Cecil County, Maryland
Department of Public Works
Stormwater Management Division

FY2023 Annual MS4 Report

October 2023

Maryland Department of the Environment
National Pollutant Discharge Elimination System (NPDES)
Municipal Separate Storm Sewer System (MS4)

Permit Number 13-IM-5500 (MDR055500)

Appendices:

APPENDIX E: MINIMUM CONTROL MEASURE 4

APPENDIX F: MINIMUM CONTROL MEASURE 5

APPENDIX G: MINIMUM CONTROL MEASURE 6

APPENDIX H: IMPERVIOUS AREA REPORTING

INTRODUCTION

The Clean Water Act of 1972 (CWA) created the National Pollution Discharge Elimination System (NPDES) permit program to assist in addressing water pollution by providing regulatory measures for point sources that discharge pollutants to Waters of the U.S.

In 1999, NPDES regulations were updated to require small Municipal Separate Storm Sewer Systems (MS4) to obtain NPDES permit coverage for their stormwater discharges. The United States Environmental Protection Agency (EPA) delegated this permitting authority to the Maryland Department of the Environment (MDE) in Maryland.

In compliance with the Clean Water Act, Cecil County adheres to the National Pollution Discharge Elimination System (NPDES) General Permit for Discharges from Small Municipal (Phase II) Separate Storm Sewer Systems (MS4), #MDR055500, 13-IM-5500 effective date of October 31, 2018 to October 30, 2023.

Cecil County filed a petition on May 25, 2018, for judicial review of this permit in the Queen Anne's County Circuit Court (Case No. C-17-CV-18-000162). On September 25, 2018, the Circuit Court granted the County a stay from submitting the Notice of Intent (NOI) for coverage under the MS4 Phase II General Permit. On October 17, 2019, the Circuit Court rendered a final order affirming the Maryland Department of the Environment's issuance of the General Permit.

As a result of this litigation, a reporting schedule was determined for Cecil County's compliance with the MS4 Phase II General Permit by MDE. The schedule was provided to Cecil County in a letter from MDE dated April 6, 2020 (**Appendix A-1**). Cecil County submitted the Notice of Intent (NOI) on June 26, 2020 and is submitting this Year 3 Annual MS4 Report on October 31, 2023 in compliance with the court decision and MDE schedule. This submission contains the MS4 Progress report, Appendix D, Section I: Impervious Area Restoration Reporting Form, and Section II: Minimum Control Measures Reporting Forms, as required by the reporting schedule. Supporting documentation is provided in Appendices A through H.

Specific language from the MS4 Phase II General Permit is repeated in gray text boxes in this Annual Report to provide a comparison between the permit requirement and the County's action to address the requirements.

PART I – COVERAGE UNDER THIS MS4 PHASE II GENERAL PERMIT

1. Permit Area
   This National Pollutant Discharge Elimination System (NPDES) general permit covers small municipal separate storm sewer systems (MS4s) in certain portions of the State of Maryland (State) as defined under Title 40 of the Code of Federal Regulations (CFR) § 122.26(b)(16) and 122.32(a)(1).
2. Regulated Small MS4s
   MS4 owners or operators required to obtain coverage under this general permit are those located within the geographical area of:
   i. Urbanized areas as determined by the latest Decennial Census by the United States (U.S.) Census Bureau; or
   ii. Other MS4s designated by the Maryland Department of the Environment (MDE) under the Clean Water Act (CWA) and associated regulations.
3. Obtaining Coverage
   Owners or operators of MS4s regulated under this general permit must apply for coverage by submitting a Notice of Intent (NOI) according to requirements in Part II below, using the form provided by MDE in Appendix C. A list of MS4 owners and operators required to obtain permit coverage is found in Appendix A. A small municipality may be a co-permittee or coordinate with a surrounding county covered under an MS4 NPDES stormwater permit.
4. Definitions
   Terms used in this permit are defined in relevant chapters of 40 CFR § 122 or the Code of Maryland Regulations (COMAR) 26.08.01, 26.17.01, and 26.17.02. Terms not defined in CFR or COMAR shall have the meanings attributed by common use.

Part I – County Action

Cecil County has obtained coverage for the General Permit for Discharges from Small (Phase II) MS4s, #MDR055500, 13-IM-5500 effective date of October 31, 2018 to October 31, 2023.

PART II – NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification

MS4 owners and operators identified in Appendix A must apply for coverage under this general permit and submit to MDE an NOI that contains the information outlined in Part II.B by October 31, 2018.

B. Contents

An NOI serves as notification that the MS4 owner or operator intends to comply with this general permit. The NOI form is provided in Appendix C of this permit. The NOI must contain the following:

i. The name, address, telephone number, and e-mail address of the responsible contact person for the required MS4 programs listed in Parts IV and V of this general permit;

ii. A brief description of the jurisdiction. This must include the approximate size, land uses, a description of the stormwater conveyance system, and a list of properties owned or operated by the permittee covered under the Maryland General Permit for Stormwater Discharges Associated with Industrial Activity or an industrial individual surface water discharge permit;

iii. A brief description of any agreements with another entity when responsibilities for permit compliance are shared between the permittee and entity. The relationship and specific duties of all parties must be provided;

iv. An estimate of the anticipated expenditures to implement the required programs specified in this general permit; and

v. An authorized signature according to Part VII.O of this general permit.

C. Where to Submit

MS4 owners or operators applying for coverage under this permit must submit NOIs to the following:

Maryland Department of the Environment Water and Science Administration Sediment, Stormwater, and Dam Safety Program 1800 Washington Boulevard Suite 440 Baltimore, Maryland 21230-1708

Part II – County Action

As a result of past litigation, Cecil County submitted an NOI on June 26, 2020 in compliance with the reporting schedule agreed upon by MDE and Cecil County.

PART III – WATER QUALITY

MS4 owners and operators covered under this general permit must manage, implement, and enforce management programs for controlling all stormwater discharges in accordance with the CWA and corresponding stormwater NPDES regulations, 40 CFR § 122, to meet the following requirements:

i. Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with Maryland's receiving water quality standards;
ii. Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with Title 33 of the U.S. Code (USC) 1342(p)(3)(B)(iii); 40 CFR § 122.44(k)(2) and (3); and
iii. Comply with all other provisions and requirements contained in this general permit, and in plans and schedules developed in fulfillment of this permit.

Compliance with the conditions contained in Parts IV and V of this permit shall constitute compliance with Section 402(p)(3)(B)(iii) of the CWA and adequate progress toward compliance with Maryland's receiving water quality standards and any stormwater WLA approved by the U.S. Environmental Protection Agency (EPA) for this permit term.

Part III – County Action

Cecil County understands its responsibility to protect water quality as exhibited in the County's actions, which adhere to Part IV and Part V of this permit.

