data collection represents the third year of the fifth round of monitoring. During this monitoring season, 43 out of 44 12-digit watersheds were sampled for physical chemistry, qualitative habitat, and benthic macroinvertebrates in accordance with Maryland Biological Stream Survey field protocols. Samples will be subsampled in accordance with Maryland Biological Stream Survey laboratory protocols and will be identified by benthic taxonomists with the appropriate Society of Freshwater Science certifications over the next several months. These data will be available for reporting and analysis for FY25 reporting. The single 12-digit watershed that was not sampled, Furnace Branch, does not contain any perennial streams at the 1:24,000 scale within County boundaries.

2.G.2.b Bacteria Monitoring

In FY24, the County finalized their bacteria monitoring plan and engaged a consultant, KCI, to sample the identified sites in the four TMDL watersheds (Anacostia, Cabin John Creek, Lower Monocacy, and Rock Creek). Sampling will begin in the late summer or fall of FY25, and data will be reported in FY25.

2.G.2.c Chloride Assessments

In FY24, County staff deployed two continuous conductivity loggers in the Watt’s Branch watershed as described in the County’s approved monitoring plan. After each monitoring site was established with loggers deployed, County staff returned approximately every 6 weeks to download data and confirm that loggers were secure and functioning. Data is being compiled and reviewed for quality assurance purposes and will be reported in FY25.

2.G.3 PCB Source Tracking

The Permit requires submittal within 1 year of Permit issuance (or by November 5, 2022) of a PCB source tracking monitoring plan for all applicable TMDL WLAs where watershed reductions are required to meet water quality standards. In August 2024, the County submitted the updated TMDL implementation plans for PCB, which was prepared in accordance with *Guidance for Developing Local PCB TMDL (Total Maximum Daily Load) Stormwater Wasteload Allocation (SW-WLA) Watershed Implementation Plans (WIPs)* (MDE 2022b).

2.H Program Funding

The Permit language of the County’s MS4 Permit Part IV.H, Program Funding, is provided as follows:

<<1. Annually, a fiscal analysis of the capital, staffing, operation, and maintenance expenditures necessary to comply with all conditions of this permit shall be submitted by Montgomery County as required in PART V below.

2. Adequate program funding to comply with all conditions of this permit shall be maintained. Lack of funding does not constitute a justification for noncompliance with the terms of this permit.>>

The MS4 Permit requires the County to submit the annual fiscal analysis of the capital, staffing, operation, and maintenance expenditures by providing the expenditures for the reporting period and proposed budget for the upcoming year. This information is provided in database format in the NPDES MS4 Geodatabase, Fiscal Analysis Associated Table (MDE 2017; MDE 2021).

2.H.1 Expenditures and Appropriated Budget

During FY24, reported expenditures associated with all MS4 Permit requirements were \$80,190,495, which marked an increase of 14 percent over FY23 MS4 Permit expenditures. The increase in expenditures is due to winter weather in FY24 and increased watershed restoration capital expenditures. Winter weather activities and expenditures were significantly reduced in FY23, which is the primary reason FY24 expenditures were higher. Watershed restoration capital expenditures will continue to increase as the County works toward accomplishing the ISR goal.

Table 2.H-1 provides the total capital and operating expenditures for the FY24 reporting period. The expenditure data presented in Table 2.H-2 and NPDES MS4 Geodatabase, Fiscal Analysis Associated Table (MDE 2017; MDE 2021), represent the FY24 expenditures for MS4 Permit implementation by DEP, MCDOT, DGS, DPS, DHCA, and MCPS. The following programs and efforts are included:

- Operating and personnel expenditures for SWM, ESC, IDDE, property management, public education, stormwater restoration, TMDL, Assessment of Controls, and DEP administrative and reporting expenditures.
- Capital and personnel expenditures from SWM, property management, stormwater restoration, and TMDL.
- Debt service payment for DEP and MCDOT CIP restoration and outfall projects.

Table 2.H-1. FY24 Operating and Capital Expenditures

Expenditure Type	Expenditure
Operating ^[1]	\$65,210,276
Capital ^[2]	\$14,980,219
Total expenditures:	\$80,190,495

Notes:

^[1] Operating expenditures are the same as what is provided in NPDES MS4 Geodatabase, Fiscal Analysis Associated Table, OP_COST field (MDE 2017; MDE 2021).

