National Pollutant Discharge Elimination System
Municipal Separate Storm Sewer System
Permit No. 11-DP-3313 MD0068276
Permit Term: October 9, 2015 to October 8, 2020

Tenth Annual Report
Fiscal Year 2025

Submitted on October 9, 2025

to:
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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

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Introduction

The Maryland State Highway Administration (SHA) prepared this Annual Report to the Maryland Department of Environment (MDE) for State fiscal year 2025 (FY25) from July 1, 2024 to June 30, 2025 in accordance with conditions in Part V.A.1 of National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) discharge permit number 11-DP-3313 MD0068276 (referred to hereafter as the "MS4 Permit"). Geographic Information System (GIS) data is provided with this FY25 MS4 Annual Report ("MS4 Geodatabase – Part 1") in accordance with conditions in Part V.A.2 of the MS4 Permit and with the *NPDES MS4 Geodatabase Design and User's Guide (Version 2.0, September 2024)*.

Two supplemental geodatabases are provided with this FY25 MS4 Annual Report. The first ("MS4 Geodatabase – Part 2") reports SHA implementation of inlet cleaning and street sweeping Best Management Practices (BMPs) and the second ("NPDES 2025 Geodatabase") provides the inventory of SHA storm drain infrastructure.

The MDE supplied SHA comments, dated April 9, 2025, related to the FY24 MS4 Annual Report and data submittal. In accordance with conditions in Part V.A.3 of the MS4 Permit, SHA responses addressing the April 9, 2025 MDE comments are submitted in tandem to this FY25 MS4 Annual Report.

Permit Administration and Legal Authority

The MS4 Permit was administered during FY25 by the SHA Office of Environmental Design (OED) with Ryan Cole, Water Programs Division Chief, serving as the MS4 Permit Manager and liaison to MDE. In accordance with conditions in Part IV.A of the MS4 Permit, SHA has provided contact information in the *Permit Info* table of the MS4 Geodatabase – Part 1 and an updated organizational chart detailing personnel and groups responsible for major NPDES program tasks in **Appendix A**.

In accordance with conditions in Part IV.B of the MS4 Permit relative to 40 Code of Federal Regulations 122.26, SHA maintained adequate legal authority for compliance with MS4 Permit conditions during the FY25 reporting period and carried out inspections, surveillance, and monitoring procedures necessary to demonstrate compliance with MS4 Permit conditions. The SHA has provided associated information in **Appendices B and C**.

Status of Implementing the Stormwater Management Program

In the following subsections, SHA has provided the status of implementing the components of its stormwater management (SWM) program that are established as MS4 Permit conditions. SWM program components reported in this FY25 MS4 Annual Report, in accordance with conditions in Part V.A.1.a of the MS4 Permit, include:

- Source Identification
- Stormwater Management
- Erosion and Sediment Control
- Illicit Discharge Detection and Elimination
- Trash and Litter
- Property Management and Maintenance
- Public Education
- Watershed Assessment
- Restoration Plans
- Total Maximum Daily Load (TMDL) Compliance
- Assessment of Controls
- Program Funding

Source Identification

During FY25, the SHA Office of Highway Development (OHD) Highway Hydraulics Division (HHD) continued to maintain the inventory of SHA-owned storm drain system that includes conveyances, major outfalls, inlets, and associated drainage areas in accordance with conditions in Part IV.C.1 of the MS4 Permit. The HHD continued to confirm or update the stormwater systems inventory information during permit reviews, as-built document reviews, incidental drainage investigations, SWM facility inspections, outfall inspections, and video pipe inspections. The SHA has reported information for storm drain infrastructure other than outfalls and SWM facilities (a.k.a., upland BMPs) in the supplemental NPDES 2025 Geodatabase provided with this FY25 MS4 Annual Report.

The SHA built 126 new upland BMPs in FY25 within the MS4 permitted areas. The *BMP* feature class of the MS4 Geodatabase-Part 1, submitted with the FY24 MS4 Annual Report, inadvertently included 513 SWM facilities located outside the MS4 permitted areas. To more accurately report the MS4, these facilities were excluded from the *BMP* feature class of the MS4 Geodatabase- Part 1, submitted with this FY25 MS4 Annual Report. In addition, 201 new upland BMP records were added to that feature class. These new upland BMPs were identified in FY25 and incorporated into the reported inventory as an outcome of ongoing SHA data integrity initiatives that seek to verify as-built data and update ownership information. Where these facilities do not have an inspection, they have been prioritized for inspection in FY26. The SHA is working to improve processes to ensure that future additions from these efforts have an inspection performed within the same fiscal year as the facility is added to the inventory. The SHA has provided outfall structure information in the *Outfall* and *Outfall Drainage Area* feature classes, and upland BMP information in the *BMP* and *BMP Drainage Area* feature classes, of the MS4 Geodatabase – Part 1.

The SHA continued working in FY25 to improve its stormwater systems inventory data and processes. Pipe inspections continued in FY25 for failures in joints, invert corrosion, and other potential damage. The SHA visually inspected 9,906 linear feet of pipe, and an additional 5,838 linear feet were inspected via remotely operated robotic pipe crawlers. The SHA storm drain inventory continues to be updated as a part of these inspections each fiscal year.

In accordance with conditions in Part IV.C.2 of the MS4 Permit, SHA has identified industrial sites within SHA right-of-way (ROW) that have the potential to contribute significant pollutants to SHA storm drain systems. These include SHA-owned facilities covered under the NPDES General Permit (number 20-SW) for Discharges from Stormwater Associated with Industrial Activities, but also non-permitted facilities requested by the MDE, such as salt storage areas, parking lots, rest areas, Park and Ride facilities, and other highly trafficked or material storage areas. One Park and Ride facility was removed from the inventory because it was identified as belonging to the Maryland Transportation Authority (MDTA). The SHA has provided location and other information for NPDES 20-SW permitted and non-permitted industrial sites in the *Municipal Facilities* feature class of the MS4 Geodatabase – Part 1. There are no commercial sites located on SHA properties.

As described in Section C.3 of the FY19 MS4 Annual Report, the SHA revised baseline analysis submitted to the MDE in June 2018 included GIS data for impervious surfaces owned by SHA in its MS4 permitted areas. The MDE found it acceptable that this information is not resubmitted, beginning with the FY19 MS4 Annual Report, and SHA has excluded it from subsequent MS4 Annual Report submittals. The SHA has updated the total impervious acres restored during the MS4 Permit term and the total impervious acres planned for restoration activities in the *Impervious Surface* table of the MS4 Geodatabase – Part 1.

In FY25, SHA opted to participate in the Chesapeake Bay Trust (CBT) Pooled Monitoring Program (PMP) to satisfy the permit requirements for Assessment of Controls. Consequently, monitoring site locations and associated information are no longer included in this report.

Information for SHA water quality improvement projects proposed, in construction, or complete through June 30, 2025, is provided in the *BMP*, *AltBMPLine*, and *AltBMPPoly* feature classes and the *Stream Restoration Protocols* table of the MS4 Geodatabase – Part 1. During FY25, six water quality improvement project records were added to the MS4 Geodatabase – Part 1. Five of these projects were credit impact replacements and one was a new water quality improvement project. Information for inlet cleaning and street sweeping BMPs is provided in the *AltBMPPoly* feature class of the MS4 Geodatabase – Part 2.

Stormwater Management

The SHA continued to comply with State and federal laws and regulations in FY25 regarding SWM and the MDE permit requirements. The SHA also continued to implement the practices established in the 2000 Maryland Stormwater Design Manual and remains in compliance with the SWM Act of 2007 and the revised Chapter 5 of the 2000 Maryland Stormwater Design Manual by implementing environmental site design to the maximum extent practicable (MEP) for all new development and redevelopment projects.

The OHD Plan Review Division (PRD) is the delegated approving authority for both erosion and sediment control (ESC) and SWM plans for all SHA projects. The PRD submitted progress reports to MDE during FY25, in accordance with the July 8, 2014 Memorandum of Understanding (MOU) between SHA and the MDE to designate SHA as an approving authority for ESC and SWM, and continues to coordinate with MDE to update the *PRD Sediment and*

Stormwater Guidelines and Procedures as necessary. Additional information can be found in the *SHA Annual Report for Delegation of Sediment and Stormwater Approval Authority* submitted to the MDE on October 9, 2025.

The SHA maintained SWM and construction inspection information during FY25 utilizing the processes described in the *Stormwater Management* section of the FY19 MS4 Annual Report. In accordance with conditions in Part IV.B of the MS4 Permit, a summary of construction inspections, non-compliance findings, and the actions taken by SHA Districts is referenced in Section 1.11 of, and is provided as electronic data with, the *SHA Annual Report for Delegation of Sediment and Stormwater Approval Authority* that was submitted to the MDE on October 9, 2025. Information for the SHA SWM program, including required documentation in accordance with conditions in Parts IV.D.1.b, IV.D.1.c, and IV.D.1.d of the MS4 Permit, is provided in the *SWM* table of the MS4 Geodatabase – Part 1.

During the FY25 reporting period, SHA conducted 1,325 preventative maintenance inspections of SWM facilities statewide in accordance with the Code of Maryland Regulations (COMAR) 26.17.02. All of the inspections completed in FY25 were completed in MS4 permitted areas in accordance with conditions in Part IV.D.1.d of the MS4 Permit. Inspection procedures for SWM facilities received a minor update in FY25, with the addition of a check dam inspection attribute, but otherwise followed procedures outlined in prior MS4 Annual Reports. The FY25 inspection activities addressed 963 of 1,469 SWM facilities due for a preventative maintenance inspection in FY25; 506 facilities did not have an inspection in FY25 and have been prioritized for inspection in FY26.

During FY25, SHA needed to implement a large number of urgent drainage emergency projects. In order to address associated safety concerns promptly, State funding had to be diverted away from other activities programmed to complete in FY25, including SWM facility inspections. Additionally, SHA saw extended processing times on requests for federal funds for individual projects and programmatic activities throughout FY25. Longer processing times resulted in delayed access to federal funding and greater need for, and usage of, State funding than originally budgeted and planned for FY25.

The SWM facility inspections are typically performed with consultant resources due to the volume of inspections that must be performed each year; however, due to the redistribution of funding from planned inspection activities to emergency drainage projects, consultant tasks could not be fully utilized to accomplish inspections due in FY25. When SHA identified the resource shortfalls, internal staff were quickly mobilized to perform SWM facility inspections. Due to the limited number of State staff and funding resources accessible, not all inspections due for FY25 could be completed by the end of FY25. An additional 11 facilities were unable to be accessed for inspection due to vegetation overgrowth or other access issues. These facilities have been prioritized for vegetation management and inspection in FY26 and have been assigned a failing rating for their FY25 inspection. The SHA has provided the inspection program information in the *BMP Inspections* and *AltBMP Inspections* tables of the MS4 Geodatabase – Part 1 and has provided, in **Appendix B**, a resolution plan for accomplishing missed FY25 SWM facility inspections during FY26.

The SHA performed 186 initial inspections in MS4 permitted areas. Initial inspections were performed using processes described in the *Stormwater Management* section of the FY20 and FY21 MS4 Annual Report and are reported in the *SWM* table of the MS4 Geodatabase – Part 1. During the FY25 reporting period, two initial inspections were flagged for follow-up activities that can include additional inspections or repair, remediation, and/or retrofit/reconstruction activities. All seven SWM facilities flagged for follow-up activities by FY24 initial inspections were determined to be functioning as designed during FY25.

