

National Pollutant Discharge Elimination System

MUNICIPAL SEPARATE STORM SEWER SYSTEM
DISCHARGE PERMIT NUMBER: MD0068365
STATE DISCHARGE NUMBER: 22-DP-3322

CHARLES COUNTY, MD
ANNUAL REPORT
JULY 2023 - JUNE 2024



Prepared for:

Maryland Department of the Environment
Water and Science Administration
1800 Washington Boulevard
Baltimore, MD 21230

Submitted by:

Charles County Government
Department of Planning & Growth Management
200 Baltimore Street
La Plata, MD 20646



TABLE OF CONTENTS

Executive Summary	v
-------------------	---

Annual Report Permit Reference and Section Title

Part I.	Identification	1
Part II.	Definitions	2
Part III.	Water Quality	2
Part IV.A.	Permit Administration	2
Part IV.B.	Legal Authority	5
Part IV.C.	Source Identification	6
Part IV.D.1.	Stormwater Management Program	10
Part IV.D.2.	Erosion and Sediment Control	20
Part IV.D.3.	Illicit Discharge and Elimination	22
Part IV.D.4.	Property Management and Maintenance	31
Part IV.D.5.	Public Education	42
Part IV.E.	Stormwater Restoration	79
Part IV.F.	Countywide TMDL Stormwater Implementation Plan	94
Part IV.G.1.	BMP Effectiveness Monitoring	96
Part IV.G.2.	Watershed Assessment Monitoring	99
Part IV.H.	Program Funding	101

FIGURES

Figure 1:	Charles County Personnel Responsible for Permit Compliance	4
Figure 2:	Charles County Stormwater System Internet Application	7
Figure 3:	Stormwater Maintenance Inspections Postcard Mailer	19
Figure 4:	Charles County Illicit Discharge Screening Map	23

Figure 5:	Visual Survey of Commercial/Industrial Landuse Map	26
Figure 6:	Commercial/Industrial Areas - Example Field Map	27
Figure 7:	Stormwater Pollution Prevention Plan Training Slides	33
Figure 8:	Matrix of Public Education Coverage	44
Figure 9:	Webform for Reporting Structure or Property Concern	45
Figure 10:	Pollution Prevention Practices Educational Handouts	47-51
Figure 11:	TV, Website, Social Media, Email, Newspaper, Podcast & Mail	52-60
Figure 12:	Public Service Announcement Radio Coverage	61
Figure 13:	Educational Materials - Brochures	65
Figure 14:	Storm Drain Marking Map	66
Figure 15:	Storm Drain Educational Door Hangers and Brochures	67-71

TABLES

Table 1:	Stormwater Management Concept and Site Plans	12
Table 2:	Redevelopment Concept and Site SWM Plans	13
Table 3:	Redevelopment Final SWM Plans Approved	13
Table 4:	Final Approved Stormwater Management Plan Permits in Fiscal Year 2024	13
Table 5:	As-Builts Approved in Fiscal Year 2024	14
Table 6:	Stormwater Best Management Practice Construction Inspections	15
Table 7:	SWM Maintenance Permits for BMPs Entered in EnerGov for Inspection	16
Table 8:	SWM Maintenance Inspections for BMPs not on Residential Lots	16
Table 9:	SWM Maintenance Inspections for BMPs on Private Residential Lots	17
Table 10:	SWM Maintenance Inspections for Restoration BMPs	17
Table 11:	Construction Permits Issued for Earth Disturbances >1 Acre Fiscal Years 2020-2024	20
Table 12:	Erosion and Sediment Control Table for Fiscal Years 2020 – 2024	21
Table 13:	Field Screening Results for Priority Outfalls	25

Table 14:	Visual Survey of Commercial & Industrial Land Use – Potential Pollution Sites FY 2024	28
Table 15:	Street Sweeping	35
Table 16:	Stormwater Pipe and Inlet Cleaning	35
Table 17:	Stormwater Inlet Inspections and Repairs	35
Table 18:	County Owned Stormwater Management Facility Inspection and Maintenance	36
Table 19:	Mosquito Control Expenses	36
Table 20:	County Owned Shoreline Stabilization and Stream Restoration Monitoring	37
Table 21:	Rain Barrel and Composting Workshop Attendance in FY 2024	64
Table 22:	FY 2024 Hazardous Waste Collection: No. Households	64
Table 23:	Septic Program Reimbursements	76
Table 24:	FY 2015 MS4 Permit Annual Alternative Control Practices	80
Table 25:	FY 2015 MS4 Permit Replacement Restoration Projects	80
Table 26:	Restoration Projects Completed in FY 2023	91
Table 27:	Restoration Projects Completed in FY 2024	91
Table 28:	Planned Restoration Projects for FY 2025	91
Table 29:	Tracking of Annual Alternative Control Practices	92
Table 30:	Tracking of Permanent Alternative Control Practices	92
Table 31:	Impervious Surface Restoration Summary (Acres)	93
Table 32:	Maintenance of 20% Impervious Restoration	93
Table 33:	WPRF Budget – Fiscal Years 2020 through 2025	103
Table 34:	WPRF Staff Positions - Fiscal Years 2020 through 2025	103
Table 35:	ESF Budget for Septic Pump-Out Program – Fiscal Years 2020 through 2025	105
Table 36:	ESF Budget for Education & Outreach – Fiscal Years 2020 through 2025	105
Table 37:	ESF Positions Dedicated towards Education and Outreach – Fiscal Years 2020 through 2025	105
Table 38:	NPDES MS4 Capital Improvements Bond Expenditures through Fiscal Year 2024	106
Table 39:	Capital Improvement Expenditures through Fiscal Year 2024 for	106

NPDES MS4 Projects

Table 40: Capital Improvement Program Appropriation per Fiscal Year	109
Table 41: NPDES MS4 Permit Expenses per Permit Condition	109

APPENDICES

Appendix A:	County Response to Comments (pdf)
Appendix B:	SWM Process Modifications in FY 2024 (pdf)
Appendix C:	Standard Operating Procedure for Investigations of Suspected Illicit Discharges (pdf)
Appendix D:	Upland Visual Survey Reports & Illicit Discharge Cases (pdf and GIS)
Appendix E:	Municipal Facilities Narratives (pdf)
Appendix F:	Charles County TMDL Stormwater Implementation Progress (xlsx and pdf)
Appendix G:	FY 2024 Adopted Enterprise Funds (pdf)
Appendix H:	FY 2024 WPRP Annual Report (xlsx and pdf)
Appendix I:	FY 2025 Financial Assurance Plan (xlsx and pdf)

Executive Summary

Charles County was issued a new National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit on December 30, 2022. This is Charles County's fourth generation MS4 permit, which covers the period from December 30, 2022 through December 29, 2027. Under Part V of the MS4 permit Charles County is required to submit annual progress reports.

This MS4 Annual Report covers a 12-month period from July 1, 2023 through June 30, 2024, which is Fiscal Year (FY) 2024. Highlights from the permit year include:

Capital Programs

- Construction of 1 stream restoration project, totaling 26.07 acres of impervious surface restoration credit.

Financial Programs

- Increasing the Stormwater Remediation Fee from \$146 to \$156 per improved parcel, raising the Watershed and Protection Fund FY 2025 budget to \$8.25 million.

Operational Programs

- Street sweeping 1,557 lane miles and removing 113.62 tons of debris.
- Vacuuming 66.74 tons of debris from storm drains and repairing inlets at a cost of \$398,048.
- Septic pump-out reimbursements for 889 applications as part of bringing public attention to the importance of routine septic maintenance.

Planning Programs

- Watershed Restoration and Outreach grant awards to two organizations:
 - University of Maryland Environmental Finance Center for project titled, "Increasing Capacity to Maintain Stormwater BMPs in Charles County;" and
 - Southern Maryland Resource Conservation & Development for project titled, "Southern Maryland Conservation Toolbox."
- Prepared and submitted plans for biomonitoring countywide, a chloride monitoring station, and bacteria monitoring which were found sufficient by the Maryland Department of Environment and will be initiated Spring of 2025.

This page intentionally blank.

I. Identification

Permit Number: 22-DP-3322 MD0068365

Permit Area: The permit covers all stormwater discharges from the municipal separate storm sewer system (MS4) owned or operated by Charles County, Maryland.

Effective Dates: December 30, 2022, through December 29, 2027.

FY 2024 Status

Charles County, Maryland has been operating its MS4 under a National Pollutant Discharge Elimination System (NPDES) MS4 permit since 1997, when the first five-year permit was issued by the Maryland Department of Environment, Water Management Administration (MDE/WMA). On July 31, 2002, the County was issued a second, five-year permit. Each permit issuance or renewal is referred to as a generation, for example, first generation, second generation, and so on. The County's first and second generation permits covered stormwater discharges from the MS4 within the Development District, designated as the County's northern urban area.

The third generation, five-year MS4 permit was issued on December 26, 2014, which expanded permit coverage to the entire county and added significant permit conditions. New conditions included expanding the Geographical Information System (GIS) data countywide, restoring 20 percent of the County's untreated impervious surface area countywide, and preparing watershed restoration plans to address total maximum daily loads (TMDLs) for both local waterways and the Chesapeake Bay. This permit was modified on November 8, 2019, to add Part IV.E.3 titled, "Nutrient Trading," which allows the County to acquire total nitrogen, total phosphorus, and total suspended solids credits in accordance with the requirements of the Maryland Water Quality Trading and Offset Program for purposes of meeting the 20 percent impervious surface area restoration requirement of the permit.

The County's fourth generation MS4 permit was issued on December 30, 2022, including new initiatives such as Good Housekeeping Plans for applicable County properties, developing a Salt Management Plan, and restoring 13 percent of the County's untreated impervious surface.

As part of this comprehensive water quality control permit, the County is required to provide annual progress reports to MDE/WMA. The annual reports are based on State/County fiscal year and are due on the anniversary date of the permit.

This report summarizes the actions taken by the County to fulfill the requirements of the NPDES permit. Following each permit condition is a description of the work completed.

II. Definitions

Terms used in this permit are defined in relevant chapter of the Code of federal Regulations (CFR) or the Code of Maryland Regulations (COMAR). Terms not defined in CFR or COMAR shall have the meanings attributed by common use unless the context in which they are used clearly requires a different meaning.

III. Water Quality

The permittee must manage, implement, and enforce a stormwater management program in accordance with the Clean Water Act (CWA) and corresponding National Pollutant Discharge Elimination System (NPDES) regulations, 40 CFR Parts 122-124.

Compliance with conditions in Parts IV through VII of the permit shall constitute compliance with Subsection 402(p)(3)(B)(iii) of the CWA and adequate progress toward compliance with Maryland's receiving water quality standards and U.S. Environmental Protection Agency (EPA) established or approved stormwater waste load allocations (WLAs) for this permit term.

IV.A. Permit Administration

Overview of Permit Conditions

1. *Charles County shall designate an individual to act as liaison with MDE for 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 MDE, including an organizational chart detailing personnel and groups responsible for major NPDES program tasks in this permit. MDE shall be notified of any changes in personnel or organization relative to NPDES program tasks.*

FY 2024 Status

Listed below are the County's liaisons to MDE for permit implementation. The contact information for the FY 2024 liaisons is listed below.

Liaisons' address:

Charles County Planning Division
200 Baltimore Street,
La Plata, MD 20646

Liaisons' Phone and E-mail Contact Information:

Charles Rice, Planning Director
301-645-0651 (P), RiceC@CharlesCountyMD.gov

Lynn Knaggs, Environmental Programs Supervisor
301-638-0810 (P), KnaggsL@CharlesCountyMD.gov

Karen Wiggen, Planner III
301-645-0683 (P), WiggenK@CharlesCountyMD.gov

Organizational Chart:

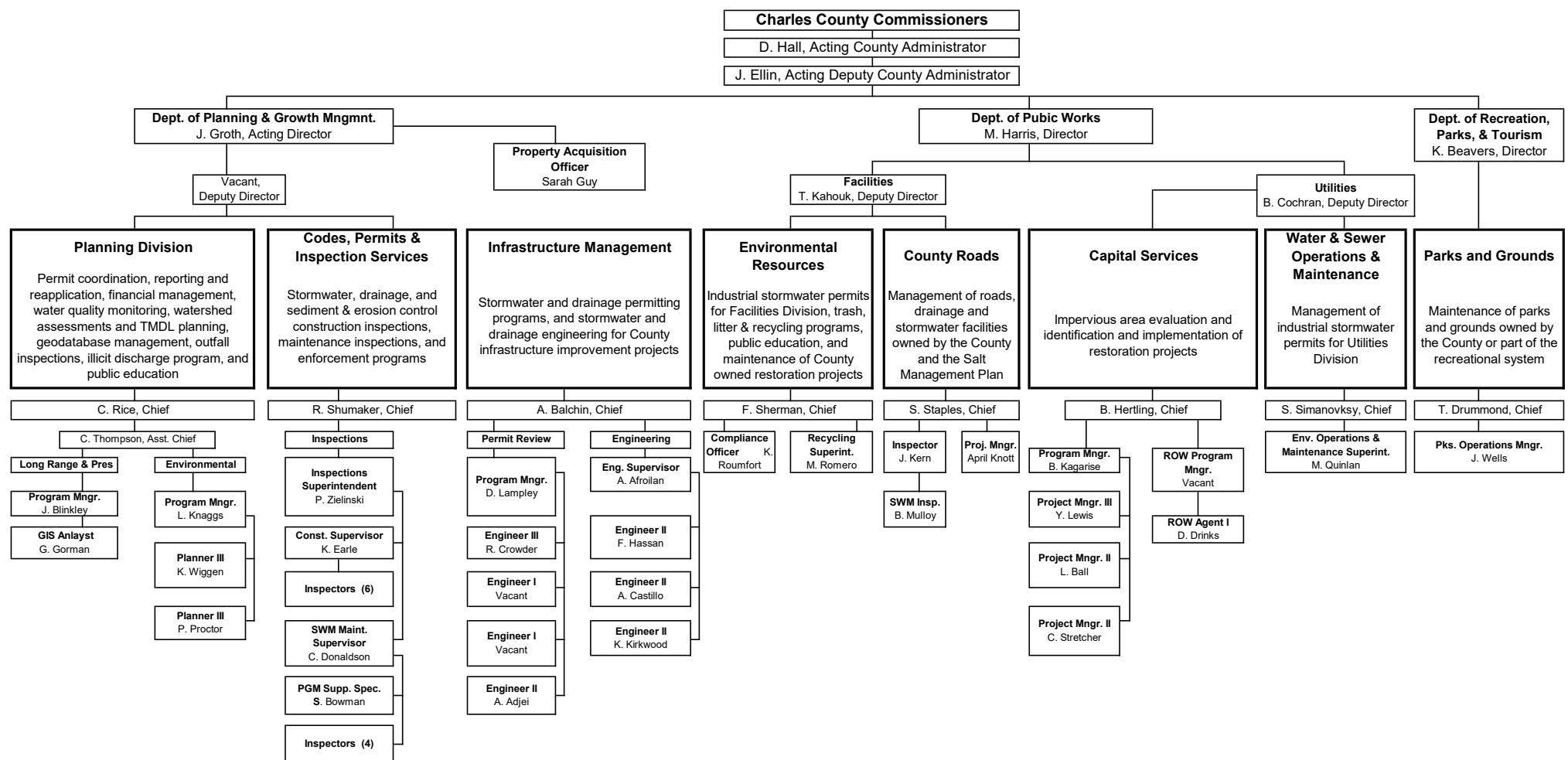
The NPDES program tasks in this permit are divided between three departments in Charles County: Planning and Growth Management (PGM), Department of Public Works (DPW) and Recreation, Parks, and Tourism (RPT). These departments coordinate with other departments, such as the County's Attorney's Office and the Department of Fiscal and Administrative Services, as necessary to implement the permit.

PGM's responsibilities primarily include the stormwater and erosion and sediment control permitting and inspection programs, development of stormwater infrastructure, geographic information system (GIS), managing the County's data in the MDE geodatabase, water quality monitoring, watershed assessments, watershed restoration planning, the illicit discharge elimination and detection program, the septic pump-out program, and public outreach. DPW's responsibilities primarily include capital restoration projects, maintenance of County-owned roads and the public drainage system, implementation of stormwater pollution prevention plans for County owned industrial properties, inspecting and maintaining County owned stormwater facilities and restoration projects, the litter and floatables program, and public outreach. RPT's responsibilities include maintenance of County owned parks and grounds.

In FY 2021 the Charles County Commissioners introduced and adopted Bill No. 2020-07 adding Chapter 299 and Resilience Authority Sections 299.01 through 299.15 to the *Code of Charles County, Maryland*. The purpose stated in Section 299.01 is, "The Resilience Authority of Charles County will undertake and support resilience infrastructure projects, that mitigate the effects of climate change by offering a range of financing structures, forms, and techniques that leverages public and private investment and stimulates demand for resilience infrastructure projects throughout Charles County." The Board was appointed in February 2021 and a Climate Resilience and Sustainability Officer was hired by the Department of Planning and Growth Management and began in FY 2022.

The following organizational chart details personnel and divisions responsible for major NPDES program tasks in this permit.

NPDES MS4 Permit Responsibilities Organizational Chart



IV.B. Legal AuthorityOverview of Permit Conditions

Charles County shall maintain adequate legal authority, in accordance with NPDES regulations 40 CFR 122.26(d)(2)(I), throughout the term of this permit. In the event that any provision of its legal authority is found to be invalid, the County shall make the necessary changes to maintain adequate legal authority.

FY 2024 Status

The County will maintain adequate legal authority throughout the term of this permit, and in the event that any provision of its legal authority is found to be invalid, the County will make the necessary changes to maintain adequate legal authority.

IV.C. Source Identification

Overview of Permit Conditions

Sources of pollutants in stormwater runoff jurisdiction-wide shall be identified and linked to specific water quality impacts on a watershed basis. A georeferenced database shall be submitted annually in accordance with MDE NPDES MS4 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: infrastructure, major outfalls, inlets, and associated drainage areas;
2. Industrial and commercial sources: industrial and commercial land uses and sites that the County has determined have the potential to contribute significant pollutants;
3. Urban best management practices (BMPs): stormwater management facility data including outfall locations and delineated drainage areas;
4. Impervious surfaces: public and private land use delineated, controlled and uncontrolled impervious areas based on, at minimum, Maryland's hierarchical eight-digit sub-basins;
5. Monitoring locations: locations established 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 NPDES Permits (2021) (hereafter 2021 Accounting Guidance) including projects proposed, under construction, and completed with associated drainage areas delineated.

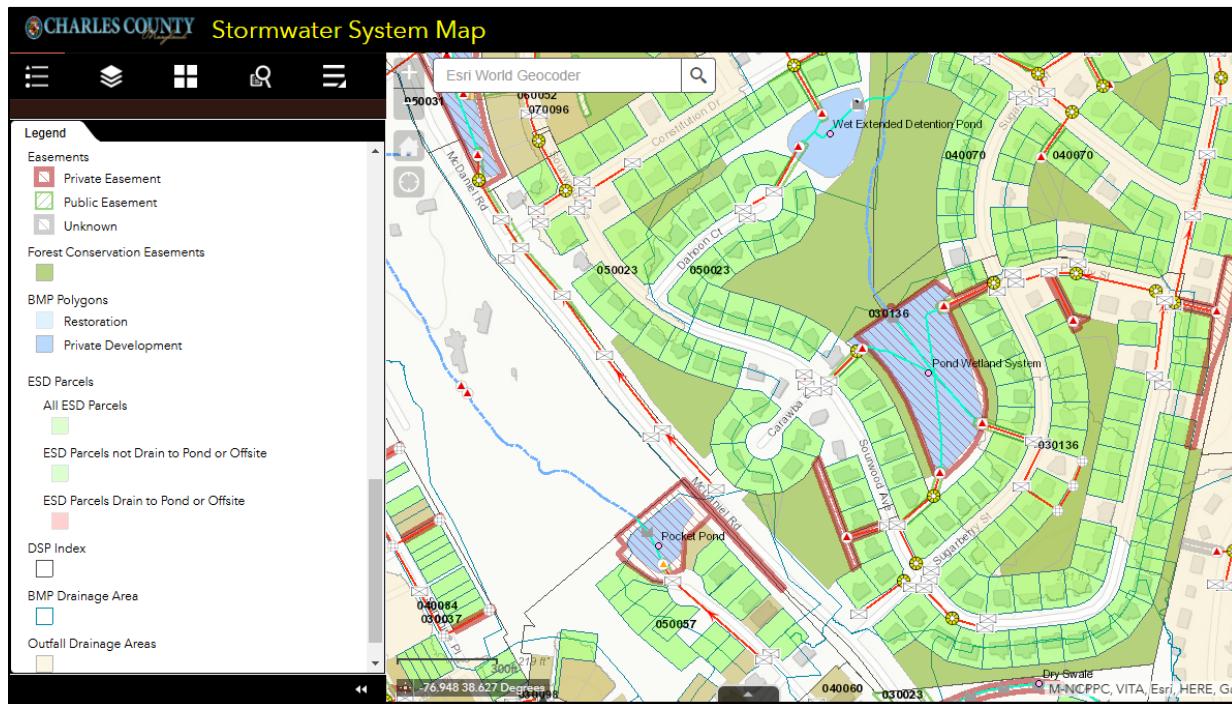
FY 2024 Status

Charles County began compiling the above listed GIS data on a countywide basis in FY 2012. The GIS data coverage is a useful resource to County staff for public storm drain and stormwater best management practice (bmp) maintenance, stormwater permitting reviews, environmental permitting reviews, stormwater facility maintenance inspections, and watershed restoration planning.

In an effort to provide the stormwater data on a platform that would be easily accessible by County maintenance providers, permit reviewers and inspectors in the office or in the field, a Stormwater System Map internet application was established in 2013, with staff trainings occurring on a regular basis.

The County's Stormwater System Map internet application includes features used for looking up the location of stormwater facilities and provides linked and/or attached data needed to know the maintenance status and view the associated engineering plans.

- Locator tools are available for finding:
 - BMPs by local bmp identification numbers and stormwater water management maintenance (SWMM) numbers
 - Properties by address
 - permit plans by permit number
 - Outfalls by outfall number
 - Forest Conservation Easements by plan number
- Related data retrievable from the features:
 - BMPs link to the facility's inspection data and drainage area.
 - Outfalls have inspection photos attached and links to drainage areas.
 - Permit plans, as-builts, and easement documents are linked to the respective permit plan features for easy viewing.
 - ESD BMP Parcels have permit drawings attached to the features.
 - Stormwater management and storm drainage easements.
 - Aerial imagery for 2014, 2017, 2023, and drone imagery of recent projects.
 - Storm drainage system with feature data including flow direction.
 - Trace tool used to trace flow in a drainage system upstream for identifying potential sources of illicit discharges, which was disabled in 2023.



MDE's NPDES MS4 Geodatabase Design and User's Guide

Early in 2015, MDE released the *NPDES MS4 Geodatabase Design and User's Guide Versions 1.0 and 1.1*. Revisions were subsequently reflected in Version 1.2, released in May 2017.

In November 2021, MDE released a *Draft Supplement to the Geodatabase Design and User's Guide (Version 1.2 Draft Updates)*. The corresponding geodatabase updates were included in draft Version 2.0, released in March 2022. Additional geodatabase updates occurred in September 2023, which were used in the County's FY23 submittal. Based on feedback from geodatabase users, MDE released the final *Version 2.0* September 2024 and allowed for an extension until March 30, 2025, for submitting the FY24 geodatabase which the County will use.

The following feature classes and tables for reporting Assessment of Controls were removed from the geodatabase and are now reported using spreadsheets. These include *Monitoring Site FC; Monitoring Drainage Area FC; Chemical Monitoring table; Local Concern Monitoring table (optional); and Biological Monitoring table*.

MDE's 2024 MS4 Geodatabase format includes the following 9 feature classes (FC) and 15 tables. These are associated with the permit conditions as follows:

- **Permit Administration:** *Permit Information table.*
- **Source Identification:** *Outfall FC; Outfall Drainage Area FC; BMP FC; BMP Drainage Area FC; Alternate BMP Line FC; Alternate BMP Point FC; Alternate BMP Polygon FC; Discharges from Grey Infrastructure Protocols table; Stream Restoration Protocols table; and Shoreline Management Practices table.*
- **Management Programs:** *BMP Inspections table; Alternate BMP Inspections table; Erosion and Sediment Control Program table; Quarterly Grading Permits FC; Stormwater Management Program table; Illicit Discharge Detection and Elimination Screening table; Municipal Facilities FC; and Chemical Application table.*
- **Restoration Plans and Total Maximum Daily Loads:** *Impervious Surface table; Chesapeake Bay TMDL Progress table; and Local TMDL Progress table.*
- **Assessment of Controls:** Reported using spreadsheets.
- **Program Funding:** *Fiscal Analysis table.*
- **Narrative Files:** *Documents, Charts and Reports table.*

The following is an overview of updates made this year in the MDE MS4 geodatabase, and the County's Storm Drain System and Planimetric geodatabases. *The Charles County Department of Planning and Growth Management Stormwater Geodatabases User Guide (12/31/2023)*, is maintained to describe database elements, methods used to populate fields, quality control processes, and how to extract data for preparing the annual MDE submittal. Only the MS4 geodatabase is submitted with this annual report and will be provided within the three-month extension period.

- **Storm Drain System:** The FY 2024 dataset includes 30,355 enabled pipes and culverts and 54,970 enabled drainage related structures. Of the enabled structures 11,773 are 'SWM Junctions' which allow the GIS network trace tool to work but are not physical structures.
- **Industrial and Commercial Sources:** This information is captured in the Municipal Facilities feature class of the geodatabase. A narrative summary is included in Part IV.D.4. of this report.
- **Urban Best Management Practices (BMPs):** The FY 2024 total is 9,009 active stormwater BMPs (3,445 Macro and 5,564 Micro BMPs). A narrative summary of the BMP data is included in Part IV.D.1. of this report.
- **Impervious Surface Baseline:** In 2013, the County first delineated impervious surface polygons based on 2011 aerial photographs. In 2017, the County's final impervious surface analysis of controlled acres based on era of stormwater management was provided to MDE. This is maintained in the County's Impervious geodatabase.
- **Monitoring Locations:** The feature class containing 25 stations were moved from the MS4 Geodatabase to the Storm Dain System geodatabase for the FY24 submittal. Some monitoring stations are no longer being used but are maintained for historical purposes. A narrative summary of monitoring data is included in Part IV.G. of this report.
- **Water Quality Improvement Projects:** Stormwater management best management practices that are completed, under construction and proposed, have been added to the BMP feature class and shown as points according to the *User's Guide*. Additional water quality improvement projects have been included under Alternate BMP lines (streams, shoreline and outfall stabilizations), Alternate BMP points (septic upgrades), and Alternate BMP polygons (inlet cleaning and tree planting) according to the *User's Guide*. A narrative summary of the water quality improvement projects is included in Part IV.E. of this report.
- **Planimetric, Impervious Surface and Topography Updates:** In 2023 the County obtained aerial imagery and LiDAR data for the entire county, which was used to produce updated planimetric, impervious surface and topography GIS layers. The County intends on updating planimetric and impervious data every three years and topography every ten years.