^[2] Capital expenditures are the same as what is provided in NPDES MS4 Geodatabase, Fiscal Analysis Associated Table, CAP_COST field (MDE 2017; MDE 2021).

The funding for the operating and capital budget includes revenue generated from the WQPC, BMP monitoring fee, tree canopy fee, stormwater waiver fee, and carryout bag tax.

The FY25 appropriated budget is provided in Table 2.H-2 and in NPDES MS4 Geodatabase, Fiscal Analysis Associated Table (MDE 2017; MDE 2021). This information represents the appropriated budget in FY25 for MS4 Permit implementation by County DEP, MCDOT, DGS, DPS, and DHCA. The FY25 budget information was gathered for the programs previously listed for the expenditure fiscal analysis.

Table 2.H-2. FY25 Appropriated Budget

Appropriated Type	Budget
Operating ^[1]	\$61,550,434
Capital ^[2]	\$30,953,000
Total FY25 budget:	\$92,503,434

Notes:

^[1] FY25 appropriated operating budget is the same as what is provided in NPDES MS4 Geodatabase, Fiscal Analysis Associated Table, OP_BUDGET field (MDE 2017; MDE 2021).

^[2] FY25 appropriated capital budget is the same as what is provided in NPDES MS4 Geodatabase, Fiscal Analysis Associated Table, CAP_BUDGET field (MDE 2017; MDE 2021).

2.H.2 Financial Assurance Plan

On December 20, 2024, the County submitted a draft biennial Financial Assurance Plan (FAP) to MDE. Maryland law requires Phase I MS4 jurisdictions to project annual and 5-year costs to meet the MS4 Permit requirements. The FAP must demonstrate the jurisdiction has sufficient funding in its current and subsequent FY budgets to meet its estimated costs for the 2-year period immediately following the FAP filing date. MDE MS4 guidance requires the FAP to include annual and projected 5-year costs needed to meet the Permit’s ISR goal. The County’s draft FAP demonstrates its commitment to fulfill the requirements of the MS4 Permit ISR requirement.

The expenditures and revenue data provided to MDE in the County’s draft FAP use different assumptions than the information required for this MS4 annual report. While the assumptions are based on the same information, they cannot be directly compared.

3. References

Maryland Department of Environmental Protection (MDE). 2000. *2000 Maryland Stormwater Design Manual*. Vol. I and II. October. Revised May 2009.

Maryland Department of Environmental Protection (MDE). 2017. *National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4), Geodatabase Design and User's Guide*. Version 1.2. May.

Maryland Department of Environmental Protection (MDE). 2021. *National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4), Geodatabase Design and User's Guide*. Version 1.2 Draft Updates. November.

Maryland Department of the Environment (MDE). 2021. *Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits*. November.

<https://mde.maryland.gov/programs/Water/StormwaterManagementProgram/Documents/Final%20Determination%20Dox%20N5%202021/MS4%20Accounting%20Guidance%20FINAL%2011%2005%202021.pdf>.

Maryland Department of the Environment (MDE). 2022a. *Guidance for Developing Bacteria TMDL (Total Maximum Daily Load) Stormwater Wasteload Allocation (SW-WLA) Watershed Implementation Plans (WIPs)*. February.

https://mde.maryland.gov/programs/water/TMDL/DataCenter/Documents/Bacteria_Guidance_for_Local_TMDL_WIPs_2022.pdf.

Maryland Department of the Environment (MDE). 2022b. *Guidance for Developing Local PCB TMDL (Total Maximum Daily Load) Stormwater Wasteload Allocation (SW-WLA) Watershed Implementation Plans (WIPs)*. August.

https://mde.maryland.gov/programs/water/TMDL/DataCenter/Documents/PCB_guidance/PCB_TMDL_Implementation_Guidance_SW-WLA_08302022.pdf.

Maryland Department of Transportation (MDOT). n.d. *Maryland Statewide Salt Management Program*. https://www.roads.maryland.gov/OOM/Statewide_Salt_Management_Plan.pdf.