The SHA continued to perform routine maintenance on SWM facilities during FY25. As a result of routine mowing and litter removal activities implemented by SHA District maintenance staff, 361 of 549 roadside swales received the highest possible rating from both their preceding and most recent triennial preventative maintenance inspections. District-specific guidance developed by SHA for routine maintenance of SWM facilities within each District can be found online at the following SHA webpage:

https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=363

In FY25, SHA continued work to address maintenance issues identified in FY24 for SWM facilities. In accordance with the 38 SHA 'maintenance enforcements' reported for non-functioning SWM facilities in the *Stormwater Management* section of the FY24 MS4 Annual Report, SHA completed construction of three SWM facility rehabilitations and continued rehabilitation design activities for the remaining 35 SWM facilities during FY25. During FY24, one SWM facility rehabilitation was reported as delayed due to permitting challenges that persisted through FY25. The SHA developed a path forward for this site in FY25 and design is now progressing, and the site will be included in a future contract. Planning efforts were initiated in late FY25 to select sites for stormwater retrofit contracts to address facilities with more significant failures. Planning for these contracts is expected to be finalized in FY26 with design anticipated to start shortly thereafter. The SHA identified seven new maintenance enforcements during FY25 for non-functioning SWM facilities in the MS4 permitted areas. The enforcement action taken in each case was the addition of the given facility to SHA rehabilitation/retrofit design contracts during FY25 that are planned for construction starting in FY26 and FY27.

During the current MS4 Permit term, a total of 62 SWM facilities in the MS4 permitted areas have been rehabilitated by SHA. At the end of FY25, 225 SWM facilities in the MS4 permitted areas still required rehabilitation. In accordance with conditions in Part IV.B of the MS4 Permit, SHA has provided a 'resolution schedule' for SWM facility rehabilitations in **Appendix B** (see **Table IV.D.1.d)**.

During FY25, one SWM facility was identified for abandonment due to impacts from roadway improvement projects. As SWM facilities are approved for abandonment, any loss of water quality/quantity will be accounted for and mitigated by SHA. For abandonments and removals that are not being accounted for as a loss of water quality treatment associated with a new development or redevelopment project, HHD and PRD will review and comment on justifications provided, water quality/quantity losses, and appropriate mitigation requirements.

Erosion and Sediment Control

During the FY25 reporting period, SHA maintained compliance with State and federal laws and regulations for ESC as well as the MDE requirements for permitting, including compliance with the General Permit for Stormwater and Discharges Associated with Construction Activity (NPDES-20-CP-A) for projects that disturb at least one acre of land. During FY25, a total of 37 SHA construction projects receiving Notice to Proceed required coverage under a NPDES-20-CP-A permit.

The SHA continued to submit applications for coverage in FY25 under the NPDES-CA State discharge permit number 20-CP-A (issued December 31, 2022; effective April 1, 2023; modified May 2, 2023; and expires March 31, 2028) for applicable projects. In accordance with conditions in Part IV.D.2.c of the MS4 Permit, SHA has provided the ESC program information in the *Erosion and Sediment Control* table, and the grading permit program information in the *Quarterly Grading Permit* feature class, of the MS4 Geodatabase – Part 1.

In accordance with conditions in Part IV.D.2.b of the MS4 Permit, and in cooperation with the Maryland Transportation Builders and Materials Association, SHA continued to offer updated ESC training and issued 383 ESC (a.k.a., Yellow Card) certifications and 130 re-certifications during the FY25 reporting period. Training continued to be offered as updated during FY24. Responsible Personnel Certification training is a prerequisite for the Yellow Card certification and is administered through the MDE online Responsible Personnel Course. More information regarding ESC certification is available at the following SHA webpage:

https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=56

Illicit Discharge Detection and Elimination

In accordance with conditions in Part IV.D.3.a of the MS4 Permit, SHA completed 174 Illicit Discharge Detection and Elimination (IDDE) field screenings during FY25. Whenever possible in FY25, SHA prioritized IDDE screening sites that had the greatest potential for illicit discharge pollution, such as those located in or adjacent to commercial and industrial areas. Sites that drain stormwater from SHA-owned facilities not already inspected as a condition of the NPDES 20-SW general permit, such as SHA Park and Ride facilities, were also prioritized.

Additional IDDE investigation and tracking activities were conducted during FY25 for an illicit discharge (ID) case first reported in Appendix C to the FY24 MS4 Annual Report and for two ID cases opened in FY25. Additional information regarding the history and outcomes of these three cases is provided in **Appendix C** to this FY25 MS4 Annual Report.

As part of its overarching program to respond to illegal discharges, dumping, and spills, SHA coordinated with the MDE, surrounding jurisdictions, and property owners during FY25 to address and respond to incidents. Spills that occur at NPDES 20-SW permitted sites are tracked in the SHA Regulatory Compliance System maintained by the OED Environmental Compliance Division (ECD). The ECD began updating its standard operating procedures for managing spills in FY24, made notable progress in FY25, and anticipates completing the effort in FY26. In

accordance with conditions in Parts IV.B, IV.D.3.d, and IV.D.3.e of the MS4 Permit, a summary of outfalls screened and potential IDs, with associated jurisdictional contacts/resolution schedules for each, is provided in **Tables IV.D.3.a** and **IV.D.3.d** located in **Appendix C**. In the MS4 Geodatabase – Part 1, SHA has provided the IDDE program information in the *IDDE Screening* table.

In accordance with conditions in Part IV.D.3.b of the MS4 Permit, ECD completed multimedia facility inspections during FY25 at SHA-owned industrial areas identified in accordance with Part IV.C.2 of the MS4 Permit. The ECD inspected 32 NPDES 20-SW permitted facilities during the reporting period. Twenty of the 20-SW permitted facilities inspected in FY25 were in the MS4 permitted areas. A total of 115 new stormwater related issues were identified from statewide inspections at NPDES 20-SW permitted facilities during FY25. Of those issues, 105 were resolved and 10 remained unresolved at the end of FY25. Five of the eight unresolved issues reported in the FY24 MS4 Annual Report were closed in FY25. Two of the issues are unresolved due to conflicts with field operation deadlines and employee mandatory equipment training, but repairs are underway as of FY26 and are expected to be complete by September 30, 2025. The other repair has been scheduled to be completed by June 30, 2028. In accordance with conditions in Part IV.B of the MS4 Permit, a summary of the most recent quarterly inspection for each NPDES 20-SW permitted facility within the MS4 permitted areas is provided in **Table IV.D.3.b** located in **Appendix C**.

The SHA performed annual visual surveys at 152 non-permitted industrial areas during FY25. The MDE geodatabase structure does not support reporting annual visual survey information, so SHA has provided a Microsoft Excel workbook with this FY25 MS4 Annual Report to report the date, issues identified, and status of issue resolutions associated with the most recent annual visual survey conducted at each non-permitted industrial area located within the MS4 permitted areas.

Trash and Litter

The previously reported SHA approach to trash/litter reduction continued in FY25 supported by SHA employees, contractors, correctional services, the Sponsor-A-Highway (SAH) program and partnerships, and labor donated through Adopt-A-Highway (AAH) volunteers. Implementation of the AAH and SAH programs in FY25 resulted in 275 highway miles adopted and 291 miles sponsored. Relative to FY24, this is an increase of 169 miles for AAH and a decrease of 19 miles for SAH. With the implementation of a new AAH Portal that allows potential volunteers to directly submit an adoption request, SHA is experiencing a significant increase in interest in the volunteer program. More information on the AAH and SAH portals can be found online at the following SHA webpages:

AAH: https://mdot-sha-highway-programs-maryland.hub.arcgis.com/pages/adopt-a-highway

SAH: https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=192

In FY23, SHA launched *Operation Clean Sweep* to increase roadside mowing, trimming, litter pick-up, and debris pick-up activities statewide. This initiative returned in Spring FY24 and FY25. Daily litter removal reports were generated to track the total number of trash bags filled and total weight for trash/litter reduction modeling. The FY25 average weight per bag was 15 lbs. For comparison purposes, the FY24 average weight per bag was 12 lbs. The SHA trash/litter reduction modeling method assumes that each truckload holds 50 bags of litter. In accordance with conditions in Part IV.D.4.d of the MS4 Permit, trash/litter removed by SHA trash reduction strategies during FY25 is documented in **Table IV.D.4.d**.

Table IV.D.4.d: Trash and Litter Removed During FY25 by SHA Trash Reduction Strategies

Jurisdiction	Truckloads	Conversion to Pounds
Anne Arundel	734	550,500
Baltimore	2,284	1,712,858
Carroll	192	144,000
Cecil	240	180,000
Charles	137	102,750
Frederick	283	212,250
Harford	262	196,500
Howard	318	238,500
Montgomery	781	585,758
Prince George's	1,496	1,121,828
Washington	98	73,500
Salisbury*	0*	0*
Totals	**6,825**	**5,118,873**

* The SHA was unable to separate trash/litter removal activities conducted within the City of Salisbury boundary from the countywide data collected for Wicomico County, wherein 138 truckloads (or 103,500 pounds) of trash/litter were removed by SHA during FY25.

In accordance with conditions in Parts IV.D.4.b and V.A.1.d of the MS4 Permit, public education and outreach activities implemented by SHA during FY25 to reduce littering are incorporated into the summary describing public education programs in **Appendix D**. Throughout FY25, SHA provided information related to proper litter/trash disposal and stopping roadside dumping on its *Educational Outreach* webpage located at the following address:

https://www.roads.maryland.gov/mdotsha/pages/index.aspx?PageId=48

Property Management and Maintenance

Twenty SHA sites within the MS4 permitted areas required and maintained NPDES 20-SW permit coverage through FY25. The NPDES 20-SW permit was challenged in court and, as a result, was modified and re-issued by MDE, effective February 7, 2025. The modified permit is referred to as permit number *20-SW-A* with only one substantive change affecting SHA permitted facilities. Facilities located in an area with an Environmental Justice score of 0.76 or higher must now submit their annual comprehensive site compliance evaluation to MDE. This change only applies to the SHA Golden Ring maintenance shop and the associated evaluation and submittal to MDE was completed for calendar year 2024.

During FY25, SHA continued to monitor the need to update Storm Water Pollution Prevention Plans (SWPPPs) and maps following site changes and continued providing annual SWPPP training to its maintenance personnel. The SHA District maintenance facility staff and the ECD District Environmental Coordinators implemented inspections during FY25 at all SHA facilities covered under the NPDES 20-SW-A permit in accordance with applicable SWPPPs.

For each municipal facility within the MS4 permitted areas and covered under the NPDES 20-SW-A discharge permit, SHA has provided, in **Table IV.D.5.a**, a summary of updates to facility SWPPPs and associated training for staff in accordance with conditions in Parts IV.D.5.a and IV.D.5.b.v of the MS4 Permit. The number of personnel trained in FY25 increased, compared to FY24, by 35 people because of staffing increases from FY24 to FY25. As previously reported, the Thurmont facility remains designated as a "satellite" site of the Frederick maintenance facility. The Thurmont facility is a NPDES 20-SW-A permitted site and consequently requires an associated SWPPP; however, the staff training is accounted for within the Frederick facility's staff training totals in **Table IV.D.5.a** below. In the *Municipal Facilities* feature class of the MS4 Geodatabase – Part 1, SHA has provided information for NPDES 20-SW-A permitted facilities located in the MS4 permitted areas.

Table IV.D.5.a: Summary of SWPPP Status and Training for SHA Municipal Facilities

District	Maintenance Facility	Industrial SW Permit Coverage Type	Date of Most Recent SWPPP Update (Month-YR)	Date of Most Recent SWPPP Training (Month-YR)	Number of Individuals Trained
1	Cambridge	General	April-23	August-24	22
	Salisbury	General	April-23	September-24	35
2	Elkton	General	April-23	August-24	34
3	Fairland	General	November-24	September-24 & November-24	37
	Gaithersburg	General	December-24	November-24	36
	Laurel	General	September-24	November-24	35
	Marlboro	General	April-23	November-24	46
4	Churchville	General	April-23	March-25	39
	Golden Ring	General	April-23	March-25 & April-25	31
	Hereford	General	April-23	March-25 & April-25	32
	Owings Mills	General	April-23	March-25	32
5	Annapolis	General	September-24	September-24 & October-24	39
	Glen Burnie	General	August-24	September-24 & October-24	35
	La Plata	General	April-23	September-24 & October-24	35
	Hanover Auto Shop	General	April-23	May-25	2
6	Hagerstown	General	April-23	April-25	38
7	Dayton	General	April-23	April-25	26
	Frederick	General	April-23	March-25	50
	Thurmont	General	April-23	-	-
	Westminster	General	April-23	March-25	34
				Total	**638**

Throughout FY25, SHA performed inlet cleaning, using vacuum technology, and street sweeping along SHA roadways. Information for FY25 implementation of inlet cleaning and storm drain vacuuming operations is provided in **Table IV.D.5.b** below and both street sweeping and inlet cleaning are reported further in the MS4 Geodatabase – Part 2.