The County has implemented several procedures to detect and reduce illicit discharges and to strengthen enforcement protocols. Chapter 322 of the Cecil County Code (Storm Drainage System) was initially adopted in April of 2011 and contains the framework for illicit discharge detection and elimination (IDDE) . Specifically, this Chapter prohibits illicit connections and discharges to the MS4 and outlines the enforcement actions if connections are identified. A Standard Operating Procedure (SOP) was developed for inspection protocols of sites with a potential illicit discharge. The SOP was submitted and approved by MDE in August 2021. Annual outfall testing is conducted and documented for a minimum of one hundred locations annually. Continuous updates and information relating to IDDE are also being provided to the public on the County IDDE website and potential illicit discharge points are being evaluated and addressed as complaints from the public are received. The IDDE page can be found by visiting the Cecil County Public Works website, navigating to the Stormwater Management Division subsection, and expanding the heading for "Illicit Discharges". A link to the page has also been provided at the end of this paragraph. A map of the MS4 assets has been created and is available on the online GIS Website – Cecil Maps. This map shows the known BMPs, inlets, outfalls, ditches, culverts, streams, and other stormwater related structures located within the County.

https://www.ccgov.org/government/public-works/public-works-divisions/stormwater-management-division/illicit-discharges

Storm drain outfalls were inspected and field screenings completed for the purpose of identifying the source of any illicit discharges and eliminating any illegal connections or illicit discharges to the system. A total of 103 outfall inspections occurred between April and May of 2023. Outfalls that exhibited concerning discharges were investigated and monitored further in order to determine the source of the discharge. The responsible parties were notified and the County continues to monitor the outfalls to ensure the illicit discharges are eliminated.

In addition to outfall monitoring and testing, Cecil County demonstrates its commitment to protecting water quality through the implementation of restoration projects above and beyond the current permit requirement. The County has constructed restoration projects resulting in 1,163.55 acres of impervious area credit, well above the 394.2 acres required. The County also has 4 projects in the planning phases to be completed by 2025 which will result in an additional 287.16 acres of impervious area credit.

PART IV – MINIMUM CONTROL MEASURES (MCM)

Permittees must ensure that the following minimum control measures (MCMs) are implemented in the jurisdiction served by the small MS4 covered under this permit:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post Construction Stormwater Management
6. Pollution Prevention and Good Housekeeping

Permittees must report on the status of implementation of these required programs in accordance with the MS4 Progress Report. MS4 Progress Reports must document program development and demonstrate full implementation of all permit requirements by the end of the five-year permit term. Permittees can choose to utilize partnerships or share responsibilities with other entities for compliance with any requirement of this general permit. If responsibilities for permit compliance are shared between the permittee and another entity, the relationship and specific duties of all participating entities must be described in the NOI and updated information provided in the MS4 Progress Report. However, the permittee shall remain responsible for compliance with all conditions of this general permit. For this reason, a legally binding contract, memorandum of understanding (MOU), or other similar means must be executed between the permittee and all other entities to avoid conflicts resulting from noncompliance with this general permit.

Part IV – County Action

It is required that the County reports on the status of the implementation of the minimum control measures (MCMs) during year 2 and year 4 of this 5-year permit term. The following sections describe all MCM activities that took place during the period of permit year 3 (FY23), in compliance with the reporting schedule as outlined in the MDE letter dated April 6, 2020. The information reported this year reflects an ongoing effort by the County to coordinate with all relevant departments to facilitate MCM compliance. Data will be compiled each reporting year in order to demonstrate permit compliance.

1.) MCM A – Public Education and Outreach

According to the MS4 Phase II General Permit, permittees are required to "implement and maintain a public education and outreach program and distribute education materials to the community and employees to help reduce the discharge of pollutants caused by stormwater runoff." In order to comply with this minimum control measure permittees must:

1. Develop a process by which the public and/or staff can report water quality complaints that must include a phone number, within one year of the permit issuance;
2. Determine the target audience and develop materials to educate the audience of the impact on stormwater. These topics may include water conservation, chemical application on lawns and landscaping, proper car wash procedures, proper disposal of paint and other household hazardous waste, recycling and trash pickup, and proper pet waste disposal;
3. Distribute stormwater educational materials through newsletters, website, or other appropriate methods. Submit examples of educational material to MDE in accordance with reporting requirements;
4. Develop and implement an annual employee training program that addresses appropriate topics to prevent or reduce the discharge of stormwater pollution into the MS4. Submit example training materials and attendee list to MDE in accordance with reporting requirements; and
5. Briefly describe in reports to MDE how the education programs complement and strengthen other programs of the MS4 permit.

NPDES General Discharge Permit No. 13-IM-5500 for Discharges from Small Municipal Separate Storm Sewer Systems, 2018, p. 4-5

Currently, the County has developed and implemented several practices to reach compliance under MCM A. The County has developed numerous opportunities to engage with and educate the community on the reduction of pollutants caused by stormwater runoff. Actions taken to engage the community while progressing toward permit compliance include:

- Provided a means of reporting water quality complaints and/or inquiries on the Cecil County Department of Public Works website using an electronic complaint form, and posted a "Contact Us" page on the Stormwater Management Division website:
  - See *https://www.ccgov.org/government/public-works* for the electronic complaint form
  - See *https://www.ccgov.org/government/public-works/public-works-divisions/stormwater-management-division/contact-us* for the "Contact Us" page
- Presented educational materials such as BMP fact sheets, paper and digital ads, and stormwater related Facebook posts to educate targeted audiences within the County. Audiences include homeowners' associations (HOA), property owners, and commercial and public SWM facility owners.
- Used several different sources to distribute information to the public, such as websites, social media, radio, newspaper press releases, pamphlets, and presentations.

- Initiated meetings with contractors, consultants, developers, and other entities, to disseminate stormwater management information.
- Formed cooperative partnerships with local groups such as the Elk and North East Rivers Watershed Association, the High 5 Initiative and the Cecil County Watershed Stewards Academy.
- Facilitated numerous training and educational opportunities for employees and the public.
- Created and implemented a new good housekeeping and pollution prevention training video. The video covers topics including pollution prevention strategies, IDDE, and the importance of reducing discharges of stormwater pollution into the MS4.

The County continues to look for new avenues to expand their public outreach and education programs. More information on MCM A efforts can be found in **Appendix B.**

2.) MCM B – Public Involvement and Participation

According to the MS4 Phase II General Permit, the County must "create and foster opportunities for public participation in the MS4 management program for controlling stormwater discharges." This allows residents to participate in the reduction of the discharge of pollutants caused by stormwater runoff in their communities. In order to comply with this minimum control measure, permittees must:

1. Determine the target audience within the jurisdiction to promote public involvement and participation activities;
2. Specify activities appropriate for the target audience and promote participation;
3. Perform at least five public events during the permit term and report to MDE in accordance with reporting requirements;
4. Provide public access to the permittee's MS4 Progress Reports via website or other method and consider any substantive public comments received concerning the permittee's MS4 program; and
5. Comply with all State and federal public notice requirements for any regulated activity associated with this general permit.

NPDES General Discharge Permit No. 13-IM-5500 for Discharges from Small Municipal Separate Storm Sewer Systems, 2018, p. 5

The County has met their goals associated with MCM B, with several goals being continuously improved upon. The County has promoted public involvement and participation within the jurisdiction, performed several public events during the permit term, and continues to comply with all State and Federal public notice requirements. They have fostered several partnerships with neighboring programs and organizations within the County to help reach compliance for MCM B. Actions taken by the County to meet permit compliance include:

- Provided funding for non-profit organizations whose activities support restoration projects and outreach goals.
- Established Memorandum of Agreements (MOAs) with organizations such as the Elk and North East Rivers Watershed Association and the High 5 Initiative.