[The MoCo Show. 2023. "Students and Staff From S. Christa McAuliffe ES Plant Trees to Commemorate Maryland's Five Million Trees Initiative." November 30. https://mocoshow.com/2023/11/30/students-and-staff-from-s-christa-mcauliffe-es-plant-trees-to-commemorate-marylands-five-million-trees-initiative/.](https://moco.show.com/2023/11/30/students-and-staff-from-s-christa-mcauliffe-es-plant-trees-to-commemorate-marylands-five-million-trees-initiative/)

Montgomery County Department of Environmental Protection (DEP). n.d.(a). *Clean Water Montgomery*. <https://www.montgomerycountymd.gov/water/>.

Montgomery County Department of Environmental Protection (DEP). n.d.(b). *Montgomery County Department of Environmental Protection*. <https://www.montgomerycountymd.gov/dep/>.

Montgomery County Department of Environmental Protection (DEP).n.d(c). *Illegal Dumping*. <https://www.montgomerycountymd.gov/DEP/contact/illegal-dumping.html>

Montgomery County Department of Environmental Protection (DEP). n.d(d). *RainScapes*. <https://www.montgomerycountymd.gov/water/rainscapes/>.

- Montgomery County Department of Environmental Protection (DEP). n.d(e). *Tree Montgomery*. <https://www.montgomerycountymd.gov/green/trees/tree-montgomery.html>.
- Montgomery County Department of Environmental Protection (DEP). n.d(f). *Watershed Grants Program*. <https://www.montgomerycountymd.gov/dep/water/clean-water-montgomery/watershed/grants.html>.
- Montgomery County Department of Environmental Protection (DEP). 2021. *Clean Water Montgomery*. <https://www.montgomerycountymd.gov/water/index.html>.
- Montgomery County Department of Environmental Protection (DEP). 2022a. *Anacostia River Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Nutrients, Sediment, and Trash*. December.
- Montgomery County Department of Environmental Protection (DEP). 2022b. *Cabin John Creek Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Sediment*. December.
- Montgomery County Department of Environmental Protection (DEP). 2022c. *Lower Monocacy River Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Phosphorus and Sediment*. December.
- Montgomery County Department of Environmental Protection (DEP). 2022d. *Potomac River Montgomery County Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Sediment*. December.
- Montgomery County Department of Environmental Protection (DEP). 2022e. *Rock Creek Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Phosphorus and Sediment*. December.
- Montgomery County Department of Environmental Protection (DEP). 2022f. *Rocky Gorge Reservoir and Triadelphia Reservoir Watersheds TMDL Stormwater Wasteload Allocation Implementation Plan for Phosphorus and Sediment*. December.
- Montgomery County Department of Environmental Protection (DEP). 2022g. *Seneca Creek Watershed TMDL Stormwater Wasteload Allocation Implementation Plan for Sediment*. December.
- Montgomery County Department of Transportation (MCDOT). n.d.(a). *Tree Maintenance*. <https://www.montgomerycountymd.gov/DOT-Highway/Tree/index.html>.
- Montgomery County Department of Transportation (MCDOT). n.d.(b). *Drainage Assistance*. https://www.montgomerycountymd.gov/dot-dte/drainage/index_existing.html.
- Montgomery County Public Information Office. n.d. *MC311 Customer Service Center*. <https://www.montgomerycountymd.gov/mc311/>
- My Green Montgomery. n.d. *My Green Montgomery*. <https://mygreenmontgomery.org/>.
- Shahzad, Maryam. 2023. "4th Graders Plant Trees at McAuliffe Elementary School." MyMCM.com. November 30. <https://www.mymcmmedia.org/4th-graders-plant-trees-at-mcauliffe-elementary-school/>.