IV.D. Management Programs

Overview of Permit Conditions

The following management programs shall be implemented jurisdiction-wide by Charles County. These management programs are designed to control stormwater discharges and reduce associated pollutant loadings to the maximum extent practicable (MEP) and are to be maintained for the term of the permit. Additionally, these programs are to be integrated with other permit requirements to promote a comprehensive adaptive approach toward solving stormwater discharge water quality problems. Annual reports for the management programs shall be in accordance with Part V.A. of the County's MS4 permit and the MS4 Geodatabase.

1. Stormwater Management

An acceptable stormwater program shall continue to be maintained in accordance with the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland. County activities shall include following items a-d.

- a. *Implementing stormwater management design policies, principles, methods, and practices found in the latest version of the 2000 Maryland Stormwater Design Manual. This includes:*
 - i. *Complying with the Stormwater Management Act of 2007 (Act) by implementing Environmental Site Design (ESD) to the MEP for new and redevelopment projects;*
 - ii. *Tracking the progress toward satisfying the requirements of the Act and identifying and reporting annually the problems and modifications necessary to implement ESD to the MEP; and*
 - 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.*

FY 2024 Status

Current Stormwater Regulations

The County continues to implement the stormwater management design policies, principles, methods, and practices found in the 2000 Maryland Stormwater Design Manual and COMAR 26.17.02. The County's most recent comprehensive update of this regulation became effective in August 2010, when the Stormwater Management and Drainage Ordinance was separated into two ordinances and stormwater management was revised to comply with the Maryland Stormwater Management Act of 2007. Maryland is currently proposing updates to its stormwater codes per 2021 Senate Bill 227, which once adopted by the State will then be incorporated into the County's local ordinance.

The following procedural modifications related to stormwater management were made in FY 2023:

- An additional requirement for projects with small pond approval was implemented to better track and ensure submittal of as-built drawings within 90 days of completion to the State for review. To ensure this step is complied with, no County permitted project can progress to completion until the County receives a confirmation of compliance letter from the Charles Soil Conservation District.
- The County issued PGM Notice 23-02 “Onsite Dedication Document Approval Requirements for Development Services Permit Issuance” on March 7, 2023. This requires the County Attorney’s Office to approve all easement, right-of-way, and covenant documents prior to issuance of the development services permit (DSP).
- The County issued PGM Notice 23-03 “Clarification of Submerged Gravel Wetland Requirements” on March 30, 2023. This notice is to ensure the Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP) is not compromised.

The following procedural modifications related to stormwater management were made in FY 2024:

- The County issued PGM Notice 24-04 “As-Built Requirements for Residential New Dwelling Permits” on June 24, 2024. This notice is to ensure the grading, stormwater management measures, and drainage conveyance system/drainage pattern(s) of the constructed lot comply with the specifications contained in the approved plans. A copy is in Appendix B.

2021 Senate Bill 227 – Advancing Stormwater Resiliency in Maryland (A-StoRM)

Charles County staff has participated on and followed progress of MDE’s committees for A-StoRM. The Stormwater Regulations Technical Advisory Committee (TAG) has met about twelve times between June 2022 and September 2024 to develop regulatory updates on four primary topics:

- (1) Precipitation and Design Storms
- (2) Managing water quality impacts and providing channel protection
- (3) Managing for flood risk
- (4) Conveyance capacity analysis

Also of interest to Charles County is the Watershed Studies Technical Advisory Group which has met six times between December 2022 and June 2024 to discuss MDE’s anticipated projects such as:

- (1) Mapping and sharing of inundation areas below high hazard and significant hazard dams
- (2) Creating a State floodplain ordinance and watershed prioritization/flood potential map
- (3) Developing a State-wide training program for flood provisions and related land use policy
- (4) Completing analysis of higher standards for resiliency

- b. *Maintaining programmatic and implementation information related to the stormwater management program including, but not limited to:*
 - i. *Number of Concept, Site Development, and Final Plans received and number of those approved. Plans that are re-submitted as a result of revision or in response to comments should not be considered as a separate project;*
 - ii. *Number of redevelopment projects received and the number of those approved;*
 - iii. *Number of stormwater exemptions issued; and*
 - 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.*

FY 2024 Status

Since the County's adoption of the stormwater management regulations (August 1, 2010) requiring environmental site design (ESD) to the maximum extent practicable (MEP), through FY 2024 a total of 474 projects have submitted Concept SWM Plans, which is Step 1 of the regulation. During that same time period, 427 projects have also submitted Site SWM Plans, which is Step 2 of the regulation.

Table 1: Stormwater Management Concept and Site Plans Per Fiscal Year

	2020 Received	2020 Approved	2021 Received	2021 Approved	2022 Received	2022 Approved	2023 Received	2023 Approved
CSWM (Step 1)	29	9	25	21	38	28	24	13
SSWM (Step 2)	23	3	25	15	27	20	38	16
<i>Total</i>	52	12	50	36	65	48	62	29

Table 1 Continued

	2024 Received	2024 Approved
CSWM (Step 1)	21	13
SSWM (Step 2)	24	23
<i>Total</i>	45	36

For the FY 2024 time period, the County received 55 new Development Services Permit submissions (these permit submissions may also include the Final Stormwater Management Plans, which is the Step 3 of the regulation).

For FY 2024 time period, 2 redevelopment projects were received under a Concept SWM Plan application; 2 redevelopment projects were received under a Site SWM Plan application, and 3 redevelopment projects received final permit approval. These projects are listed in the following tables.

Table 2: Redevelopment Concept (CSWM) and Site SWM (SSWM) Plans Received for Review

Plan Number	Name
CSWM-230020	Shops at Waldorf – New Chipotle
CSWM-240008	Chase Shops at Waldorf
SSWM-230024	Mt. Carmel Woods WWTP
SSWM-230026	Pinefield EMS Station

Table 3: Redevelopment Final Stormwater Management Plans Approved

Plan Number	Name
DSP-220047	Waldorf McDonalds
DSP-230002	2215 Crain Highway Property
DSP-230033	Bryan's Road Dash-In

In addition to the three stormwater redevelopment plan permits receiving final approval on the above table, there were 30 stormwater management plan permits for new development that received final approval and the associated development services permits were subsequently issued in FY 2024 (some of these issued permits were plan revisions). A table of FY 2024 issued SWM permits follows.

Table 4: Final Approved Stormwater Management Plan Permits in Fiscal Year 2024

DSP 210038	DSP 230004	DSP 230013	DSP 230030	DSP 230049
DSP 220005	DSP 230006	DSP 230018	DSP 230031	DSP 230050
DSP 220013	DSP 230008	DSP 2230019	DSP 230035	DSP 230053
DSP 220037	DSP 230010	DSP 2230021	DSP 230036	DSP 240014
DSP 220043	DSP 230011	DSP 230027	DSP 230039	DSP 240015
DSP 230001	DSP 230012	DSP 230028	DSP 230042	VCI_180001

* This table does not include Redevelopment Plan Permits, which are shown on table above.

For the FY 2024 time period, the County did not receive or grant any requests for Exemptions or Administrative Waivers for quality and/or quantity.

Once stormwater BMPs have been constructed, As-built drawings of the BMPs are verified and approved by the County, then a final acceptance inspection is completed by the County, and finally a warranty period begins prior to bond release.

Table 5: As-Builts Approved In Fiscal Year 2024

Permit Number	Name	Approval Date
VC_170022	Dr. Samuel Mudd Elementary School	7/25/2023
DSP-180009	Matthews Road Improvements	7/28/2023
DSP-210005	Waldorf Popeye's Water & Sewer Replacement	8/1/2023
DSP-190089	CSM Center for Health Sciences	8/3/2023
VR_180014	Raven Woods	8/2/2023
DSP-200048	Brookstone Townhouse Development	8/9/2023
DSP-220020	4420 Crain Highway Sewer Extension	8/9/2023
DSP-210039	Atlantic Car Wash Wawa	8/15/2023
VR_050062	Worthington Subdivision, Phase 3	10/2/2023
DSP-200030	CSM Center Thompson Access Drive	10/10/2023
DSP-220015	McDonough High School Synthetic Turf	11/16/2024
DSP-200052	Rosewick Road Improvement Plan	11/20/2023
VR_140040	Piney Church Road Upgrade	11/17/2023
DSP-190069	UPS Waldorf Expansion	11/29/2023
DSP-210042	Trinity Orchard	11/30/2023
VR_60068	Worthington Subdivision	12/28/2023
DSP-210025	Cobb Island Dollar General Store	1/8/2024
DSP-190056	Eva Turner Elementary School	1/11/2024
DSP-210041	Panera Bread	1/11/2024
DSP-190029	Huntt Manor Subdivision	2/16/2024
Dsp-190032	Acton Park Place	3/4/2024
DSP-220021	Tommy Box Carwash	3/4/2024
DSP-200027	Acton Village Stream Restoration	3/19/2024
DSP-210013	Dyson Storage, Phase 1	3/24/2024
DSP-200056	Mount Carmel Building Addition	4/29/2024
DSP-200026	7-Eleven St. Ignatius	4/30/2024
VR_180005	Windsor Mill Phase 2	4/30/2024
VC_130015	St. Charles High School Mitigation Bank	5/2/2024
DSP-210024	JP Ryon Elementary School Addition	6/3/2024
DSP-210035	Parklands Neighborhood Stream Crossing	6/3/2024
DSP-200012	South Park East	6/24/2024
DSP-190091	Parklands Neighborhood Sewer Trunk	6/27/2024

c. *Maintaining construction inspection information is to be maintained according to COMAR 26.17.02 for all ESD treatment practices, structural stormwater management facilities, and stable conveyance and capacity to receiving waters, including the number of inspections conducted and violation notices issued by Charles County.*

FY 2024 Status

In accordance with COMAR 26.17.02.10 Construction Inspection and Enforcement, County personnel perform the various inspections, as outlined for the ESD treatment practices and structural stormwater management facilities. The County also reviews the as-built plans and certifications, including the submission of the Notice of Construction Completion Forms.

In January 2019, Charles County Department of Planning and Growth Management fully transitioned to a permit management software system called EnerGov. This system schedules and tracks review and inspection activities associated with all types of construction permits. The EnerGov module provides a location in each permit file to store photos, permit drawings, reports, data forms, and documents such as inspection reports, violation notices, and letters.

The number of stormwater management facility construction inspections is shown on the following table. The inspections of residential micro-stormwater practice inspections count as one per permit, even if there are multiple stormwater practices per permit. There were no stormwater construction violations or stop work orders specifically associated with stormwater, as the leverage of the permit is used to hold the developer accountable to make the needed changes to bring non-compliant stormwater facilities into compliance.

Table 6: Stormwater Best Management Practice (BMP) Construction Inspections

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Development Services Permits (DSP) (BMPs not on Residential Lots)	571	363	286	232	293
Residential Permits (RESD) (BMPs on Private Residential Lots)	1,182	1,080	1,361	1,154	667
Construction Violations (Stop Work Orders)	0	0	0	0	0

d. *Conducting preventative maintenance inspections according to COMAR 26.17.02, of all ESD treatment systems, structural stormwater management facilities, and stable structural 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 shall be submitted in the County's annual reports.*

FY 2024 Status

The County continues conducting preventative maintenance inspections of all stormwater management (SWM) devices on a triennial basis. In FY 2021 inspections were expanded to include Charles County Government and Public School owned BMPs located in the Towns of La Plata and Indian Head.

In February 2020, the SWM Maintenance Inspections fully transitioned to the new EnerGov software. Since then, each existing and new stormwater BMP not on a private residential lot is assigned a Stormwater Management Maintenance (SWMM) permit number in EnerGov. These are referred to as macro-BMPs. Residential micro-stormwater practices are inspected under the original construction permit number and not assigned a separate SWMM permit. This is because the multiple BMPs on residential lots are inspected under a single inspection entry whereas the stormwater macro-BMPs are inspected and tracked individually. In FY 2024 there are 3,043 active SWMM permits for macro-BMPs.

Table 7: SWM Maintenance Permits for Macro-BMPs Entered in EnerGov for Inspection

	Jan 1, 2020 – June 30, 2021	FY 2022	FY 2023	FY 2024
# SWMM Permits Entered	1,484	1,339	209	111

Maintenance inspection photos and reports are recorded directly into the EnerGov software module on electronic field tablets during the inspection of each BMP. If necessary, certified letters are sent to initiate compliance and these are also saved within the individual permit file within EnerGov.

The EnerGov software provides the following options for each inspection result: “Pass” or “Re-inspection Required”. Inspections with “Pass” results are recorded as “Pass” and the inspections with “Re-inspection Required” results are recorded as “Fail” in the MS4 Geodatabase. It should be noted that the reasons for “Re-inspection Required” vary widely and include not being able to access the site, needing minor maintenance, and structural failure. Therefore, a “Fail” in the MS4 geodatabase does not indicate severity of the situation. Owners are notified that maintenance is required and re-inspections are scheduled on the timeframe determined suitable by the inspector. If the owners do not rectify the situation, the cases are referred to the County Attorney’s Office for enforcement.

Table 8: SWM Maintenance Inspections for BMPs not on Private Residential Lots

	FY 2021	FY 2022	FY 2023	FY 2024
Total Inspections	1,378	1,547	1,112	1,720
Failed Inspections	242	345	667	793
Total BMPs Inspected	1,163	1,371	692	1,283
Noncompliant BMPs	154 (13%)	203 (15%)	273 (39%)	365 (28%)

*Noncompliant BMPs are those *F* at end of Fiscal Year.

Table 9: SWM Maintenance Inspections for BMPs on Private Residential Lots

	FY 2021	FY 2022	FY 2023	FY 2024
Total Inspections	3,009	219	2,099	4,019
Failed Inspections	463	101	929	1,648
Total Private Residential Lots Inspected	2,590	178	1,373	2,593
Lots w/Noncompliant BMPs	326 (13%)	44 (25%)	213 (16%)	230 (9%)

*Noncompliant BMPs are those F at end of Fiscal Year.

Table 10: SWM Maintenance Inspections for Restoration BMPs*

	FY 2021	FY 2022	FY 2023	FY 2024
Total Inspections	32	1	9	36
Failed Inspections	0	1	7	11
Total Restoration BMPs Inspected	32	1	4	30
Noncompliant BMPs	0	1	2	5

*These inspections are included in the totals found in Table 6.

*Noncompliant BMPs are those F at end of Fiscal Year.

The data in this section is captured in the MS4 Geodatabase as follows:

- Number of various types of stormwater plan reviews, and construction inspections are in the *SWM Table*,
- New development and restoration BMPs are in the *BMP Table*, and
- BMP Maintenance inspections are in the *BMP Inspections Table*.

Stormwater Maintenance Inspection Process Updates

EnerGov Software

The EnerGov software began to be used for scheduling and tracking stormwater maintenance inspections in February 2020. Processes for adding BMP inspections into the EnerGov queue:

- 1) Active historic BMPs and new BMPs are manually entered into EnerGov. As of FY 2023 this is mostly complete.
- 2) When new BMPs are constructed and the final inspections passes, staff schedule the future 1-year inspections.
- 3) Following inspections must be requested in EnerGov prior to completing a current

inspection, otherwise the BMP will not be in the queue for another inspection.

- 4) Private Residential micro-BMPs are often built under multiple permits, such as house, garage, pool, deck, etc. A maintenance inspection is tracked for each original permit in EnerGov and not the revision permit, if applicable.

Processes for transferring data from EnerGov into the MS4 geodatabase:

- 1) EnerGov quarterly reports of fully constructed BMP permits passing final construction inspection (aka 'finaled') are used to add new BMPs to the geodatabase records.
- 2) EnerGov quarterly reports of BMP maintenance inspections are entered into the geodatabase.
- 3) New EnerGov Inspection Numbers are matched with existing inspection numbers to ensure no duplicate inspections are entered into the MS4 geodatabase.
- 4) The SWMM Permit numbers from EnerGov have been added to the County's MS4 geodatabase schema for easily matching records.
- 5) Up until mid-FY 2022, inspection records within the geodatabase were matched by BMP_ID and re-inspections and manually collapsed into the line item of the original "Fail" inspection. If a BMP had "Fail" on re-inspection, the third inspection was entered on a new line item, and the process is repeated. The collapsing process ceased due to MDE's new schema released in March 2022, that collects each inspection as a separate line item.

General EnerGov processes:

- 1) When a constructed BMP is modified under a subsequent project permit, often the BMP will be in the inspection queue under both project permits and thus have repeated inspections. When these are found one of the duplicate BMP records is 'completed' (aka closed) in EnerGov and removed from the MS4 geodatabase *BMP Inspections Table*.
- 2) EnerGov provides a data line for entering the entity maintaining each BMP. In FY 2024 a request to expand the options was entered and expected to be completed in FY 2025. Having this data in the EnerGov allows for a report to be run of upcoming inspection dates for entity maintaining the BMPs.
- 3) BMP inspections that have been associated with multiple or incorrect property ID's in EnerGov need to be corrected. This likely needs to be done by a software manager.
- 4) EnerGov software may create multiple SWMM permit numbers for the same BMP, likely due to an internal saving process occurring during data entry and can only be corrected by a software manager. Several have been identified for correction and some corrected.
- 5) EnerGov process for violations and enforcement should be clarified and reports developed for BMPs that have failed multiple times in a row.

Inspection Notification for Private Residential Lot Owners

The Stormwater Maintenance Inspections postcard mailer started being used in May 2019 for pre-notification to homeowners that a County inspection would be held within 2-4 weeks and

that access to their property is needed. A door hanger was also developed to let the homeowners know if a BMP issue was found during the inspection and to expect a follow-up letter from the County. The feedback on the pre-notification and the door hanger has been positive. Images of the postcard are provided.



In accordance with the stormwater management maintenance requirements set by the Code of Maryland Regulations (COMAR), the Department of Planning & Growth Management is required to ensure preventive maintenance is occurring by inspecting all stormwater management systems. Inspections shall occur during the first year of operation and at least once every 3 years thereafter. An inspection of the following facilities will take place on the property listed below within 2 to 4 weeks of this mailing. Inspection results will be mailed to the property owner.

Property to be inspected: _____

Facilities to be inspected: _____

To prepare for this inspection routine maintenance activities such as grass cutting, trash removal and stabilizing areas of minor erosion should be completed.

Code of Maryland Regulations Title 26.17.02.11 (maintenance)
<http://www.dsd.state.md.us/comar/comarhtml/26/26.17.02.11.htm>
For more information regarding your stormwater management facilities
<https://www.charlescountymd.gov/pgm/planning/watershed/stormwater-bmps-and-facility-inspection-maintenance>

For questions regarding Stormwater maintenance contact PGM/CPIS at 301-645-0821

Private On-Site SWM Facilities Declaration of Covenants Disclosure Form

In FY 2021 the Charles County Department of Planning and Growth Management instituted a process of disclosing to future homeowners their maintenance responsibilities regarding on-site micro scale stormwater management practices. This is done by executing and recording an agreement in County Land Records which outlines responsibilities of homeowner maintenance and County inspections. This agreement runs with the land, thus binding future owners.

As-Built Requirements for New Residential Dwelling Permits

Effective June 28, 2024, an as-built plan must be submitted and approved prior to obtaining a Certificate of Use and Occupancy for a new home from the Department of Planning and Growth Management. The as-built plan must show information needed to ensure the grading, stormwater management measures, and drainage conveyance systems/drainage pattern(s) comply with the specifications contained in the approved permit drawings. A copy of Notice 24-04 announcing this change is included in Appendix B.

1. Erosion and Sediment Control

An acceptable erosion and sediment control program shall be maintained and implemented in accordance with Environmental Article, Title 4, Subtitle 1, Annotated Code of Maryland. County activities shall include, but not be limited to items a-c.

a. *Implementing program improvements identified in any MDE evaluation of the County's erosion and sediment control enforcement authority.*

FY 2024 Status

Every two years, MDE performs field reviews of active construction sites to review the County's implementation of the erosion and sediment control program. The County's current delegated program authority was renewed on October 7, 2024, to extend through June 30, 2026.

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 MDE.*

FY 2024 Status

County sediment and erosion control inspection staff continues to verify that site operators hold valid Responsible Certification as required by MDE.

c. *Reporting quarterly to MDE, information regarding earth disturbances exceeding one acre or more.*

FY 2024 Status

The required data has been provided to MDE on a quarterly basis in FY 2024. The following information summarizes the number of entries in the MS4 Geodatabase *Quarterly Grading Permits Feature Class*.

Table 11: Construction Permits Issued for Earth Disturbances > 1 Acre, Fiscal Years 2020-2024

Permit Type	2020	2021	2022	2023	2024
Development Services Permits	27	33	35	27	24
Residential Permits	6	2	7	6	4

Erosion and Sediment Control Program activity shall be recorded in the MS4 Geodatabase and submitted to MDE as required in Part V.A of the permit.

FY 2024 Status

The following information is included in the MS4 Geodatabase *Erosion Sediment Control Table*.

Table 12: Erosion and Sediment Control Table for Fiscal Years 2020 - 2024

Fiscal Year	2020	2021	2022	2023	2024
Number of Grading Permits Issued	701	1,099	1,238	1,211	1,758
Number Grading Permits Active (overall)	1,295	1,417	1,307	1,339	1,159
Disturbed Area for Active Grading Permits	4,498	3,845	4,125	4,418	2,839
Number of Other Permits Issued	22	28	24	24	27
Number of Other Active Permits (overall)	46	31	50	51	60
Disturbed Area for Other Active Permits	2,845	1,767	1,732	1,762	3,774
Number of Sediment Control Inspectors	4	4	5.25	5.5	5.5
Number of Supervisors	1	1	1	1	1
Number of Sediment Control Inspections	8,053	5,624	6,372	5,230	3,177
Number of Stop Work Orders Issued	23	15	16	15	21
Number of Fines Collected	23	15	16	15	21
Amount of Fines Collected	\$11,109	\$7,530	\$8,302	\$7,875	\$11,025
Number of Violations	23	24	16	15	21
Number of Court Cases	0	0	0	0	0
Number of Sediment Control Complaints Received	12	40	32	30	33

3. Illicit Discharge Detection and Elimination

An inspection and enforcement program shall be implemented to ensure that all discharges to and from the MS4 that are not composed entirely of stormwater are either permitted by MDE or eliminated. Activities include:

- a. *Field screening at least 100 outfalls annually. Each outfall having a discharge shall be sampled using a chemical test kit. Within one year of permit issuance, an alternative program may be submitted for MDE approval that methodically identifies, investigates, and eliminates illegal connections to the County's storm drain system;*
- b. *Conducting annual visual surveys of commercial and industrial areas for discovering, documenting, and eliminating pollutant sources. Areas surveyed shall be reported annually.*
- c. *Maintaining a program to address and, if necessary, respond to illegal discharges, dumping, and spills;*
- d. *Using appropriate enforcement procedures for investigating and eliminating illicit discharges, illegal dumping, and spills. Significant discharges shall be reported to MDE for enforcement and/or permitting; and*
- e. *Reporting discharge detection and elimination activities as specified in Part V. of the permit.*

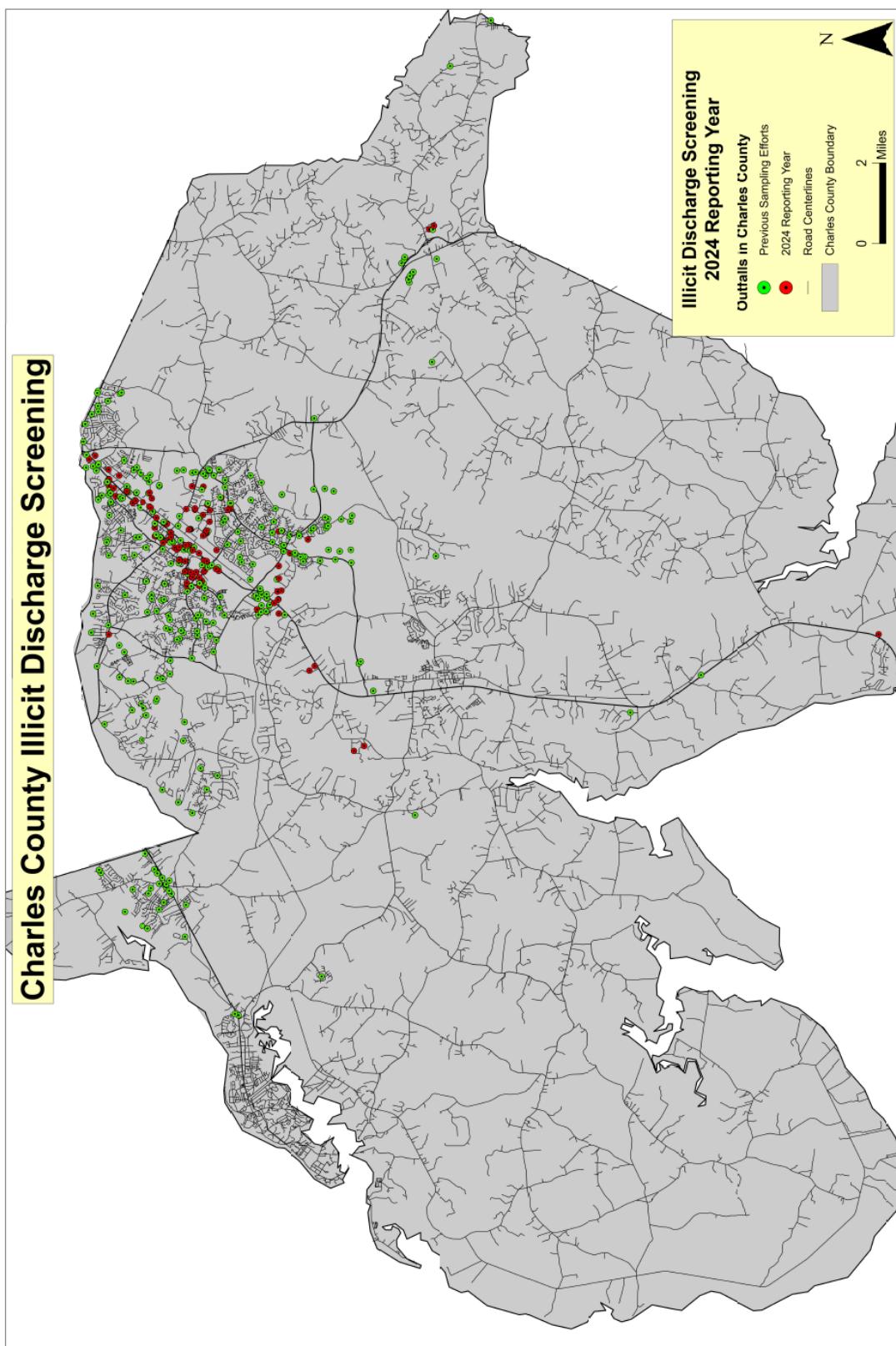
FY 2024 Status

Illicit Connection Detection Field Screening

During the FY 2024 screening, 104 sites were inspected. This includes 22 draining industrial areas and 82 draining commercial areas. For FY 2024, residential outfalls were not screened, while commercial outfalls with pipe diameters of less than 36" were both inventoried and screened.