- Regularly notified community members of upcoming meeting dates, meeting agendas, and records of meeting minutes via the County website, to promote participation and comply with State and Federal notice requirements.
- Participated and or supported a number of public events with local agencies, local businesses, non-profit organizations and community members such as:
    1. Stream clean-ups such as *Shore River – Project Clean Stream (April 11 and 25, 2022)* and the *High Five Initiate (7 clean-ups);*
    2. Participated in events similar to Earth Day such as *Cecil County Household Hazardous Waste Day (October 17, 2021; October 16; 2022; April 23, 2023); Earth Day: Our Future Planet (April 23, 2023); Elk River Exploration (June 24, 2023);*
    3. Hosted the *Cecil County Wade-In (August 14, 2021; June 10, 2022; June 17, 2023);*
    4. Participated in the *Cecil County Fair (July 2022 and July 2023);*
    5. Donated tree saplings for the Pawsome *Panda Service Day at Perryville Elementary School (June 8, 2023).*
- A full list of the public events is provided in **Appendix C-2**.

The County continuously works to expand their public engagement initiatives to reach a larger audience with their efforts. From hosting public meetings, utilizing the SWM Division website to share information, coordinating, supporting & hosting events the County strives to foster community engagement in a meaningful way. More information on MCM B efforts can be found in **Appendix C**.

3.) MCM C – Illicit Discharge Detection and Elimination

According to the MS4 Phase II General Permit, the County is required to "develop, implement, and enforce a program to detect and eliminate illicit discharges into the MS4 in accordance with 40 CFR § 122.34(b)(3). A permittee will satisfy this MCM by field screening outfalls, inspecting the MS4 to identify sources of illicit discharges, eliminating illegal connections or illicit discharges, and enforcing penalties where appropriate. The illicit discharge program must also address illegal dumping and spills." In order to comply with this minimum control measure, permittees must:

1. Develop and maintain an updated map of the MS4 that identifies all stormwater conveyance, outfalls, stormwater best management practices (BMPs), and waters of the U.S. received stormwater discharges;
2. Adopt an ordinance or other regulatory means that prohibits illicit discharges into the MS4;
3. Establish and document legal means for gaining access to private property to investigate and eliminate illicit discharges (e.g., ordinance, easements);
4. Develop and implement written standard operating procedures (SOPs) that specify the following:
    a. An inspection checklist describing how outfalls are screened for dry weather flows (see Figure B.2 of Appendix B for an example of an outfall screening checklist);
    b. Screening 20% of total outfalls per year, up to 100 outfalls;
    c. Procedures for identifying the source, and eliminating spills, illegal dumping, and other suspected illicit discharges;
    d. Identification of priority areas for illicit discharge screening based on pollution potential;
    e. Enforcement and penalty procedures;
    f. Procedures to inform employees, businesses, and the general public of the issues relating to illegal discharges and improper waste disposal; and
    g. Coordination with adjacent/interconnected MS4 operator(s).
5. Submit SOPs to MDE for review and approval within two years of permit issuance. MDE will review for consistency with guidance in Appendix B, Section II;
6. Document results of illicit discharge screening efforts, including a description of how screening locations were prioritized, and any necessary follow-up investigations, enforcement, and remediation measures implemented to address any suspected discharge. Submit to MDE in accordance with reporting requirements; and
7. Maintain complete records of IDDE program investigations and make available to MDE during field reviews of the permittee's MS4 program.

NPDES General Discharge Permit No. 13-IM-5500 for Discharges from Small Municipal Separate Storm Sewer Systems, 2018, p. 6-7

Over the course of this permit term, the County has made great progress toward MCM C compliance and has implemented several procedures based off of previous recommendations from MDE and consultants to help reach compliance for MCM-C. Actions taken by the County to progress toward permit compliance include:

- Coordinated with the County GIS coordinator to interpret field collected GPS points to map and continuously update the County GIS storm drain feature class.
- Created an online map showing all identified outfalls for web-based map viewing, https://cecilmaps.org/viewer.
- Adopted an ordinance, Chapter 322 of the Cecil County Code, pertaining to illicit discharge detection and elimination: https://ecode360.com/15793552.
- Outlined in the County Code the legal means for gaining access to private property.
- Documented the results of annual outfall testing including a minimum of one hundred locations annually. See **Appendix D-1** for an overview of the FY23 outfall screenings.
- Provided continuous updates and information relating to IDDE to the public on the County IDDE website, including an IDDE informational brochure. See **Appendix D-2** for a copy of the IDDE brochure.https://www.ccgov.org/government/public-works/public-works-divisions/stormwater-anagement-division/illicit-discharges.
- Addressed, evaluated, and eliminated potential illicit discharge points as complaints from the public were received. See **Appendices D-3** and **D-4** for customer service requests for FY21 - FY23. There was only one complaint received in FY23 which the County worked with the property owner to resolve.
- Developed a Standard Operating Procedure (SOP) regarding inspections for sites of potential illicit discharge that was submitted to and approved by MDE. See **Appendix D-5** for the Final IDDE Guidance Manual and **Appendix D-6** for the MDE IDDE Manual Approval document.
- Developed a system for receiving complaints, via phone, email, and the SWM Division webpage, and performing corrective actions on illicit discharges and outfalls requiring maintenance.

Additionally 103 outfall inspections were conducted in April and May of 2023. Of the 103 outfalls inspected, there were 19 outfalls exhibiting flow, 15 of which were determined to be sourced from streams and groundwater flow, 3 were categorized as potential illicit discharges, and 1 was categorized as a suspected illicit discharge. The locations and screening results of each outfall inspected have been provided in the Dewberry Monitoring Report in **Appendix. D-1.** The 4 outfalls of concern were investigated and monitored further in order to determine the source of the discharge. After source tracking, 3 of the 4 outfalls were found to be potential illicit discharges, and 1 outfall was found to be a suspected illicit discharge. Warning notices were sent to the responsible parties for all locations and the County continues to monitor the outfalls to ensure the illicit discharges are eliminated.

The County has made significant progress toward permit compliance for MCM C and plans to maintain and improve this level of compliance moving forward. The County continues to look for additional avenues for improvement that may benefit their IDDE program. More information on MCM C efforts can be found in **Appendix D**.