Appendix A
Illicit Discharge Detection and Elimination

Appendix A1

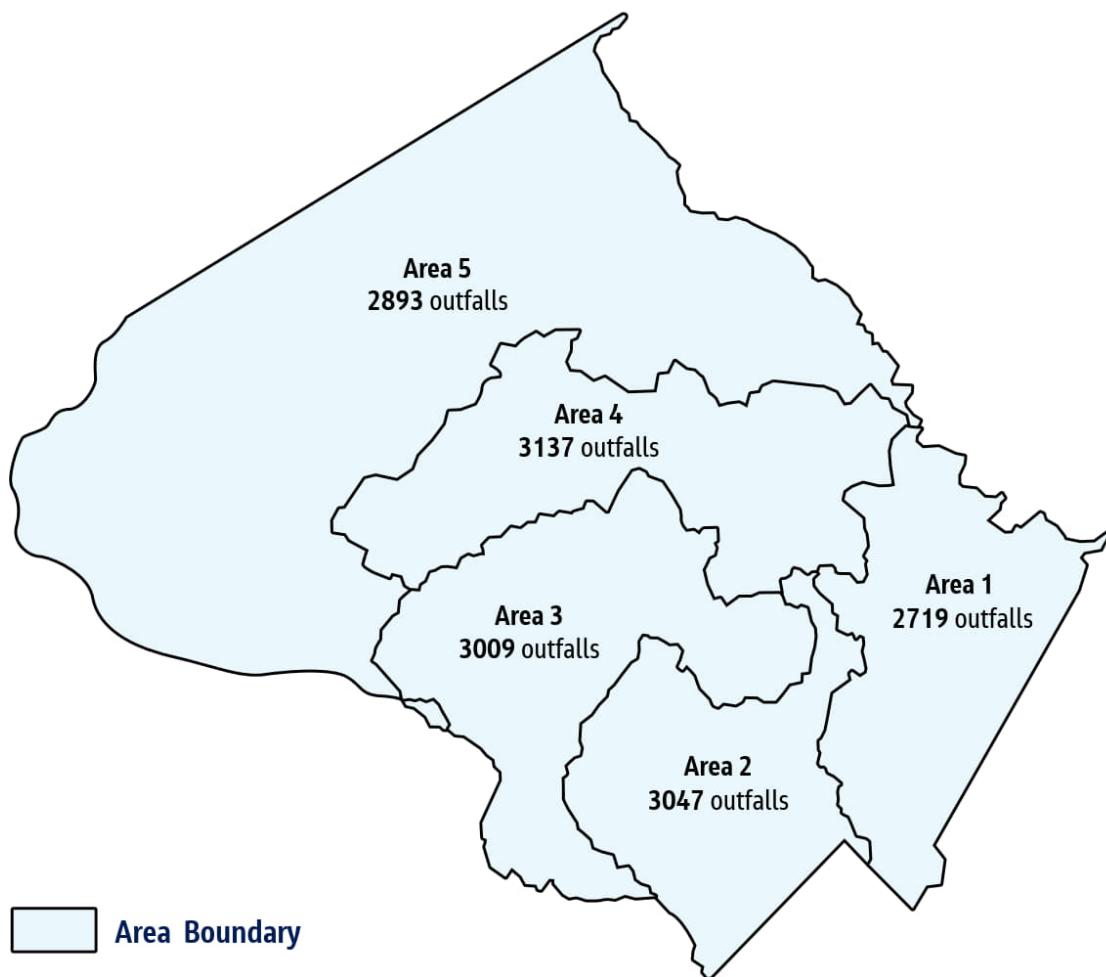
Montgomery County Illicit Discharge Detection
and Elimination Standard Operating Procedures

Appendix A1

Montgomery County Illicit Discharge Detection and Elimination Standard Operating Procedures (revised September 5, 2023)

At a minimum, the Montgomery County Department of Environmental Protection (DEP) will survey 150 outfalls and 40 hotspots within a given mapped area during each fiscal year. The areas will rotate annually wherein all of Montgomery County will be surveyed during a 5-year period (Figure A-1). This appendix details Montgomery County’s standard operating procedures (SOPs) for its illicit discharge detection and elimination (IDDE) program.

Figure A-1. Illicit Discharge Detection and Elimination Areas and Number of Outfalls per Area



A.1 Annual Illicit Discharge Detection and Elimination Standard Operating Procedures

This section lists the annual illicit discharge detection and elimination (IDDE) standard operating procedures (SOPs).