For the 2024 reporting year, 76 previously mapped outfalls that were not sampled during the 2023 reporting year were selected for sampling and accounted for 76 of the 104 sites. The remaining 28 outfalls were newly added to the major outfall inventory for the 2024 reporting year to align with the updated selection criteria. Of the 28 new outfalls screened, 27 of these drain commercial areas, and one drained industrial area. The location of the outfalls sampled in FY 2024 are identified on the *Charles County Illicit Discharge Screening* map on the following page.

The screening was conducted in June of 2024. A two-person field crew visited each site following 72-hours of dry weather. The physical condition of each site was recorded on a Charles County Outfall Screening Field Sheet. An example of the Field Sheet is attached to the



County's updated Standard Operating Procedure (SOP), in Appendix C. If a dry-weather flow was present, a sample was taken and tested with a Hach chemical test kit. Tests were conducted for pH, detergents, chlorine, copper, phenols, temperature, and ammonia nitrogen. If a chemical test detected a high concentration of any contaminant, the site was retested to verify the results. Retesting was conducted no sooner than 4 hours after the initial test and no later than 24 hours following the initial test.

The results of the chemical tests performed were compared with the accepted statewide averages described in *Dry Weather Flow and Illicit Discharges in Maryland Storm Drain Systems* (MDE, 1997). Using these statewide averages, the 1997 study provides thresholds for each constituent based on watershed land use. The results from the FY 2024 chemical tests were compared against these thresholds to identify storm drain systems that may have possible illicit connections and require further investigation. The thresholds listed were 0.4 ppm for chlorine, 0.17 for phenols, 0.21 for copper, and 0.5 ppm for detergents. No state-approved threshold limits exist for ammonia. Based on EPA and USGS documentation, a value of 2.0 ppm appears reasonable. This is consistent with the high outlying values found in previous screening efforts. Review of past data shows that typical pH values in Charles County fall outside the standard threshold range of 6.5 to 8.5. Therefore, for the 2024 reporting year, the following thresholds were used to determine if an upstream investigation was necessary:

- pH outside the range 5.5-8.5
- >0.5 ppm Detergents
- >0.4 ppm Chlorine
- >0.17 ppm Phenols
- >0.21 ppm Copper
- >2.0 ppm Ammonia

When a confirmed high concentration of a contaminant was found, field crews followed the storm drain system upstream attempting to locate the source of the contamination. Additional tests at upstream structures were conducted as needed in an effort to track the contamination upstream to the source, especially where two systems converged. For any outfall with flow, a brief inspection of the storm drain system was performed to indicate the source of the discharge.

All data collected during the illicit discharge screening is recorded in the MS4 geodatabase in the *IDDE Screening Table*.

The results show that of the 104 sites, 8 had observed flow. Of these, 2 had observed flow where a sample was not able to be gathered. One outfall was completely submerged, with small flow at the first upstream structure. However, all upstream inlets were grated. The other outfall was behind a fence, with the second upstream structure showing flow. All upstream structures were grated inlets. For these outfalls, observed flow is set to 'no' and water

temperature and CFS flow are not filled out in the geodatabase since a sample was not collected. Of the remaining 6 sites where flow was able to be collected, all had detectable ammonia, though only Outfall #247 tested above threshold. No concentrations of detergents, chlorine, phenol or copper were detected at the sites where flow was able to be collected. pH levels were within historical ranges for all outfalls sampled.

Metal corrosion was present at 5 outfalls and 9 outfalls were found to either be backwatered or submerged. Five (5) outfalls were experiencing concrete cracking/spalling. Other issues encountered at the 9 outfalls included joint separation, endsection separation, bituminous coating cracking, and pipes filled over halfway with sediment. Moderate erosion was occurring at four outfalls, and severe erosion at one.

Algae was found at 18 outfalls, which may indicate excessive nutrients in the water. Outfall #158 had an oil/grease odor. Outfall #247 had a rancid/sour and soap smell. Outfall #158 had yellow colored flow and Outfall #247 had orange colored flow upon the first inspection, and grey colored flow upon the second. Outfall #158's color was attributed to natural causes such as iron flocculent, while Outfall #247's color was attributed to the illicit discharge entering the system upstream. Both sites' flow was also cloudy. Sediment and iron flocculent deposits were found at many sites. The screening results are listed in the following table.

Table 13: Field Screening Results for Priority Outfalls

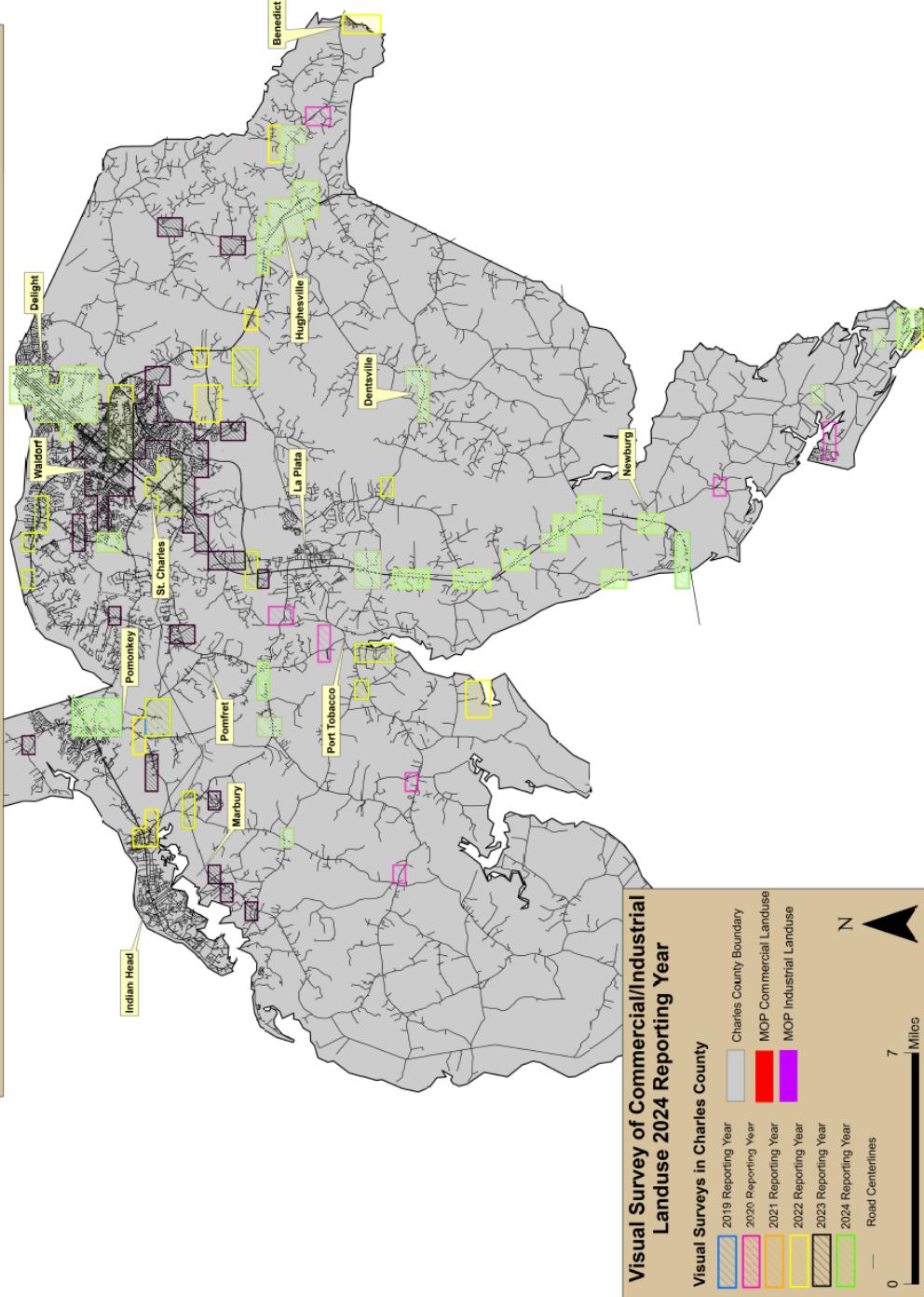
Outfall #	Problem
#76	One of the three culverts' pipes is corroded through
#278	Erosion at second upstream inlet
#477	Pipe buried 75% with sediment
#472	Pipe buried 75% with sediment, trash, and debris
#303	Erosion present downstream of outfall
#488	Joint separation and pipe corroded through
#72	Pipe buried with 75% with sediment
#247	High ammonia and soapy/rancid discharge associated with carwash

Commercial and Industrial Visual Surveys

During the FY 2024 screening, several portions of the County including Waldorf, Bryan's Road, Cobb Island, Dentsville, Hughesville, and US 301 south of La Plata to Newburg were targeted for visual surveys. The visual surveys were conducted in early June 2024 and 312 tax parcels were visually assessed in the field. The *Charles County Visual Survey of Commercial and Industrial Land Use* on the next page maps the survey locations.

For the FY 2024 screenings, the approach to selecting, tracking, and inspecting commercial and industrial surveys was continued from FY 2023. The ISA_PARCEL shapefile was utilized to determine tax parcels within the County that had commercial or industrial land uses.

Charles County Visual Survey of Commercial/Industrial Landuse



NPDES MS4 Annual Report | FY 2024

Commercial and industrial tax parcels were selected from this shapefile and field maps with parcel account numbers were generated for the targeted areas. See Figure 6, *Example Field Map*.

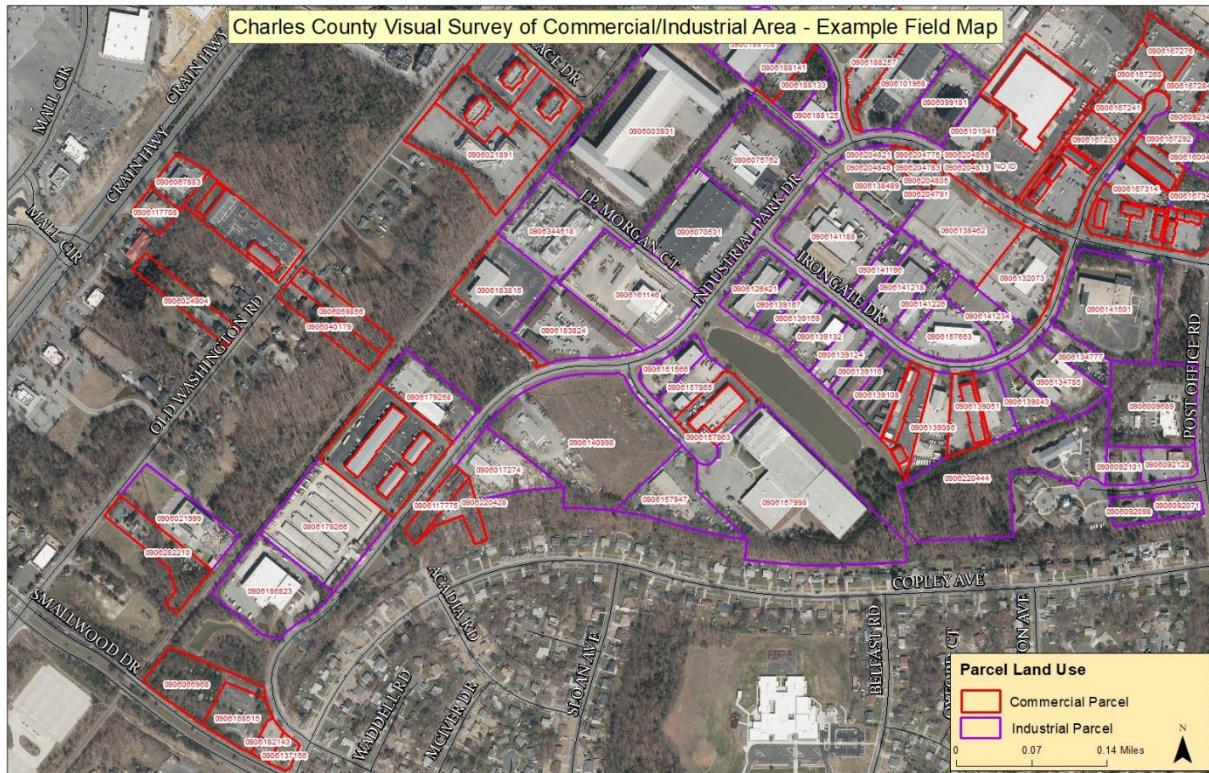


Figure 6: Commercial/Industrial Areas – Example Field Map

Tracking of inspected tax parcels were completed using the ISA_PARCEL shapefile to ensure all commercial and industrial properties are inspected over the permit term.

The survey uses a modified Center for Watershed Protection (CWP) Hotspot Site Investigation (HSI) Sheet, which can be found as an attachment to the County's updated SOP in Appendix C. The modified HSI Sheet contains the most common items that inspectors find in the field, including vehicle operations, storage of outdoor materials, waste operations, and facility management. Each tax parcel identified on the field maps was visually assessed from a vehicle or on foot depending on access and safety. If no visible practices or conditions that would produce pollution to nearby storm drain inlets or watersheds are observed, then a Charles County HSI Sheet was not filled out, but the field map was marked to show the tax parcel was surveyed.

If visible practices or conditions that would produce pollution to nearby storm drain inlets or watersheds were observed, field crews used the Charles County HSI Sheet to record the tax parcel number, address/location, business name, property owner (if available) and to document

their observations in writing with attached photographs. The crew also marks the field map to show which tax parcel was surveyed.

Within the targeted areas, 32 businesses were documented as having practices or conditions that would produce pollution to nearby storm drain inlets or watersheds in 2024. These businesses and their practices or conditions are listed below in Table 14. Detailed reports for each can be found in Appendix D and enforcement activity is described in the following section.

Table 14: Visual Survey of Commercial & Industrial Land Use – Potential Pollution Sites FY 2024

Date	Site Name	Problem
4-Jun-24	Ace Hardware	Broken bags of asphalt left outside.
4-Jun-24	Bryan's Road Tire & Auto	Staining on pavement and improper material storage.
4-Jun-24	CubeSmart	Overflowing dumpsters and grease trap/dumpster staining.
4-Jun-24	Domino's	Trench construction behind building with unprotected stockpiles and trash bags.
4-Jun-24	Exxon	Fuel spill on pavement at one of the gas pumps.
4-Jun-24	JC's Outboard & Marine	Improperly stored materials including a gas lamp and engines.
4-Jun-24	Mr. Tire	Oil stains on pavement and tires/IBC tanks stored outside without cover.
4-Jun-24	Pinefield North	Leaking grease trap and public dumping behind shopping center.
4-Jun-24	Premier Auto Imports	Car mats being washed outdoors and poor housekeeping.
4-Jun-24	Speedy Clean Car Wash	Wash water leaving car wash bays.
4-Jun-24	WASH HOUSE	Public dumping and leaking unidentified storage container.
5-Jun-24	Asados Grill	Overflowing dumpster and excess trash surrounding dumpster.
5-Jun-24	National Tire and Battery	Dumpster with excess trash piled behind it.
5-Jun-24	Cabinet Era Waldorf	Uncovered trash pile behind building.
5-Jun-24	Eddie Leonards	Excess miscellaneous loose trash behind business.
5-Jun-24	Empty Lot; parcel 0906061451	Previous commercial site with discarded chemical buckets and mattresses, possibly public dumping.
5-Jun-24	Firestone	Uncovered, rusted oil bucket stored behind building.
5-Jun-24	Hip Hop Chicken	Abandoned lot with public dumping and overflowing trash piles/trash cans.
5-Jun-24	Jimmy Johns	Grease trap staining/discharge on pavement.
5-Jun-24	Prime Thrift Waldorf	Overflowing dumpsters with loose trash surrounding them and underneath trash compactor.
5-Jun-24	Roy Rogers	Heavy staining underneath dumpster and numerous chemical buckets lined next to dumpster.
5-Jun-24	Sam's Club Gas Station	Unprotected concrete stockpile next to an inlet.
5-Jun-24	Shark Bar	Open grease bin with heavy staining underneath.
5-Jun-24	Thai Palace	Heavy staining on the sides of two grease traps and on the pavement surrounding them.

NPDES MS4 Annual Report | FY 2024

5-Jun-24	Unclaimed Lot; parcel 0906047394	Uncovered stockpiles (asphalt and dirt) without any stormwater protection.
10-Jun-24	Waldorf Chevy Ram	Active vehicle washing behind building with water runoff entering stormwater pond.
17-Jun-24	301 Truckstop	Uncovered excess trash piles.
17-Jun-24	Hardesty's Liquors	Overflowing dumpster with excess loose trash throughout property. Trash building up behind dumpster.
17-Jun-24	Newburg Marine	Evidence of possible boat washing; cleaning supplies left outside next to hose and wet boats.
17-Jun-24	Unknown Lot; parcel 0904004256	Excess trash piles and gas tanks with unknown materials stored behind them.
17-Jun-24	We Pave	Uncovered millings stockpile with no stormwater protection.
18-Jun-24	Everything Amish	Uncovered excess trash/material pile next to building.

Enforcement Activities

Between December 2023 and December 2024, 65 illicit discharge complaints were reported and investigated. Thirty-two (32) originated from the spring survey and 33 came from the public. See Appendix D for a list of the investigations and their status.

Standard Operating Procedure

The Illicit Discharge and Detection Elimination Standard Operating Procedure (SOP) has been revised and updated to include the definition of an *illicit discharge* as per the Center for Watershed Protection's *IDDE Guidance Manual* and to incorporate changes necessary to reflect design upgrades to the County's case management software system that was launched in 2023. The County's SOP is included in Appendix C.

Illicit Discharge is defined in the County's updated SOP as follows, including several examples:

“...[A]ny discharge into a municipal storm sewer system that is not purely stormwater runoff, except discharges from common residential outdoor uses, firefighting activities or from any legally permitted discharge. Certain common residential discharges, such as lawn and landscape irrigation, individual car washing, and de-chlorinated swimming pool water, are also exempt from being considered illicit. Examples of illicit discharges include dredged soil, solid waste, sewage, garbage, debris, wastewater, sludge, chemical and biological materials, radioactive substances, sediment, yard and pet waste, nutrients, toxic substances, pesticides, herbicides, automotive fluids, petroleum products, and other pollutants.”

The Charles County Storm Drainage Ordinance also defines *Illicit Discharge* as:

“...[A]ny discharge to a municipal separate storm sewer system that is not composed entirely of

stormwater runoff, except discharges from common residential outdoor uses, firefighting activities or from any legally permitted discharge.”

Proposed Program Improvements

In line with the recommendations from FY 2022 and FY 2023, inventory and screening efforts in FY 2024 focused exclusively on commercial and industrial outfalls. Additionally, pipes with internal diameters of less than 36 inches were included in the inventory and screening process. All inspection work conducted in FY 2024 adhered to these guidelines.

For FY 2025, it is recommended to continue additional inventory and screening efforts to identify any new potential illicit discharges from these outfalls. Historically, the County's field screening efforts included residential major outfalls. However, shifting the focus away from residential areas allows for greater attention on commercial and industrial zones, where the risk of pollution is typically higher.

4. Property Management and Maintenance

- 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 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 MDE 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.*

FY 2024 Status

County-Owned Facilities with Industrial Stormwater Permits

As of FY 2024, three County-owned municipal facilities require the NPDES industrial stormwater permit coverage. These facilities are the Charles County Wastewater Treatment Plant (WWTP), the Sanitary Landfill #2, and the Department of Public Works (DPW) campus. All three facilities have active SWPPPs (Stormwater Pollution Prevention Plans). The facilities have been operating under the new 20-SW permits and comply with the new requirements.

At all three facilities, routine inspections are conducted. At a minimum, on a quarterly basis, quarterly visual assessments and routine facility inspections are completed. Monthly, non-stormwater discharge assessments and routine monthly inspections (focused on spill prevention) are conducted. The facilities complete annual staff training and comprehensive site evaluations. More information is in the Staff Training section below.

The Municipal Facilities Narratives are in Appendix E, and the *Municipal Facilities Table* is included in the enclosed MS4 Geodatabase.

- 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 MDE by the County in its third year annual report and implemented thereafter. A standard GHP 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; and*
- 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.*

FY 2024 Status

Good Housekeeping Plan

Charles County collaborated with other Maryland Phase I permittees to develop a Good Housekeeping Plan (GHP) template for applicable County-owned properties. On April 18, 2024, the Maryland Department of Environment approved the GHP template. The next step for the County is to introduce the GHP to the County's Executive Leadership Team so that all County Departments are aware and prepared for site evaluations and plan implementation. This meeting is anticipated in early 2025, with final GHP completion anticipated in late 2025.

Staff Training in Pollution Prevention and Good Housekeeping Practices

Per the Charles County Department of Public Work's (DPW) Stormwater Pollution Prevention Plans (SWPPP), all applicable staff are trained annually on, but not limited to: spill prevention and control, proper fueling procedures, general good housekeeping practices, waste recycling, and used oil management. A PowerPoint presentation is developed and presented by the Environmental Compliance Manager to discuss the topics, as well as any specific examples of how to improve DPW's housekeeping practices. A recorded PowerPoint presentation is played at the employee's convenience by the completion due date. A record of all employees who completed these training courses is kept with the SWPPP. Divisions of the Department of Public Works received their annual SWPPP training in November 2024. Example training slides are shown below.



Stormwater Pollution Prevention Plan Training Dept. of Public Works

Presenter:
Keith Roumfort,
Environmental Compliance Manager

Nov. - Dec. 2023

Slide 7

Spills

- 1. Stop it**
 - gas, diesel, oil, or other hazardous liquid
- 2. Clean it**
 - access a spill kit or spill supplies
 - several locations at DPW
- 3. Report it**
 - complete report forms in spill kit
 - online or hard copy

Slide 12

What does 20-SW permit do?

20-SW Permit Outlines:

- Prohibited stormwater discharges
- Eligible discharges
- Stormwater Pollution Prevention Plan (SWPPP)
- Corrective actions
- Inspections, monitoring, reports
- Standard permit conditions

Slide 7

What can you do?

Practice Common Sense Good Housekeeping

1. Keep fluids and loose solids properly contained as they are used or moved.
2. If a spill happens: stop it, clean it, and report it.
3. Please return materials to their proper locations after you're done.

Slide 9

The Mattawoman Wastewater Treatment Plant (WWTP) conducted their annual SWPPP training in December 2023. Hazen and Sawyer assisted the county in preparation of the new SWPPP and conducted training with staff about all areas of the SWPPP and conducting Inspections.

The Mattawoman Wastewater Treatment Plant SWPPP team takes applicable staff on their routine facility inspection and discusses good housekeeping practices. The SWPPP team also discusses spill response, which covers the gates to lock in an emergency and the locations of all spill kits. Staff has also taken extra steps in cleaning around site to maintain spill prevention and placing spill kits in key areas. Equipment maintenance staff have been included to ensure day to day operations and activities maintain compliance with spill prevention.

Mattawoman is undergoing major upgrades and with the construction activities at the facility and the greater possibilities of fuel/oil contamination from equipment leaks. Observation of any incidents of this nature was stressed so remediation can take place if necessary. Erosion control that has been put in place for these construction activities is inspected regularly by the County Inspectors. In addition to this service, the SWPPP team members at the facility also inspect these sediment controls as part of their inspections.

- 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.8.a;*
 - ii. *Inlet inspection and cleaning in the amount identified in Appendix B and annually updated thereafter in accordance with PART IV.E.8; 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 the properties;*
 - *Piloting biological pest control programs; and*
 - *Establishing “no mow” areas.*

FY 2024 Status

Street Sweeping

In FY 2024, the Roads Division (Roads) swept 1,557 miles of Charles County roadways, mostly within high traffic and residential areas. The hired contractor typically uses one to three trucks

when they mobilize and typically uses a 2006 or 2016 Freightliner Broom Bear sweeper. Tonnage collected from sweeping was 113.62 tons and the FY 2024 budget for street sweeping remains at \$125,000.00. Roads requests a 10% increase for all line items every budget year regarding the Watershed Protection and Restoration Fund.

Table 15: Street Sweeping

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Miles Swept	430.7	522.47	1,156	1,358	1,557
Debris Removed (tons)	94.6	46.5	157	89	113.62
Contractual Expenses	\$101,250	\$99,000	\$98,500	\$92,700	\$125,300

Inlet Inspection, Repair, Cleaning, and Marking

The weight of material removed from storm drain inlets cleanings was 66.74 tons. FY 2024 budget for inlet cleaning was \$150,000 with an additional \$500,000 for inlet and catch basin inspections. Inlet repairs totaled \$398,048. Actual expenditures vary from budgeted amounts. Budgets for FY 2024 are indicated in the following tables.