4.) MCM D – Construction Site Stormwater Runoff Control

Permittees are required to comply with Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland and State erosion and sediment control regulations under COMAR 26.17.01. The statute and COMAR specify the requirements for any construction activity that disturbs 5,000 square feet of land area or 100 cubic yards or more of earth movement. MDE considers compliance with the State statute to be compliance with this MCM of this MS4 Phase II General Permit, and 40 CFR § 122.34(b)(4). In order to comply with this minimum control measure, permittees must:

1. Adopt an MDE approved ordinance that includes a process for plan review and approval for proposed construction drawings and erosion and sediment control plans, and inspection and enforcement procedures in accordance with COMAR 26.17.01. Subsequently, any proposed amendments to the ordinance must be submitted to MDE for review and approval;
2. A municipality may accept the program that is being implemented by its respective county or the State of Maryland. Each permittee that relies on its respective county for the implementation of an erosion and sediment control program must execute a binding agreement or resolution with said county. The agreement must clarify respective roles of all parties related to plan review and approval, construction site inspections, and enforcement;
3. Require compliance with requirements under MDE's *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control* or most recent revision and COMAR 26.17.01;
4. Ensure all necessary permits have been obtained, including MDE's General Permit for Stormwater Associated with Construction Activity for projects disturbing one acre or more, and local sediment and erosion control plan approval;
5. Develop a process for receiving, investigating, and resolving complaints from any interested party related to construction activities within the jurisdiction. Notify the complainant of the investigation and findings within seven days;
6. Track all active grading permits within the jurisdiction and report to MDE the disturbed areas for all active grading permits in accordance with reporting requirements;
7. Ensure that construction site inspections and enforcement procedures are performed in accordance with COMAR. For permittees that are not delegated, this will require ongoing communication and collaboration with the enforcement authority to ensure that any violations are properly addressed;
8. Use procedures within existing municipal codes to help prevent and reduce erosion and sediment pollution into waters of the state from any construction activity. A municipality may suspend or deny the issuance of a building or grading permit when it determines that the applicant is not in compliance with an approved erosion and sediment control plan; and
9. Ensure staff is adequately trained on proper procedures and actions to address potential discharge of pollutants into the MS4 as a result of any construction activity. The Responsible Personnel Certification on-line training course through MDE must be made available to appropriate staff.

NPDES General Discharge Permit No. 13-IM-5500 for Discharges from Small Municipal Separate Storm Sewer Systems, 2018, p. 7-8

The County implements the required measures for achieving full compliance under MCM D. Actions taken by the County to progress toward permit compliance include:

- The Cecil Soil Conservation District (CSCD), DPW, MDE, and the County Development Plans Review Division (DPR) work in partnership to implement the erosion and sediment (E&S) control program.
- The County E&S code (Article IV Section 312) requires all earth disturbing activities to obtain an approved plan by the County SCD: https://ecode360.com/15793074.
- The CSCD performs E&S plan review and approval to ensure the plans are consistent with the 2011 Standards and Specifications and COMAR 26.17.01.
- MDE is the delegated enforcement authority and is responsible for performing construction site inspections and enforcement of the E&S plan.
- DPR reviews, approves and issues grading permits.
- The Stormwater Management Division spot checks sites and coordinates with MDE on enforcing permit requirements related to E&S.
- Approved E&S control and stormwater management plans are required to be submitted with the grading permit application.
- The County has six staff trained in the MDE Responsible Personnel Certification and makes this training available to staff as necessary.

The County plans to continue developing and monitoring construction site stormwater runoff control efforts to ensure that their procedures are up to date and effective while also looking for additional avenues for improvement that may benefit the program. More information on MCM D efforts, including a list of active grading permits is provided in **Appendix E-1**.

5.) MCM E – Post Construction Stormwater Management

Permittees are required to maintain an acceptable stormwater management program in accordance with Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland and State stormwater management regulations under COMAR 26.17.02. The statute and COMAR require that stormwater management must be addressed for new development and redevelopment for any proposed project that disturbs 5,000 square feet or more of land area. MDE considers compliance with the State statute to be compliance with this MCM of this MS4 Phase II General Permit, and 40 CFR § 122.34(b)(5). In order to comply with this minimum control measure, permittees must:

1. Adopt an MDE approved stormwater management ordinance that provides plan review and approval processes, and inspection and enforcement procedures that ensure proper construction and maintenance of BMPs in accordance with COMAR 26.17.02. Subsequently, any proposed amendments to the ordinance must be submitted to MDE for review and approval;
2. A municipality may accept an MDE approved stormwater program that is being implemented by its respective county. Each permittee relying on the county for the implementation of a stormwater management program must execute a binding agreement or resolution with said county. The agreement must clarify respective roles of all parties related to stormwater plan review and approval, construction and post construction inspections, routine maintenance, enforcement, and BMP tracking;
3. Require that all new and redevelopment projects adhere to the design criteria and performance standards in the latest version of the *2000 Maryland Stormwater Design Manual, Volumes I & II* (Manual). This includes that environmental site design (ESD) be implemented to the maximum extent practicable (MEP);
4. Maintain stormwater program implementation information and provide updates in accordance with the MS4 Progress Report that include:
   a. An Urban BMP database in accordance with the database structure in Appendix B, Tables B.1.a, b, and c. This information must be annually submitted to MDE with MS4 Progress Reports;
   b. Total number of triennial inspections performed and verification that inspections occur at least once every three years;
   c. Total number of violation notices issued and status of enforcement activities; and
   d. Summary of routine maintenance activities for all publicly owned BMPs. Maintenance plans must address periodic mowing, plant composition and health, trash and debris accumulation, sedimentation and erosion, dewatering, and overall function of the BMP in accordance with approved plans. Specify any actions taken to correct problems noted during routine maintenance activities;
5. Provide training to stormwater program staff and to staff responsible for proper BMP design, performance, inspection, and routine maintenance. Report to MDE the number of trainings offered, topics covered, and number of attendees.

NPDES General Discharge Permit No. 13-IM-5500 for Discharges from Small Municipal Separate Storm Sewer Systems, 2018, p. 8-9

The County is committed to reaching and maintaining full permit compliance for MCM E permit requirements as resources allow. An MDE approved stormwater management ordinance has been adopted, site inspections, and enforcement efforts have been documented, and the County requires that all new and redevelopment projects adhere to the 2000 Maryland Stormwater Design Manual, Volumes I & II. The County has initiated several processes to ensure proper inspection and maintenance of Best Management Practices to promote compliance for MCM E, including an SOP for prioritizing the maintenance of failing facilities. Actions taken by the County to progress toward permit compliance include:

- Ensures that all one-year and triennial BMP inspections occur as required.
- Adopted Chapter 325 Stormwater Management of the Cecil County Code in compliance with MDE requirements: https://ecode360.com/15793653.
- Performed stormwater management plan reviews for developments within the County limits, with the exception of Elkton and Charlestown.
- Require all new and redevelopment projects to adhere to guidelines and requirements outlined in the Maryland Stormwater Design Manual.
- Coordinates with County's on-call engineering firm to assist with updating the urban BMP geodatabase.
- Completed routine maintenance for County owned BMPs.
- Coordinates meetings to discuss project requirements and timelines with various agencies and departments.
- Conducts and documents BMP inspections and maintenance processes using the Fulcrum App and finalized a failing facilities SOP to assist in the maintenance process. The failing facilities SOP was provided to MDE with the FY22 Annual Report.
- Provided educational materials to community members via BMP Fact Sheets. See **Appendix F-1** for BMP Mailing Tick Sheet.
- Continued to coordinate the maintenance enforcement process with the Legal Department and Administration.

The County is continuing their work on maintaining stormwater program implementation and providing updates in accordance with MS4 Progress Reports. They continuously seek and provide training to stormwater program staff. The County has met the majority of their goals as they relate to MCM E and they continue to explore avenues for expansion. Supporting information for MCM E is be found in **Appendix F**.