A.1.1 Section 1. Identifying Target Commercial and Industrial Hotspots and Outfalls for Surveying

1. Identify target commercial and industrial hotspots:
 - a. Define hotspots as properties zoned as commercial or industrial.
 - b. Determine number of commercial versus industrial hotspots to survey during each cycle as a percentage of the area’s total combined commercial and industrial properties.
 - c. Resurvey hotspots that required enforcement action during the previous survey cycle as part of the 40 minimum hotspots surveyed.
 - d. Do not resurvey hotspots that did not have issues during the previous survey cycle if possible.
 - e. Determine hotspots to be surveyed based on proximity to inlets and outfalls and streams with hotspots closer to inlets and having higher priority.
 - f. Use staff knowledge about known hotspots to identify hotspots to be surveyed.
2. Identify target outfalls:
 - a. Define outfalls as outfall structures owned and maintained by Montgomery County.
 - b. Resurvey outfalls that had pollution issues during the previous survey cycle as part of the 150 minimum outfalls surveyed.
 - c. Determine outfalls to be surveyed based on proximity to commercial and industrial properties and inlets.

A.1.2 Section 2. Selecting Hotspots and Outfalls

1. Select hotspots:
 - a. In Geographic Information System (GIS), use the *Property Layer* from the County’s Spatial Database Engine (SDE) to select all properties that have an industrial or commercial land use code in the “Land Use Codes” field (refer to Table A-1).

Table A-1. Specific Land Use Codes

Type	Code	Description
Industrial	200	Industrial Park (multiple buildings, single ownership of land)
Industrial	201	Industrial Production, Multiple Occupancy – Mixed Industrial Use
Industrial	202	Industrial Production, Multiple Occupancy – Mixed Industrial Use (condominium)

Type	Code	Description
Industrial	203	Industrial Production, Single Industrial Use (fee simple)
Industrial	204	Industrial Production, Single Industrial Use (condominium)
Industrial	205	Mixed Industrial and Commercial
Industrial	206	Mixed Light Industrial (Single Occupancy)
Industrial	637	Warehouse Storage Facilities (nontransportation, communications, and utilities) – primary storage of goods to be used elsewhere
Commercial	501	Regional Shopping Center (large – Montgomery Mall, White Flint, Lake Forest, Wheaton Plaza)
Commercial	502	Sub Regional Shopping Center
Commercial	503	Convenience Center (major anchor is grocery or drug store) – several stores at one location
Commercial	504	Highway Commercial
Commercial	531	Department Store
Commercial	521	Lumber and Other Building Materials
Commercial	541	Groceries – Retail
Commercial	551	Motor Vehicles – Retail
Commercial	553	Gasoline Service Stations
Commercial	641	Automobile Repair
Commercial	559	Other Automotive – Retail Trade
Commercial	580	Fast Food Eating Places
Commercial	581	Eating and Drinking (non-fast food)

- b. Remove properties surveyed during previous survey cycle that did not have issues.
 - c. Identify commercial and industrial properties 100 feet from inlets and 250 feet from outfalls and streams for survey until 40 hotspots are found; increase or decrease search radius by increments of 50 feet until 40 or more targeted hotspots are found.
 - d. Create maps for each hotspot that includes property address and contact information for management and owner.
 - e. Disseminate an equal number of hotspots amongst staff for surveying.
2. Select outfalls:
- a. Use *the outfall layer* from the County’s SDE to determine a minimum 150 outfalls.
 - b. Automatically select outfalls with pollution issues from the previous survey cycle to be resurveyed as part of the 150 minimum outfalls.

- c. Identify targeted outfalls within 100 feet of an inlet and within 100 feet of a stream for survey until the 150 minimum outfalls is reached; increase or decrease search radius by increments of 50 feet until 150 or more targeted outfalls are found.
- d. Compile a list of unique outfall IDs from the “Feature ID” field in the *outfall layer’s* attribute table (for example, JP123P0989) .
- e. Disseminate an equal number of outfalls amongst staff fur surveying.
- f. Conclude all surveys by June 30 of the survey year.