Table IV.D.5.b: Tons Collected in FY25 from Inlet Cleaning and Storm Drain Vacuuming

County	SHA Maintenance Shop	Total Number of Inlets Cleaned	Tons Collected	Tons Collected from Storm Drain Vacuuming
Anne Arundel	Annapolis	8	.76	5.36
	Glen Burnie	595	46.58	23.77
Baltimore	Golden Ring	396	27.16	0
	Hereford	0	0	0
	Owings Mills	918	62.93	6.96
Carroll	Westminster	55	3.74	4.58
Cecil	Elkton	127	8.53	4.34
Charles	La Plata	38	2.70	7.52
Frederick	Frederick	13	.87	32.72
Harford	Churchville	27	1.81	0
Howard	Dayton	77	5.17	14.26
Montgomery	Fairland	241	16.18	0
	Gaithersburg	0	0	4.0
Prince George's	Laurel	10	0.67	0.63
	Upper Marlboro	329	22.09	0
Washington	Hagerstown	577	38.75	2.52
Wicomico[1]	Salisbury	0	0	10.22
	Totals	**3,411**	**237.94**	**116.89**

[1.] The City of Salisbury is a Phase I MS4 jurisdiction, not Wicomico County as a whole.

In accordance with conditions in Part IV.D.5.b of the MS4 Permit, SHA continued implementation of its programs to reduce pollutants associated with maintenance activities at SHA-owned facilities. The SHA has provided its statewide usage for herbicide, fertilizer, and deicing chemicals during FY25, including percent change for each chemical type compared to amounts reported for the FY24 period, in the *Chemical Application* table of the MS4 Geodatabase – Part 1.

The SHA reduced use of glyphosate in FY25 compared to FY24. The SHA promoted use of plant growth regulators (e.g., trinexapac-ethyl) and selective herbicides to preserve desirable vegetation to reduce mowing costs and fuel use. The SHA applied a wide variety of herbicides alone and in mixtures as glyphosate alternatives. The SHA references purchasing records and estimates of contractor application usage from contract documents to report statewide application of vegetation management chemicals.

The SHA continued efforts to reduce the extent of frequently mowed areas during FY25 and increased the installation of meadows on new construction projects, where appropriate. The percentage of meadow used for permanent stabilization by SHA increased from 50.2% in FY24 to 66.0% in FY25. Meadow plantings include a seed mix of primarily native, taller-growing species that are intended for less frequent mowing cycles. The SHA otherwise stabilizes areas disturbed by construction activities with topsoil, a fertilizer blend, seeded turfgrass, and straw to reduce erosion through vegetative establishment and growth.

In FY25, SHA continued to use slow-release nitrogen and low-phosphorus or no-phosphorus fertilizers when establishing and maintaining turf, meadows, and other vegetation. Fertilizer application amounts are modeled based on the square footage of the seeding applied and are

reported in pounds of nitrogen and phosphorus. Topsoil stockpiles of producers are sampled and tested for major and minor plant nutrients every six months, and test results are used to develop Nutrient Management Plans to ensure optimal nutrient levels while avoiding excess fertilizer application.

The SHA will continue efforts to reduce the use of chemical fertilizers. Efforts to employ compost as a fertilizer have been limited by the inconsistent composition and physical qualities of commercially available compost products, and it is unlikely that compost will be used as a fertilizer source for construction.

The SHA "ENV 200" class provides Maryland Department of Agriculture (MDA) Pesticide Applicator recertification credit and was presented to 74 SHA staff in May 2025. The MDA-Registered Pesticide Applicator training "ENV 100" and MDA Pesticide Applicator Core and ROW test prep training "ENV 210" were not provided as in-person trainings in FY25; however, the electronic training materials were distributed upon request.

The SHA continued to test and evaluate new equipment and strategies during FY25 in an ongoing effort to improve the level of service provided to motorists during winter storms while minimizing the impact of its operations on the environment. In FY25, SHA continued to minimize the use of winter deicing materials using previously reported practices like "anti-icing" before storm events and through continuation of the *Annual Snow College* training for State and hired contractor operators. An in-depth description of SHA winter operations and a link to the current version of SHA Salt Management Plan, most recently updated in September 2024, is publicly accessible at the following web address:

https://www.roads.maryland.gov/mdotsha/pages/index.aspx?PageId=352

The SHA continued applying solid (e.g., rock salt, solar salt) and liquid (e.g., salt brine) deicing chemicals to roadways statewide during the 2024/2025 winter season to protect the safety of motorists. FY25 application amounts show a significant increase in the application of solid and liquid deicing chemicals when compared to the amounts of each reported for FY24. This increase was driven primarily by the increased frequency of weather patterns observed in FY24, as persistent frozen precipitation, below-average temperatures, and a higher number of storm events extended into FY25.

The SHA continues to refine operational practices through training, equipment calibration, and effective decision making, all of which are intended to help minimize the overuse of salting resources to the maximum extent practicable. The larger number of winter events in FY25 also provided opportunities to apply these practices in real world conditions, which is expected to improve efficiency moving forward. The SHA uses a metric of pounds of road salt per total lane miles per inch of snow (lbs./lm./inch) in its year-to-year comparisons of road salt usage. For the FY25 reporting period, the value for this metric was 1,022 lbs./lm./inch which is an increase of 156 lbs./lm./inch relative to the FY24 period. It should be noted that salt usage within the City of Salisbury cannot be tracked or reported, as a MOU is not currently in place with the City to share deicing usage data.

In accordance with conditions in Part IV.D.5.b.v of the MS4 Permit, SHA implemented its *Annual Snow College* statewide and trained 84 operators in snow removal and salt management, including new hires and refresher trainees. Prior to the 2024/2025 winter season, SHA's *Annual Snow College* was modified to showcase any equipment and operational changes for the upcoming winter season. The SHA also continued to provide its *Winter Hired Equipment Presentations* during FY25, with annual outreach training an estimated 2,100 temporary, hired equipment operators. The scale of outreach for these trainings is variable year-to-year depending on active contracts, State employee vacancies and new hires, and equipment acquisitions.

Public Education

In accordance with conditions in Part IV.D.6 of the MS4 Permit, SHA maintained its public education webpage throughout FY25 to provide information to the transportation community for reduction of stormwater pollutants. The SHA organized internal training and participated in various educational opportunities throughout FY25 as described further in **Appendix D**.

The SHA also continued to operate its Customer Care Management System throughout FY25 for the general public to submit service requests. The SHA system received 28,165 service requests in FY25, a 5% increase relative to the FY24 reported amount. Of these, 4,420 service requests were related to littering, dumping, spills, drainage, or water quality issues.

Watershed Assessment

In accordance with conditions in Part IV.E.1 of the MS4 Permit, SHA continued to reference County watershed assessments to identify specific watershed issues and restoration project opportunities.

Throughout the current permit term, SHA committed resources to advocating for, drafting, negotiating, executing, and amending long-term MOUs/Agreements with 21 different County, State, and federal government agencies to facilitate collaborative watershed restoration and monitoring activities. These interagency partnerships have facilitated:

- Data exchanges
- ROW/easement acquisition and access
- Monitoring and research for stormwater management and restoration practices
- Design and construction of restoration BMPs including:
    - SWM facilities
    - Forest planting
    - Outfall stabilization
    - Impervious area removal
    - Stream restoration

The SHA met with Anne Arundel County, Baltimore County, Calvert County, Cecil County, Charles County, Howard County, Maryland Department of Natural Resources, Maryland Transit Authority, Mount Saint Mary's University, Queen Anne's County, Saint Mary's County, South

Baltimore Gateway Partnership, the United States Fish and Wildlife Service, the United States Geological Survey, and the United States National Parks Service during FY25 to share and discuss watershed restoration strategies, plans, and opportunities for collaborative projects.

All restoration planning by SHA for future MS4 permit terms has been based on the 2% per year pace of restoration established for the stormwater sector in Phase I, II, and III of Maryland's Chesapeake Bay Watershed TMDL Implementation Plan.

Restoration Plans

In accordance with conditions in Part IV.E.2.a of the MS4 Permit and the MDE 2014 MS4 Accounting Guidance, SHA submitted impervious surface area assessments and implemented restoration BMPs for more than 4,621 equivalent impervious acres (EIA) required by end of the MS4 Permit term. In accordance with conditions in Part IV.E.3 of the MS4 Permit, SHA has provided its EIA achieved in **Table IV.E.3** below. EIA achieved during both the preceding MS4 permit term (applicable to discharge permit number 99-DP-3313 MD0068276 that expired October 21, 2010, and was administratively continued through October 8, 2015) and the current MS4 Permit term is accounted toward the current MS4 Permit restoration goal (i.e., 4,621 EIA) in accordance with the MDE guidance and the EIA computation rules established in the MDE 2014 MS4 Accounting Guidance.

Achieved EIA must be permanently removed from SHA restoration progress accounting when the water quality treatment function of any given BMP is directly reduced or eliminated by new development or redevelopment projects (whether by SHA or external agents) or when access or credit claiming rights becomes uncertain for any BMPs built on property not owned by SHA. For FY25, SHA has permanently removed 3.27 EIA from its restoration progress accounting presented in **Table IV.E.3**. Despite the EIA permanently removed in FY25, SHA achieved 6,124 EIA by October 8, 2020 and remains in compliance with the current MS4 Permit restoration goal to achieve at least 4,621 EIA by the MS4 Permit expiration date.

In comments dated July 30, 2021, MDE stated that SHA may not claim non-functioning restoration BMPs for compliance with the MS4 Permit restoration conditions. The SHA has expanded on the MDE guidance since 2021 and temporarily removes EIA credits from SHA annual progress accounting if any given BMP's EIA credit cannot be verified. This includes instances where a given restoration BMP's credit verification inspection is not completed in accordance with the schedules established in the MDE 2014 MS4 Accounting Guidance or when inspection information collected in the field has data quality/accuracy issues. Within the "GEN_COMMENTS" attribute field for applicable BMP records in the *AltBMPPoly*, *AltBMPLine*, and *BMP* features classes of the MS4 Geodatabase – Part 1, SHA has provided details for temporary or permanent EIA removal and has reduced the credit 'claimed' amount for the BMP accordingly. The total EIA claimed for compliance by SHA, as presented in **Table IV.E.3** below, has been discounted for BMPs that have been temporarily or permanently removed from SHA's restoration progress accounting.

No new SHA stream restoration or outfall stabilization BMPs completed construction in FY25, so no credit computation information has been submitted with this FY25 MS4 Annual Report.