6.) MCM F – Pollution Prevention and Good Housekeeping

Permittees are required to "develop and implement an operation and maintenance program that includes a training component to prevent and reduce pollutant runoff from municipal operations in accordance with 40 CFR § 122.34(b)(6)." A permittee will satisfy this MCM by developing, implementing, and maintaining procedures for pollution prevention and good housekeeping on permittee owned or operated properties and roads as outlined in the MS4 Phase II General Permit. In order to comply with this minimum control measure, permittees must:

1. Ensure that appropriate staff and contractors receive training at least annually. The training must be designed to reduce or eliminate the discharge of pollutants during municipal operations. Training may include in-person, online, toolbox talks, on-the-job, or other formats, and permittees may build on existing training activities to fulfill this requirement. Topics must include spill prevention and response, proper disposal of waste, and periodic visual inspections to detect and correct potential discharges at properties owned or operated by the permittee;
2. Develop, implement, and maintain a good housekeeping plan for permittee owned or operated properties where any of the following activities is performed: maintenance of vehicles or heavy equipment, and handling of any of the following materials: deicers, anti-ices, fertilizers, pesticides, road maintenance materials such as gravel and sand, or hazardous materials. A standard plan may be created to address multiple properties where similar activities are conducted, provided the below items are addressed. The plan must include:
    a. A description of site activities;
    b. A list of potential pollutants including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site;
    c. Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;
    d. Written procedures for corrective actions to address any release, spill, or leak on site; and
    e. Documentation of any discharge, release, leak, or spill, including date, findings, and response actions.
3. Quantify and report pollution prevention efforts related to the following activities:
    a. Number of miles swept and pounds of material collected from street sweeping and inlet cleaning programs, as applicable;
    b. Good housekeeping methods for pesticide application such as integrated pest management plans or alternative techniques;
    c. Good housekeeping methods for fertilizer application such as chemical storage, landscaping with low maintenance/native species, and application procedures;
    d. Good housekeeping methods for snow and ice control such as use of pretreatment, truck calibration and storage, and salt dome storage and containment; and
    e. Other good housekeeping methods performed by the permittee not listed above.
4. Submit in the NOI a list of properties owned or operated by the permittee where the activities listed in this MCM are performed and indicate which are covered under the Maryland General Permit for Stormwater Discharges Associated with Industrial Activity. Provide an update in annual reports if the status of industrial activity permit coverage changes for any property.

NPDES General Discharge Permit No. 13-IM-5500 for Discharges from Small Municipal Separate Storm Sewer Systems, 2018, p. 9-11

Over the permit term, the County has provided training opportunities for employees related to pollution prevention and good housekeeping, developed pollution prevention and good housekeeping plans for several County owned properties, and worked to quantify all known pollution prevention efforts. The County has previously submitted a list of properties owned or operated by the permittees that are covered under the Maryland Phase II General Permit for Stormwater Discharges Associated with Industrial Activity. The County has initiated several processes to promote permit compliance for MCM F. Actions taken by the County to progress toward permit compliance include:

- Provided training opportunities for County employees to participate in workshops, conferences, and webinars related to water quality and MS4 compliance, including a Spill Prevention Control and Countermeasures (SPCC) and Stormwater Pollution Prevention Plan (SWPPP) training.
- Worked with a consultant to develop a pollution prevention and good housekeeping training video. The training will be an annual requirement for existing DPW employees and new DPPW employees will be required to complete the training within 2 weeks of being hired.
- Continued to coordinate recycling programs through multiple events during the year.
- Implemented several pollution and litter reduction programs such as street sweeping, inlet cleaning, and litter and tire pick up initiatives.
- Worked with a consultant to develop good housekeeping plans and checklists for 3 DPW Roads Divisions Yards and the County Administration Building;
- Implemented pollution prevention measures at County-owned properties such as proper salt and chemical storage and application techniques.
- Quantified and reported pollution prevention efforts.
- Promoted trash cleanup opportunities.
- Submitted an NOI to MDE to include a list of properties covered under the Industrial Activity Permit. Revisions of permit coverage changes will be relayed to MDE in annual reports.

The County is working to expand their pollution prevention and good housekeeping efforts to ensure compliance with the MS4 Phase II General Permit. They are working to increase staff and contractor training and are actively working on implementing, and maintaining good housekeeping plans for County-owned properties. See the link at the bottom of this paragraph to view the good housekeeping training video. The County will continue to quantify and report pollution prevention efforts. A good housekeeping plan template has been developed and is being adapted and implemented for the required facilities within the County. As noted above, several good housekeeping plans have already been created and implemented. These plans are provided in Appendix **G-3.** These steps will significantly increase permit compliance. The County also continues to plan out new efforts that will expand their permit compliance under MCM F. Supporting information for MCM F may be found in **Appendix G**.

https://www.ccgov.org/government/public-works/public-works-divisions/stormwater-management-division/good-housekeeping-training

PART V – CHESAPEAKE BAY RESTORATION AND MEETING TOTAL MAXIMUM DAILY LOADS

Maryland's Watershed Implementation Plan (WIP) specifies the nutrient and sediment load reductions required to address the Chesapeake Bay TMDL by 2025. This general permit will make progress toward that strategy by requiring small MS4s to commence restoration efforts for twenty percent of existing developed lands that have little or no stormwater management. This five-year permit term requires permittees to develop planning strategies and work toward implementing water quality improvement projects. Restoration planning strategies and implementation schedules required under this general permit are consistent with addressing the water quality goals of the Chesapeake Bay TMDL by 2025. The conditions established below require permittees to perform watershed assessments, identify water quality improvement opportunities, secure appropriate funding, and develop an implementation schedule to show the twenty percent impervious area restoration requirement will be achieved by 2025. This constitutes adequate progress toward compliance with Maryland's receiving water quality standards and any stormwater WLA established or approved by EPA for small MS4s regulated under this permit.

Restoration efforts may include the use of ESD practices, structural stormwater BMPs, retrofitting, stream restoration, or other alternative restoration practices. Trading with other sectors may also be considered as another method to achieve pollutant reductions, once a program has been established, regulations are adopted, public participation requirements are satisfied, and its use is approved by EPA. Acceptable design criteria for stormwater BMPs are outlined in the Manual and MDE's 2014 Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, referred to hereafter as the Accounting Guidance. Appendix B of this permit provides relevant guidance from the Accounting Guidance for small MS4 permittees to comply with these requirements. A permittee must demonstrate compliance with restoration requirements by performing the following:

1. Develop a Baseline Impervious Area Assessment
2. Develop and Implement an Impervious Area Restoration Work Plan
3. Develop a Restoration Activity Schedule
4. BMP Database Tracking

1.) Develop a Baseline Impervious Area Assessment

Cecil County has developed a baseline impervious area assessment in accordance with the MS4 Phase II General Permit requirements. This section outlines the process that Cecil County utilized to initially develop the baseline and update it in Fiscal Year (FY) 2023.

Define MS4 Baseline Area

The urbanized area within Cecil County was based on the 2010 census. All impervious surfaces were delineated County-wide in 2014 using lidar data. A consultant assisted the County in evaluating and making adjustments to the impervious surfaces layer within the County's urbanized area. It was

determined that the existing impervious area within the urbanized area was 5,225 acres. The impervious surface adjustments included the removal of lightly compacted unpaved areas, such as material piles or less-trafficked dirt roads, from the impervious area shapefile. The existing urbanized impervious area within the County is presented visually in Figure 1 below.