A.1.3 Section 3. Performing Hotspot Surveys

1. Conduct pre-hotspot survey:
 - a. Have staff familiarize themselves with the hotspot and its business.
 - b. Review property map and determine entrance and parking situation.
 - c. If site access is limited, contact the property owner to arrange hotspot survey.
 - d. Fill out the hotspot assessment form (HAF; attached) with property information.
2. Conduct hotspot surveys:
 - a. Arrive to site and announce intentions to property owner or manager if present; obtain contact information if unknown.
 - b. Walk as much of the property as possible and around buildings; complete HAF during walk if possible.
 - c. Note and photograph any violations (refer to Figures A-2 and A-3.
 - d. Finish completing the HAF at car if unfinished.
3. Conduct post-hotspot survey:
 - a. Have staff create a case within DEP’s CaseBase investigation database for each hotspot surveyed: Water Quality, Surface Water or Hotspot Survey.
 - b. Provide case description as “<Year> hotspot survey of <property>.”
 - c. Provide case location as the property addressed surveyed.
 - d. Add any property owner or manager information to contacts.
 - e. Scan the HAF into PDF and attach it to the case as “Sample Results” document.
 - f. Input all actions as description of the visit.
 - g. If problems are found, take the appropriate enforcement action to ensure compliance (refer to Section 5 for enforcement actions).

A.1.4 Section 4. Performing Outfall Surveys

1. Conduct pre-outfall survey:
 - a. Ensure the following necessary equipment is taken:
 - Personal items (for example, proper clothing, water, food, and bug spray; waders and high boots are recommended)

- Fully charged iPad with access to Online Outfall Application and Explorer Mapping app
 - Test kits for chlorine, detergents, copper, and phenols
 - Oakton, Hydrolab, or device to measure water temperature and conductivity
 - Tape measure
 - Gloves
 - Liquid-waste container
 - Outfall Field Sheet (attached)
- b. Familiarize yourself with outfall to be surveyed, noting access points and parking.
2. Conduct outfall surveys:
- a. Provide required information on Online Outfall Application (attached).
 - b. If flow present, then proceed as follows:
 - i. Perform required chemical tests (chlorine, detergents, copper, and phenols).
 - ii. Collect required temperature and conductivity water parameters.
 - iii. Determine flow using fill method or application measurement method (see attached outfall screening and monitoring field sheets).
 - c. If suspicious flow is found, dry weather flow found to be exceeding any chemical parameter limits, as set by MDE, and/or containing suspicious discoloration, odors, floatables or conditions deemed suspicious by the investigator, is found (refer to definition of pollution and suspicious flow), then proceed as follows:
 - i. Halt survey and immediately investigate suspicious flow.
 - ii. Call in additional help if necessary.
 - iii. Investigate up-pipe until source is found or investigation is inconclusive.
 - d. If no suspicious flow found, then complete online form, photograph the outfall, attach photographs to form, upload the form, and confirm successful upload before moving on.
 - e. If the suspicious flow source is found, take appropriate enforcement action to ensure compliance (refer to Section 5 for enforcement actions).
3. Conduct post-outfall survey:
- a. Check CaseBase and ensure PDF form, correct location, and pictures are uploaded.
 - b. Enter survey actions into CaseBase.
 - c. Follow-up on outfalls with suspicious flow within 2 weeks of initial survey (weather permitting), and complete Outfall Follow-up Form (attached) with each follow-up visit.
 - d. Forward follow-up site visits to IDDE lead staff.
 - e. Forward any mistakes entered or changes needed to information technology (IT) staff.
 - f. Forward newly found outfalls found to IT to add to geographic information system (GIS) layer.

A.1.5 Section 5. Achieving Compliance Through Enforcement Actions

1. When violations are found, establish primary goal to bring the offender into compliance.
2. Take appropriate enforcement action for violations discovered:
 - a. Issue verbal or written warnings as first enforcement step for first-time offenders or lesser issues.
 - b. Issue a notice of violation (NOV) as a second step when warnings do not achieve compliance.
 - c. Issue civil citations with fines of \$500 as the last enforcement step when the NOV does not achieve compliance; use civil citations for repeat offenders or egregious violations.
3. Use timeframe for achieving compliance:
 - a. Ensure offenders cease any activity that causes violations and pollution immediately.
 - b. Depending on the nature of the violation, request offenders to come into compliance within 30 days of the NOV (provided pollution is immediately ceased).
 - c. Work with offenders to ensure they achieve compliance and extend compliance deadlines if reasonable.
 - d. Issue civil citation(s) if compliance is not achieved within an agreed-upon timeframe.