Table 16: Stormwater Pipe and Inlet Cleaning

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Pipes/Inlets Vacuumed	81/69	77/46	59/31	28	74/48
Debris Removed (tons)	155.4	319.2	55.19	115.13	66.74
Contractual Expenses	\$119,922	\$119,491	\$119,754	\$119,964	\$147,890

Table 17: Stormwater Inlet Inspections and Repairs

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Inlets Repaired	53	9	36	35	46
Contractual Inlet Inspection Expenses	\$270,580	\$274,349	\$316,777	\$370,000	\$499,562
Outfall Repairs (in sq. ft.)	--	2,345	1,375	1,131	810
Contractual Inlet Repair Expenses	--	\$557,410	\$396,373	\$324,249	\$398,048

See Part IV.D.5 Public Education for information on the Storm Inlet Marking program.

The *Alternate BMP Polygons* feature class containing inlet cleaning information, is in the MS4 Geodatabase.

County Owned Stormwater Management Facility Inspection and Maintenance

The County owns and maintains approximately 500 stormwater management facilities for the purposes of managing stormwater runoff from County roads, parking areas and buildings. These facilities must be inspected and maintained on a regular basis to ensure proper functioning.

The intent of providing annual maintenance for these facilities is for consistent performance and to reduce costly repairs. Facility repairs are typically per Planning and Growth Management's stormwater maintenance triennial inspection findings.

Table 18: County Owned Stormwater Management Facility Inspection and Maintenance

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
# Facilities	360	341	393	455	365
Expenses (Contractual)	\$342,321	\$347,209	\$342,845	\$398,682	\$396,757

Mosquito Control expenses associated with County owned property are funded by the Watershed Protection and Restoration Fund since FY 2018 as they are part of maintaining the stormwater management systems.

Table 19: Mosquito Control Expenses

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Expenses	\$6,000	\$16,000	\$16,000	\$25,000	\$32,000

County Owned Stream Restoration and Shoreline Stabilization Projects

In FY 2020 the Department of Public Works (DPW) began conducting year-two and beyond inspections for all completed shoreline stabilization and stream restoration projects that are constructed by the Capital Services Division. As part of each project's completion, Capital Services conducts necessary inspections and monitoring for the year following the project's completion. The Environmental Resources Division conducts any maintenance and inspections thereafter.

In FY 2024, the cost for the Environmental Resources Division to monitor, inspect, and maintain shoreline stabilization projects and stream restoration projects totaled \$164,736.00. This cost may incrementally increase in future fiscal years as more projects are added or as maintenance is needed on mature projects. The cost of each project varies depending upon the level of stabilization or restoration work needed. FY 2025's budget for this task is currently \$250,000.

Table 20: County Owned Shoreline Stabilization and Stream Restoration Monitoring by Environmental Resources

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
# Shoreline Stabilizations	2	5	5	4	2
# Stream Restorations	2	2	5	6	8
Contractual Expense	\$31,676	\$54,648	\$101,910	\$164,736	\$250,000 (budgeted)

Vegetation Management

In FY 2023, Roads used a contractor to apply approximately 392 gallons of herbicide to four County-maintained highways. The contractor used the 1.5% ratio at 2 oz of Round-Up® per gallon. Roads does not apply any other chemicals or pollutants for roadway vegetative management.

The Parks and Grounds Division (Parks) is responsible for maintaining all parks, sport facilities, and lawn care surrounding government buildings within the County. In FY 2015, Parks converted from a quick release to slow-release fertilizer for all applications. Coated/slow-release carrier minimized risk of fertilizer moving into ground and surface water through and less likelihood of runoff. Also, the use of slow-release fertilizer has reduced the frequency of grass mowing. Parks has also stopped the usage of fertilizer that contains phosphorus entirely. The latest saturated soil analysis was conducted on May 7, 2019. In FY 2024, Parks used 36.6 gallons of Buccaneer (EPA #: 55467-9) (Glyphosate, 41%), an herbicide, on County property. The following other herbicides were applied on County property in FY24: 6.83 gallons of Cornerstone Plus, 1.28 gallons of Credit 41 Extra, 2.5 gallons of Lesco 3-way, and 1 gallon of Pramitol.

The White Plains Golf Course is managed independently of the other County parks. In FY 2022, 193 gallons of herbicide/pesticide was applied, as well as 2.5 tons of fertilizer over the 30 acres of turfgrass.

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.*
 - *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.*

FY 2024 Status

Winter Weather Deicing

Rather than spreading salt throughout the storm event, Roads Division waits until the storm has nearly passed to plow and spread salt to increase its effectiveness and decrease runoff. In FY 2024, Roads staff were mobilized for three storm events and applied 2,400 tons of salt to roadways. No pretreatment compounds are used on County roads, such as magnesium chloride and potassium chloride. Roads strictly uses sodium chloride salt when necessary.

Salt spreaders are calibrated before and after their use to ensure they work effectively. Staff is also trained on proper salt-spreading techniques and usage before the beginning of each winter season. If needed, the staff and/or individual contractors are trained throughout the season, depending on the severity of winter weather and their adherence to County policies. Snow supervisors and their contractors know they must remove any excess salt from County roadways after a winter weather event. If any policy is violated, the contractor will not be allowed to continue their snow contract with the County.

Roads is exploring a salt-tracking barcode scanner cell phone application where any person using salt from one of the County's domes will have to scan the amount of salt taken and returned. This way, if salt is improperly applied, the specific contractor can be re-trained or removed from the program.

The Roads Division has drafted a Salt Management Plan which will be submitted for review by the Maryland Department of Environment.

Parks uses a de-icing compound called “Quad-Release”, which is a blend of magnesium chloride, calcium chloride, sodium chloride, and potassium chloride on pedestrian walkways and parking lots. While Parks cannot eliminate the use of this product due to public safety concerns, staff has been trained to reduce the amount used whenever possible. This included the following direction: shovel first prior to applying material, apply the recommended amount or less during large winter events, and close lesser-used walkways. Parks will also sweep sidewalks after the storm is over. Parks did not apply any Quad-Release snow melt on sidewalks and parking lots throughout the winter season in FY 2024. No salt was applied to the White Plains Golf Course.

Four Parks staff attended the Winter 2023-2024 Smart Salting certification course piloted by the University of Maryland Extension and the Maryland Department of Environment.

- e. *The County shall evaluate current litter control problems associated with discharges into, through, or from portions of its MS4. Additionally, the County shall continue to remove from or prevent from entering its MS4 273.5 tons of litter and debris as identified in the first year of permit issuance or as updated annually thereafter in accordance with PART IV.E.8.*

FY 2024 Status

Litter Control Programs

The Charles County Department of Public Works, Environmental Resources Division, (DPW) has multiple litter control programs that have proven to be effective in combating litter.



The litter control crews routinely patrol the litter hot spots in the County, as well as respond to citizen complaints. In addition to the County-staffed litter crews, a contractor conducts daily cleanings for priority roads. The FY 2023 budget for the litter contractor crew was \$185,000. In FY 2024, both contracted and County-staffed crews removed 156.3 tons of litter from the roads. Due to the closure of the Southern Maryland Pre-Release Unit in April of 2021, Litter Control crews were comprised of part-time Charles County employees in FY22. In FY 2024, full-time Litter Control Technician positions were added. Three

Litter Control Teams were created to address litter on roadways and county right-a-ways as well as reported complaints of littering and illegal dumping in Charles County.

The Adopt-A-Road program allows residents to volunteer to clean up their County roads. A sign is placed on the adopted road in recognition of the group/individual that adopted it. The program had 80- roads adopted and 145 cleanings had been reported in FY 2024. Some inactive groups were removed from the program in order to attract more participatory groups.

The Potomac River Watershed Cleanup is scheduled in April every year. This popular event saw 10 volunteer groups conducting cleanups throughout the County. More than 11 tons of litter and debris were removed from waterways. The County and local watershed organizations continue to supply bags, vests, gloves, and litter grabbers, and provided trash removal for the cleanup groups.

In May of 2024, Charles County hosted its third annual Charles County Community Cleanup. Residents and businesses were encouraged to select a community or public space to clean and beautify. Twelve volunteer groups participated in the event, removing nearly 4 tons of debris and litter from area public space.

Litter Control Public Education

DPW has increased their efforts to educate the public on the importance of reducing, reusing, and recycling in numerous ways. DPW has adapted their outreach approach. A brochure was mailed to 60,000 residents in their tax bill regarding household hazardous waste (HHW) recycling and the benefits of grass cycling. Rather than newspaper advertisements or press releases, DPW boosted more social media advertisements, and aired a commercial at the local movie theatre. There were nearly 40 social media posts and videos in FY 2024. Recycling and Litter Control staff were interviewed for five segments of the Charles County YouTube Channel show titled "Your Charles County".



DPW continued offering monthly onsite, secure paper shredding. Residents are required to register for the events in advance. These events shredded and recycled 32.3 tons of personal documents. The FY24 expenses for all public outreach and education was \$50,655 including printing, marketing, community promotions, Geo-bin (composting bin) costs, and rain barrel subsidy. Rain barrels are provided to registered residents at workshops at a reduced cost to capture rainwater for recommended usage.

In FY 2024, the County budgeted approximately \$115,000 for household hazardous waste collection days. This contracted service provides residents a drop-off location on the first Saturday of each month.

Effectiveness of Litter Control Efforts

The latest finalized waste diversion rate is for Calendar Year 2022, which was 49.69%. The County has surpassed the State mandated 35% recycling rate for numerous years.



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.

FY 2024 Status

Changes in Property Management and Maintenance programs are noted above under each applicable permit condition and in the following tables within the MS4 Geodatabase:

The *Alternate BMP Polygon* table reports pollutant reduction resulting from implementation of the storm drain vacuuming program.

The *Chemical Application* table contains information about the types and quantities of chemicals the County uses in maintaining public right-of-way and property.

5. Public Education

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. Provide 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. Increasing proper disposal of household hazardous waste;*
 - v. Improving lawn care and landscape management (e.g., the proper use of herbicides, pesticides, and fertilizers, ice control and snow removal)*
 - vi. Proper residential car care and washing;*
 - vii. Litter reduction;*
 - viii. Reducing, reusing, and recycling solid waste; and*
 - ix. Proper pet waste management.*

The County shall conduct a minimum of 15 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.

FY 2024 Status

The Public Education program continued to develop and grow in FY 2024. Outreach efforts included:

1. Phone, email, and online reporting by the public for suspected illicit discharges and drainage concerns

2. County-wide website, social media, email, newspaper, tax bill inserts, smart apps, County government television (live stream and video on demand)
3. Cable TV, streaming, and digital media Public Service Announcements (PSAs)
4. Radio PSAs
5. Storm Drain Stenciling/Marking Program
6. Homeowners outreach and education on stormwater management
7. Public meetings, public hearings, County Fair
8. Citizens' Academy
9. Rain barrel and composting workshops
10. Septic system maintenance webinars
11. Household hazardous waste collection days, shredding events, community cleanup events
12. Chesapeake Bay Trust Outreach and Restoration Grant Program awards
13. Student and youth outreach
14. Septic Pump-Out and Riser Reimbursement Program
15. Pollution prevention guidance for businesses

Charles County Watershed Protection and Restoration Program - Logo

Charles County's Watershed Protection and Restoration Program (WPRP) logo continues to serve as a branding mechanism for the program. The logo was developed in FY 2015 to project a united program whose staff is spread amongst two departments and several divisions. The logo can be seen on the program's web pages, outreach guidance documents, engineered drawings for restoration projects, brochures, and outreach presentations. The logo served as the program's brand on PSAs during FY 2024 shown on cable television, digital streaming and on County social media. The logo is also featured on promotional merchandise handed out at community and outreach events used to promote the program and increase interest in stormwater management and watershed stewardship.



The following matrix illustrates Charles County's MS4 permit public education coverage.

Charles County Phase 1 MS4 Public Education Coverage

PUBLIC EDUCATION TOOL	Telephone & Hotline	Online Form	Mobile App	Website	MDE Website	Mailed Letters	Inspection	Brochure	Workshop & Training	HOA Meetings	Schools	County Fair	Citizens Academy	Radio PSA	Video PSA	Rebate	CBT Grant	Adopt-A-Road	Storm Drain Marking	River Cleanup	Household Haz Waste Day	Shred-It Event	Comm Cleanup
PERMIT CONDITION																							
Public Reporting Of Water Quality Complaints	✓	✓		✓		✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓		
Water Conservation				✓				✓	✓	✓	✓	✓	✓										
Stormwater Management	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	
Erosion and Sediment Control	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									✓	
Household Hazardous Waste	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
Septic Systems	✓	✓		✓		✓		✓	✓	✓	✓	✓	✓			✓							
Lawn Care & Landscape Management			✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Rain Barrels & Rain Gardens		✓				✓	✓	✓	✓	✓	✓	✓	✓			✓	✓					✓	
Herbicides & Pesticides & Fertilizer				✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Ice Control & Salt Use				✓	✓	✓			✓	✓	✓	✓	✓	✓	✓							✓	
Yard Waste & Composting			✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Litter Reduction	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Reduce, Reuse & Recycle			✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Vehicle Care & Washing	✓	✓		✓	✓	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	
Pet Waste	✓	✓		✓			✓	✓			✓	✓	✓	✓	✓	✓			✓			✓	
NPDES Requirements				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	BUSINESS PERMITS	
Pollution Prevention Plans					✓	✓	✓	✓	✓	✓							✓						
Proper Housekeeping					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
Spill Prevention & Response	✓	✓		✓	✓	✓	✓	✓	✓	✓						✓							

Government > Planning and Growth Management >

Structure or Property Concerns

[Print](#) [Feedback](#) [Share & Bookmark](#) Font Size: A A A

Please use the report form below to submit your structure or property complaint or concern to the Department of Planning and Growth Management for the following types of complaints.

- Abandoned Structures
- Junk or Untagged Vehicles
- Property Maintenance Concerns
- Tall/Overgrown Grass
- Work Performed without Permits
- Illicit Discharge
- Site Drainage Problems

For other types of complaints or concerns please contact the appropriate agency below:

Type of Complaint/Concern	Appropriate Agency	Phone Number	Website
Animal Concern	Dept. of Emergency Services Animal Control	301-743-2222	Website
County Road Complaint	Department of Public Works	301-932-3450	Website
Snow Removal Concern	Department of Public Works	1-888-460-SNOW	Website
Pothole Repair	Department of Public Works	1-800-595-7623	Website
Road Drainage and Culvert Pipes	Department of Public Works	301-932-3450	Website
State Road Complaint	State Highway Administration	301-934-8031	Website
Public Water/Sewer Concern	Department of Public Works	301-609-7400	Website
Private Well/Septic Concern	Charles County Health Department	301-609-6751	Website
Wildlife Complaints	Maryland Department of Natural Resources	1-877-463-6497	Website
Noise Complaint (Daytime Hours)	Charles County Health Department	301-609-6751	Website
Noise Complaint (Nights/Weekends)	Charles County Sheriff's Office	301-932-2222	Website

Name

Preferred method of contact?
 Phone
 Email

Primary Phone

Email

***Type of Complaint:**

***Description of Complaint** (2000 Character limit)

Street Address for the Location of the Complaint (or nearest cross street) (2000 Character limit)

*If address of the complaint house is not available and you have provided the closest address, please provide a description of the house (e.g. it is a white house with blue shutters and a black mailbox) in the additional directions box below.

Additional Directions

(2000 Character limit)

***Is the complaint visible from the public right-of-way?**
 Yes
 No

Illicit Discharge Detection and Elimination Program (IDDE)

Public Education and Reporting

The WPRP webpage features information on the IDDE Program. The webpage explains what IDDE is, describes Charles County's program, and explains how to report an illicit discharge either by telephone or online. The website also displays links to the following: 1) business and homeowner's guidance to Charles County's IDDE program; and 2) pollution prevention guidance brochures for specific business types. The brochures were also distributed to citizens and businesses via mail and handed out during inspections and outreach events. Citizens used the IDDE online reporting webform (*Structure or Property Concern*) for reporting suspected illicit discharges and/or activities with the potential to pollute listed as dumping, junk/untagged vehicles, property maintenance concerns, construction work without permits, or site drainage problems—many of which could have detrimental effects to surface water if left unchecked. The County's webform remains available for anyone to report suspected illicit discharges and allows for uploading up to five photographs per complaint. Citizens also reported suspected illicit discharges either by telephone/hotline or online.

When an illicit discharge (or potential for a discharge) to the storm drain system is found during an inspection, the County inspector speaks with the property owner or an on-site representative; however, if they are not present, the inspector writes a detailed note and their contact information

on a door hanger to be placed on the front entrance. Educational materials on good housekeeping and pollution prevention were attached to inspection reports and violation notices and mailed to business/property owners and managers. The material includes the County's 1) multi-fold brochure, *Illicit Discharges Affect Everyone . . . Even You! A Business and Homeowners Guide to Charles County's IDDE Program*, 2) rack cards (see below), and if applicable, 3) State or EPA guidance, and information on Maryland NPDES individual permits.

In FY 2024, Charles County distributed two-sided 4 x 9 in. rack cards for the purpose of educating local businesses on how to prevent stormwater pollution and illicit discharges into the County's storm drain system/surface waters from various activities related to:

1) Automotive Businesses; 2) Dumpsters; 3) Restaurants; and 4) Outdoor Storage. The cards list recommendations of good housekeeping practices and pollution prevention methods by business-type, and they include photographs of correct and incorrect examples.

During FY 2024, the video titled *IDDE: A Grate Concern* (Excal Visual, Inc.) ran daily on the Charles County Government TV station (CCGTV) and had several views on Charles County Government YouTube channel. The video can be viewed here <https://youtu.be/gX5j6wlHzb8> .

For more information on the County's IDDE Program, see Section IV.D.3.

ILLICIT DISCHARGES AFFECT EVERYONE... EVEN YOU!

A BUSINESS AND HOMEOWNERS
GUIDE TO CHARLES COUNTY'S
IDDE PROGRAM



Charles County Government
Dept. of Planning & Growth Management
[www.CharlesCountyMD.gov/
Watershed](http://www.CharlesCountyMD.gov/Watershed)



ILLICIT DISCHARGES AFFECT EVERYONE... EVEN YOU!

A BUSINESS AND HOMEOWNERS
GUIDE TO CHARLES COUNTY'S
IDDE PROGRAM

What is the Charles County Illicit Discharge Detection and Elimination (IDDE) Program

Under its National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit, Charles County Government is required to implement an inspection and enforcement program to ensure all discharges to and from the municipal separate storm sewer system (MS4) that are not composed entirely of stormwater are either permitted by the Maryland Department of the Environment (MDE) or eliminated.

Charles County Government conducts an annual random screening of storm drain outfalls as well as a routine survey of commercial and industrial watersheds. The overall goal of the IDDE program is to identify illegal dumping activities, unauthorized storage of materials and illicit discharges. By identifying such activities and having specific reports of a violation, the county proceeds with efforts to remove such unpermitted discharges.

What is an Illicit Discharge?

Illicit discharges are generally any discharge into a storm drain system that is not entirely composed of rain water. Unlike wastewater which flows to a wastewater treatment plant, stormwater generally flows to waterways without any additional treatment. Illicit discharges often include pathogens, oil, grease, litter, surfactants, and various toxic chemicals that pollute our waterways that are used for recreation and drinking water.

Penalties for Illicit Discharges

Illicit discharges are a serious offense that can result in criminal prosecution. Every case of illicit discharge is investigated. Persons responsible for illicit discharges are subject to civil fines and possible criminal prosecution.



What is Illegal Dumping?

Illegal dumping is anyone depositing solid waste at a location other than a legally accepted facility. Illegal dumping is a serious problem that requires the county to relinquish funds for investigation, clean-up and enforcement.

Penalties for Illegal Dumping

Illegal dumping is a serious offense that can result in criminal prosecution. Every case of illicit discharge is investigated. Illegal dumpers are subject to civil fines and possible criminal prosecution.



Learn more:
[www.CharlesCountyMD.gov/
Watershed](http://www.CharlesCountyMD.gov/Watershed) (Click on Pollution)



Examples of Illicit Discharges

- ▶ Any induction of non-stormwater to the ground or into the storm drain.
- ▶ Sanitary waste water.
- ▶ Septic tank effluent.
- ▶ Car wash waste waters.
- ▶ Motor oil disposal.
- ▶ Radiator flushing disposal.
- ▶ Laundry waste waters.
- ▶ Auto or household toxic chemical disposal.
- ▶ Restaurant grease or cooking oil.
- ▶ Leaves or yard waste.



Examples of Illegal Dumping

- ▶ Disposing of your trash in dumpsters or containers you do not own.
- ▶ Disposing of trash along public roadways, vacant lots, fields, woods, stream valleys, parks or any other unacceptable location.
- ▶ Dumping chemicals, pesticide's, used automotive fluids or other chemical liquids into storm drains, water ways, or on the ground.
- ▶ Burning solid waste.
- ▶ Improperly disposing of yard waste over your property line or nearby woods.
- ▶ Burying solid waste.
- ▶ Dropping off solid waste at any location other than a regulated, legally accepted facility, dump, transfer station, or convenience center.

Reporting of Illegal Dumping or Illicit Discharges

- If you suspect an illicit discharge is being released into the storm sewer system, contact the Charles County Government at 301-645-0692 (Monday through Friday 8 a.m. to 4:30 p.m.).
- If you suspect an illicit discharge is going into the storm sewer system during non-business hours, please call the Maryland Department of the Environment's toll-free 24-Hour emergency number for pollution problems in Maryland at 866-633-4686 (or 866-MDE-GOTO).
- Submit complaint online: www.CharlesCountyMD.gov/Watershed (click on Pollution, and then Report a Suspected Illicit Discharge)
- When reporting, try to include the following:
- Date and time of incident.
- Location of dumping or discharge.
- Digital photos and/or description of incident observed.
- Vehicle and license plate information if involved.



Charles County Government
Department of Planning & Growth Management
200 Baltimore Street • La Plata, Maryland 20646
301-645-0692 • MD Relay: 711 (TDD: 1-800-735-2258)



Charles County
Watershed
Protection &
Restoration

Equal Opportunity County



How Businesses Can Help Keep Illicit Discharges Out of Our Waterways:

Keep water from contacting work areas – work areas can be contaminated by raw materials, liquids, grease, waste oil, heavy metals, or other fluids. Stormwater runoff flows across work areas and picks up these contaminants.

To keep from discharging contaminated stormwater:

- Keep stormwater runoff from contacting any industrial areas, either indoors or out.
- Install roofs or move industrial operations indoors.
- Avoid hosing down outdoor work areas or washing commercial vehicles where the wastewater will enter the storm sewer system.
- Control leaks and spills – Clean them up, even if only minor.
- Review operating routines to ensure adequate requirements are met to eliminate potential for contamination on surfaces.
- Regularly check equipment for exposed or leaking parts.
- Minimize the use of chemicals. When needed, make sure you are using the right product in the right amount by following all label instructions. Dispose of any waste and empty containers properly.

Educate employees about how to prevent stormwater pollution:

- Develop required standard operating procedures such as proper equipment washing.
- Provide training to employees on the importance of following the procedures so they understand why they are being asked to change their methods.
- Post signs as reminders to close covers and protect storage containers, including dumpsters.
- Let your customers know the efforts you are making to minimize waste and eliminate potential pollution sources.

How Homeowners Can Help Keep Illicit Discharges Out of Our Waterways:

Keep water from contacting work areas – work areas can be contaminated by raw materials, liquids, grease, waste oil, heavy metals, or other fluids. Stormwater runoff flows across work areas and picks up these contaminants.

To keep from discharging contaminated stormwater:

- Used oil, antifreeze, or batteries should be recycled. Be sure to check your vehicle on a regular basis for leaks, and clean up any spills with an absorbent that can be swept up and disposed of properly.
- Either wash your car on the grass, so the waste water filters through the soil, or take your car to a commercial wash that sends their water to a wastewater treatment plant.
- Grass clippings and yard waste should be swept away from storm drains after mowing and cutting to either be composted or taken to a proper disposal location.
- Bag or scoop your pet's waste and dispose of it properly.
- Many household products are considered hazardous waste and should be disposed of properly. Charles County Government offers regularly scheduled Household Hazardous Waste Collection days. Details: www.CharlesCountyMD.gov/HHW or call 301-932-3599.

About Charles County Government

The mission of Charles County Government is to provide our citizens the highest quality service possible in a timely, efficient and courteous manner. To achieve this goal, our government must be operated in an open and accessible atmosphere, be based on comprehensive long- and short-term planning and have an appropriate managerial organization tempered by fiscal responsibility. We support and encourage efforts to grow a diverse workplace. Charles County is a place where all people thrive and businesses grow and prosper; where the preservation of our heritage and environment is paramount; where government services to its citizens are provided at the highest level of excellence; and where the quality of life is the best in the nation.

It is the policy of Charles County to provide equal employment opportunity to all persons regardless of race, color, sex, age, national origin, religious or political affiliation or opinion, disability, marital status, sexual orientation, genetic information, gender identity or expression, or any other status protected by law.

Charles County Pollution Prevention Practices

AUTOMOTIVE BUSINESSES

In order to manage stormwater runoff pollution, Charles County implemented the **Illicit Discharge Detection and Elimination Program** in 2001. Stormwater runoff is a result of a rain or snow event flowing over impervious surfaces like streets, sidewalks, and parking lots. This **stormwater runoff** conveys pollutants associated with vehicle maintenance, pet waste, lawn care, and litter into the storm drain system leading directly to our local waterways. When materials like used oil, trash juice from dumpsters, chemicals, or other hazardous materials are discharged, intentionally or unintentionally, into the storm water sewer system, this is considered an **illegal discharge**. Charles County is charged with the responsibility to discover, document, and eliminate these sources of stormwater pollution.

Help Charles County Prevent Stormwater Pollution

 **YES** Keep garbage can and dumpster lids **closed**, and the area free of debris. Ensure that the dumpster is in proper working condition (i.e., no leaks, or seal damage).

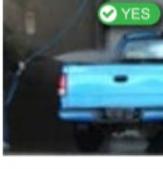
 **NO**

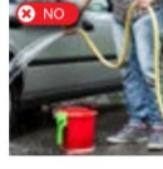
 **YES** **Immediately** clean up any oil, chemical, or non-stormwater spill using **dry methods** like kitty litter. Properly dispose of the cleanup material after absorbance.

 **NO**

 **YES** **Label** liquid storage containers and place on spill pallets to catch any leaks or spills. Store containers **inside** or under cover to prevent exposure to stormwater.