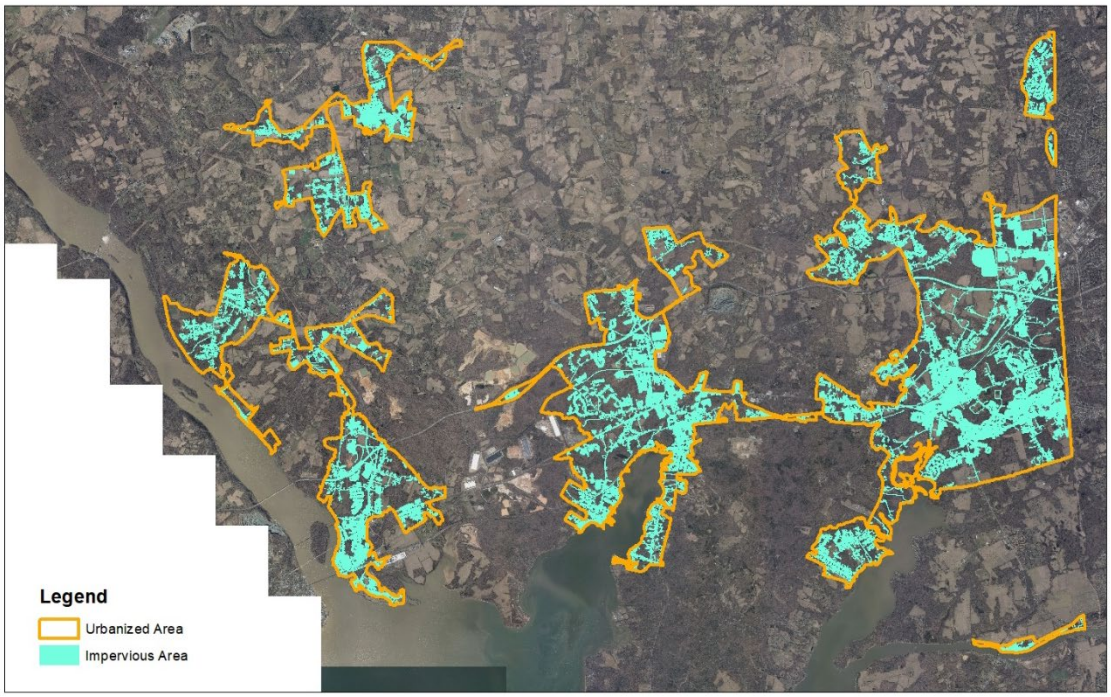

Figure 1. *Cecil County Urbanized Boundary and Impervious Area.*

Define Excluded Areas

There are impervious areas located on parcels within Cecil County's urbanized area that are not the responsibility of the County. As a result, the impervious areas within these parcels were excluded from the impervious area baseline. Jurisdictions that have their own MS4 permit coverage were the first exclusions made to the impervious area baseline. This included Federal, State, municipality, and State Highway Administration (SHA) owned properties:

- 13 Federally-owned parcels resulted in a decrease of 72 impervious acres.
- 49 State-owned parcels resulted in a decrease of 61 impervious acres.
- MS4 Phase II General Permit holders are the towns of Rising Sun, Perryville, North East, and Elkton and resulted in a decrease of 1,779 impervious acres.
- The Town of Charleston was determined to not contribute substantially to local water quality (Basis for Final Determination to Issue the General Permit, page 10) and resulted in a decrease of 82 impervious acres.
- 22 town-owned parcels existing outside of town limits resulted in a decrease of 2 acres; and
- SHA roadway Right-of-Way (ROW) areas resulted in a decrease of 641 impervious acres from the Cecil County impervious area baseline.

County owned roads and parcels located inside of the town boundaries were added back to the impervious area baseline as these areas are the responsibility of Cecil County. This resulted in 22 impervious acres of County owned roads and 77 impervious acres of County owned parcels being added back to the impervious area baseline.

Additional exclusions that were made to the Cecil County impervious area baseline include private railroads and private NPDES permit holders:

- 47 parcels owned by private railroads resulted in a decrease of 12 impervious acres.
- 57 parcels from 37 private NPDES permit holders resulted in a decrease of 321 impervious acres.

Cecil County evaluated every NPDES permit holder within the County to determine if the permit type qualified as an exclusion and if it was within the urbanized area. After a meeting between Cecil County and MDE on May 27, 2021, it was determined that a reevaluation was required for the marina and other private permit exclusions. The marina reevaluation concluded that of the 27.96 acres of impervious area in Cecil County, 25.20 acres are not directly associated with industrial activity and therefore must be included into the baseline. Conversely, it was found that 2.76 acres of impervious area on marina parcels are associated with industrial activity, therefore reducing the baseline by 2.76 acres. The impervious area from the private NPDES permit holders was reduced from 346 acres (FY21) to 321 acres (FY22) based on this marina reevaluation. MDE accepted these changes in their comment response letter dated February 21, 2023.

Additional impervious area was removed from the baseline due to slivers created by the exclusions via overlaps and gaps between the urbanized boundary and parcel boundary GIS shapefiles. These minor exclusions resulted in 4 impervious acres being removed from the baseline.

Cecil County's total impervious area baseline was reported as 2,350 acres after exclusions. The urbanized area with exclusions and associated impervious area is depicted in tabular form in Figure 2 and in visual form in Figure 3 below.

Baseline Parameter	FY23
Existing Impervious Area within the Urbanized Area	5225 ac
Properties not part of the MS4 Jurisdiction (i.e. exclusions)	
Federal-owned property	-72 ac
Phase I – State-owned property	-61 ac
Phase I – State Highway Administration (road ROW)	-641 ac
Phase II – MS4 Municipalities (4 Towns)	-1779 ac
Other Municipalities (1 Town)	-82 ac
Private Railroad	-12 ac
Other Local Exclusions	-2 ac
NPDES Permit Holders	-321 ac

Urbanized Area minus all Exclusions	2255 ac
Other Impervious Area (i.e., slivers created by other exclusions)	-4 ac
MS4 before County Owned Roads (and Parcels)	2251 ac
County Owned Roads Inside Excluded Municipalities	+22 ac
County Owned Parcels Inside Excluded Municipalities	+77 ac
Preliminary Impervious Area Baseline	**2350 ac**