Table IV.E.3: EIA Credits Achieved During the MS4 Permit Compliance Period

BMP Type	MS4 Permit Number 99-DP-3313 MD0068276 Administratively Continued Period	MS4 Permit Number 11-DP-3313 MD0068276 Term							MS4 Permit Number 11-DP-3313 MD0068276 Administratively Continued Period						Total EIA Achieved without Temporary Credit Removals	Total EIA temporarily removed	Total EIA Claimed for Compliance[2]
	Total EIA Achieved this Period	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 July 1, 2020 to Oct. 8, 2020	Total EIA Achieved this Period	FY 2021 Oct. 9, 2020 to June 30, 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total EIA Achieved this Period[1]			
Impervious Urban to Pervious	0.00	0.00	1.76	0.02	0.11	0.49	0.00	2.38	0.00	0.00	0.00	0.00	0.00	0.00	**2.38**	**0.51**	**1.87**
Reforestation on Pervious Urban	467.59	56.98	19.69	76.29	67.75	24.10	0.00	244.81	26.73	0.00	0.00	1.28	1.16	29.17	**741.57**	**267.46**	**474.11**
New Stormwater Control Structures	85.44	60.47	44.70	51.01	33.35	0.00	0.00	189.53	0.00	0.00	1.23	0.00	0.76	1.99	**276.96**	**64.62**	**212.34**
Retrofit Existing Stormwater Control Structures	0.00	100.80	6.33	70.79	56.94	15.99	12.59	263.44	31.69	0.00	0.00	0.00	0.00	31.69	**295.13**	**39.64**	**255.49**
Outfall Stabilization	0.00	11.83	9.20	165.26	53.24	160.18	0.00	399.71	299.74	0.00	0.00	0.00	0.00	299.74	**699.45**	**0.00**	**699.45**
Stream Restoration	350.13	48.72	22.27	6.84	0.00	3,620.06	420.27	4,118.16	302.07	0.00	0.00	0.00	0.00	302.07	**4,770.36**	**0.00**	**4,770.36**
Conservation Landscape	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.38	0.00	2.38	**2.38**	**0.00**	**2.38**
Built BMP Totals =	**903.16**	**278.80**	**103.95**	**370.21**	**211.39**	**3,820.82**	**432.86**	**5,218.03**	**660.23**	**0.00**	**1.23**	**3.66**	**1.92**	**667.04**	**6,788.23**	**372.23**	**6,416.00**
Percent Restored of SHA Baseline Untreated Impervious Acres[3] =	**3.91%**	**1.21%**	**0.45%**	**1.60%**	**0.91%**	**16.54%**	**1.87%**	**22.58%**	**2.86%**	**0.00%**	**0.01%**	**0.02%**	**0.01%**	**2.89%**	**29.38%**	**0.02**	**27.77%**
Inlet Cleaning[4]	164																
Street Sweeping[4]	29																
Credit Acquisition	0																

Note: EIA achieved during the MS4 permit number 99-DP-3313 MD0067276 administratively continued period is accountable toward the 4,621 EIA (20%) restoration requirement established in the MS4 permit number 11-DP-3313 MD0068276. After accounting for impacted BMPs and their associated replacement BMPs, 6,123.70 EIA (26.50%) was achieved and is accountable by SHA against the MDE-approved 4,621 (20%) MS4 Permit restoration requirement by October 8, 2020.

[1] EIA achieved after the expiration date of the current MS4 Permit on October 8, 2020 is accounted in accordance with the EIA computation rules established in the MDE 2021 MS4 Accounting Guidance.

[2] Total EIA claimed for compliance after temporary removal of 372.23 EIA associated with BMP credit that could not be verified at the end of FY25.

[3] In MDE comments dated September 16, 2019, MDE established 23,104.8 as the SHA baseline for untreated impervious acres within the MS4 permitted areas.

[4] Total EIA achieved for inlet cleaning and street sweeping annual BMPs is presented here as the average annual implementation through FY20, as finalized in MDE comments dated July 30, 2021. SHA's street sweeping and inlet cleaning operations since the end of the current MS4 Permit term have not met the minimum qualifications for restoration credit established in the MDE 2021 MS4 Accounting Guidance. Therefore, SHA implementation of these BMP types beyond October 8, 2020, is not claimed for restoration credit.

Information in/with the *Stream Restoration Analysis Summary Report* provided as Appendix G to the FY23 MS4 Annual Report continues to accurately and comprehensively present current SHA EIA computations for all stream restoration and outfall stabilization BMPs claimed for compliance.

TMDL Compliance

The SHA completed development of an individual watershed TMDL implementation plan for nutrients (i.e., nitrogen and phosphorus) in the Baltimore Harbor Tidal watershed during FY25 and will submit the plan to MDE for approval in FY26. A 30-day public comment period was initiated and advertised in the Baltimore Sun, Washington Post, and on SHA's website on August 18, 2025 in accordance with conditions in Part IV.E.4.d. of the MS4 Permit. The public comment period concluded on September 17, 2025 with no public comments received by SHA.

In accordance with conditions in Part IV.E.5 of the MS4 Permit, SHA has provided its TMDL Assessment Report in **Appendix E**. The SHA has also provided Chesapeake Bay and local TMDL compliance information in the Chesapeake Bay Progress and Local TMDL Progress tables of the MS4 Geodatabase – Part 1.

Assessment of Controls

In a letter to SHA dated September 20, 2024, MDE provided approval for SHA's enrollment in the CBT PMP to comply with Assessment of Controls permit conditions. Throughout the remainder of FY25, SHA participated in the CBT PMP as a financial contributor and as a voice on the Pooled Monitoring Advisory Committee (PMAC), recommending research questions and reviewing research proposals. The SHA contributed $770,000 to the CBT PMP on July 22, 2024 and an additional $913,960 on July 25, 2025, for a sum SHA contribution of $1,683,960. This contribution is intended to satisfy Assessment of Controls permit conditions for six years, from FY25 through FY30. The SHA MOU with CBT for enrollment in its PMP was executed on June 28, 2024 and remains in effect through December 31, 2030. Through the term of the agreement, SHA will continue to participate as a PMAC member.

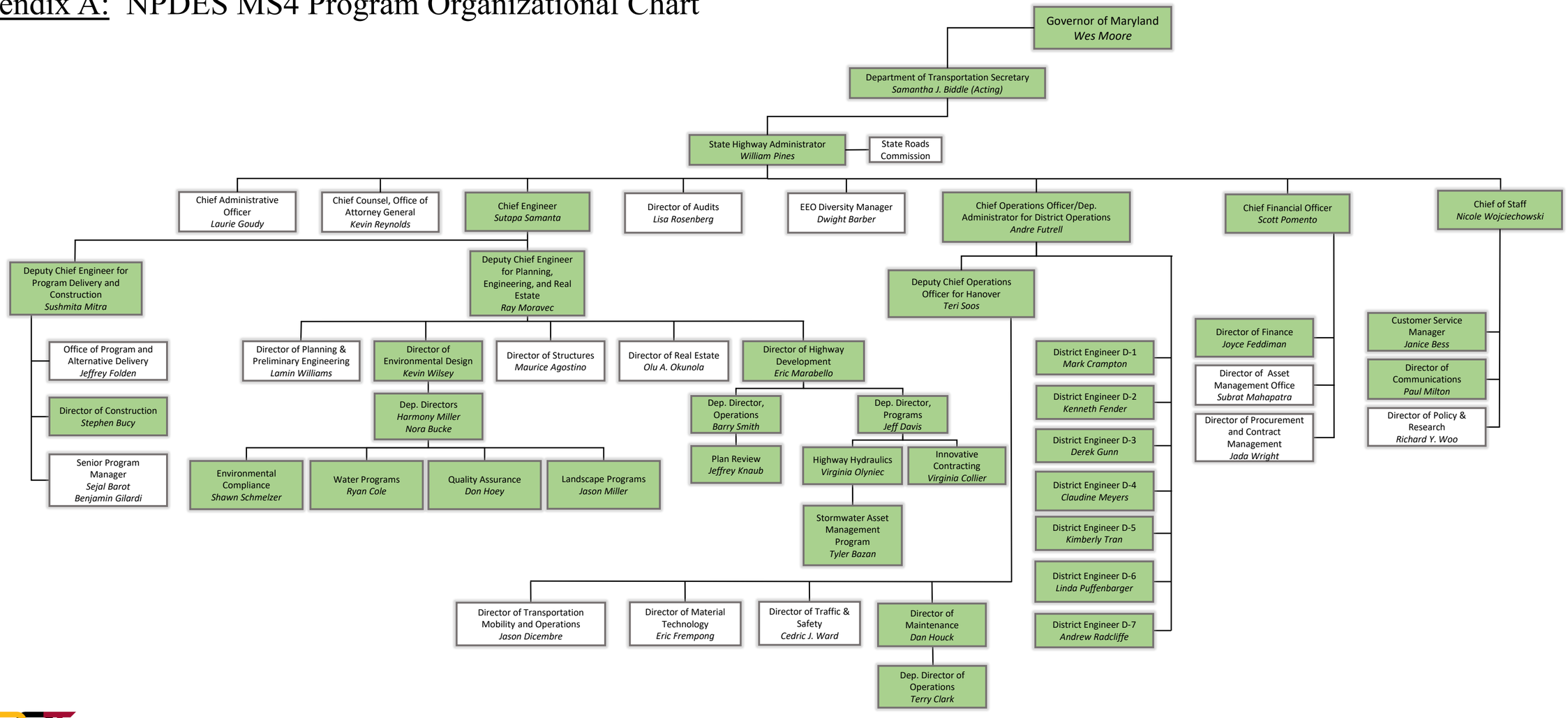
Program Funding

In accordance with conditions in Parts IV.G.1 and V.A.1.c of the MS4 Permit, SHA has provided program funding information in the *Fiscal Analyses* table of the MS4 Geodatabase – Part 1. **Table V.A.1.c** below contains a supplemental summary of this information.

Table V.A.1.c: MS4 Expenditures for FY25 and Proposed Budget for FY26

Fund	FY25 Expenditures (Millions)	FY26 Budget (Millions)
Fund 82 – TMDL Compliance & MS4 Program Management	$11.8	$24.5
Fund 74 – Drainage	$23.0	$21.6
Fund 49 – Industrial	$0.91	$0.48
Fund 14 – Operations/Maintenance	$19.2	$19.2
Totals:	**$54.9**	**$65.8**

Appendix A: NPDES MS4 Program Organizational Chart



MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

[Title]
[*Name*] = Personnel responsible for major NPDES program tasks

Appendix B: Rehabilitation Report for Stormwater Controls

During FY25, HHD continued to use its improved rehabilitation work order design templates, as reported in Appendix B to the FY24 MS4 Annual Report, for SWM rehabilitation projects. The templates received minor updates in FY25 to accommodate changes in contract delivery and to improve overall plan quality.

As reported in Appendix B to the FY24 MS4 Annual Report, the Federal Highway Administration determined that stormwater facility and outfall rehabilitation along the National Highway System is eligible for federal funding. In FY25, SHA began updates to its Stormwater Asset Management Plan with the intent of including preventive maintenance and inspections under the umbrella of activities eligible for federal funding. If eligible, this additional avenue of funding will potentially allow SHA to better weather funding downturns, improve its ability to proactively maintain stormwater assets, and improve the overall quality of its stormwater asset inventory.

Standard Operating Procedure (SOP) documents for stormwater inspection and rehabilitation were last updated in FY23 to incorporate feedback from contractors, inspectors, and other stakeholders. In FY25, SOPs received updates for storm drain inventory and minor updates to SWM inspection due to enhancements made to the internal NPDES geodatabase. These updates included the addition of a check dam attribute for SWM inspections, new attributes collected for storm drain inventory, and an overhaul of storm drain feature classes. Previously, storm drain inventory was collected into two feature classes; under the new database, each drainage structure and conveyance type now reside in a separate feature class. This revision allows for improved ability and efficiency in performing analysis of the SHA inventory and makes performing inventory additions and updates easier.

In accordance with conditions in Part IV.B of the MS4 Permit, SHA has provided **Table IV.D.1.d** below to summarize the current resolution schedule for SWM facilities requiring rehabilitation or retrofit. The information provided includes identification of applicable rehabilitation contracts, commitments for dates of completion, and comments on the status of work.