 **NO**

 **YES** Ensure vehicles are cleaned in a **wash bay** that either recycles used water or drains to a sanitary sewage system. Do not allow wash water to enter a storm drain or the environment.

 **NO**

To report a concern about pollutants or possible illegal dumping into the storm drain system, contact the Department of Planning & Growth Management: 301-646-0692

Charles County Pollution Prevention Practices

OUTDOOR STORAGE

Properly label and cover potentially hazardous materials, such as used oil, paints, detergents, or antifreeze in appropriate containers with secondary containment.

 **YES**  **NO**

Ensure all outdoor containers have lids and are kept closed when not in use.

 **YES**  **NO**

Cover outdoor work areas and piles of loose materials (i.e., sand, salt) to prevent contaminated runoff from reaching storm drains.

 **YES**  **NO**

Move any activities which have the potential for pollution indoors.

Help Charles County Prevent Stormwater Pollution



Pollution Prevention Practices is a publication of the Charles County Watershed Protection & Restoration Program. For additional information, visit online or contact us by phone or email.

301-646-0692 • PGM@CharlesCountyMD.gov
www.CharlesCountyMD.gov/Watershed



Charles County Government
Department of Planning & Growth Management
200 Baltimore Street • La Plata, Maryland 20646
MD Relay: 711 (TDD: 1-800-735-2258) • Equal Opportunity County

Charles County Pollution Prevention Practices

DUMPSTERS

In order to manage stormwater runoff pollution, Charles County implemented the **Illicit Discharge Detection and Elimination Program** in 2001. Stormwater runoff is a result of a rain or snow event flowing over impervious surfaces like streets, sidewalks, and parking lots. This **stormwater runoff** conveys pollutants associated with vehicle maintenance, pet waste, lawn care, and litter into the storm drain system leading directly to our local waterways. When materials like used oil, trash juice from dumpsters, chemicals, or other hazardous materials are discharged, intentionally or unintentionally, into the storm water sewer system, this is considered an **illegal discharge**. Charles County is charged with the responsibility to discover, document, and eliminate these sources of stormwater pollution.



Help Charles County Prevent Stormwater Pollution

Why is dumpster maintenance important?

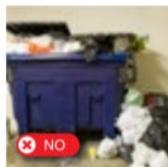
Unmainted dumpsters can...

- **Contaminate** stormwater runoff
- **Pollute** our waterways
- **Hurt** our wildlife
- **Harm** our environment



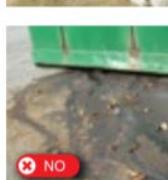
What do I need to do?

- **Train** employees to close all dumpster lids after every use. Post dumpster maintenance tips.
- **Fix** damaged or broken lids, and replace dumpsters that leak.
- **Sweep** litter into a trash receptacle.
- **Inspect** the area around dumpsters regularly to ensure it is clean.
- **Dispose** of grease and hazardous waste (i.e., oil, batteries, electronics) by using separate containers.



What should I NOT do?

- **Do not** overfill dumpsters.
- **Do not** dispose of liquids or allow leakage.
- **Do not** pressure wash, hose, or sweep debris or spills into the storm drain.
- **Do not** leave lids open so rainwater can get into the dumpster.
- **Do not** wash the dumpster area with detergents.



To report a concern about pollutants or possible illegal dumping into the storm drain system, contact the Department of Planning & Growth Management: 301-646-0692

Charles County Pollution Prevention Practices

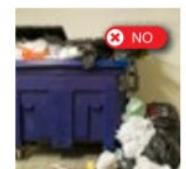
RESTAURANTS

In order to manage stormwater runoff pollution, Charles County implemented the **Illicit Discharge Detection and Elimination Program** in 2001. Stormwater runoff is a result of a rain or snow event flowing over impervious surfaces like streets, sidewalks, and parking lots. This **stormwater runoff** conveys pollutants associated with vehicle maintenance, pet waste, lawn care, and litter into the storm drain system leading directly to our local waterways. When materials like used oil, trash juice from dumpsters, chemicals, or other hazardous materials are discharged, intentionally or unintentionally, into the storm water sewer system, this is considered an **illegal discharge**. Charles County is charged with the responsibility to discover, document, and eliminate these sources of stormwater pollution.



Help Charles County Prevent Stormwater Pollution

Keep garbage can and dumpster **lids closed**, and the area free of debris. Ensure that the dumpster is in proper working condition (i.e., no leaks, or seal damage).



Immediately clean up any oil, chemical, or other liquid spill using **dry methods** like kitty litter. Properly dispose of the cleanup material after absorbance.



Use **indoor sinks** or floor drains to clean floor mats and empty dirty mop water. **Do not** dispose of any wash water outdoors or into the storm drains.



Keep grease dumpster and used oil container **lids closed** at all times when not in use. Using a closed container to prevent spills, **transport** used cooking oil to grease dumpster after it has cooled.



To report a concern about pollutants or possible illegal dumping into the storm drain system, contact the Department of Planning & Growth Management: 301-646-0692

CCGTV, Website, Social Media, Email, Newspaper & Mail

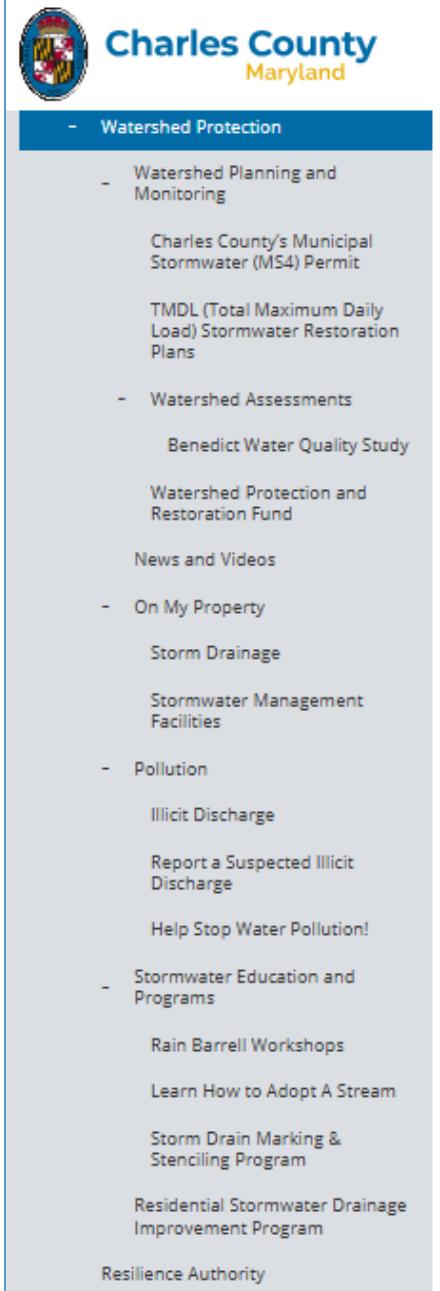
CCGTV: Charles County Government Television (CCGTV) is the government local access channel for Charles County, Maryland. CCGTV is available on Comcast and Verizon FIOS as well as streaming via AppleTV, Roku and the internet. The channel broadcasted live meetings of the Board of County Commissioners, as well as Public Hearings. CCGTV also produces original programming to highlight county programs and events. A schedule and video on demand library remain available through <https://www.charlescountymd.gov/services/media-services/charles-county-government-television>.

Website: www.CharlesCountyMD.gov/watershed

In FY 2024, Charles County's WPRP continued to:

1. Update webpages.
2. Encourage interest in the WPRP.
3. Increase public awareness of the County's efforts on watershed protection, stormwater management and MS4 permit compliance.
4. Educate citizens and business owners on the basics of watershed, stormwater, and stormwater management concepts.
5. Convey the role of citizens in achieving improved water quality.
6. Increase transparency of the program.

The WPRP webpages remained featured under the Department of Planning and Growth Management (PGM) and the Department of Public Works (DPW) websites. Information is organized and presented under four major categories on the PGM homesite: 1) Education & Programs; 2) News and Videos; 3) Planning & Monitoring; and 4) Pollution. In addition, interactive online tools and webforms continue to be available on the website. Examples are shown on the following pages.



The screenshot shows the Charles County Watershed Protection and Restoration website. The header features the Charles County Maryland logo and the text "Charles County" and "Maryland". Below the header is a navigation menu with the following items:

- Watershed Protection
 - Watershed Planning and Monitoring
 - Charles County's Municipal Stormwater (MS4) Permit
 - TMDL (Total Maximum Daily Load) Stormwater Restoration Plans
- Watershed Assessments
 - Benedict Water Quality Study
 - Watershed Protection and Restoration Fund
- News and Videos
- On My Property
 - Storm Drainage
 - Stormwater Management Facilities
- Pollution
 - Illicit Discharge
 - Report a Suspected Illicit Discharge
 - Help Stop Water Pollution!
 - Stormwater Education and Programs
 - Rain Barrell Workshops
 - Learn How to Adopt A Stream
 - Storm Drain Marking & Stenciling Program
 - Residential Stormwater Drainage Improvement Program
- Resilience Authority



The image displays four cards representing different website categories:

- EDUCATION AND PROGRAMS: Shows a group of people sitting together, looking at a tablet.
- NEWS AND VIDEO: Shows a film reel.
- PLANNING & MONITORING: Shows the "Watershed Protection and Restoration" logo.
- POLLUTION: Shows a stream flowing through a forest.

Help Stop Water Pollution!



Font Size: + - Share & Bookmark Feedback Print

Water pollution is defined as the contamination of water bodies, including lakes, rivers, oceans, aquifers and groundwater. Humans and wildlife depend on clean water to survive, it is essential to sustain life. Access to clean water is one of the largest global health risks. When water becomes unfit for drinking and recreation, human and wildlife populations suffer. Water pollution does not only affect people around the world, it affects our local communities. Sources of water pollution in Charles County include:



- Automotive Fluids, Oils, Grease, Industrial Waste, and Paint
- Yard Waste and Litter
- Pesticides, Fertilizers, and Road Salt
- Pet Waste
- Leaking or Overflowing Sewage Pipes

Protecting water quality can be accomplished by everyone. Click on the areas below to find out how you can help.

[Lawn Care and Landscape Management](#) >

[Proper Car Care and Washing](#) >

[Proper Disposal of Household Hazardous Waste](#) >

[Proper Pet Waste Management](#) >

[Rain Barrels and Workshops](#) >

[Rain Garden](#) >

[Restaurants Pollution Prevention](#) >

[Dumpster Maintenance](#) >

[Storm Drain Stenciling/Marking Program](#) >

DPW's Environmental Resource's Downloadable Mobile Apps
and Waste Wizard Sorting Game Tool

Environmental Resources

Font Size: + - Share & Bookmark Print

Waste Sorting Game



Waste Sorting Game

- [Play the game >](#)

[Privacy](#) | [Terms of Service](#) | [Cookie Policy](#)

[List of Materials](#)

Powered by 



In those areas that receive curbside recycling service, single stream recycling materials are collected year-round on an every-other-week basis and yard waste materials are collected weekly by a separate truck, April through December. All materials must be placed curbside by 7:00 a.m. to ensure pick-up.

A Recycling Information Hotline is available at 301-932-5656.





Charles County began accepting donations of usable bicycles through the Bikes for the World, a network of individuals and organizations committed to preserving our environment and empowering the less fortunate through the collection of usable used bicycles for donation to qualified community service programs overseas.

Social Media: The WPRP uses social media to reach out to citizens and promote the WPRP. Workshops, community events, proposed regulations, and public hearings, were posted and shared on Facebook, Instagram, NextDoor, YouTube, and LinkedIn to build public awareness, increase participation, and make registration easy.

The Charles County Government Facebook page has 20,000-plus followers (an increase of approximately 1,000 from FY 2023). Charles County Government improves community communication through their

Charles County Government • March 20 • [... See more](#)

When we come together, we make a bigger difference. Join us on April 6th to restore the Potomac River! Sign up today through the link below!

<https://bit.ly/49QemLi>

#potomaccleanup ... See more

 A graphic for the "Annual Potomac River Watershed Cleanup". It features the text "Annual Potomac River Watershed Cleanup" in large, bold, blue and orange letters. In the top right corner, there is a circular logo with the text "TRASH FREE POTOMAC WATERSHED" and "ALICE FREDRICKSON FOUNDATION". Below the main text is a stylized blue wave graphic.

nextdoor

Search for Electrician

- Home
- Discover
- For Sale & Free
- Notifications
- Chats
- Neighbors

+ Post

Charles County Government • Communications Coordinator Kayla Hunt · 20 Aug

We are excited to introduce "Stay Engaged, Charles County," our new online engagement platform. This tool encourages residents to actively participate in shaping the future of their county by sharing their insights, concerns, and ideas on upcoming plans and initiatives!

To explore this new platform, visit <https://charles-county-md.civicspace.io/en>.

For the full press release, visit <https://charlescountymd.info/StayEngagedCC>.

 A graphic for the "Stay Engaged, Charles County" platform. It features a collage of many small, diverse portraits of people of various ages and ethnicities. Overlaid on the collage is the text "STAY ENGAGED, CHARLES COUNTY" in large, bold, white letters.

YouTube channel. Charles County Government YouTube channel has 5,440 subscribers (300 more than the previous year). This visual, social medium has become a successful outreach tool that informs and entertains. The YouTube channel introduces County leaders and provides information on local programs, events, proposals, services, and local places of interest. Health, safety, education, history, tourism, parks and recreation, economic opportunities, utilities, waste management, infrastructure, and the environmental protection were some of the topics covered. Latest videos were consistently uploaded from various County government departments and local community groups. The channel features over 700 videos organized in 26 playlists. All seven WPRP public service announcements (PSAs) were featured on the channel.



YouTube video player showing two people planting a tree in front of the Waldorf Senior and Recreational Center. The video is titled "Your Charles County: Urban Tree Planting".

Climate change
United Nations • Climate change refers to long-term shifts in temperatures and weather patterns. Human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas.



YouTube video player showing a close-up of hands working on a car engine. The video is titled "Charles County Tidbit - Earth month".

Charles County Government
5,44K subscribers

68 views Apr 1, 2024
This Earth Month we want you not only to help protect the dry land you walk on but the water around you. To help give you tips on how to do just that, Paula Proctor sat down with us to give you this months Tidbits!



Play (k) 0:22 / 0:47

Charles County Government 5.44K subscribers Subscribed 0 Share Download ...

60 views 1 month ago www.CharlesCountyMD.gov/Litterbug ...more

E-News: In FY 2024, Charles County citizens stayed connected and engaged with County news, updates, and events through the weekly Charles County Government e-newsletter sent directly to their email. All citizens, especially new residents, were encouraged to register for the e-newsletter by WPRP staff and on CCGTV by visiting the County's Stay Connected webpage at <https://www.charlescountymd.gov/services/media-services/stay-connected> or by calling the County's Public Information Office at (301) 645-0580.

News Releases/Newspapers: News releases from the Charles County Media Services Division alerted citizens about upcoming WPRP events, trainings, grants, and hearings. All News Releases were published in local southern Maryland newspapers, posted on Charles County Government social media outlets, and emailed to individuals who registered to the County's e-news distribution. News Releases advertise rain barrel workshops, yard waste collection for composting, hazardous waste collection days, shred events, grant programs, public meetings, hearings, and other WPRP announcements.

News

Gilbert Run Park Oil and Antifreeze Drop Off Relocated to Recycling Center

Post Date: 09/25/2024 11:00 AM

Charles County Government
NewsRelease



News Release # 2024-091

Wednesday, Sept. 25, 2024

Charles County Department of Public Works has announced that the Oil and Antifreeze drop-off location at Gilbert Run Park (13140 Charles Street, Charlotte Hall, MD 20622) will relocate to the Gilbert Run Park Recycling Center, which is adjacent to the park, beginning Friday, November 1, 2024. The drop-off point will be accessible during the center's normal operating hours, which are Monday, Wednesday, and Saturday from 9 a.m. to 5 p.m.

Motor Oil, Transmission Fluid, Gear Oil, Hydraulic Oil, and Power Steering Fluid are acceptable materials at all Charles County Oil and Antifreeze recycling sites. The Department of Public Works would like to remind residents to transport materials in leak-free and rust-free containers to avoid accidental spillage and to empty containers into the correctly assigned tank to avoid contamination.

Residents are reminded to pour fluids into the properly marked tank. Please do not pour gasoline, oil mixtures, refrigeration oil, solvents, brake fluid, or cooking oil into the tanks. Doing so could contaminate the storage tanks. Do not pour oils into a full tank to avoid environmental contamination of the ground and surrounding area. If a spill does occur, call **301-932-5656** to report the spill **as soon as possible**.

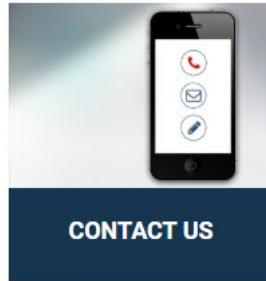
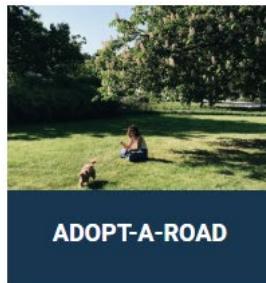
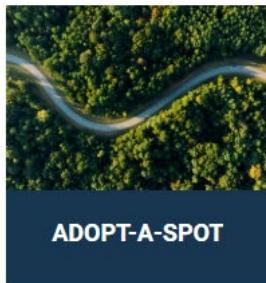
The facility is closed for New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. For more information, visit the **Charles County Environmental Resources** page or call the recycling information hotline at **301-932-5656**.

###

Welcome to the Adopt A... Family!



The Charles County Landfill, all Recycling Centers, and the Piney Church Road Mulch Facility will be closing Wednesday, November 27 at 12:00pm and closed on Thursday, November 28.



Tax Bill Inserts. In the summer of 2024, the County's tax bill mail-out included a mailer with instructions to County residents on how to use the *Charles County Recycles* App. On the back of the mailer, information was provided about free, monthly Household Hazardous Waste collection events for County residents.



Are you using the Charles County Recycles App?

Fast, Up-To-Date Recycling Details Right at Your Fingertips

Install our app **Charles County Recycles** to your smartphone, or check our website at: www.CharlesCountyMD.gov/Recycling

CHARLES COUNTY RECycles

- Sign up for **Reminder Notifications** and schedule change alerts.
- Visit the **Wizard** to discover proper methods to dispose of many items.
- Play our game **What Goes Where** and learn more about recycling in Charles County.
- Schedule your **Yard Waste** collection.
- Purchase **Tag-A-Bag Tickets** to be mailed directly to your residence.
- Check for **Special Events** like the next Shred Event.
- Search for the nearest drop-off **Recycling Center**.

Charles County Environmental Resources
10430 Audie Lane, La Plata, MD 20646 • 301-932-5656
MD Relay: 7-1-1 (TDD: 1-800-735-2258) • Equal Opportunity Employer

Charles County Government

HOUSEHOLD HAZARDOUS WASTE

HHW events are held year round ... January–December!

Events are **FREE OF CHARGE** to Charles County residents.

1st Saturday of Each Month • 9 a.m. to 3 p.m.
Department of Public Works • 10430 Audie Lane, La Plata, MD
Sign up online for CNS to receive notice of inclement weather delays.



Learn more about the Household Hazardous Waste Program at: www.CharlesCountyMD.gov/HHW

Charles County Environmental Resources
10430 Audie Lane, La Plata, MD 20646 • 301-932-3599
Maryland Relay: 7-1-1 (Relay TDD: 1-800-735-2258) • Equal Opportunity Employer

Public Service Announcements

The WPRP airs Public Service Announcement (PSA) commercials that serve as an effective visual medium to educate citizens of all ages on the origins of nonpoint source water pollution and how to protect water quality. These messages emphasize the catchphrase, “Be the Solution to Water Pollution,” inspiring community action and awareness. All seven PSAs remain a vital component of the County’s public outreach efforts, reaching audiences through cable television, Charles County Government Television (CCGTV), the Charles County YouTube channel, and various digital streaming platforms. They were also featured on the [Stormwater Management - News and Videos](#) webpage.

Public Service Announcements Statistics in FY 2024

#	PSA	Video	Link
1	Where our water pollution comes from		https://www.youtube.com/watch?v=9IE2TKv0PFg&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2&index=6
2	Take Responsibility for Water Pollution		https://www.youtube.com/watch?v=RkP7vDv5xgU&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2
3	Max the Dog and Pet Waste		https://www.youtube.com/watch?v=y-lijVAw_Sal&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2&index=2

4	Lawn Care & Using Fertilizers		https://www.youtube.com/watch?v=islMrwMpnPU&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2&index=3
5	How the Storm Drain Works		https://www.youtube.com/watch?v=4XfrHMxJZcM&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2&index=4
6	Max the Dog & Lawn Waste		https://www.youtube.com/watch?v=5DDw0Bjoo4Y&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2&index=5
7	Illicit Discharge Detection & Elimination		https://www.youtube.com/watch?v=gX5j6wlHzb8&list=PLYKfJ608FjL9iMMhiTn5kjvWv8sDNmoz2&index=7 CCGTV: https://www.charlescountymd.gov/services/media-services/charles-county-government-television/ccgtv-live-stream

COMCAST Spotlight

Campaign Summary Proposal FY 24

Campaign Date	September 1, 2023-June 16, 2024
Zones	Charles County Comcast
Total Spots	2,949
Reach & Frequency	95% & 6.2x
Special Programming	29 NFL Football Games & 50 Washington Capitals Games
Impressions	203,682 (TV) +125,00 (Streaming)= 328,682 (Total)
TOTAL INVESTMENT	\$19,000



The WPRP TV and Digital Media campaign continued in FY 2024 with Comcast Spotlight. PSAs were aired on Comcast cable, Spotlight Streaming Video, and Verizon Fios throughout FY 2024. The spots were aired on major networks including high profile programs such as: Monday and Thursday Night Football, CNBC, Tru TV, Paramount, Discovery, The Weather Channel, and others. In total 2,949 cable spots (with 203,682 impressions) and 125,000 streaming impressions were delivered to Charles County customers in FY 2024.

Outreach Events*Rain Barrel & Composting Workshops*

Charles County WPRP in collaboration with the University of Maryland (UMD) Extension and Nanjemoy Creek Environmental Education Center, held rain barrel and composting workshops during two Saturdays in FY 2024 (July 22, 2023, October 21, 2023, and May 18, 2024). Two rain barrel sessions and two composting sessions were held on these dates for a total of four rain barrel sessions and four composting sessions. Attendance numbers for the rain barrel workshops were listed in the table below.

Rain barrels were only available for purchase to attendees of the workshop (\$30.00 for Charles County residents, \$65.00 for non-Charles County residents). Composting bins were handed out to all who registered and attended the composting workshops, free of charge.

Applications to the County's Stormwater Remediation Fee rebate program were made available at the end of every rain barrel session to County residents. Several questions were answered

about the rules of the rebate program and the purpose of the Charles County stormwater remediation fee. Various WPRP promotional items and educational materials were available free of charge. The educational materials covered topics such as water pollution prevention at home and work, stormwater impacts, stormwater management, and best maintenance practices for stormwater facilities.

Rain Barrel and Composting Workshop Attendance in FY 2024

Workshop Date	Rain Barrels	
	Barrels Purchased	Attendance
7/22/2023	47	17
10/21/2023	15	17
5/18/2024	48	39
Total	110	73

Shred/Household Hazardous Waste Collection/Cleanup Events

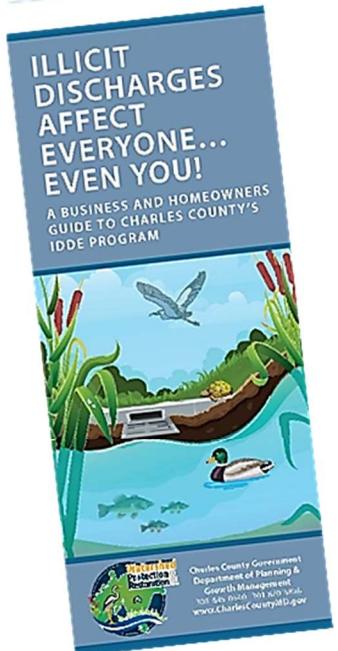
Eight Charles County shred events were held by DPW throughout FY 2024. These free events provide citizens the opportunity to recycle paper documents securely. During the year, approximately 946 vehicles delivered a total of 35.05 tons of paper.

Also in FY 2024, a total of 1,292 households took part in Charles County household hazardous waste collection events. These monthly collection events provide citizens a safe and responsible method to dispose of hazardous waste including pesticides, herbicides, fertilizer, gasoline, oil-based paint, cleaning supplies, pool chemicals, fluorescent lights, mercury thermometers, and other poisons found in the home. Residents were instructed to correctly label any container that did not have a readable-original label.

FY 2024 Hazardous Waste Collection: No. Households	
Jul	86
Aug	162
Sep	143
Oct	103
Nov	137
Dec	57
Jan	87
Feb	63
Mar	63
Apr	107
May	107
Jun	147
TOTAL:	1,292

Charles County volunteers were the driving force behind community cleanup events. Volunteers witness firsthand the harmful effects of litter on waterways, wildlife, and the surrounding environment within their watershed and are dedicated to becoming part of the solution.

In FY 2024, Charles County held their fourth annual countywide community cleanups, on the Charles County Community Cleanup one-day event. Residents and businesses were encouraged to select a community or public space to clean and beautify. Fourteen volunteer groups took part in the one-day event, removing nearly four tons of debris and litter from neighborhoods, communities, and parks. During April, county citizens also participated in the Potomac River Watershed Cleanup collecting over eleven tons of trash and marine debris from ten locations along County waterways. Through the County's Adopt-A-Road and Adopt-A-Spot program, volunteers completed 145 clean-up events along adopted roadways.