Figure 2. *Cecil County FY23 Impervious Area Baseline Exclusions*

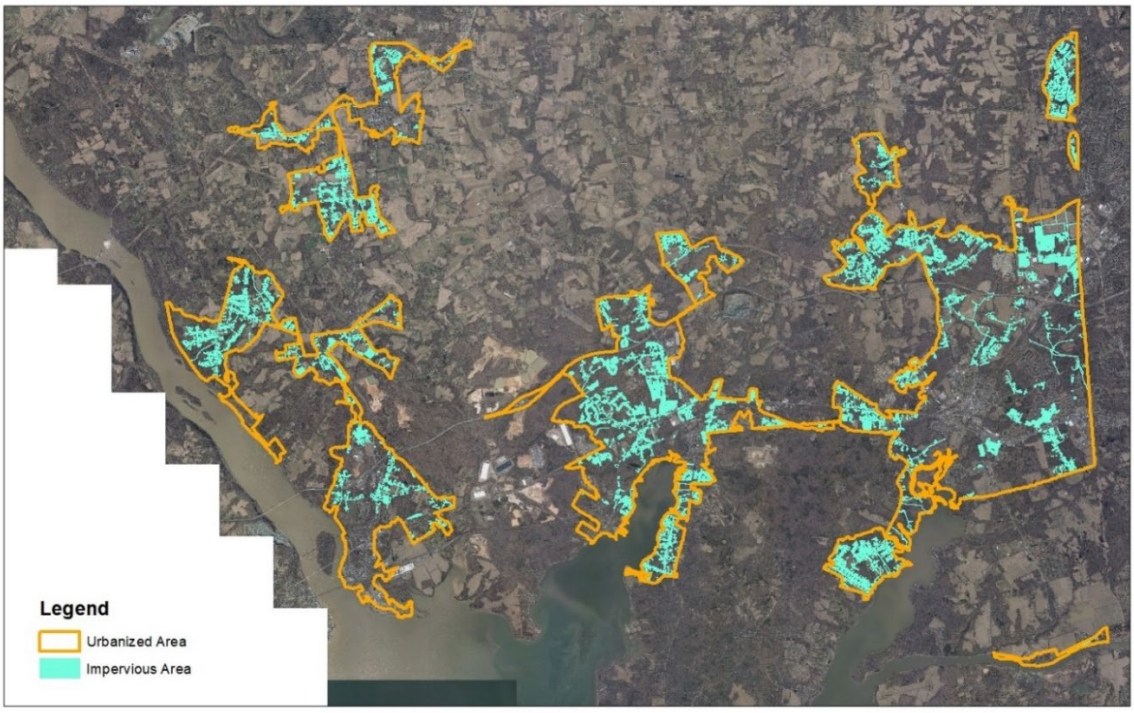

Figure 3. *Cecil County FY23 Impervious Area Baseline with Exclusions.*

Define Areas Treated by Existing BMPs

As part of Cecil County's MS4 Program Management efforts, all identified best management practices (BMPs) within the County's urbanized boundary were evaluated for impervious area treatment credit. The Stormwater Management by Era approach was utilized. BMPs with an approved or built date of 2002 or later were considered full treatment. BMPs with an approved or built date between 1986 and 2001 were considered partial treatment. These assumptions exclude dry ponds, which never receive impervious area credit. Existing grass swales that were identified in an effort performed by a consultant in 2017 were considered non-structural treatment. The County also reviewed all BMPs constructed in-line with a stream, both inside and outside the urbanized boundary, to ensure that no in-line facility had a PE greater than 0.5 inches. The full, partial, and non-structural treatment BMP credits were calculated and serve as additional reductions to the Cecil County impervious area baseline.

Based on the Stormwater Management by Era Approach for full treatment BMPs, it was assumed that all of the impervious area within the drainage area was completely treated by the BMP. For partial treatment BMPs, drainage areas were drawn, and credit calculations were completed to determine the impervious area treated by the BMP. The impervious area treated by full treatment BMPs resulted in a decrease of 292 impervious acres from the baseline. The impervious area treated by partial treatment BMPs resulted in a decrease of 77 impervious acres from the baseline. The impervious area treated by non-structural treatment BMPs resulted in a decrease of 10 impervious acres from the impervious area baseline. The amount of full and partial treatment credit has increased between FY22 and FY23 due to the County's commitment to locating all existing BMPs within the County and adding newly constructed BMPs to the database.

The County recognizes the need for all BMPs to be in compliance in order to claim impervious area credit. The County tracks BMPs with failing inspections and uses a Standard Operating Procedure (SOP) to evaluate and prioritize maintenance on failing BMPs to minimize the impact on impervious acres treated. The County understands that the impervious area treated by BMPs failing due to maintenance issues that affect water quality is in jeopardy and may impact the baseline. As of June 30th, 2023, 135 BMPs are failing recent inspections. Of those 135 BMPs, 87 BMPs accounting for 211.27 impervious acres are affecting water quality. The SWM Division will continue to coordinate the maintenance enforcement process with the Legal Department and Administration.

The total impervious area baseline for Cecil County's Year 3 Annual MS4 Report is reported to be **1,971 acres** after the exclusions and BMP treatment were considered. **Appendix H-1. FY23 Baseline & Credit Memo** provides additional documentation for the development of the County's FY23 baseline and restoration requirement. The results of the failing facilities SOP are provided as an attachment to Appendix H-1. The impervious area baseline is presented in Figure 4 and will be adjusted in future annual reports.

Baseline Parameter	FY23
Preliminary Impervious Area Baseline	2350 ac
Area Treated by Existing BMPs	
Full Treatment	-292 ac
Partial Treatment	-77 ac
Non-Structural Treatment	-10 ac
Total Impervious Area Baseline	**1971 ac**
Restoration Requirement	**394.2 ac**

Figure 4. *Final Impervious Area Baseline.*

2.) Develop and Implement an Impervious Area Restoration Work Plan

As a condition of the MS4 Phase II General Permit, an Impervious Area Restoration Work Plan was developed. The Work Plan was created to guide the County in meeting the permit requirements by establishing the tasks that should be completed by the end of each year of the permit term. In Figure 5 below, the items listed in green have been completed and the items listed in black are ongoing efforts. This Work Plan was amended to reflect actions that were completed in FY23. The Work Plan can also be found in **Appendix H-2**.

Timeline	Management Strategies and Goals
Year 1	·Develop impervious area baseline assessment. (Complete)
	·Develop restoration work plan for MDE review and approval. (Complete)
	·Assess opportunities and timelines for implementing water quality BMPs. (Complete)
	·Assess opportunities to develop partnerships with other NPDES permittees. (Complete)
	·Determine funding needs and develop a long-term budget. (Complete)
	·Update and submit Urban BMP database. (Complete)
	·Maintain inspection records for all BMPs. (Complete)
Year 2	·Perform watershed assessments and identify water quality problems and opportunities for restoration. (Complete) ·Develop list of specific projects to be implemented for restoration and identify on the Restoration Activity Schedule. (Complete) ·Incorporate future growth agency-wide/jurisdiction-wide master plans into restoration planning efforts. (Complete) ·Evaluate and refine budget needs for project implementation. (Complete)
Year 3	·Update and submit Urban BMP database and documented maintenance and inspection status for all BMPs. (Complete)
	·Develop adaptive management strategies for BMP implementation that identify opportunities for improved processes and procedures. (Complete - SOP for Failing Facilities)
	·Continue to identify opportunities for water quality improvement projects and collaborative partnerships to meet restoration requirements. (In Progress) ·The Long Green Farms stream restoration and forest buffer were completed in FY22 and achieve approximately 375 acres of total restoration credit. ·Cecil County continues to proactively plan water quality improvement projects and has four additional projects planned to be implemented prior to 2025. These projects are estimated to achieve approximately 289 acres of restoration credit.
Year 4	·Update and submit project implementation status in Table 2: Restoration Activity Schedule (Complete) ·Updates to the RAS for this submittal include adding cost information for all projects and new projects.
	·The County investigated the feasibility of separating ESD and structural BMPs currently reported as systems in the BMP Geodatabase. The County found that this effort would be excessively resource intensive and does not plan on appropriating funds for this cause at this time.
	·Update and submit Urban BMP database and documented maintenance and inspection status for all BMPs. (Complete) ·Cecil County continues to update the BMP database with up to date information including adding new BMP records, adding missing information, and inspection and maintenance dates. The County has completed triennial inspections for all BMPs and has made progress in completing maintenance and documentation for publicly owned BMPs.
	Bring failed BMPs into compliance. (Ongoing)