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
020003	Infiltration Basin	Fail		6/30/2028	
020003	Infiltration Basin	Fail		6/30/2028	
020026	Wet Pond	Fail		9/30/2028	Redesign and Permitting Required[1]
020052	Infiltration Basin	Fail		6/30/2028	
020061	Infiltration Basin	Fail		9/30/2028	
020088	Surface Sand Filter	Fail		6/30/2028	
020092	Infiltration Trench	Fail		9/30/2028	Redesign and Permitting Required[1]
020103	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
020109	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
020114	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
020124	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
020167	Dry Pond	Fail		9/30/2028	
020177	Infiltration Trench	Fail		9/30/2028	
020231	Infiltration Trench	Fail		6/30/2028	
020244	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020271	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
020273	Dry Pond	Fail		6/30/2028	
020338	Infiltration Basin	Fail		9/30/2028	
020339	Infiltration Basin	Fail		6/30/2028	
020357	Infiltration Trench	Pass[2]	AA9785474	6/30/2025	Construction Complete, As-Builts Approved
020363	Wet Extended Detention Pond	Fail		9/30/2028	
020388	Infiltration Basin	Fail		9/30/2028	
020393	Infiltration Basin	Fail		6/30/2028	
020394	Infiltration Basin	Fail		9/30/2028	
020396	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
020399	Infiltration Basin	Fail		6/30/2028	
020403	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020406	Dry Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
020409	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020410	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020429	Infiltration Trench	Fail[2]	XB1965574	6/30/2028	In Design & Permitting Process
020473	Infiltration Basin	Fail		6/30/2028	
020480	Wet Pond	Fail		6/30/2028	

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
020484	Infiltration Trench	Fail[2]		6/30/2027	Ready For Construction Pending Contract Mechanism
020486	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
020489	Infiltration Basin	Fail		9/30/2028	Redesign and Permitting Required[1]
020494	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
020514	Infiltration Basin	Fail		6/30/2028	
020516	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020521	Multiple Pond System	Fail		6/30/2028	
020532	Infiltration Trench	Fail		6/30/2028	
020538	Infiltration Trench	Fail[2]	XB1965574	6/30/2028	In Design and Permitting Process
020544	Wet Pond	Fail		6/30/2028	
020559	Infiltration Basin	Fail		6/30/2028	
020560	Infiltration Basin	Fail		6/30/2028	
020561	Infiltration Basin	Fail		6/30/2028	
020565	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020603	Bioretention	Fail		6/30/2028	
020760	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
020761	Infiltration Basin	Fail		6/30/2028	
020774	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020782	Infiltration Trench	Fail[2]		6/30/2027	Ready For Construction, Pending Contract Mechanism
020787	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020795	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020800	Infiltration Basin	Fail		6/30/2028	
020810	Infiltration Trench	Fail		6/30/2028	
020811	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
020817	Surface Sand Filter	Fail		6/30/2028	
020820	Surface Sand Filter	Fail		6/30/2028	
020827	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
020845	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
020850	Infiltration Basin	Fail		9/30/2028	
020868	Infiltration Trench	Pass[2]	AA9785574	6/30/2025	Construction Complete, As-Builts Approved
020875	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
020880	Infiltration Trench	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
021018	Infiltration Basin	Fail		6/30/2028	
030001	Grass Channel Credit	Fail[2]	XB1965474	6/30/2028	In Design and Permitting Process
030011	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
030031	Bioretention	Fail		6/30/2028	
030113	Infiltration Trench	Fail		6/30/2028	
030116	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
030124	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030129	Dry Pond	Fail		6/30/2030	BMP Added to List in FY25
030131	Infiltration Trench	Fail		6/30/2028	
030157	Infiltration Trench	Fail		6/30/2028	
030175	Dry Pond	Fail[2]	XB1965474	6/30/2028	In Design and Permitting Process
030183	Infiltration Basin	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
030189	Infiltration Basin	Fail		9/30/2028	
030195	Infiltration Trench	Fail		6/30/2028	
030199	Infiltration Trench	Fail		6/30/2028	
030200	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
030209	Infiltration Trench	Fail[2]	XB1965474	6/30/2028	In Design and Permitting Process
030210	Infiltration Trench	Fail[2]	XB1965474	6/30/2028	In Design and Permitting Process
030211	Infiltration Trench	Fail		6/30/2028	
030212	Infiltration Trench	Fail		6/30/2028	
030213	Infiltration Trench	Fail		6/30/2028	
030214	Infiltration Basin	Fail		9/30/2028	
030220	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030245	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030252	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030253	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030256	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030269	Dry Pond	Fail		6/30/2028	
030274	Infiltration Trench	Fail		6/30/2028	
030284	Bioretention	Fail		6/30/2028	
030333	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
030385	Surface Sand Filter	Fail[2]	XB1965474	6/30/2028	In Design and Permitting Process
030936	2A Grass Swale	Fail		6/30/2028	
040001	Bioretention	Fail		6/30/2028	
040016	Dry Swale	Fail		6/30/2028	
040036	Dry Pond	Fail[2]		6/30/2028	
040118	Infiltration Trench	Fail		6/30/2028	
060106	Dry Pond	Fail		6/30/2028	

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
070003	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
070004	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
080004	Wet Pond	Fail		6/30/2028	
080019	Infiltration Basin	Fail		6/30/2028	
080037	Infiltration Trench	Fail		6/30/2028	
080069	Wet Pond	Fail		6/30/2028	
080070	Wet Pond	Fail		6/30/2028	
080071	Wet Pond	Fail		6/30/2028	
080074	Wet Pond	Fail		6/30/2028	
092591	Wet Pond	Fail		6/30/2028	
100001	Bioretention	Fail		6/30/2028	
100004	Surface Sand Filter	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
100060	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
100065	Dry Pond	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
100099	Wet Pond	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
100120	Micropool Extended Detention	Fail		6/30/2030	BMP Added to List in FY25
100129	Wet Swale	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
100310	Bio-Swale	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
120008	Dry Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
120009	Dry Pond	Fail		6/30/2028	
120016	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
120019	Infiltration Trench	Fail		6/30/2028	
120023	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
120024	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
120028	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
120039	Infiltration Trench	Fail		9/30/2028	Redesign and Permitting Required[1]
120042	Infiltration Trench	Fail		9/30/2028	Redesign and Permitting Required[1]
120063	Infiltration Trench	Fail[2]	XB1965474	6/30/2028	In Design and Permitting Process
120066	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
120089	Infiltration Trench	Fail		6/30/2028	
120105	Dry Extended Detention Pond	Fail		9/30/2028	
120108	Infiltration Basin	Fail		6/30/2028	
120112	Infiltration Trench	Fail[2]		6/30/2028	BMP Planned for Future Retrofit Contract
120133	Infiltration Basin	Fail		9/30/2028	

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
120199	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
120200	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
120208	Surface Sand Filter	Fail		6/30/2028	Redesign and Permitting Required[1]
120209	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
120291	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
122029	Rain Garden	Fail		6/30/2028	
130050	Infiltration Basin	Fail		6/30/2028	
130072	Dry Extended Detention Pond	Fail		9/30/2028	
130074	Micropool Extended Detention Pond	Fail		9/30/2027	Redesign and Permitting Required[1]
130077	Wet Pond	Fail		9/30/2028	
130078	Dry Pond	Fail[2]	XB1965774	6/30/2028	In Design and Permitting Process
130134	Wet Pond	Fail		6/30/2028	
130167	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
130172	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
130180	Grass Swale	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
130204	Infiltration Basin	Fail[2]	HO5165174	6/30/2026	In Design and Permitting Process
130206	Wet Pond	Pass		9/30/2028	Per Latest Inspection, BMP is Functioning as Designed
130208	Infiltration Trench	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
130237	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
130251	Surface Sand Filter	Fail		6/30/2028	Redesign and Permitting Required[1]
130259	Surface Sand Filter	Fail		6/30/2028	Redesign and Permitting Required[1]
130263	Surface Sand Filter	Fail		6/30/2028	
130271	Dry Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
130292	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
130293	Other Infiltration	Fail		6/30/2028	Redesign and Permitting Required[1]
130294	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
130317	Infiltration Trench	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
130318	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
130319	Infiltration Trench	Fail		6/30/2028	
130322	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
130326	Infiltration Trench	Fail[2]	XB1965774	6/30/2028	In Design and Permitting Process
130332	Infiltration Trench	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
130353	Infiltration Trench	Fail		6/30/2030	BMP Added to List in FY25
130366	Infiltration Trench	Fail		6/30/2028	BMP Failed Post Rehabilitation, Recommended for Retrofit

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
130377	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
130386	Infiltration Basin	Fail		6/30/2028	
130393	Grass Swale	Pass[2]	HO5255374	6/30/2025	Construction Complete, As-Builts Approved
130421	Wet Pond	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
132097	Micro-Bioretention	Fail		6/30/2028	
150066	Dry Pond	Fail		6/30/2028	
150175	Landscape Infiltration	Fail		6/30/2028	
150201	Infiltration Trench	Pass		6/30/2028	Per Latest Inspection, BMP is Functioning as Designed
150238	Infiltration Trench	Fail		6/30/2028	
150242	Infiltration Trench	Fail		6/30/2028	
150252	Infiltration Trench	Fail		6/30/2028	
150304	Surface Sand Filter	Fail[2]	XB1965374	6/30/2027	In Design and Permitting Process
150312	Dry Extended Detention Pond	Pass		9/30/2028	Per Latest Inspection, BMP is Functioning as Designed
150555	Infiltration Trench	Fail		6/30/2028	
150556	Infiltration Basin	Fail		6/30/2030	BMP Added to List in FY25
150623	Infiltration Trench	Fail		6/30/2028	
150705	Infiltration Trench	Fail		6/30/2028	
160008	Infiltration Trench	Fail		6/30/2028	
160025	Infiltration Trench	Fail		6/30/2028	
160053	Wet Pond	Fail		6/30/2028	
160060	Infiltration Basin	Fail		6/30/2028	
160126	Infiltration Trench	Fail		6/30/2028	
160127	Wet Extended Detention Pond	Fail		6/30/2028	
160131	Infiltration Trench	Fail[2]	XB1965374	6/30/2027	In Design and Permitting Process
160173	Infiltration Trench	Fail		6/30/2028	
160176	Dry Extended Detention Pond	Fail		6/30/2028	
160181	Infiltration Trench	Fail		6/30/2028	
160187	Wet Swale	Fail		6/30/2028	Redesign and Permitting Required[1]
160197	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
160203	Shallow Marsh	Fail		6/30/2028	
160211	Infiltration Trench	Fail		6/30/2028	
160218	Dry Pond	Fail		6/30/2028	
160224	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
160232	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
160301	Dry Pond	Fail		6/30/2028	

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
160305	Wet Pond	Fail[2]		6/30/2027	BMP Planned for Future Retrofit Contract
160326	Rain Garden	Fail		6/30/2030	BMP Added to List in FY25
160378	Dry Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
160402	Infiltration Trench	Fail		6/30/2028	
160408	Infiltration Trench	Fail		6/30/2028	Redesign and Permitting Required[1]
160456	Wet Pond	Fail		6/30/2028	
160477	Infiltration Basin	Fail		6/30/2028	
160505	Wet Pond	Fail		6/30/2028	Redesign and Permitting Required[1]
160552	Infiltration Trench	Fail		6/30/2028	
160601	Surface Sand Filter	Fail		6/30/2028	
160662	Wet Pond	Fail		6/30/2028	
160747	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
160748	Infiltration Basin	Fail		6/30/2028	
160806	Wet Pond	Fail		6/30/2028	
160867	Bio-Swale	Fail		6/30/2028	
170048	Grass Swale	Fail		6/30/2028	
170056	Infiltration Trench	Fail		6/30/2028	
170061	Grass Swale	Fail		6/30/2028	
170090	Infiltration Trench	Fail		6/30/2028	
170096	Infiltration Basin	Fail		6/30/2028	
170208	Bio-Swale	Fail		6/30/2028	
180007	Infiltration Trench	Fail		6/30/2028	
180076	Dry Pond	Fail		6/30/2028	
180170	Infiltration Basin	Fail		6/30/2028	
180172	Infiltration Basin	Fail		6/30/2028	
210003	Dry Swale	Fail		6/30/2028	Redesign and Permitting Required[1]
210009	Infiltration Basin	Fail		6/30/2028	Redesign and Permitting Required[1]
210938	Bio-Swale	Fail		6/30/2028	
220162	Infiltration Trench	Fail		6/30/2028	
220163	Infiltration Trench	Fail		6/30/2028	
220164	Infiltration Trench	Fail		6/30/2028	
220166	Infiltration Trench	Fail		6/30/2028	
220167	Infiltration Trench	Fail		6/30/2028	
220174	Infiltration Trench	Fail		6/30/2028	
220182	Infiltration Trench	Fail		6/30/2028	

Table IV.D.1.d: SHA SWM Facilities for Rehabilitation Work Orders

SWM Facility Number	Facility Type	MDE Pass / Fail	Contract	Completion Commitment Date	Rehabilitation Comments
220183	Infiltration Trench	Fail		6/30/2028	
220184	Infiltration Trench	Fail		6/30/2028	

[1] Refers to sites that were either in design or had a design completed and now need full redesign and permitting due to the original work order exceeding stable shelf life. Issues such as erosion at a site may have increased in size and much of the design will need to be revised to account for these field changes. These designs will also need updates for compliance with the NPDES 20-CP-A permit and reevaluations for wetland, waterway, and tree impacts.
[2] Refers to sites that have been flagged as maintenance enforcement in prior Annual Reports. Status updates are provided in the General Comments column.