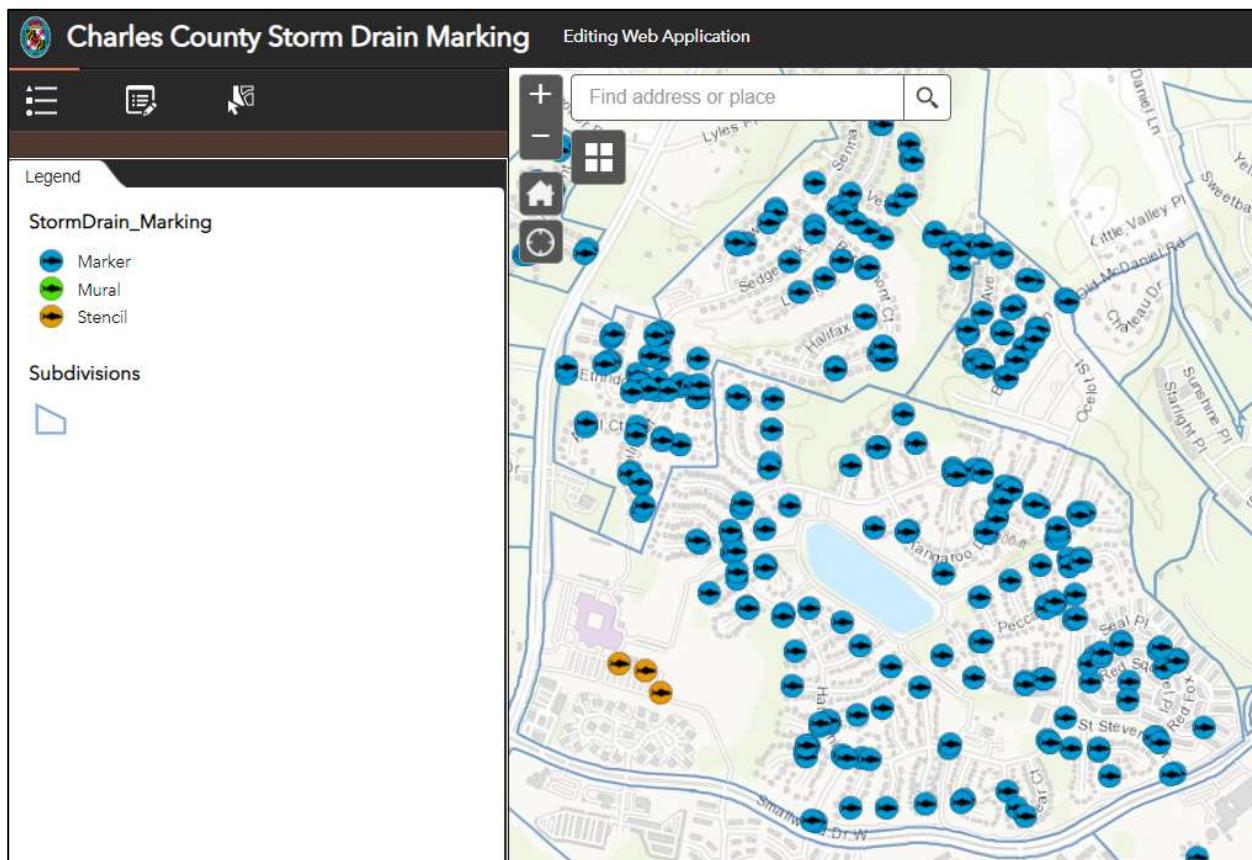
Educational Materials – Brochures

Storm Drain Stenciling/Marking Program

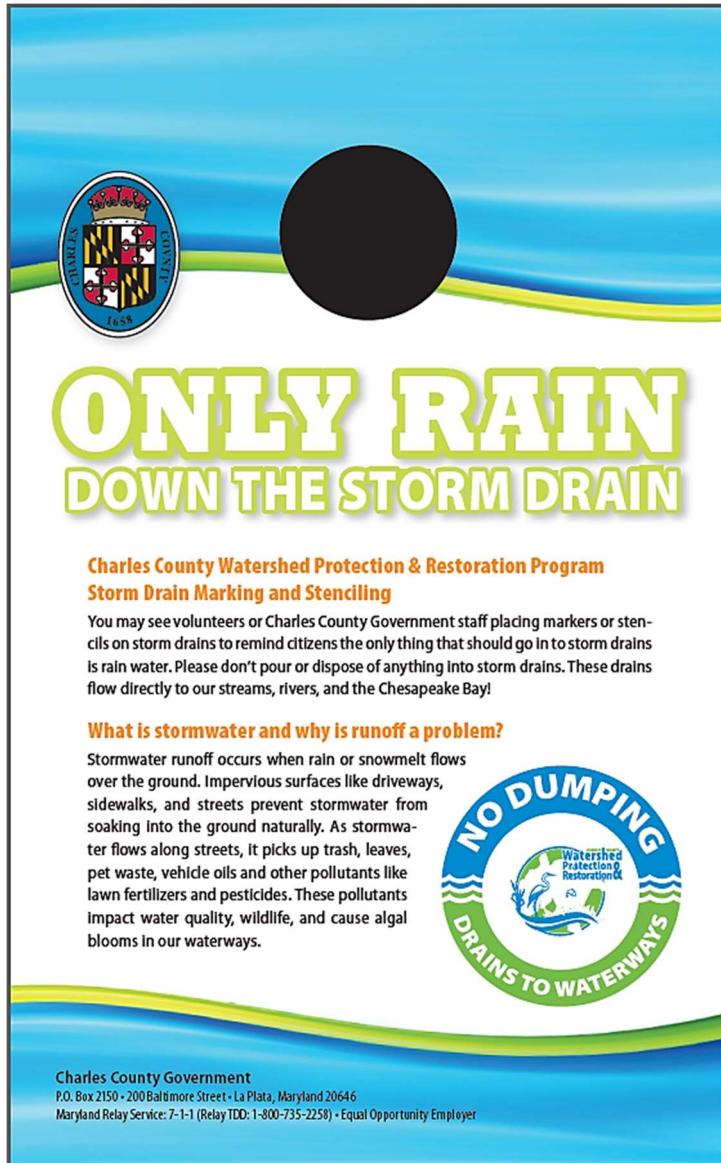


Storm drain marking continued in FY 2024. Fifty-four aluminum storm drain markers preprinted with "NO DUMPING, DRAINS TO WATERWAY" were installed in the new Highgrove subdivision.

County Roads Division staff also replaced hundreds of damaged plastic markers with the durable aluminum storm drain markers throughout the County. The newly marked storm drain locations were uploaded to a GIS map layer. An example is shown below.



**Door Hangers
(Front)**



Door Hangers
(Back)

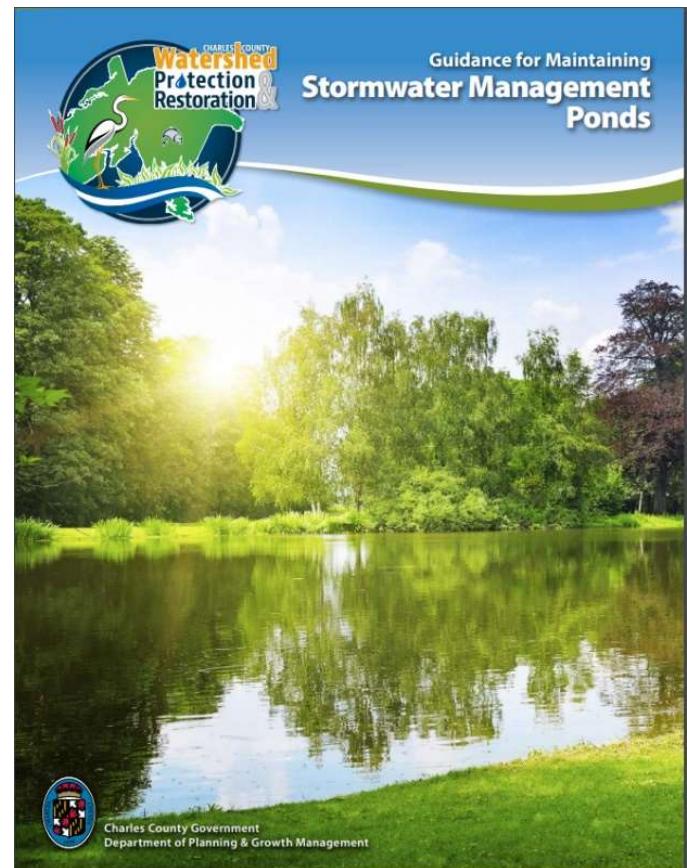
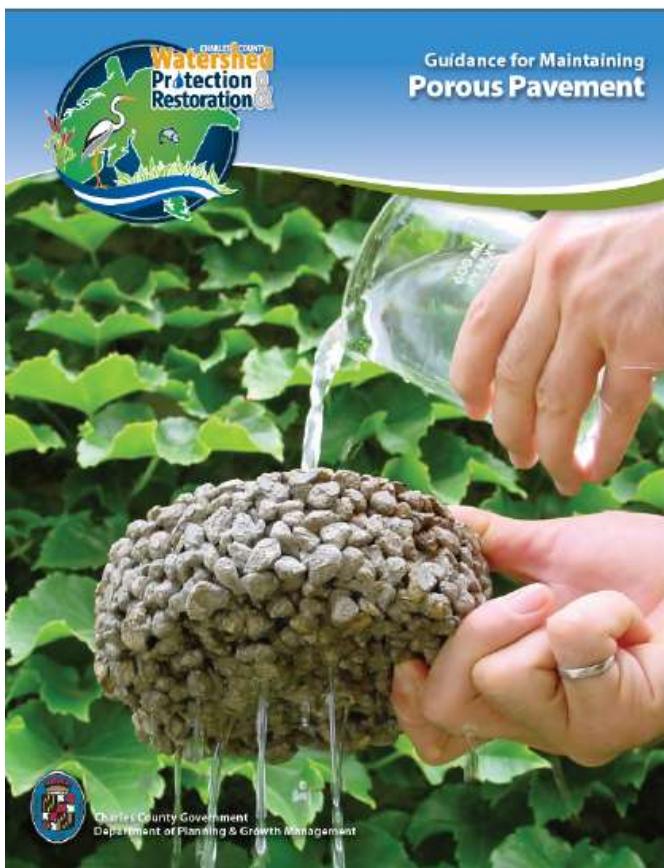


Residential and Community Stormwater Management Implementation and Facility Maintenance Outreach

The WPRP and stormwater inspection staff continued to be available to homeowners and HOAs to answer questions and provide guidance on stormwater treatment facilities and practices. Staff also distributed guidance brochures on stormwater management implementation and facility maintenance for:

- *Stormwater Management Ponds* (English & Spanish)
- *Rain Gardens, Bioswales, and Micro-Bioretention*
- *Porous Pavement*, and
- *Dry Wells*

The booklets describe in detail the purpose of the stormwater facilities and how to properly maintain them. They were distributed to individual homeowners, at HOA meetings, community walkthroughs, trainings/workshops, and at public events such as the County Fair and Citizen's Academy. They also remain available online on the PGM [Stormwater Management Facilities webpage](#).



County stormwater inspectors regularly distribute these guidance booklets to property owners and HOAs during inspections. If a homeowner is not present, the inspector leaves the

inspection results and contact information on a door hanger. The WPRP built on the success of last year's rain garden maintenance training for homeowners by hosting a series of new workshops in FY 2024, which are detailed in the following section.

Stormwater Management Facilities

Font Size: + - + Share & Bookmark Feedback Print

Stormwater management facilities are used to:

- Capture stormwater runoff from impervious surfaces, like roads, rooftops, parking areas, and driveways to prevent downstream flooding and allow time for natural infiltration underground.
- Remove pollutants from stormwater runoff before the water is discharged into local streams.

These facilities include rain gardens, bioswales, micro-bioretention facilities, drywells, porous pavement, grass channels, ponds and other structural and non-structural stormwater management facilities. If they are functioning correctly, stormwater facilities help slow down stormwater and remove pollutants before the water is discharged into local streams.

Who Is Responsible For Maintenance?

Privately maintained stormwater management facilities are maintained by the facility owner. The county does not have direct maintenance responsibility.

However, Charles County is still responsible under state and federal stormwater permits for ensuring that the facilities remain in place, operate properly and are functional. To this end the county has established an inspection schedule for all privately maintained facilities, together with reporting and enforcement procedures for communicating inspection results to facility owners and gaining maintenance compliance.

Which Codes Determine Maintenance Responsibility?

Chapter 274-53 of The Code of Charles County, Maryland "Responsibility of owner or occupant".

"The owner of any property containing a stormwater management system, or any other person or agent in control of such property, shall perform or cause to be performed preventive maintenance of all completed ESD treatment practices and structural stormwater management systems to ensure proper functioning."

[Charles County, MD / Division 2: Code of Ordinances and Resolutions / Part II: General Legislation / Stormwater Management](#)

Can I Remove the Stormwater Management Facility on My Property?

No, you cannot remove these facilities if they have been required by Charles County as part of your building installation. The County maintains a database of all required stormwater management structures and is required to inspect the facilities every three (3) years ensuring that the facilities remain in place, are properly operated, and functional.



Charles County Government
Department of Planning & Growth Management
Watershed Protection & Restoration Program
200 Baltimore Street, La Plata, MD 20646 • 301-645-0692

Name:			
Address:			
Date:	Time:		

A stormwater management (SWM) facility inspection was performed on your property, and a maintenance issue was found. A letter with additional details is forthcoming.
A stormwater management (SWM) facility inspection was attempted to be performed on your property, but no access to the facility was available.

Inspector:	
------------	--

www.CharlesCountyMD.gov/Watershed
Maryland Relay: 7-1-1 • Equal Opportunity Employer

Mantenimiento 101

Lista de verificación de mantenimiento constante

Cortar el césped y el manejo de la vegetación son tareas de mantenimiento frecuentemente descuidadas para los estanques. Cortar el césped y controlar la vegetación puede reducir o eliminar los problemas de mantenimiento estructurales.

1. Cortar el césped

Corte el césped en las siguientes áreas **al menos dos veces al año**:

- Pendientes superiores y aguas abajo de la presa
- Pendientes aguas arriba de la presa (estanques secos)
- 25 pies alrededor de la estructura de control (estanques secos)
- Canales de entrada, alrededor de cabeceras y tuberías dentro del área del estanque
- Canal de salida

Los estanques húmedos diseñados con componentes recreativos o estéticos requieren un corte más frecuente, **cada 1 a 3 semanas** durante los meses más cálidos.



2. Manejo de la vegetación

Los árboles y la vegetación leñosa deben eliminarse de las siguientes áreas **al menos dos veces por año**:

- Pendientes superiores, aguas arriba, y aguas abajo de la presa
- Canales de entrada y salida
- 25 pies alrededor de la estructura de control
- Canales, cabeceras, y tuberías en el área del estanque



3. Eliminar basura y escombros

Realice la remoción de basura y escombros **mensualmente** en las siguientes áreas:

- Dentro y alrededor del estanque
- Dentro y alrededor del estante de basura en la estructura de control



4. Eliminar fuentes de contaminación

Conozca las fuentes de contaminación en su propiedad y trate de reducirlas o eliminarlas.

Chesapeake Bay Trust Grant Partnership Program

Charles County continued their partnership with the Chesapeake Bay Trust (CBT) in FY 2024 to administer grants funded by the Stormwater Remediation Fee. The Outreach and Restoration Grant program provides funds for outreach projects that raise public awareness and engage citizens about challenges and solutions to restoring natural resources, such as green spaces, parks, streams, rivers, and bays. The grant program also provides funds for on-the-ground community-based restoration projects that benefit Charles County's rivers, streams, native plants, trees, and the Chesapeake Bay, as well as a combination of outreach and restoration for the maximum award of up to \$70,000.

Grants Awarded in FY 2024

Increasing Capacity to Maintain Residential Stormwater BMPs in Charles County: \$43,816

University of Maryland College Park - Environmental Finance Center:



The University of Maryland (UMD) – Environmental Finance Center (EFC) was awarded an outreach and restoration grant to provide outreach and training for homeowners and service providers on the proper care and maintenance of rain gardens and other vegetated micro-BMPs.

In partnership with the Chesapeake Conservation Landscaping Council and the University of Maryland, the Charles County WPRP hosted two hands-on outdoor rain garden maintenance training workshops for homeowners. These events took place at a demonstration rain garden owned and maintained by Christ Church in La Plata, MD, on the evening of June 22 and Saturday, July 9. Fourteen homeowners attended the June workshop, and fifteen homeowners participated in the July session.



A full day of hand-on training was also held for private landscaping providers who work in Charles County on October 22 at the Fieldside Community Center and the surrounding grounds, courtesy of the Fieldside HOA. The training was taught by Chesapeake Bay landscape professionals from the Chesapeake Conservation Landscaping Council (CCLC) and twenty-eight (28) service providers became CBLP "crews" certified.



This project had four main goals in FY 2024: 1) to educate and train homeowners with County-monitored rain gardens on how to properly care and maintain their rain gardens; 2) to teach homeowners in the Scotland Heights community about maintaining their porous driveways, sidewalks, and common area roads and parking lots; 3) to reduce the number of property owners with failed rain garden inspections; and 4) to train service providers in the Charles County regional workforce through the Chesapeake Bay Landscape Professional (CBLP)-"Crews" certification program, thereby increasing the number of certified entities in sustainable landscape maintenance for stormwater BMPs.

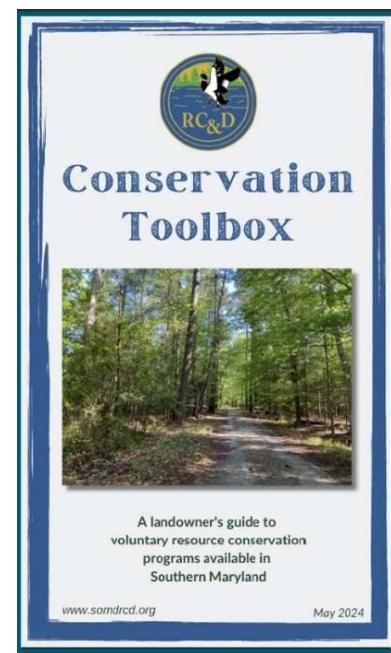
The HOA for the Scotland Heights community has not yet been established, and approval to host a porous pavement maintenance workshop and demonstration could not be secured. As a result, the workshop was not conducted. Instead, the funding allocated for this training under the CBT grant was redirected to provide scholarships for County staff and private service providers to attend the Level 1 CBLP certification program.

Southern Maryland Resource Conservation & Development, (RC&D)

Southern Maryland Conservation Toolbox

Award Amount: \$9,587

RC&D produced a Conservation Toolbox for Southern Maryland landowners, targeting those who own at least 20 acres. The Toolbox



is an eight-panel brochure highlighting twenty-five federal, state, and local programs that offer resources for landowners in southern Maryland including agency contacts, educational opportunities, and more.

The Toolbox is available online, distributed via email, and provided in hard copy. A targeted mailing was conducted, and in-person workshops continue to be held for interested landowners.

University of Maryland College Park

Fostering Deicing Salt Stewardship in Charles County through Education

Award Amount: \$18,362



Applying excess salt not only increases the environmental harm but also wastes money. Photo by Andrew Lazur.

The University of Maryland was granted an extension to continue developing educational materials for homeowners about the environmental impacts of deicing salt. As part of this initiative, a Charles County Student Deicing Salt Education Video Contest was held at North Point High School in the spring of 2024. The contest encouraged students to create engaging 1- to 2-minute videos that educated homeowners on the environmental effects of deicing salt and offered eco-friendly alternatives for its use.

Five students participated, submitting videos that were evaluated based on content quality, creativity, and informational accuracy. Judges awarded prizes to the top submissions, including \$300 for 1st place, \$200 for 2nd place, \$100 for 3rd place, and \$75 each for two honorable mentions.

The contest was made possible through partnerships with the Charles County North Point High School, Maryland Department of the Environment, the Mattawoman Watershed Society (MWS), the Nanjemoy-Potomac Environmental Coalition, Inc., the Port Tobacco River Conservancy (PTRC), and the Potomac Riverkeeper Network. Plans are underway to use the videos as outreach tools through platforms such as YouTube and other channels, with further development ongoing.

Student Outreach

The WPRP staff continued outreach education within Charles County Public Schools during FY 2024. Staff attended Career Day at Billingsley Elementary School and educated over 100 students about the Watershed Protection and Restoration Program (WPRP), watershed concepts, stormwater pollution, and what everyone can do to help protect water quality. Each presentation began with a demonstration using the EnviroScape watershed model. After the demonstration, key questions were posed to competing classrooms, with prizes awarded for each correct answer.



WPRP staff also presented the EnviroScape watershed model at the *Summer Teen Leaders Day Camp* for teens ages 13 to 16 at Stoddert Middle School in Waldorf by the County's Department of Recreation, Parks & Tourism.

Septic System Maintenance Incentives, Outreach & Education

Septic Pump-Out/Riser Reimbursement Program

The Septic Pump-Out Reimbursement Program was started in 2015 as an incentive program to encourage homeowners to change their behavior by either getting their septic tank pumped for the first time and/or to pump their tank more frequently (once every three to five years). For over ten years the program has been reimbursing approved septic system owners between \$100 to \$182.50 for a pump-out. On average, the County has approved 850 pump-out reimbursements per year with a primary goal to have most septic tanks pumped regularly, at least once every five years. This frequency is the smallest standard for greatest performance to prevent leachate from seeping into surface water, breakage, or drain field failures.

Charles County is home to an estimated 25,500 residences that rely on private septic systems. To meet the county's five-year pumping goal, approximately 5,100 septic tanks need to be

pumped annually. However, data from the Mattawoman Treatment Plant for FY 2024 indicates that only about 1,571 septic tanks were pumped. This figure falls significantly short of the program's target of 5,100 pump-outs per year, highlighting the need to educate homeowners on the importance of regular septic system maintenance.

WPRP staff, with help from the Charles County Extension Office, the Health Department, and the County's Media Services continue to draw attention to the issue of septic system maintenance by recommending that homeowners have their septic system inspected and cleaned regularly.

Reimbursements		
Fiscal Year	# of Pump-Outs	# of Risers
2015	832	-
2016	783	-
2017	606	-
2018	760	-
2019	779	36
2020	948	142
2021	1238	215
2022	857	207
2023	830	135
2024	889	114

Bay Restoration Fund (BRF) Grant Program:

The BRF is a State-supported fund that replaces conventional septic tanks with nitrogen-reducing units or connects existing dwellings to sewer treatment utility. For low-income households, BRF funding can be used to replace a failing septic system. The program's purpose has been to reduce the amount of harmful nutrients entering the Chesapeake Bay and its tributaries from failing septic systems.

Public information on how to apply for a Bay Restoration Fund Grant continues to be available on the Charles County Health Department website at <https://CharlesCountyhealth.org/percolation-sewage-bay-restoration/> and the Charles County Government website at <https://www.CharlesCountyMD.gov/government/planning-and-growth-management/septic-system-reimbursement-programs>.



Charles County Government

September 18 ·

...

It's **#SepticSmartWeek!** Did you know that most septic tanks need to be inspected every 3 years? This will:

- Save you money from malfunction repairs or replacements
- Protect home value
- Keep water clean and safe
- Keep the environment clean

Charles County residents are eligible once every 3 years for \$100 towards the cost of a septic system pump-out.

For more information, visit <https://charlescountymd.info/3Xugd3o> or call 301-645-0692.



14

3 comments 9 shares

MDE's Water and Wastewater Permitting Requirements and Guidance for the Regulated Community

The County supplies the following information regarding NPDES permitting requirements, pollution prevention plan development, proper housekeeping and spill prevention and response, upon request and to violators or potential violators of the County's IDDE regulations:

Maryland Wastewater Permits Program

<https://mde.state.md.us/programs/Water/wwp/Pages/index.aspx>

<https://mde.maryland.gov/programs/LAND/Documents/EPA%20Sector%20P%20Transportation%20Facilities%20Fact%20Sheet%2012.2006%2011%20pgs.pdf>

Maryland Water Permit Applications

<https://mde.maryland.gov/programs/Permits/WaterManagementPermits/Pages/waterpermits.aspx>

Maryland NPDES Industrial & General Surface Water Discharge Permits

<http://www.mde.state.md.us/programs/Water/wwp/Pages/IndustrialSurfaceDischargePermits.aspx>

Maryland Guidance for Developing Your Storm Water Pollution Prevention Plan

<http://mde.maryland.gov/programs/Permits/WaterManagementPermits/Documents/Marina%20GP/16MA/16MA%20MDE%20SWPPP%20Guidance%20for%20Marinas.pdf>

Maryland Stormwater Pollution Prevention Guidance

<https://mde.maryland.gov/programs/Permits/WaterManagementPermits/Documents/GDP%20Stormwater/MD%20Stormwater%20Hotspots.pdf>

Maryland General Permit for the Discharge of Exterior Vehicle Washwater to Groundwater from Commercial Vehicle Washing Operations

https://mde.maryland.gov/programs/Water/wwp/Documents/GENERAL_VW_PERMIT_FINAL.pdf

Maryland Spill Response - Toll Free Number (866) 633-4686

<http://mde.maryland.gov/programs/Crossmedia/EmergencyResponse/Pages/ERHome.aspx>

IV.E. Stormwater Restoration

Overview of Permit Conditions

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 Charles 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. *Annual alternative control practices used by Charles County to meet its prior MS4 permit's impervious acre restoration requirement shall be:*
 - a. *Continued annually at the same level of implementation (e.g., street lane miles swept, septic systems pumped) under this permit;*
 - b. *Replaced with 138 impervious acres using stormwater management BMPs, programmatic initiatives, or alternative control practices in accordance with the 2021 Accounting Guidance; or*
 - c. *A combination of a and b above.*

FY 2024 Status

Under the County's prior MS4 permit (issued in FY 2015), 138 impervious acres of annual alternative control practices were implemented. These practices must be continued or replaced in accordance with the 2021 Accounting Guidance to prevent backsliding or loss of restoration progress.

Practices continued from the previous FY 2015 permit use the accounting methods in place at the time of implementation. The three practices implemented by the County include street sweeping, storm drain vacuuming and septic pump-outs. These will be maintained using the 2014 Accounting Guidance, except for street sweeping for which accounting methods changed prior to the 2021 Accounting Guidance to require a minimum number of four repeat sweeps per year. The County focuses on high priority areas for street sweeping and does not repeat sweeping unless necessary.

The following tables track the status of the County's prior annual alternative control practices.