A.1.6 Section 6. Common Violations Observed During Hotspot Surveys

Figures A-2 and A-3 show IDDE violations identified during past surveys.

Figure A-2. Poor Housekeeping at Businesses



Figure A-3. Grease Spills and Poorly Maintained Used Grease Containers



Appendix A2
Investigated Water Quality Issues

Appendix A2
Investigated Water Quality Issues in FY24

Case No.	Location Description	Issue	Enforcement Action	Resolved
20241242	City Place Mall	Water Quality	Verbal Warning	Yes
20241253	Peterson's Properties at 8500 Colesville Rd	Grease	Verbal Warning	Yes
20241354	12345 Columbia Pike	None	None	n/a
20241355	12511 Prosperity Dr	None	None	n/a
20241357	Exxon 13420 New Hampshire Ave	None	None	n/a
20241358	13440 New Hampshire Ave	Grease	Notice of Violation	Yes
20241359	Cloverly Auto Care	None	None	n/a
20241363	813 Silver Spring Ave	None	None	n/a
20241364	817 Easley St	None	None	n/a
20241365	904 Bonifant St	None	None	n/a
20241366	906 Ellsworth Dr	Grease	Notice of Violation	Yes
20241367	909 Thayer Ave	None	None	n/a
20241368	919 Gist Ave	Water Quality	Verbal Warning	Yes
20241449	Hillandale Shell Gas Station	None	None	n/a
20241450	BP Gas 10226 New Hampshire Ave	Solid Waste	Verbal Warning	Yes
20241476	Giant Food 12028 Cherry Hill Rd	Grease	Verbal Warning	Yes
20241478	Target 12000 Cherry Hill Rd	Solid Waste	Verbal Warning	Yes
20241479	12006 Plum Orchard Dr	None	None	n/a
20241480	DARCARS Collision Center	Water Quality	Notice of Violation	Yes
20241482	11931 Tech Rd	None	None	n/a
20241483	11501 Old Columbia Pike	None	None	n/a
20241484	3325 Briggs Chaney Rd	None	None	n/a
20241485	Briggs Chaney Exxon	Water Quality	Notice of Violation	Yes
20241629	CMI Moulding	Water Quality	Notice of Violation	Yes
20241630	15408 Old Columbia Pike	Water Quality	Verbal Warning	Yes
20241639	Wendys 21 Vital Way	None	None	n/a
20241646	Sport Chevrolet-Cadillac Dealership	Solid Waste	Verbal Warning	Yes
20241673	DARCARS Chrysler, Dodge, Jeep, Ram Dealer	None	None	n/a
20241674	Jim Coleman Nissan	Water Quality	Verbal Warning	Yes
20241676	2121 Industrial Pkwy	None	None	n/a
20241686	DARCARS Toyota 12210 Cherry Hill Rd	Water Quality	Notice of Violation, Citation	Yes
20241688	Percontee Inc.	Water Quality	Notice of Violation, Citation	Yes
20241700	Shops of Burtonsville	Water Quality	Verbal Warning	Yes
20241701	BMW of Silver Spring	None	None	n/a
20241922	M+D Autobody	None	None	n/a
20241927	Public Storage 7800 Fenton St	None	None	n/a
20241928	8107 Fenton Street	Solid Waste	Verbal Warning	Yes
20241929	Citgo Gas 8333 Fenton St	None	None	n/a
20241930	Exxon Gas 8301 Fenton St	None	None	n/a
20241931	Marathon Gas and Rich Tires	None	None	n/a
20241932	Exxon Gas 9331 Georgia Ave	Water Quality	Verbal Warning	Yes
20241933	Lee's Transmission	None	None	n/a
20241915	CVS 9520 Georgia Ave	Solid Waste	Verbal Warning	Yes
20241914	Shell Gas 9510 Georgia Ave	Solid Waste	Verbal Warning	Yes
20241917	Sniders Super Foods	Water Quality	Verbal Warning	Yes