The SHA acknowledges the incomplete SWM facility inspections in FY25. The following work plan outlines how SHA proposes to reestablish compliance with the required triennial inspections. As shown, SHA is planning to have completed the FY25 outstanding inspections by January 2026. Follow up reporting will be provided to MDE in January 2026 that demonstrates all outstanding inspections are complete and SHA is on track for inspection compliance for the FY26 period.

Inspections	Carryover	Due	Planned	Completed	Deficit
FY25	0	1,469	1,469	963	506
FY26	438	2,502	2,502	73 (as of 9/30/25)	None anticipated
FY27	0	2,331	2,331	0	None anticipated

Appendix C: Illicit Discharge Detection and Elimination Program Summaries

Table IV.D.3.a below summarizes primary field screening efforts for the FY25 reporting period. In the MS4 Geodatabase – Part 1 submitted with this FY25 MS4 Annual Report, SHA has provided the applicable IDDE program information in the *IDDE Screening* table.

Table IV.D.3.a: Primary Field Screening Summary

County	Number of Outfalls Field Screened FY25
Anne Arundel	1
Montgomery	95
Prince Georges	77
Talbot (Town of Easton)	1
Totals	174

The SHA screens stormwater drainage infrastructure types other than structures that qualify as 'major' outfalls for illicit discharges (IDs) if said structures have been identified by the IDDE program as having a high potential to contribute pollutants to the SHA MS4. For screenings performed at these other structure types, corresponding records were added to the Outfall feature class of the MS4 Geodatabase – Part 1.

Table IV.D.3.b below summarizes information from the most recent quarterly facility inspection performed at each of the NPDES 20-SW permitted industrial sites within the SHA MS4 Permit area. Included in the summary is a description of each issue identified during those inspections and the associated resolutions made by SHA during the FY25 reporting period.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
Cambridge	4th QTR 2025	4/08/2025	0	N/A	N/A	N/A	N/A
Salisbury	4th QTR 2025	4/18/2025	3	Yes	Stormwater/Material Storage- Stormwater Management Facilities Need Repair/ Maintenance - On the south side of the facility, the stormwater inlet grate has structural issues and is beginning to collapse. This stormwater issue was brought to the attention of the Resident Maintenance Engineer for correction.	No	Correction coordination of this incident and resulting compliance issue is being managed by District 1 & site management. This issue was reported to MDE's Industrial Stormwater Compliance Program on April 19, 2024. As of the FY24 MS4 Annual Report, the shop had received approval from the Office of Environmental Design to move forward with the project and put the project out for bid with contractors. Due to routine field operation deadlines/ employee mandatory equipment trainings, they were attempting to complete with a contractor, however, the shop's budget would not allow this work to be completed in FY25. The shop has begun work with its own SHA forces and anticipates completing the repairs by September 30, 2025.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
	4th QTR 2025	4/18/2025		Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained - Excessive garbage/floatable debris is located along the fence line behind the dumpsters/scrap tire area. The shop was asked to clean it up immediately to meet the requirements of the 20-SW permit.	Yes	The garbage and floatable debris were cleaned up.
	4th QTR 2025	4/18/2025		Yes	Stormwater/Material Storage- Erosion and Sediment Controls Not Adequate - The area behind the solar salt building and trailer is not draining properly. This area needs to be reconstructed with rip-rap stone to resume proper drainage.	No	Correction coordination of this incident and resulting compliance issue is being managed by District 1 & site management. This issue was reported to MDE's Industrial Stormwater Compliance Program on April 19, 2024. During FY25, the shop received approval from the Office of Environmental Design to move forward with the project and put the project out for bid with contractors. Due to routine field operation deadlines/ employee mandatory equipment trainings, they were attempting to complete with a contractor, however, the shop's budget would not allow this work to be completed in FY25. The shop has begun work with its own SHA forces and anticipates completing the repairs no later than September 30, 2025.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
Elkton	4th QTR 2025	4/16/2025	1	Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained - Due to recent heavy winds, there is excessive garbage on the ground and along the fence line in the back yard near the dumpsters/Quarterly Visual Monitoring location 3. This garbage can easily make its way into the stream due to open areas underneath the fence line. The shop was asked to clean it up immediately to meet the requirements of the 20-SW permit.	Yes	The shop cleaned up the garbage and floatable debris.
Fairland	4th QTR 2025	4/2/2025	3	Yes	Stormwater/Material Storage - Materials Not Stored Under Cover/Contained - Two jugs of oil are stored outside on a wooden pallet in front of the team leader bay. The shop was asked to move the jugs indoors on a spill pallet or in a flammable storage cabinet.	Yes	The jugs are now being stored indoors.
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage- Storage Pile Management Problems – There is sediment accumulating near the Quarterly Visual Monitoring location #2 storm drain. ECD spoke with staff onsite about clearing the area to prevent sediment from entering the stormwater system.	Yes	The accumulated sediment was removed from the area.
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained – A trashcan was blown over by the wind with garbage along the fence line in the area near Quarterly Visual Monitoring location #2. ECD spoke with staff onsite about cleaning up the garbage.	Yes	All trash and floatable debris have been cleaned up from the area and disposed of.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
Gaithersburg	4th QTR 2025	4/21/2025	0	N/A	N/A	N/A	N/A
Laurel	4th QTR 2025	4/15/2025	1	Yes	Stormwater/Material Storage- Storage Pile Management Problems - Soil and spill control are on the ground at and around the fuel island.	Yes	The soil and spill control were cleaned up.
Upper Marlboro	4th QTR 2025	4/2/2025	6	Yes	Stormwater/Material Storage- SWPPP Not Available - Stormwater/Material Storage- SWPPP Not Available – The photos from the calendar year 4th quarter quarterly visual monitoring are not printed and maintained with the environmental records.	Yes	The photos are printed.
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage - Materials Not Stored Under Cover/Contained - Cold patch stored in the lot are not covered from stormwater exposure.	Yes	The cold patch is tarped.
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage- Fueling Area Not Properly Maintained to Prevent Stormwater Pollution - The fueling area is not properly maintained to prevent stormwater pollution. Liquid is in both the gasoline and diesel spill buckets.	No	The shop has been notified to remove the liquid from the spill buckets.
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained - Trash is located on the hill behind the shop and in the back yard.	No	The shop has been notified to clean up the trash.
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage- Erosion and Sediment Controls Not Adequate - Erosion noted along fence line at the dip going up toward shop dumpsters	Yes	The shop repaired the erosion by filling the eroded area with large rock.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
	4th QTR 2025	4/2/2025		Yes	Stormwater/Material Storage- Stormwater Management Facilities Not Properly Maintained - Stormwater structure 160748 is failing and rated as a "D" by Highway Hydraulics Division (HHD) during CY 2020. Because the structure is not draining as designed, 20-SW quarterly visual monitoring sampling location #2 was slightly shifted to capture sheet flow drainage from the structure during qualifying rain/snow events. Stormwater structure 160747 is failing and rated as a "D" by HHD during the 2023 triannual inspection. This structure is an infiltrating basin. The HHD 2023 inspection notes indicate that there is evidence of significant long-term ponding.	No	The failing structure was reported to MDE's Industrial Stormwater Compliance Program on July 8, 2024, to notify MDE of the intent to exceed 45 days to repair stormwater controls as required by 20-SW. ECD also met with HHD in 3rd QTR FY24 and 4th QTR FY24 to ensure that the identified failing structural BMP is added to the queue for upcoming repair. HHD has identified a completion commitment date of June 30, 2028 to repair the structures.
Golden Ring	4th QTR 2025	4/17/2025	0	N/A	N/A	N/A	N/A
Hereford	4th QTR 2025	4/3/2025	3	Yes	Stormwater/Material Storage - Materials Not Stored Under Cover/Contained - Cold patch buckets are sitting outside the shop door.	Yes	The cold patch buckets were placed indoors.
		4/3/2025		Yes	Stormwater/Material Storage- Storage Pile Management Problems – Sand is located outside of the storage bins.	Yes	The shop swept up the sand and pushed it into the sand bin.
		4/3/2025		Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained - Trash is located along hillside in the contractor staging area.	Yes	The trash has been cleaned up.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
Owings Mills	4th QTR 2025	4/7/2025	0	N/A	N/A	N/A	N/A
Churchville	4th QTR 2025	4/30/2025	3	Yes	Stormwater/Material Storage - Materials Not Stored Under Cover/Contained – A cold patch bucket is stored outside the team leader bays.	Yes	The cold patch bucket was placed under cover.
	4th QTR 2025	4/30/2025		Yes	Stormwater/Material Storage- Fueling Area Not Properly Maintained to Prevent Stormwater Pollution - The fueling area is not properly maintained to prevent stormwater pollution. Liquid is in the diesel spill bucket.	Yes	The liquid was removed from the diesel spill bucket.
	4th QTR 2025	4/30/2025		Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained – There is trash around the stormwater pond.	Yes	The shop picked up the trash.
Annapolis	4th QTR 2025	4/10/2025	2	Yes	Stormwater/Material Storage- Salt Storage Not Appropriate - Salt is located outside the salt barn.	Yes	The salt was pushed into the salt barn.
	3rd QTR 2025	1/30/2025		Yes	Stormwater/Material Storage- Storage Pile Management Problems – The sand storage pile is uncovered.	No	The shop was asked to cover the sand pile.
Glen Burnie	4th QTR 2025	4/24/2025	6	Yes	Stormwater/Material Storage- Salt Storage Not Appropriate – there is a small pile of salt stored on the lot near a swale.	Yes	The salt has been removed.
	4th QTR 2025	4/24/2025		Yes	Stormwater/Material Storage- Fueling Area Not Properly Maintained to Prevent Stormwater Pollution - The fueling area is not properly maintained to prevent stormwater pollution. Liquid is in the diesel spill bucket.	Yes	The liquid was removed from the spill bucket.