Table 24: FY 2015 MS4 Permit Annual Alternative Control Practices

BMP Type	Equivalent Impervious Area (EIA)	Status	Notes
Street Sweeping	75.69	Replaced	See table below for replacement.
Storm Drain Vacuuming	40.23	Ongoing	This ongoing BMP is credited at 0.03 EIA each per the 2014 Accounting Guidance. Additional credits are 0.02 EIA each per the 2021 Accounting Guidance.
Septic System Pumping	22.4	Ongoing	This ongoing BMP is credited at 0.03 EIA each per the 2014 Accounting Guidance. Additional credits are 0.02 EIA each per the 2021 Accounting Guidance.
TOTAL	138.32		

Table 25: FY 2015 Permit Replacement Restoration Projects

FY 2015 Permit Restoration Projects	Year Removed	EIA Removed	Replacement Restoration Projects	Year Replaced	EIA Replacement
Street Sweeping	2020	75.69	St. Charles Stream Restoration	2020	7.1
			Potomac Heights Shoreline Stabilization	2020	70.20
Total		75.69			77.3

Overview of Permit Conditions

2. *The impervious acre restoration requirements described below are in addition to the requirements listed in Part IV.E.1 of this permit.*
3. *By December 29, 2027, Charles County shall commence and complete the restoration of 1,083 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.*

FY 2024 Status

Charles County began restoration of 1,083 impervious acres immediately after the FY 2015 permit completed in December 2019. Following are updates on Capital Projects that will count towards the 1,083 impervious acres.

Capital Projects Complete or Under Construction***Apple Creek Stream Restoration***

(County Permit # VCI 160055)

Design completed May 2019.

Construction began July 2019.

*Impervious Treatment: 18.02 acres**Approx. cost per acre treated: \$38,222**Status: Construction Complete March 2020****LaPlata High School Stormwater Retrofit***

(County Permit # N/A)

Design completed May 2018.

Construction began May 2019.

*Impervious Treatment: 29 acres**Approx. cost per acre treated: \$23,858**Status: Construction Complete May 2020****St. Charles Parkway Stream Restoration***

(County Permit # VCI 170053)

Design completed August 2019.

Construction began December 2019.

*Impervious Treatment: 7.1 acres**Approx. cost per acre treated: \$110,220**Status: Construction Complete June 2020*

Thomas Higdon ES Stream Restoration
(County Permit # VCI 170071)

Design completed August 2019.
Construction began December 2019.

Impervious Treatment: 50 acres

Approx. cost per acre treated: \$21,316

Status: Construction Complete June 2020



Potomac Heights Shoreline Restoration
(County Permit # VCI 180003)

Design completed September 2019.
Construction began November 2019.

Impervious Treatment: 70.2 acres

Approx. cost per acre treated: \$19,836

Status: Construction Complete June 2020



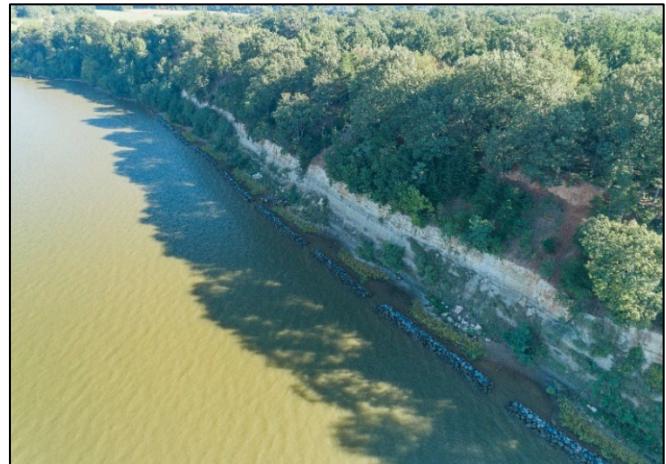
Cliffton Shoreline Stabilization Phase 1&2
(County Permit # VCI 160056 Phase1)
(County Permit # VCI 170096 Phase2)

Design completed August 2017 Phase 1.
Design completed May 2019 Phase 2.
Construction began July 2019.

Impervious Treatment: 82.16 acres Phase 1
Impervious Treatment : 92.72 acres Phase 2

Approx. cost per acre treated: \$16,167

Status: Construction Complete July 2020



General Smallwood Middle School
(County Permit # VCI 170032)

Design completed February 2019.
Construction began May 2019.

Impervious Treatment: 3.43 acres

Approx. cost per acre treated: \$148,396

Status: Construction Complete September 2020



Bensenville Park Stormwater Retrofits and Tree Planting
(County Permit # VCI 170079)

Design completed September 2018
Construction began May 2019.

Impervious Treatment: 6.78 acres

Approx. cost per acre treated: \$126,224

Status: Construction Complete November 2020



Best Buy Stormwater Pond Retrofit
(County Permit # DSP 190036)

Design completed April 2019.
Construction began June 2020

Impervious Treatment: 4.62 acres

Approx. cost per acre treated: \$61,141

Status: Construction Complete May 2021



Cedar Tree Stormwater Pond Retrofit
(County Permit # DSP 190047)

Design completed April 2019.
Construction began June 2020

Impervious Treatment: 3.61 acres

Approx. cost per acre treated: \$49,870

Status: Construction Complete June 2021



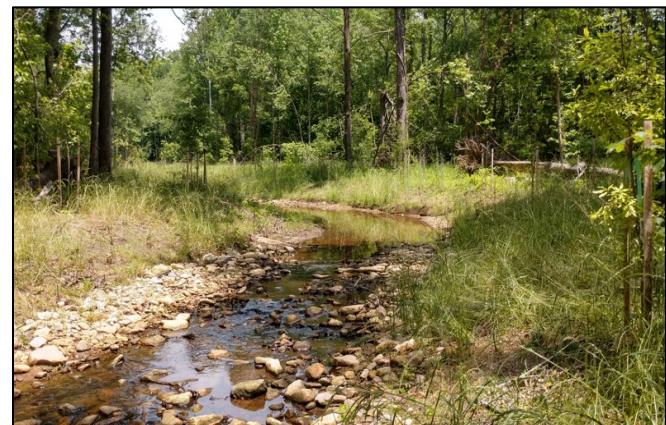
Ruth B. Swann Main Channel Stream Restoration
(County Permit # DSP 190020)

Design completed September 2019
Construction began November 2020

Impervious Treatment: 106.07 acres

Approx. cost per acre treated: \$15,257

Status: Construction Complete September 2022



Hunt Club/Bridle Path Stream Restoration

(County Permit # DSP 190022)

Design completed July 2019
Construction began November 2021

Impervious Treatment: 37.79 acres

Approx. cost per acre treated: \$36,180

Status: Construction Complete May 2022



Marbella Subdivision Stream Restoration and Outfall Stabilizations
(County Permit # DSP 190107)

Design completed July 2021
Construction start date TBD

Impervious Treatment: 63.5 acres (originally)

Approx. cost per acre treated: \$33,100 (originally)

Status: Re-design to include two cross culvert replacements due to flooding issues is underway.



CSM Tributary Stream Restoration
(County Permit # DSP 190030)

Design completed May 2020
Construction began January 2022

Impervious Treatment: 53.5 acres

Approx. cost per acre treated: \$25,829

Status: Construction Complete September 2022



Acton Village/Westdale Drive Stream Restoration
(County Permit # DSP # 200027)

Design completed October 2022
Construction began October 2022

Impervious Treatment: 26.07 acres

Approx. cost per acre treated: \$78,589 (CDBG Grant funded)

Status: Construction Complete March 2024



Ruth B. Swann Tributary Restoration

(County Permit # DSP 190051)

Design Completed July 2021

Construction began June 2022

*Impervious Treatment: 19.38 acres**Approx. cost per acre treated: \$61,115**Status: Construction Complete June 2023***Ruth B. Swann Upper Stream Restoration**

(County Permit # DSP 190080)

Design Completed August 2022

Construction began April 2024

*Impervious Treatment: 78.1 acres**Approx. cost per acre treated: \$29,053**Status: Construction underway***Worthington Subd/Wilton Court Pond Retrofit**

(County Permit # DSP 190034)

Design Completed July 2022

Construction began October 2024

*Impervious Treatment: 10.24 acres**Approx. cost per acre treated: \$46,620**Status: Construction underway*

White Oak Village Wet Pond Retrofit

(County Permit # DSP 200058)

Design Completed April 2021

Construction began May 2021 (Sinkhole/Pipes Installation)

Impervious Treatment: 21.01 acres

Approx. cost per acre treated: \$42,344

Status: Construction to start January 2025 (SWM Pond)



White Plains Failing Septic to Sewer

(Gateway Blvd. and Park Ave.)

(County Permit # DSP 210019)

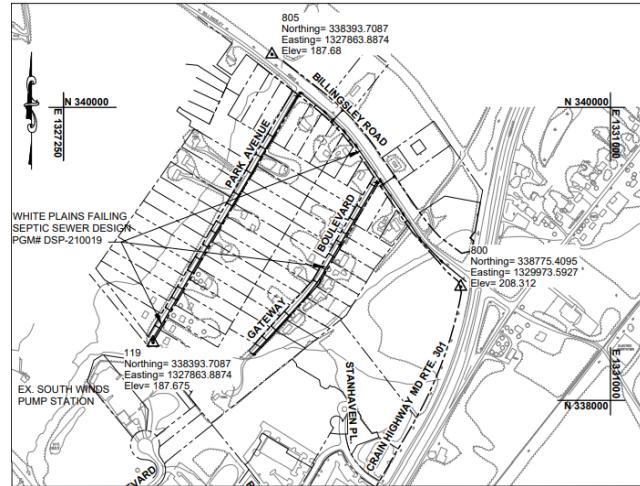
Design Completed

Construction to begin January 2025

Impervious Treatment: TBD

Approx. cost per acre treated: TBD

Status: Construction Underway



Southerland Failing Septic to Sewer

(County Permit # DSP 220010)

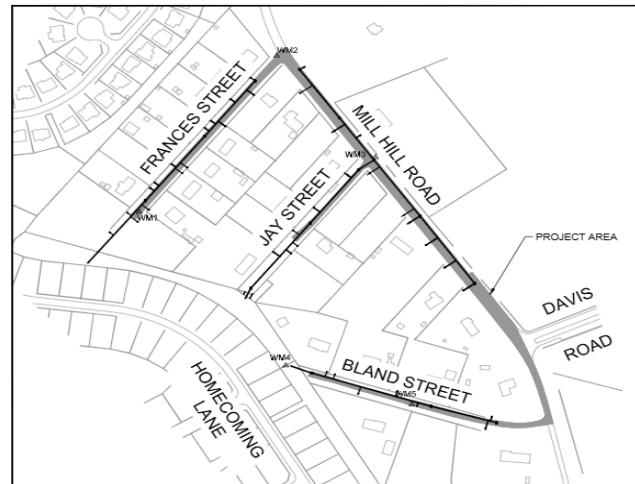
Design Completed February 2023

Construction to begin in 2025

Impervious Treatment: TBD

Approx. cost per acre treated: TBD

Status: Under Procurement



Capital Projects under Design & Estimated Impervious Acres to be Treated

The following impervious acres are taken from the most recent engineered drawings or concepts and are subject to change based on final approved engineered drawings.

Board of Education Projects (Subtotal: 71.6 Acres)

Milton Somers Middle School Steam Restoration and Stormwater Pond Retrofit (Town of LaPlata Permit) – 39.4 Impervious Acres

Mitchell Elementary School Outfall Stabilization, Stream Restoration and Bioretention (County Permit # DSP 200029) – 32.2 Impervious Acres (Re-design to include the new property owner and BOE's comments.)

Stream Restoration Projects (Subtotal: 171.81 Acres)

Port Tobacco Stream Upper/Lower (County Permit # DSP 200035) – Estimated 56 Impervious Acres (Reduced from 84.6 Impervious Acres due to subtraction of Compton property)

Locust Grove Farm Stream (County Permit # CSD Concept) – 0.00 Impervious Acres (On hold due to passing one property owner's spouse and rejection of the living spouse to grant temporary access.)

Oak Ridge Park Western Stream (County Permit # DSP 200025) – 97.18 Impervious Acres (Re-design due to exclusion of two property owners. Stream limits/extents will be changed.)

Oak Ridge Park Eastern Stream – 18 Impervious Acres (Re-design due to exclusion of two property owners and inclusion of Outfall Stabilization. Stream's limits/extents will be changed.)

Stormwater Management Facilities/ Step Pool Conveyance Projects (Subtotal: 54.06 Acres)

South Hampton Pond Retrofits & Step Pool Conveyance (County Permits # DSP 190073-76) – 37.4 Impervious Acres

White Plains Golf Course Pond Retrofit (County Permit # DSP 190097) – 16.66 Impervious Acres

Miscellaneous Projects (Subtotal: 130 Acres)

Waldorf Urban Redevelopment Corridor Infrastructure Improvements Study – Impervious Acres TBD
Elite Gymnastics Impervious Surface Removal (0.95 Impervious Acres)

Pope's Creek Shoreline Stabilization (12 Impervious Acres)

Full Delivery – Garner Shoreline Stabilization (100 Impervious Acres)

Huntington Upland at Thomas Stone High School (2.5 Impervious Acres)

Huntington Stream Restoration (15 Impervious Acres)

4. *By December 29, 2023, Charles County shall complete the stormwater BMPs, programmatic initiatives, or alternative control practices listed in the Year 1 BMP Portfolio provided in Appendix B. Charles 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.

Appendix B: Year 1 BMP Portfolio – New and Replacement BMPs

GEODATABASE ID	PROJECT NAME	BMP TYPE	NUMBER OF BMPS	IMPERVIOUS ACRES TREATED	LENGTH RESTORED
<i>Capital Projects – New Restoration</i>					
CH17ALN000005	St. Charles Parkway	STRE	1	7.1	552 Linear Feet (LF)
CH20ALN000028	Potomac Heights	SHST	1	70.20	1,755 LF
CH17ALN000011	Apple Creek	STRE	1	18.02	748 LF
CH16RST000097	La Plata High School	PWED	1	29	NA
CH17ALN000014	Higdon Elementary School	STRE	1	50	1,480 LF
CH18ALN000004	Cliffton	SHST	1	82.16	2,054 LF
CH20ALN000027	Cliffton	SHST	1	92.72	2,318 LF
CH19RST000006	Cedar Tree	PPKT	1	3.61	NA
CH19RST000005	Best Buy	PWET	1	4.62	NA
CH16RST000014	Smallwood Middle School	BIO	1	1.53	NA
CH17RST000067	Smallwood Middle School	BIO	1	1.9	NA
CH17RST000062	Bensville Park	ODSW	1	1.15	NA
CH17RST000002	Bensville Park	ODSW	1	1.69	NA
CH17RST000063	Bensville Park	FSND	1	3.33	NA
CH17APY000456	Bensville Park	FPU	1	1.76	NA
<i>Other</i>					
	Septic Denitrification	SEPD	10	1.5	NA
TOTAL				370.29	

*The impervious acres treated for Best Buy has been corrected from 12.66 shown in Appendix B to 4.62 acres. Additionally, the impervious acres treated for Smallwood Middle School has been corrected from 2.07 and 2.57 shown in Appendix B to 1.53 and 1.9, respectively.

FY 2024 Status

The FY 2015 permit term ended in December 2019 and all projects completed after that date count towards the current permit term. From January 2020 through FY 2022, the Year 1 benchmark projects listed above were completed, including an additional 86 septic denitrification upgrades and 12 connections of on-site septic disposal systems to the public sanitary sewer system, shown on Table 30.

- Charles 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 108 equivalent impervious acres restored.

6. *Any Nutrient Credits acquired by Charles 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.*
7. *Charles 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.*

Annual Restoration Benchmark Schedule, Table 1

Metric	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Cumulative Percent Impervious Acre Restoration Completed</i>	<i>15%</i>	<i>30%</i>	<i>48%</i>	<i>72%</i>	<i>100%</i>

8. *In each year's annual report, Charles 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. *Charles 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 December 29, 2027.*

Progress Towards Restoration Benchmarks

In FY 2023 the following permanent projects were completed, which brings the Year 1 total to 788 acres or 73% of the total planned restoration. However it should be noted that 77.3 acres of the total will be applied to maintain level of effort for the FY 2015 permit, so will not count towards the FY 2023 permit.

Table 26: Restoration Projects Completed in FY 2023

GEODATABASE ID	PROJECT NAME	BMP TYPE	NUMBER OF BMPS	IMPERVIOUS ACRES TREATED	LENGTH RESTORED (Linear Feet)
Capital Projects – New Restoration					
CH17ALN000013	Ruth B Swann Main	STRE	1	106.07	1,509 LF
CH21ALN000003	Ruth B Swann Trib	STRE	1	17.08	1,644 LF
CH22ALN000001	Ruth B Swann Trib Outfalls	OUT	6	2.3	687 LF
CH17ALN000012	Hunt Club – Bridle Path	STRE	1	37.79	1,795 LF
CH17ALN000008	CSM Tributaries	STRE	3	53.5	1,330 LF
Other					
	Septic Denitrification	SEPD	23	3.68	NA
	Septic Connection	SEPC	4	0.92	NA
TOTAL				221.34	

In FY 2024 the permanent projects shown on Table 27 have been completed, which brings the total to 625.05 acres or 57% of the total planned restoration. Table 28 shows planned projects for FY 2025.

Table 27: Restoration Projects Completed in FY 2024

GEODATABASE ID	PROJECT NAME	BMP TYPE	NUMBER OF BMPS	IMPERVIOUS ACRES TREATED	LENGTH RESTORED
Capital Projects – New Restoration					
CH21ALN000001	Acton Village – Westdale	STRE	1	26.08	728 LF
Other					
	Septic Denitrification	SEPD	6	0.96	NA
	Septic Connection	SEPC	2	0.46	NA
TOTAL				27.5	

Table 28: Planned Restoration Projects for FY 2025

GEODATABASE ID	PROJECT NAME	BMP TYPE	NUMBER OF BMPS	IMPERVIOUS ACRES TREATED	LENGTH RESTORED
Capital Projects – New Restoration					
CH21ALN000002	Ruth B Swann North	STRE	1	78.1	2,081 LF
CH16RST000034	White Oak Pond Retrofit	PWET	1	21.01	NA
CH16RST000056	Wilton Court Pond Retrofit	PPKT	1	10.24	NA
Other					
	Septic Denitrification	SEPD	10	1.5	NA
TOTAL				110.85	

Summary of Progress Towards the FY 2023 MS4 Permit**Annual Alternative Control Practices**

The credit for the annual alternative the control practices must be averaged over the five-year permit period and are used to maintain the level of effort of the FY 2015 MS4 permit. No additional credits for these practices are proposed for the FY 2023 MS4 permit.

Table 29: Tracking of Annual Alternative Control Practices

	FY 2020 # of Units	FY 2020 Acres	FY 2021 # of Units	FY 2021 Acres	FY 2022 # of Units	FY 2022 Acres
Inlet Cleaning	155.4 tons	27.54	319.2 tons	56.56	60.65 tons	10.75
Septic Pump-outs	960	26.67	1,714	40.01	1,505	41.75

	FY 2023 # of Units	FY 2023 Acres	FY 2024 # of Units	FY 2024 Acres
Inlet Cleaning	115.13 tons	20.4	66.74 tons	11.83
Septic Pump-outs	1,458	36.63	1,559	38.65

(1) Inlet Cleaning: 40.23 acres accounts for maintenance of 2015 MS4 permit level of effort using pre-2021 Guidance. To exceed maintenance level requires a Standard Operating Procedure per 2021 Guidance.
 (2) Septic Pump-outs: 22.4 acres (747 units) accounts for maintenance of 2019 level of effort using pre-2021 Guidance (0.03 acre/unit). Units exceeding 747 use 2021 Guidance (0.02 acre/unit).
 (3) Alternative Control Practices for the entire FY 2020 year are counted for the 2023 MS4 permit.

Table 30: Tracking of Permanent Alternative Control Practices

	FY 2020 # (Jan 1 – Jun 30)	FY 2020 Acres	FY 2021 #	FY 2021 Acres	FY 2022 #	FY 2022 Acres
Septic Denitrification	25	4	26	4.16	35	5.6
Septic Connection to Sanitary Sewer	2	.46	4	0.92	6	1.38
TOTAL	27	4.46	17	5.08	41	6.98

	FY 2023 #	FY 2023 Acres	FY 2024 #	FY 2024 Acres
Septic Denitrification	23	3.68	6	0.96
Septic Connection to Sanitary Sewer	4	0.92	2	0.46
TOTAL	27	4.6	8	1.42

(1) Septic Denitrification Upgrades: Pre-2021 Guidance allowed for 0.26 acre/unit; 2021 Guidance allows for 0.16 acre/unit.
 (2) Septic Connection: Pre-2021 Guidance allowed for 0.39 acre/unit; 2021 Guidance allows for 0.23 acre/unit.
 (3) The first half of FY 2020 counts towards the 2015 MS4 permit, so only the second half of FY 2020 is shown on this table. The following table summarizes the County's progress towards impervious restoration requirement of 1,083 acres. See the enclosed MS4 Geodatabase, in the *Impervious Surface Table*.

Table 31: Impervious Surface Restoration Summary Towards Goal of 1,083 Acres

	Half of FY 2020 (Jan 1 - Jun 30)	FY 2021	FY 2022
Impervious Surface Area Total (Countywide)	10,637	10,637	10,637
Baseline Acres (uncontrolled baseline impervious w/o SWM)	7,887	7,887	7,887
Planned Acres for Restoration during the current permit term	1,083	1,083	1,083
Capital Projects Completed in Reporting Year	360.86	189.28	0
Other Permanent Projects Completed in Reporting Year	4.46	5.08	6.98
Total Completed in Reporting Year	365.32	194.36	6.98
Restored Acres Total during the current permit term	365.32	559.68	566.66

	FY 2023	FY 2024
Impervious Surface Area Total (Countywide)	10,637	10,637
Baseline Acres (uncontrolled baseline impervious w/o SWM)	7,887	7,887
Planned Acres for Restoration during the current permit term	1,083	1,083
Capital Projects Completed in Reporting Year	216.74	26.07
Other Permanent Projects Completed in Reporting Year	4.6	1.42
Total Completed in Reporting Year	221.34	27.5
Restored Acres Total during the current permit term	788.00	815.15

- (1) The Impervious Surface Area Total is based on impervious surface from 2011 aerial photos.
- (2) The Impervious Acres Total does not include impervious surface on federal, state, town, or industrial stormwater permit properties. It does include County Government and Board of Education owned properties in towns.
- (3) Annual operational restoration projects are based on averages over the permit period.
- (4) 77.3 acres of impervious surface restoration shown for FY 2020 will not count towards the 1,083 acres goal because it is used to maintain level of effort as shown on Table 32.

The total restoration achieved from the prior FY 2015 MS4 permit must be maintained to prevent backsliding. Street sweeping is no longer proposed to be tracked towards impervious restoration and is to be replaced by the projects shown on the following table. Any other projects that are not verifiable and maintained will be replaced and tracked on the following table.

Table 32: Maintenance of 20% Impervious Restoration Completed for the FY 2015 MS4 Permit

2019 Restoration Project	Year Removed	EIA Removed	Replacement Restoration	Year Replaced	EIA Replacement
Street Sweeping 5-year Avg.	2020	75.69	St. Charles Stream Restoration	2020	7.1
			Potomac Heights Shoreline Stabilization	2020	70.20
Various Shoreline and Outfall Stabilizations not maintained	2021	20	TBD	TBD	TBD
Total		75.69			77.3

IV.F. Countywide TMDL Stormwater Implementation Plan

Overview of Permit Conditions

1. *Where Charles County has submitted an implementation plan for a TMDL identified in Appendix A, 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 having a stormwater WLA, Charles County shall submit an implementation plan to MDE for approval. The TMDL implementation plan shall be based on MDE's TMDL analysis, or equivalent and comparable Charles County water quality analysis, 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 analysis and methods, and how they are comparable with MDE's TMDL analysis; and*
 - c. *Final implementation dates and benchmarks for meeting the TMDL's applicable stormwater WLA. Once approved by MDE, 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.*

FY 2024 Status

The County's implementation plans for TMDLs identified in Appendix A of the FY 2023 permit have all been approved by MDE, apart from the sediment TMDL for Patuxent River Lower nontidal segments, which is currently being monitored for delisting per the *Maryland Department of Environment's Delisting Methodology for Biological Assessments in Maryland's Integrated Report*. The "Final Justification for Delisting" document will be submitted to MDE for approval in 2025.

In FY 2023 the County completed an update to its FY 2017 Countywide Stormwater TMDL Stormwater Restoration Plan. Updates included using the Maryland Department of Environment's recent modeling spreadsheets, documenting the County's progress to date, and adapting the implementation strategies to incorporate recently approved alternative best management practices (BMPs). The FY 2023 plan addresses the Chesapeake Bay segments listed in Appendix A of the

County's FY 2023 permit together, as a single TMDL for the whole County, which is allowed by MDE.

The portion of the FY 2017 plan addressing the County's bacteria TMDL was updated separately and submitted to MDE on April 30, 2024. The plan was approved by the MDE on July 31, 2024, for moving to the next step of monitoring, which will begin in early 2025.

In FY 2024 an annual update to document progress towards achieving TMDLs is provided. The FY 2024 Countywide TMDL Implementation Progress report and spreadsheets are found in Appendix F of this MS4 Annual Report.

4. *Charles 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. Charles 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, Charles 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 of 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.*

FY 2024 Status

The County maintains a website for the Watershed Restoration Program with a tiny URL: www.CharlesCountyMD.gov/Watershed for easy access. All of the County's TMDL Restoration Plans can be reached from this landing page. Alternately, the full URL for TMDL plans is: <https://www.charlescountymd.gov/government/planning-and-growth-management/stormwater-management/tmdl-total-maximum-daily-load-stormwater-restoration-plan>.

Additionally, the public is provided televised presentations and discussions of the plans with the Charles County Planning Commission and 30-day public comment periods prior to finalization of any of the stormwater implementation plans.