	·Cecil County has developed a SOP for Failing Facilities that includes a prioritization matrix to support decision making in resource allocation for failing BMPs. The County analyzed all failing facilities and is beginning maintenance efforts based on these results. RAS facilities are prioritized in this matrix.
	·The County is working on finalizing a process to use on-call County contractors to complete required maintenance on privately-owned BMPs when owners do not comply with inspection failure notices.
	·Incorporate future growth agency-wide/jurisdiction-wide master plans into restoration planning efforts. (Ongoing) ·In July of 2022, Cecil County, with the help of Dewberry Engineers, Inc. completed the Lower North East Creek Watershed Master Plan to investigate historical flooding, model future impacts, and identify mitigation opportunities. This report may be integrated into future stormwater and resiliency planning efforts.
	·Evaluate and refine budget needs for project implementation. (Ongoing)
	·Submit narrative describing progress and updated adaptive management strategies toward meeting implementing restoration projects. (Complete)
Year 5	·Update and submit project implementation status in the Restoration Activity Schedule (RAS). (Complete) ·Provide complete list of specific projects needed to meet the twenty percent restoration requirement in the RAS and include the projected implementation year (no later than 2025). (Complete)
Future	As the County awaits the next generation of its MS4 permit, the County will continue to: ·Stay on track with triennial BMP inspections, use the SOP for Failing Facilities to strategize and implement BMP maintenance, and maintain the BMP Geodatabase with as complete and accurate information as possible. ·Plan and implement further restoration efforts and will include the Lower North East Creek Watershed Master Plan in project consideration.

Figure 5. *Cecil County Year 3 Impervious Area Restoration Work Plan (See Appendix H-2).*

3.) Develop a Restoration Activity Schedule

Cecil County's Restoration Activity Schedule (RAS) was developed as a condition of the MS4 Phase II General Permit to ensure that the County is meeting restoration requirements. The RAS outlines the restoration BMPs within the County under different stages of implementation. The implementation of each restoration BMP provides impervious area treatment credit toward meeting the County's restoration requirement. In FY23, the impervious area baseline was determined to be 1,971 acres. The MS4 Phase II General Permit indicates that 20% of the impervious area baseline must be treated through the implementation of restoration projects. Therefore, the updated restoration target for FY23 was 394.2 acres. The RAS was developed by calculating impervious area credit achieved from MS4 restoration projects that were completed by the County and/or in partnership with other organizations. The RAS also includes future restoration projects that are in the planning phase. The County is also planning for additional restoration equivalent to 10% of the current baseline by 2030. Only completed projects are counted toward the restoration credit in this report. In FY23, the County updated planned restoration project credit projections where necessary.

Currently, Cecil County has provided 1,163.55 acres of restoration credit, achieving 295.17% of the restoration requirement. The Restoration Activity Schedule is provided as an attachment in excel format. The main restoration effort for FY23 was the credit adjustment for the Long Green Farms Forest Buffer. In FY22, the forest buffer area was adjusted to that which was agreed upon in the Memorandum of Agreement (MOA) between Cecil County and the Cecil Land Trust. Then in FY23, the credit was adjusted from 36.29 acres to 9.19 acres of impervious area credit using the August 2014, *Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated* guidance, for continuity with the stream restoration project. Further restoration projects are planned that include stream restorations at Cecil County Admin Services Center and Cecil County Landfill, a surface sand filter at Cecil County Admin Services Center, a living shoreline project at Bohemia River State Park, and an ESD project at Elk Neck State Park – North East Beach Area. In FY23, the Cecil County Admin Services Center Stream Restoration Protocol 1 credit was adjusted and additional credit from Protocol 5 was considered. The planned credit changed from 32.27 acres in FY22 to 37.29 acres in FY23. The planned restoration projects are estimated to generate an additional 287.16 acres of credit by 2025. The planned restoration projects through 2025 will exceed the additional restoration equivalent of 10% of the current baseline, a requirement which is anticipated in the next permit term. Additional information on the development of the RAS in FY23 is provided in **Appendix H-1**. The County is continuing to pursue grant funding and opportunities for additional restoration. The County received a grant funded by Chesapeake and Atlantic Coastal Bays Trust Fund through DNR for the construction of the Elk Neck State Park ESD project, which is to begin construction in the Fall of 2023. The County is also considering pursuing construction grant funds for the Bohemia River State Park Living Shoreline project in FY24 and if awarded would move towards construction in FY25.

4.) BMP Database Tracking

Cecil County's Urban BMP Database is a tracking mechanism for all identified BMPs within the County and the required information is provided with this Year 3 Annual MS4 Report as a snapshot of County stormwater assets as of June 30, 2023. The database submitted for this Annual MS4 report does not include BMPs within towns that have their own MS4 permit coverage within in the County (North East, Perryville, Rising Sun, and Elkton), as those will be submitted with their respective annual reports. The geodatabase will be submitted as an excel file containing the geographic location of each stormwater facility in the County. Available BMP plans and stormwater management reports were utilized to develop the BMP database. The information provided in the geodatabase includes year built, impervious area treated, and inspection status (pass/fail), along with the other required fields. This information is crucial for the development of the County's impervious area baseline. The impervious area within the drainage area and the PE were used to inform the impervious area treatment credit, using the Stormwater Management by Era approach.

During FY23, the County continued to update missing information in the geodatabase and has also populated the maintenance date column for some publicly owned BMPs. The County has finalized an SOP for failing facilities to organize the facilities that require maintenance to be brought back into compliance in a way that will increase the efficiency of maintenance efforts. The SOP uses the County's inspection reports to determine if maintenance needs are affecting water quality. It prioritizes rehabilitation based on metrics such as impervious area treated and maintenance investment required. In FY23, Cecil County had numerous internal government meetings about the next steps for bringing failing facilities into compliance.

Although some data is missing from the current geodatabase, the County is working to ensure that all fields are correct and complete. The County has started to investigate options for separating BMPs unnecessarily reported as systems in the database. Currently, some BMP systems include structural and alternative BMPs along with ESD BMPs. The County determined that separating these facilities into unique BMP IDs would be a very time and cost intensive undertaking given the nature of the changes that will need to be performed in both the GIS database and the Fulcrum App. The Fulcrum App is an app the County utilizes for inspections, and it is set up with different inspection questions based on a BMP's ESD or structural classification. At this time, the County has chosen to utilize their resources toward filling in missing geodatabase information. The geodatabase is submitted in excel format to accompany this Year 3 Annual MS4 Report.

Conclusion

In this Year 3 Annual MS4 Report Cecil County has demonstrated their commitment to complying with the MS4 Phase II General Permit. The County continues to grow their MS4 program and find innovative ways to meet MCM and restoration requirements. Cecil County is continuously planning and preparing for future projects, events, and trainings, all of which help to strengthen the overall MS4 program as well as educate staff and community members. Public outreach initiatives, finalizing standard operating procedures, populating the geodatabase with available data, and ensuring that staff is adequately trained have all helped to grow Cecil County's MS4 program. The County plans to continue these efforts, in addition to the other procedures outlined in this Year 3 Annual MS4 Report, in order to achieve full permit compliance.