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
	4th QTR 2025	4/24/2025		Yes	Stormwater/Material Storage- Brine Tank and/or Maker Problems - A brine tank hose appears to be leaking brine.	Yes	The brine tank hose is no longer leaking.
	4th QTR 2025	4/24/2025		Yes	Stormwater/Material Storage- Stormwater Management Facilities Not Properly Maintained - Soil has accumulated in a swale and needs to be removed for proper function.	No	The shop plans to remove the soil from the swale by August 15, 2025.
	4th QTR 2025	4/24/2025		Yes	Stormwater/Material Storage - Materials Not Stored Under Cover/Contained - Paint cans are stored outside behind concrete drainpipes in lower yard.	Yes	The shop was asked to move the paint cans to a location under cover.
	4th QTR 2025	4/24/2025		Yes	Stormwater/Material Storage- Floatable Debris Not Properly Contained – There is trash on the ground around the dumpsters and in the lower yard.	No	The shop will remove the trash by August 15, 2025.
Hanover	4th QTR 2025	4/08/2025	1	Yes	Stormwater/Material Storage- Quarterly Visual Monitoring was not completed for the 3rd quarter of FY25.	Yes	The shop was retrained on the requirement to complete quarterly visual monitoring.
LaPlata	4th QTR 2025	4/08/2025	0	N/A	N/A	N/A	N/A
Hagerstown	4th QTR 2025	4/2/2025	1	Yes	Stormwater/Material Storage- Management Control Problems - sand and salt piles not completely covered	Yes	The pile was tarped.
Frederick	4th QTR 2025	4/16/2025	1	N/A	Stormwater/Material Storage- Salt Storage Not Appropriate – A protective barrier is needed at the salt barn entrance.	Yes	Straw bales were placed at the entrance to the salt barn.
Thurmont	4th QTR 2025	1/9/2025	0	N/A	N/A	N/A	N/A

Table IV.D.3.b: Summary of the Most Recent Quarterly Inspection for NPDES 20-SW Permitted Facilities

Facility Name	Quarter Number and Fiscal Year for Last Inspection	Date of Last Quarterly Inspection	Number of Issues Identified During QTR	Uploaded to Web-based Tracking (Yes or No)	Issue Details	Resolved? (Yes or No)	Comments
Dayton	4th QTR 2025	4/09/2025	0	N/A	N/A	N/A	N/A
Westminster	4th QTR 2025	4/7/2025	1	Yes	Stormwater/Material Storage- Salt Storage Not Appropriate - Salt has migrated to the edge of the salt barn entrance. A protective barrier is needed at the barn entrance.	Yes	Straw bales were placed at the entrance of the salt barn after the inspection.

Table IV.D.3.d below summarizes the illicit discharge (ID) cases that required follow-up investigations during the FY24 and FY25 periods. The SHA performs a follow-up investigation only if dry weather flow is observed during the primary field screening and a subsequent follow-up testing confirms that one or more pollutant parameters were exceeded during both testing events. In FY25, one ID case (see "2 – From FY24" in the table below) was revisited to confirm that the source of the ID was still disconnected, and follow up actions were taken for two sites (see "1 – FY25" and "2 – FY25" in the table below) where a pollutant parameter did not exceed the allowable limits but an obvious dry weather flow occurred that required attention.

Table IV.D.3.d: Illicit Discharges Requiring Further Investigation During Reporting Period

Case No.	County	SHA Structure or BMP#	Date of ID	Potential Pollutant	Status
2 – From FY24	Anne Arundel	0200273.001	3/26/2024	Detergent	Investigation initiated 3/26/2024. Anne Arundel County issued a Correction Notice to cease operations. The SHA confirmed on 4/21/2025 that corrective action was taken. This case is considered closed.
1 – FY25	Prince George's	1602882.001	3/20/2025	Water Main Break	Investigation initiated 3/20/2025. Water Main break fixed. This case is considered closed. The narrative provided below includes investigation procedure and outcomes.
2 – FY25	Talbot (Town of Easton)	2000016.386	4/8/2025	White Fluid Discharge	Investigation initiated 4/9/2025. Town of Easton has educated source entity. This case is considered closed. The narrative provided below includes investigation procedure and outcomes.

No additional IDs were reported by citizens or investigated by SHA during the FY25 reporting period. The following updates summarize the jurisdiction contacts, action items, and resolution schedule for the ID cases listed in Table IV.D.3.d. Updates below are numbered in alignment with entries in the "Case No." column of **Table IV.D.3.d** above.

2 – From FY24. On February 25, 2024, the IDDE team was made aware of a potential ID from another SHA project. It was observed that dry weather flow was discharging from structure #0200273.001 into a tributary of Picture Spring Branch located on westbound Annapolis Road (MD 175) between 1200 Annapolis Road and 1144 Annapolis Road in Odenton, Maryland. Upon field inspection and screening performed March 26, 2024, it was found that detergents were 1.36 mg/L which exceeds the established limit of < 0.50 mg/L. The sampling results did not indicate pH, phenols, copper, or chlorine were outside the allowable limits. Flow was traced to an upstream storm drain structure (0200273.011) and it was identified that upstream structures contained standing water. The field team suspected that an

adjacent car wash is the source of the flow. Although flow was not identified during the inspection due to inactivity at the car wash, there is a trench drain at the back of the car wash that ties into the Anne Arundel storm drain system that ties into SHA right-of-way. It was suspected that the high detergent concentration was a result of car wash discharge. On March 27, 2024, SHA notified Anne Arundel County Department of Inspections and Permits of the potential ID source. On March 28, 2024, Anne Arundel County notified SHA that the County will send a Correction Notice to the car wash to cease operations until the containment/reclaim system is serviced and will inform the business to make sure customers' vehicles are centered over the self-serve bays to limit sheet flow. Anne Arundel County Inspections and Permits office performed a follow-up inspection on May 20, 2024, and noted that the car wash had cleaned all underground washwater storage tanks and the reclamation system had been serviced. All systems were observed to be working functionally.

To confirm that the ID from the car wash was still not occurring, SHA performed a field screening on April 21, 2025. The results of the April 21, 2025 field screening indicated dry weather flow, but flow is not sourced from the car wash. Sampling parameters were within the allowable limits, although pH was slightly high (8.6). It is assumed that the source of dry weather flow is ground water infiltration from the large drainage area to the outfall. Given that sampling parameters were within allowable limits and dry weather flow is not sourced from the car wash, SHA considers this case closed.

1 - FY25. During FY25 primary screenings on March 20, 2025, structure #1602882.001; located behind the U-Haul facility located on MD 414, at 3710 Saint Barnabas Rd, Suitland, Maryland; had "more than normal" dry weather flow. The flow was screened, and sampling parameters were within the allowable limits. The source of the flow was traced to an upstream water main break in the DC Regional Christian Church parking lot at 3701 Saint Barnabas Rd, Suitland, Maryland. The flow appeared to be an ongoing issue as there was algae buildup on the pavement with cones and caution tape around the area. Flow appeared to bubble up from the ground indicating a possible underground water pipe break. A follow up investigation of the source of flow was performed by SHA on March 27, 2025 to confirm the water main break. The SHA submitted a notification to the Washington Suburban Sanitary Commission (WSSC Water) via WSSC's mobile application and an email to WSSC's Emergency Call Center on 3/28/2025 indicating the leak. SHA visited the site on June 13, 2025 and confirmed that the water main break had been repaired and the outfall did not have dry weather flow. The case is considered closed.

2 – FY25. On April 8, 2025, the IDDE team received information from SHA's District 2 Maintenance Shop (Easton) about a potential ID at structure #2000016.386; located in Talbot County, Town of Easton, at the southeast intersection of MD 322 and MD 333. Maintenance crews identified a milky white discharge from the outfall.

The SHA performed a follow up investigation and screening of the outfall on April 9, 2025. Dry weather flow was not present during the April 9, 2025 investigation but based on tracing for a potential source that caused the previous day's dry weather flow, indicators of potential sources were identified. Potential sources were a sewer manhole overflow assumed to be caused from the YMCA (202 Peachblossom Road, Easton, Maryland) pool draining and/or the YMCA contractors washing out paint brushes. The SHA reported the potential sources to the Town of Easton on April 15, 2025. The Town of Easton informed SHA that they have contacted the YMCA to discuss and educate regarding the illicit discharge. The SHA visited the site on April 18, 2025 and identified no dry weather flow. The case is considered closed.

The SHA IDDE program was implemented in compliance with associated permit conditions in Part IV.D.3 of the MS4 Permit throughout FY24 so modifications were not required during the FY25 reporting period.

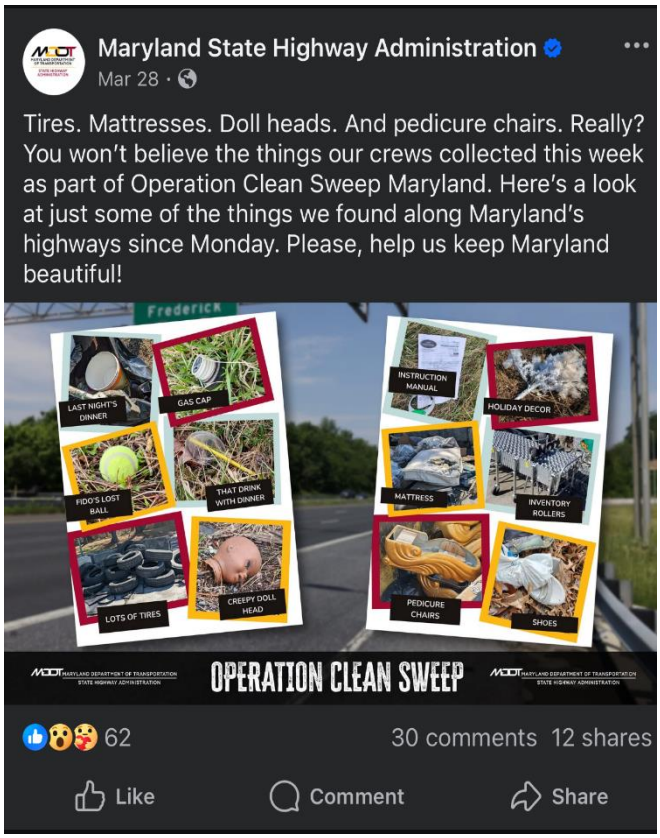
Appendix D: Public Education and Outreach Program Report

In accordance with Part V.A.1.d of the MS4 Permit, SHA prepared the following summary describing its public education programs implemented during the FY25 reporting period in accordance with conditions in Parts IV.D.4 and IV.D.6 of the MS4 Permit.

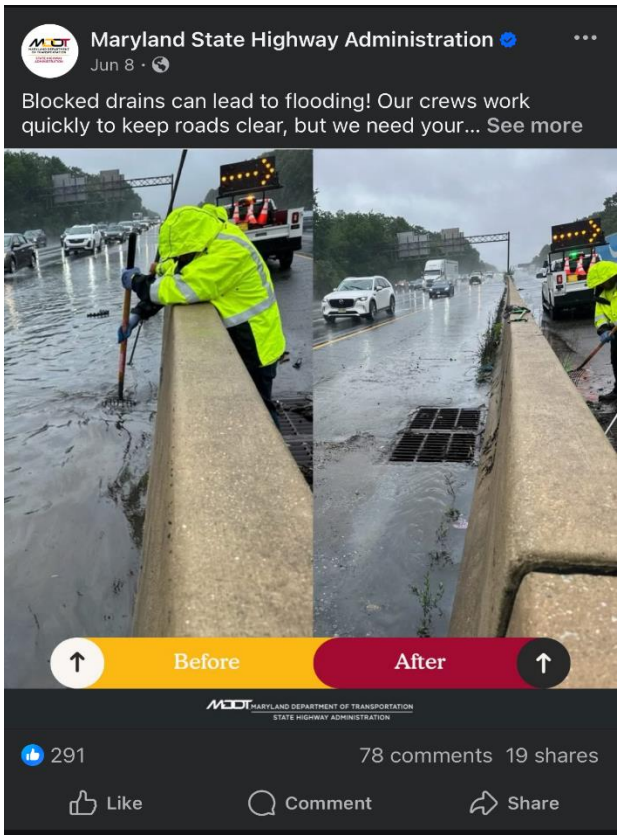
Social Media

The SHA leveraged social media platforms Facebook, Twitter, LinkedIn, and Instagram in FY25 to promote and encourage participation in SHA's various environmental initiatives. Posts included, but were not limited to, information about SHA's litter clean-ups, flood awareness, and stormwater management efforts. Examples of SHA FY25 social media posts are provided below.