IV.G. Assessment of ControlsOverview of Permit Conditions

Charles 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 April 30, 2023, or by July 1 of each year, the County shall notify MDE which option it chooses for BMP effectiveness monitoring. The two options are:

- a. *The County shall collaborate with MDE 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 \$75,000, or an amount to be proposed by the permittee 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 and 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 in the Mattawoman Creek watershed, or select and submit for MDE's approval a new BMP effectiveness study for monitoring by April 30, 2023. 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:*
 - *Eight (8) storm events shall be monitored per year at each monitoring location with at least two occurring per quarter. Quarters shall be based on calendar year. If exceptional weather patterns (e.g. extended 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 (EMC) shall be calculated;*
- *Baseflow sampling shall occur quarterly as near as the mid-point of each season (e.g., February for the first quarter, May for the second quarter, August for the third quarter, and November for the fourth quarter) as is practicable to allow for 72 hours of preceding dry time following baseflow sampling best practices;*
- *Storm flow and baseflow measurements shall be recorded at the outfall and in-stream stations for the following parameters:*

Stormwater and Baseflow Representative Samples (Parameters)
<i>Total Suspended Solids (TSS)</i>
<i>Bacteria (E. coli or enterococcus spp.)</i>
<i>Chloride</i>
<i>Discharge (flow)</i>
<i>Biochemical Oxygen Demand (BOD₅) or Total Organic Carbon (TOC)</i>
<i>Orthophosphate</i>
<i>Total Nitrogen (TN)</i>
<i>Nitrate + Nitrite</i>
<i>Total Ammonia (sewer signal)</i>
<i>Total Phosphorus (TP)</i>

- *Continuous flow measurements shall be recorded for the parameters listed at the in-stream monitoring station or other practical location based on the approved study design:*

Continuous Measurements (Parameters)
<i>Temperature</i>
<i>pH</i>
<i>Discharge (flow)</i>
<i>Turbidity (Optional per 2021 MS4 Monitoring Guidelines)</i>
<i>Conductivity</i>

- *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.*
- *If the County elects to continue monitoring Mattawoman Creek, 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 MDE 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 an MDE 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 study design. This assessment shall include an 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, etc.) 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 MDE's long-term monitoring database 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.

FY 2024 Status

Pooled Monitoring for BMP Effectiveness

On March 24, 2023 Charles County notified MDE that it would be participating in the pooled monitoring option for BMP Effectiveness Monitoring. The final five-year agreement with the Chesapeake Bay Trust was fully executed on July 10, 2023, and a copy provided to MDE.

The County staff participates on the Pooled Monitoring Committee to provide input to the study questions to be posed in requests for grant proposals, reviewing proposed projects, and working with grant awardees as they set up and progress through their projects.

2. *Watershed Assessment Monitoring*

By April 30, 2023, or by July 1 of each year, the County shall notify MDE 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 the CBT for determining appropriate watershed assessment monitoring. To implement the required monitoring, the County shall pay \$134,100 annually into a pooled monitoring CBT fund. 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 April 30, 2024, related to stream biology and habitat, bacteria, and chlorides and commence monitoring upon MDE'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 assessment at one location.*

2. PCB Source Tracking

Within one year of permit issuance, Charles County shall develop a PCB source tracking monitoring plan for all applicable TMDL WLAs where watershed reductions are required to meet water quality standards. Charles County shall submit results and provide updates annually on the monitoring efforts.

FY 2024 Status

Watershed Assessment Monitoring

For this permit condition the County has selected to prepare a comprehensive plan for watershed assessment and trend monitoring, to include stream biology and habitat for 25 sites within the County and chloride monitoring for one site within the County. The County submitted the stream biology and habitat monitoring plan on October 2023 to MDE for review and approval. On December 20, 2023 MDE determined the plan was acceptable and requested the County move to the next step of preparing and submitting a Quality Assurance Plan. The County plans on completing this step and initiating monitoring in spring 2025.

The County's draft Chloride Monitoring Plan was submitted to MDE on April 30, 2024. On June 28, 2024 MDE approved the plan and requested the County move to the next step of preparing and submitting the Quality Assurance Plan. The County plans on completing this step and initiating monitoring in early 2025.

The bacteria monitoring site is not required for Charles County, because the Maryland Department of Environment maintains the necessary monitoring site in the tidal portion of Indian Creek under the Shellfish Monitoring Program. However, bacteria monitoring is proposed in the non-tidal portion of the watershed as described in the County's Indian Creek Bacteria TMDL and Monitoring Plan. For further information on the plan see Part IV.F Countywide TMDL Stormwater Implementation Plan.

There are no PCB TMDL WLAs where watershed reductions are required by Charles County in order to meet water quality standards, thus a PCB source tracking monitoring plan is not applicable.

III.G. Program Funding

Overview of Permit Conditions

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 Charles County as required in PART V of the permit.*
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.*

FY 2024 Status

Funding Sources

Since the County's first generation NPDES MS4 permit was issued in 1997, the County has had dedicated enterprise funding to ensure permit compliance. The two original enterprise funds included the Environmental Service Fund and the Inspection and Review Fund. In 2013, the Watershed Protection and Restoration Fund was adopted. Revenues to support the enterprise funds are from the Environmental Service Fee, Lot Recordation Fee, Inspection and Review Fees, Stormwater Remediation Fee, and most recently a subsidy from the General Fund's Transfer Tax revenues. The adopted FY 2024 Enterprise Funds are in Appendix G.

1. **Environmental Service Fund:** The ESF is no longer the primary source of funding for MS4 permit compliance since replacement by the Watershed Protection and Restoration Fund. However, ESF litter control outreach and septic programs still support permit compliance.
2. **Inspection and Review Fund:** The MS4 permit requires the County to maintain acceptable stormwater management and erosion and sediment control programs for new development in accordance with the Annotated Code of Maryland. Operating revenues for these activities are generated primarily by service charges for engineering plan reviews, site plan reviews, grading inspection, erosion and sediment control inspections, storm drain and stormwater inspections, which are deposited in the Inspection and Review Fund. This fund is for salary and fringe of full time and contractual positions.
3. **Watershed Protection and Restoration Fund (WPRF):** In June 2013, Charles County adopted Chapter 275 of the Charles County Code, establishing the Watershed Protection and Restoration Program and associated Stormwater Remediation Fee. The WPRF may be used for: capital improvements for stormwater management, including stream and wetland restoration projects; operation and maintenance of stormwater management systems and facilities; public education and outreach related stormwater management or stream and wetland restoration; stormwater

management planning, including mapping and assessment of impervious surfaces, as well as related monitoring, inspection, and enforcement activities; reasonable costs necessary to administer the fund; and grants to nonprofit organizations for watershed restoration projects.

The Stormwater Remediation Fee is a flat rate charged to all improved properties countywide, except in the Towns of La Plata and Indian Head where the MS4 programs are funded and administered separately. Property owners in the County may obtain a 50% fee credit by demonstrating the use of onsite stormwater practices such as rain gardens, pervious paving, and other options. The following table shows the rates for the current permit term. Credits and exemptions are reported annually.

Fiscal Year	2020	2021	2022	2023	2024	2025
Stormwater Remediation Fee	\$78	\$92	\$115	\$127	\$146	\$156

In 2014 NPDES MS4 permit coverage was expanded countywide, however the lot recordation fee continued to apply only to new lots recorded in the Development District (revised boundary in 2016) because this continued to be the County's urban area. This fee was discontinued in FY 2021.

Fiscal Year	2020	2021
Lot Recordation Fee	\$154	-

Since FY 2016, subsidies from the General Fund have been approved in order to maintain a stable fee. The subsidy is only applied as needed.

Fiscal Year	2020	2021	2022	2023	2024	2025
General Fund Transfer	\$550,000	\$300,000	\$0	\$0	\$33,722	\$0

WPRF Budget and Staff Positions

The WPRF supports applicable expenditures and staff from County Departments including Planning and Growth Management, Public Works, County Attorney's Office, and Fiscal and Administrative Services. The following tables summarize the WPRF budget and staff positions.

Table 33: WPRF Budget - Fiscal Years 2020 through 2025

Fiscal Year	2020 Audited	2021 Audited	2022 Audited	2023 Audited	2024 Unaudited	2025 Budget
Budget:	4,699,320	5,579,100	6,186,420	7,035,500	7,799,490	8,246,900
Revenue:						
Stormwater Remediation Fee	3,970,537	4,714,488	5,915,720	6,566,660	7,599,372	8,241,900
Recordation Fee per Lot	66,836	0	0	66,836	0	0
Miscellaneous	9,466	15,550	14,343	14,871	16,538	5,000
General Fund Subsidy	550,000	300,000	0	0	33,722	0
Total Operating Revenues	4,596,839	5,030,038	5,930,063	6,648,367	7,649,632	8,246,900
Expenditures:						
Salary & Fringe	705,838	1,065,151	1,189,668	1,371,521	1,662,172	1,605,700
Operating	1,810,778	1,891,509	2,161,178	2,332,391	2,712,804	3,105,600
Capital Project Transfer	67,000	343,200	249,000	77,000	77,000	77,000
Debt Service	1,702,492	2,146,031	1,972,586	2,331,480	2,425,444	2,687,300
Total Expenditures	4,286,108	5,445,891	5,572,432	6,112,392	6,982,421	8,246,900
Operating Gain/(Loss)	310,731	(415,853)	357,632	535,974	633,489	0
Fund Balance:						
Beginning	326,704	637,435	221,582	579,214	1,115,188	1,748,677
Ending	637,435	221,582	579,214	1,115,188	1,748,677	1,748,677

Table 34: WPRF Staff Positions - Fiscal Years 2020 through 2025

Dept.-Division	Position	2020	2021	2022	2023	2024	2025
PGM-Admin	Director	0.1	0.1	0.1	0.1	0.1	0.1
PGM-Admin	Deputy Director	0.1	0.1	0.1	0.1	0.1	0.1
PGM-Admin	Assist to the Director	0.1	0.1	0.1	0.1	0.1	0.1
PGM-CPIS-Permits	Engineer I-IV	1.8	1.8	1.8	1.7	-	-
PGM-CPIS-Insp	Chief	0.1	0.1	0.1	0.5	0.1	0.1
PGM-CPIS-Insp	Engineer Supervisor	0.1	0.1	0.1	0.3	-	-
PGM-CPIS-Insp	Permit Technician	0.3	0.0	0.0	0.0	-	-
PGM-CPIS-Insp	Admin Associate	-	0.1	0.1	0.1	0.1	0.1
PGM-CPIS-Insp	PGM Support Specialist	1.0	1.0	1.0	1.0	1.0	1.0
PGM-CPIS-Insp	Inspection Supervisor	-	1.0	1.0	1.0	1.0	1.0
PGM-CPIS-Insp	Inspector	2.0	2.0	2.0	2.0	2.0	3.0
PGM-Planning	Chief	0.3	0.3	0.3	0.3	0.3	0.3
PGM-Planning	Climate Resilience & Sustainability Officer	-	-	0.5	0.5	0.5	0.5
PGM-Planning	Assistant Chief	0.1	0.1	0.1	0.2	0.2	0.2
PGM-Planning	Assist to the Chief	0.1	-	-	0.3	0.3	0.3
PGM-Planning	Engineer I-IV	1.0	1.0	2.0	-	-	-

PGM-Planning	Planning Supervisor	0.3	0.3	0.3	-	-	-
PGM-Planning	Planner I-III	2.0	2.0	1.8	1.8	2.3	3.2
PGM-Planning	Planning Technician	-	-	-	-	-	0.8
PGM-Planning	PGM Support Specialist	-	-	-	0.3	0.3	0.3
PGM-Planning	Admin Associate	-	0.3	0.3	-	-	-
PGM-Planning	Resource Analyst - GIS	0.1	0.3	0.3	0.3	0.3	0.3
PGM-Resource & Inf. Mgmt.	Assistant to the Chief	-	-	-	-	0.3	0.3
PGM-Resource & Inf. Mgmt.	Engineer Supervisor	-	-	-	-	0.3	0.3
PGM-Resource & Inf. Mgmt.	Engineer I-III	-	-	-	-	3.5	4.0
DPW-Env Res	Env Compliance Officer	1.0	1.0	1.0	1.0	1.0	1.0
DPW-Roads	Chief of Roads	-	-	-	-	0.1	0.1
DPW-Roads	Assistant Chief of Roads	-	-	-	-	-	1.0
DPW-Roads	Bridge Mgmt./Proj Mgr.	0.2	0.2	0.2	0.3	0.4	0.4
DPW-Roads	Roads Construction Insp.	0.2	0.2	0.2	0.3	0.4	0.4
DPW-Roads	Roads Project Manager	-	-	-	0.3	0.4	0.4
TOTAL Full Time Equivalent (FTE)		10.7	12.1	13.2	12.2	15.1	19.3

ESF Budget and Staff Positions

A small percentage of the Environmental Service Fund is allocated to support the County's Septic Pump-Out and Riser Reimbursement Programs implemented by the Department of Planning and Growth Management. This is because septic pumping is considered an alternative urban best management practice in MDE's 2021, *Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated Guidance for NPDES Permits* and awarded 0.02 acres equivalent impervious surface per septic pumped towards the impervious surface restoration goal.

The Septic Pump-Out Reimbursement program started in 2015, and the Riser Reimbursement program started in 2018 per Chapter 122, Article I of the Charles County Code. The code requires new home construction utilizing on-site sewage disposal systems to install visible septic tank risers. The code also includes reimbursement of up to \$100 per single-family dwelling for homeowners voluntarily choosing to have a septic tank riser installed. The County began implementation of the reimbursement program on December 1, 2018. The Septic Tank Risers program is in Chapter 122, Article I of the Charles County Code.

Table 35: ESF Budget for Septic Pump-Out Reimbursement Program – Fiscal Years 2020 through 2025

Fiscal Year	2020 Audited	2021 Audited	2022 Audited	2023 Audited	2024 Unaudited	2025 Budget
Budget	\$120,000	\$254,500	\$172,500	\$184,300	\$185,300	\$181,700
Expenditures	\$123,289	\$254,648	\$141,379	\$129,691	\$141,557	\$181,700

A portion of the Environmental Service Fund is allocated to support the County's Education and Outreach Program to reduce litter entering storm drain systems and the environment. The litter control and recycling outreach efforts increase recycling and educate the public on the importance of reducing, reusing, and recycling.

Table 36: ESF Budget for DPW's Education & Outreach – Fiscal Years 2020 through 2025

Fiscal Year	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Budget
Budget	\$227,000	\$210,400	\$239,000	\$316,200	\$364,500	\$258,300
Expenditures	\$208,426	\$211,499	\$204,100	\$204,700	\$228,900	\$258,300

Table 37: ESF Positions Dedicated towards Education and Outreach - Fiscal Years 2020 thru 2025

Department-Division	Position	2020	2021	2022	2023	2024	2025
DPW- Env Resources	Recyc./Litter Control Superintendent	1.0	1.0	1.0	1.0	1.0	1.0
DPW- Env Resources	Recycling Manager	0.25	0.25	0.25	0.25	0.25	0.25
DPW- Env Resources	Recycling Supervisor	0.25	0.25	0.25	0.25	0.25	0.25
DPW- Env Resources	Recycling Supervisor	0.25	0.25	0.25	0.25	0.25	0.25

Capital Improvement Projects Budgets

Capital projects are the primary compliance tool in meeting Part IV.E Stormwater Restoration of the NPDES MS4 permit. The County's Capital Improvements Program (CIP) budget is funded by 30-year bonds. Payments on the bonds come from the WPRF and is noted as 'Debt Service' on Table 33.

In February 2004 the County began issuing bonds for the NPDES Retrofits Projects CIP budget. In March 2007 construction was initiated on the County's first watershed restoration projects. Individual project budgets and expenditures are listed in Table 39 below.

Table 38: NPDES MS4 Capital Improvements Bond Expenditures 2004 through Fiscal Year 2024

Bonds Issued to Date	Issued	Spent	Balance
2004 Public Improvement Bond	40,000	40,000	0
2006 Public Improvement Bond	100,000	100,000	0
2007 Public Improvement Bond	1,000,000	1,000,000	0
2008 Public Improvement Bond	400,000	400,000	0
2009 Public Improvement Bond	471,800	471,800	0
2010 Public Improvement Bond	500,000	500,000	0
2011 Public Improvement Bond	1,400,000	1,400,000	0
2012 Public Improvement Bond	700,000	700,000	0
2013 Public Improvement Bond	1,700,000	1,700,000	0
2014 Public Improvement Bond	3,000,000	3,000,000	0
2015 Public Improvement Bond	2,000,000	2,000,000	0
2016 Public Improvement Bond	4,880,000	4,880,000	0
2017 Public Improvement Bond	4,800,000	4,800,000	0
2018 Public Improvement Bond	5,000,000	5,000,000	0
2019 Public Improvement Bond	6,000,000	6,000,000	0
2020 Public Improvement Bond	3,800,000	3,800,000	0
2021 Public Improvement Bond	3,500,000	3,500,000	0
2022 Public Improvement Bond	6,060,000	3,491,292	2,568,708
2023 Public Improvement Bond	300,000	148,855	151,145
2024 Public Improvement Bond	185,000	0	185,000
TOTAL	45,836,800	42,931,947	2,904,853

Table 39: Capital Improvement Expenditures 2004 through Fiscal Year 2025 for NPDES MS4 Projects

CIP for NPDES Retrofits	Budget	Spent	Balance
Carrington (8014)	\$1,867,230	\$1,867,219	complete
Pinefield (8023)	1,096,090	1,096,057	complete
Acton/Hamilton (8401008024)	1,931,240	1,824,603	106,637
Bryan's Road (8025)	1,915,880	1,912,855	complete
NPDES Study (8028)	24,740	24,738	complete
Fox Run (8030)	930,670	930,632	complete
Lancaster (8031)	73,010	72,997	complete
Northwood (8032)	28,830	28,830	complete
Ryon Woods (8033)	121,750	121,716	complete
White Plains Retrofits (8034)	564,630	564,629	complete
NPDES Mapping (8035)	716,110	716,103	complete
GIS Mapping (8036)	455,530	455,521	complete
Pinefield Temi Drive (8037)	1,126,320	1,126,283	complete
Holly Tree Farm Stream Restoration (8038)	1,632,490	1,632,468	complete
Stavors Road (8039)	0	0	complete

Acton Lane (8040)	282,700	282,676	complete
Cobb Island Drainage Study (8043)	20,710	20,704	complete
Potomac Heights (8046)	732,400	732,393	complete
Master Drainage Plan (8047)	186,390	183,332	complete
Feasibility & Concept Design (8400008048)	1,971,880	1,951,381	20,498
Port Tobacco (8049)	11,750	11,744	complete
Tanglewood (8050)	1,341,570	1,341,571	complete
Charles County Plaza (8051)	870,160	870,160	complete
Tenth District (8052)	97,250	97,239	complete
Swan Point WWTP Shoreline Stabilization (8053)	1,498,470	1,498,470	complete
Public Works Campus Stormwater Management Improvements (8400008055)	1,412,000	1,025,544	386,455
General Smallwood Middle School (8056)	509,000	508,998	complete
Lackey High School (8057)	115,220	115,220	complete
Poplar Court - Laurel Branch (8058)	112,750	112,881	complete
TC Martin Elementary School (8059)	51,360	51,360	complete
JP Ryon Elementary School (8060)	41,360	41,354	complete
Piccowaxen Middle School / Higdon Elementary School (8061)	67,810	67,798	complete
McDonough High School (8062)	49,410	49,393	complete
JC Parks Elementary School / Matthew Henson Middle School (8063)	87,340	87,337	complete
Mattawoman Middle School / Berry Elementary School (8065)	22,180	22,165	complete
Apple Creek Court (8066)	818,860	679,692	Complete
Floodplain Analysis Studies (8070008069)	473,610	217,541	256,068
Gilbert Run Watershed Dam Repairs (8070)	123,770	122,271	complete
Roof Top Disconnects Inspections (8071)	38,150	38,141	complete
Cliffton Shoreline Restoration (8401008072)	1,325,650	1,325,647	complete
Benedict Shoreline Restoration (8073)	864,190	864,156	complete
Friendship Farm Park (8074)	97,940	97,932	complete
GIS Mapping (8075)	42,250	42,244	complete
La Plata High School (8401008076)	795,980	692,730	103,250
Hale Court (8077)	65,880	65,864	complete
Adams Farm Lake (Lambeth Lake) (8078)	4,530	4,520	complete
Huntington Lake (8079)	4,530	4,520	complete
Wakefield Lake (8080)	4,530	4,520	complete
Post Office Road Lake (8081)	4,530	4,520	complete
Upper Zekiah Ponds (8082)	11,930	11,923	complete
Pinefield Drainage (8083)	1,164,980	1,164,977	complete

St. Charles Parkway Stream Restoration (8084)	728,560	728,556	complete
Bridle Path Stream Restoration (8401008085)	1,367,260	1,083,632	283,628
Ruth Swann Stream Restoration (8401008086)	1,618,310	1,407,202	211,107
Thomas Higdon Stream Restoration (8087)	1,065,780	1,065,777	complete
Marbella Subdivision (8401008088)	2,408,760	302,037	2,106,722
Longmeade Outfall Protection (8089)	96,830	96,803	complete
Bensville Park (8401008090)	1,120,740	1,073,991	46,749
Cliffton Shoreline Rest Phase II (8401008091)	1,501,620	1,501,613	complete
County-wide Shoreline Assessment (8095)	189,630	189,631	complete
Bryan's Road Storm Filter Maintenance (8096)	18,760	18,753	complete
Ruth B. Swann Tributary Channel Stream Restoration (8401008097)	1,184,400	1,075,521	108,879
Warren J. Willett Subdivision (8401008098)	12,660	12,647	13
Potomac Heights Shoreline Stabilization (8401008099)	1,392,520	1,392,717	complete
South Hampton Stormwater Management Pond Retrofits (8401008100)	418,670	397,351	21,318
Oak Ridge Park - Upper Western Branch Stream Restoration (8401008101)	424,080	323,110	110,970
Oak Ridge Park - Lower Western Branch Stream Restoration (8401008102)	446,060	152,457	293,602
Cedar Tree Pond Retrofit (8103)	180,030	180,030	complete
Wilton Court Pond Retrofit (8401008104)	485,790	156,671	329,118
Milton Somers Middle School- Pond Retrofit and Stream Restoration (8401008105)	1,728,320	323,966	1,404,353
CSM North Tributaries Stream Restoration (8401008106)	1,381,830	1,285,164	96,665
Oak Ridge Park - Upper Eastern Branch Stream Restoration (8401008108)	251,840	201,842	49,998
Oak Ridge Park - Lower Eastern Branch Stream Restoration (8401008109)	190,490	130,914	59,576
Best Buy Pond Retrofit (8110)	282,470	282,541	complete
CSM Lot 5 Outfall Stream Restoration (8111)	73,750	73,750	complete
White Plains Golf Course Pond Retrofit and Stream Restoration (8401008112)	725,790	159,574	566,215
Walter Mitchell Outfall Repair and Stream Restoration (8401008113)	1,982,250	323,760	1,658,490
Locust Grove Farm (8401008115)	327,400	209,296	118,104
Port Tobacco (Upper) Stream Restoration (8401008116)	224,030	224,030	0
Port Tobacco (Lower) Stream Rest. (8401008117)	2,501,210	257,295	2,243,914
Ruth B. Swann North Tributary Stream Rest. (8401008118)	2,271,100	985,922	1,285,178

White Oak Pond Retrofit (8401008119)	906,990	351,379	555,611
Westdale Drive Stream Imp (8401008122)	2,048,810	1,184,163	864,647
Gilbert Run Watershed Dam Repairs PH 2 (8050008124)	9,349,000	253,152	9,095,848
Full Delivery of Water Quality Improvement (8070008125)	2,094,000	9,020	2,084,980
Benedict Water Quality Study (8070008126)	28,210	28,205	complete
NPDES Swan Point Drainage (8401008128)	131,300	131,300	complete
TBD (8401000000)	49,398,940	0	49,398,940
TOTAL	\$118,365,730	\$44,361,341	\$74,004,389

The Capital Improvement Program appropriation for the NPDES Retrofit budget is the annual amount approved by the County Commissioners. The appropriations are cumulative towards the project total.

Table 40: Capital Improvement Program Appropriation per Fiscal Year

CIP Appropriation per Year		CIP Appropriation per Year		CIP Appropriation per Year	
FY03	214,000	FY11	2,409,000	FY19	11,346,000
FY04	220,000	FY12	1,505,000	FY20	11,017,000
FY05	224,000	FY13	5,657,000	FY21	7,958,000
FY06	72,000	FY14	5,290,000	FY22	8,922,000
FY07	778,000	FY15	3,135,000	FY23	8,956,000
FY08	1,452,000	FY16	11,514,000	FY24	3,150,000
FY09	2,127,000	FY17	11,672,000	FY25	8,568,000
FY10	2,409,000	FY18	11,070,000	FY26	TBD

Fiscal Analysis of Permit Conditions

Permit task implementation is supported by the enterprise funds listed above and includes staff salary, contractual costs, and other expenses. In summary, the cost for permit implementation:

Table 41: NPDES MS4 Permit Expenses per Permit Condition

Permit Condition	FY 2020 Audited	FY 2021 Audited	FY 2022 Audited	FY 2023 Audited	FY 2024 Unaudited
Source Identification	255,848	294,577	311,767	384,584	351,904
Stormwater Management	593,443	803,450	801,269	728,080	576,194
Erosion and Sediment Control	259,223	265,732	248,092	248,022	256,633
Illicit Detection & Elimination	46,268	74,543	102,726	96,075	122,218
Trash Elimination Education	216,280	219,407	212,672	214,468	374,117
Property Management	178,597	248,886	265,017	260,910	376,961
Inlet Cleaning	121,785	121,888	123,323	124,610	156,169
Street Sweeping	103,113	101,397	102,069	97,408	133,579

Road Maintenance - Other	737,553	805,445	859,725	1,900,667	1,380,513
Public Education	220,782	264,123	280,999	244,927	262,246
Watershed Assessment	10,421	13,832	37,778	30,595	36,484
Watershed Restoration	1,844,236	2,280,872	2,237,024	2,633,728	2,851,611
Chemical Monitoring	79,181	123,483	137,987	108,321	74,389
Biological Monitoring and	23,381	50,371	62,969	61,407	41,246
Physical Stream Assessment	15,973	24,954	35,110	17,878	14,274
Design Manual Monitoring	15,973	24,954	35,110	17,878	14,274
TMDL Assessments	31,856	44,767	57,999	30,425	30,456
Total Cost	\$4,753,915	\$5,906,796	\$5,911,636	7,199,984	8,050,399

Financial Assurance Plan (FAP) and Watershed Protection and Restoration Program (WPRP) Annual Report

The FY 2024 WPRP Annual Report includes information on the number of subject properties, approved credits, hardships and appeals, and does not require Charles County Commissioner approval. The WPRP Annual Report is included in Appendix H.

On November 19, 2024, Charles County's FY 2025 FAP Resolution Number 2024-14 was approved by the Charles County Commissioners to fulfill requirements specified in the Annotated Code of Maryland, Environment Article, §4-202.1. This FAP is included in Appendix I.