Posted on Facebook, April 22, 2025 — Earth Month outreach



Posted on Facebook, March 28, 2025 - Operation Clean Sweep



Posted on Facebook, June 8, 2025 – Flood awareness outreach

Keep Maryland Beautiful Grant Program

Maryland Environmental Trust (MET) awarded twenty *Keep Maryland Beautiful* (KMB) grants in 2025 to support environmental education, community cleanup, and beautification projects throughout Maryland. Four different grants were offered to help volunteer and nonprofit groups, communities, and land trusts to support their capacity building and environmental education, litter removal, citizen stewardship, and natural resource management projects in urban and rural areas. Funding for the KMB grants program is provided by MET in partnership with the Maryland Department of Transportation (MDOT), MDA, and CBT. In FY25, $238,751 in KMB grants were awarded statewide. More information regarding KMB grants and the FY25 projects can be found online at the following web addresses:

https://news.maryland.gov/dnr/2025/03/20/keep-maryland-beautiful-grants-award-238751-for-conservation-efforts-for-2025/

Adopt a Highway Interactive Map

Since the AAH Program started in 1989, SHA has partnered with more than 150 volunteer groups to help remove litter along over 200 miles of SHA's roadway. In FY25, SHA enhanced the program with a new website and interactive map to make participation more convenient for community members. The interactive map allows volunteers to track and report their cleanups, upload before-and-after photos, and view publicly available statistics on adoption activity. A

new paperless system was also implemented to streamline the adoption process and improve program administration. These updates are intended to increase accessibility and encourage long-term volunteer engagement. Additional information can be found at the following web address:

https://mdot-sha-highway-programs-maryland.hub.arcgis.com/pages/adopt-a-highway

Educational Resources, Pollution Control

In addition to implementing large scale projects to capture pollutants from roadways and impervious areas, SHA provides resources to members of the transportation community interested in reducing pollutants. These resources include information on proper erosion and sediment control, proper disposal of vehicle fluids, storm drain stenciling, and more. Additional information can be found at the following web address:

https://roads.maryland.gov/mdotsha/pages/index.aspx?PageId=48

Bike to Work Day/Week

The SHA conducted 'Bike to Work Week' from May 12 through May 18, 2025 with May 16, 2025 designated as 'Bike to Work Day.' This program seeks to promote bicycling as a healthy commuting option and to improve public awareness of associated safety and environmental benefits. Pit stops along the designated bicycle paths, including one outside SHA Headquarters in Baltimore City, offered refreshments and water bottles. Participants were able to sign up to receive notifications for Bike to Work Week and to receive updates on future active transportation opportunities in the Baltimore Region. Additional information can be found at https://biketoworkmd.com/.

MDOT pit stop on Bike to Work Day. Available: https://biketoworkmd.com/node/371

National Pollinator Month

Pollinator habitat efforts across the nation were highlighted during National Pollinator Week that ran June 16-22, 2025. In December 2024, SHA received a federal grant of $150,000 to improve

pollinator habitat, allowing for approximately 8 acres of pollinator habitat to be installed. The SHA built demonstration gardens that attract pollinators and serve to educate SHA staff, stakeholders, and customers about the importance of beneficial insects and birds. The gardens also include educational signage that indicate pollinator habitat, as shown in the photo below. These demonstration gardens were installed at the SHA Hanover Complex and District Offices located in Anne Arundel, Baltimore, Frederick, and Prince George's counties.

Signage indicating pollinator habitat.

The SHA maintains a public education webpage for its pollinator habitat program/plan that includes educational videos, among other resources, for anyone interested in learning more about the program/plan and how they can help. This information can be found at the following web address:

https://roads.maryland.gov/mdotsha/pages/index.aspx?PageId=344

Training and Educational Activities

The SHA organized trainings and presented at conferences on topics related to stormwater pollution during FY25. The following is a list of some of the trainings and conferences with corresponding descriptions and dates:

- Outfall Assessment Application Training. On November 12-13, 2024, SHA collaborated to train consultant partners to perform outfall assessments utilizing an updated FieldMaps application and discussed standard operating procedures, best practices, and workflows for data collection.

- Outfall Assessment QC Training. On November 25, 2024, SHA collaborated to train consultant partners to perform QC of outfall assessments utilizing an updated FieldMaps application.

- ACEC/MW 2025 Chesapeake Bay TMDL Symposium. On April 3, 2025, SHA presented to attending engineering consultants and various MS4 partners. Topics included restoration progress, approaches to addressing new MS4 permit conditions, and upcoming projects.

- SWM Facility Assessment Application Training. On February 13, 2025, SHA trained internal staff members to perform SWM facility assessments and discussed standard operating procedures, best practices, and workflows for data collection.

- Outfall Assessment Application Training. On April 25, 2025, SHA trained internal staff members to perform outfall assessments utilizing an updated FieldMaps application and discussed standard operating procedures, best practices, and workflows for data collection.

- ACEC/MD Environmental Spring Forum. On May 22, 2025, SHA presented its priorities and challenges in delivering environmental programs to attending engineering consultants and State employees. The SHA presentation was titled *Resilient Infrastructure, Reliable Future: Resilience and Readiness at SHA.*

Community Outreach

During FY25, SHA launched numerous projects to support its mission/goals such as enhancing safety and accessibility for motorists, pedestrians, and bicyclists and delivering stormwater management facility and drainage improvements. To inform the public and engage stakeholders during project planning and construction, SHA reached out to individual communities to communicate details of the upcoming work in their areas and to solicit their feedback. Attached to this Appendix D are two examples of the project information community outreach fliers SHA distributed in FY25.

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 222 Port Deposit Urban Reconstruction Project

New Design to be Presented at Public Open House on October 16

The Maryland State Highway Administration (SHA) invites you to attend a public open house for the MD 222 Port Deposit Urban Reconstruction Project in Cecil County. The project extends along MD 222 (Main Street) from 2,500 feet south of High Street to Mill Street. The project design is currently 30% complete. The project team is seeking public input as the design continues toward the 65% design milestone.

Project Overview

The purpose of the project is to improve drainage, pedestrian connectivity and accessibility and provide a state of good repair.

The scope of the project includes:

- installation of new storm drain structures and replacement of the existing storm drain facilities;
- installation of new sidewalks, upgrades to existing sidewalks to meet Americans with Disabilities Act (ADA) requirements and replacement of existing granite sidewalks with a similar material;
- installation of curb and gutter as needed for drainage;
- improvements to the roadway grade to minimize water ponding;
- resurfacing pavement;
- installation of new stormwater management facilities; and
- adjustlng driveway entrances to direct rain discharge away from private properties to meet current SHA and Federal guidelines.

For More Information

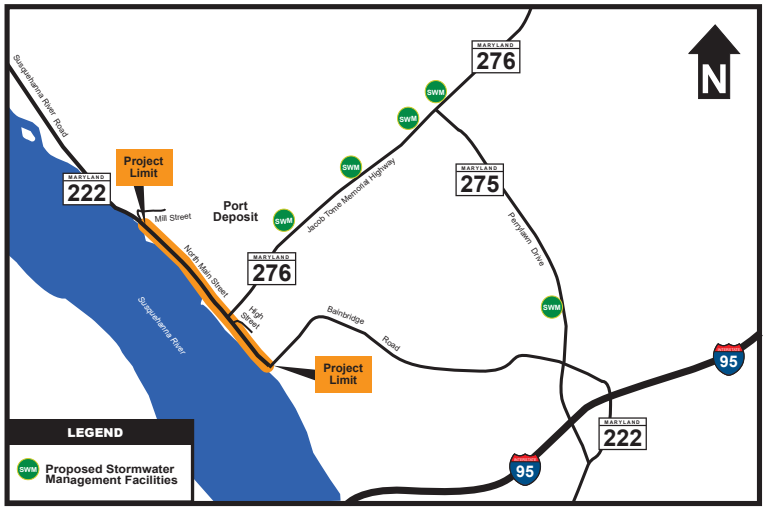
Marta Kebede, P.E., Project Manager
Maryland Department of Transportation
State Highway Administration, Office of Highway Development
707 North Calvert St., Baltimore, MD 21202
Phone: 410-545-8523 **Email:** mkebede@mdot.maryland.gov

Holly Pearl, Community Relations Manager
Phone: 443-202-0934 **Email:** Hpearl@mdot.maryland.gov

You are Invited to Attend

The State Highway Administration will hold a public open house Wednesday, October 16, 2024, 5 - 7 p.m. at the Cultural and Wellness Center, 100 N. Main St., Port Deposit.

The open house will provide attendees with an opportunity to view design details. Maps and displays will highlight the proposed improvements, and State Highway Administration representatives will be available to listen to your feedback and answer project-related questions. This information may be used to improve and advance project development. There will be no formal presentation. You may arrive at any time during the open house hours and walk through the display area at your own pace.



Find Us on the Web

For additional information about the MD 222 Port Deposit Urban Reconstruction Project, please visit the Project Portal page at **https://bit.ly/MDOTSHA-MD222-from-High-St-to-Mill-St**
You may also use the QR code on the right.

Scan Here!

@MDOTSHA MarylandStateHighwayAdmin
@MDSHA MDStateHighwayAdmin

Scan Here!

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 222 Port Deposit Urban Reconstruction Project

ATTEND THE PUBLIC OPEN HOUSE

WEDNESDAY, OCTOBER 16
5 - 7 p.m.

Cultural and Wellness Center
100 N. Main St., Port Deposit

Request for Assistance

The Maryland Relay Service can assist teletype users at 7-1-1. Persons requiring translation assistance should send an email to: SHATitleVI@mdot.maryland.gov. Please indicate the desired language in the subject line.

Maryland Relay
Dial 7-1-1

Chinese:

需要翻译协助的人员请发送电子邮件至:
shatitleVI@mdot.maryland.gov 请在主题行中注明所需翻译语言。

French:

Les personnes ayant besoin d'une assistance à la traduction doivent envoyer un courriel à: shatitleVI@mdot.maryland.gov. Veuillez indiquer la langue souhaitée dans la ligne d'objet.

Korean:

통역 서비스 요청은 shatitleVI@mdot.maryland.gov 로 이메일을 보내주십시오. 제목에 도움이 필요한 언어를 명시해주십시오.

Spanish:

Las personas que requieran asistencia de traducción deben enviar un correo electrónico a: shatitleVI@mdot.maryland.gov. Indique el idioma de preferencia en el asunto.

Office of Highway Development
707 North Calvert St.
Baltimore, MD 21202

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 77 Bridge Replacement Project

State Highway Administration to Build a New Bridge on MD 77 Public Open House planned for January 21, 2025

The Maryland Department of Transportation State Highway Administration invites you to attend a public open house to present information about a project to replace the bridge carrying MD 77 (Rocky Ridge Road) over Beaver Branch and under the Maryland Midland Railway in Rocky Ridge, Frederick County. The bridge was constructed in 1928 and is safe, but is nearing the end of its useful service life. Work will include replacing the bridge over Beaver Branch with a wider bridge and making drainage improvements.

How will traffic be impacted?

To expedite the construction, the State Highway Administration will close MD 77 and a detour will be in place for approximately eight months. Given the existing bridge's narrow width and the confined work area, closing MD 77 will maximize safe work zone conditions and ensure efficient construction time. The detour route will direct eastbound and westbound motorists to use MD 76 (Motters Station Road), Appolds Road and Old Frederick Road. Trucks will be directed to MD 77, MD 550 (Woodsboro Creagerstown Road) and MD 194 (Woodsboro Pike).

When will the work be performed?

Construction is scheduled to begin in spring 2025 and be completed by summer 2026. The State Highway Administration will make every effort to complete this project as quickly as possible while minimizing impacts to residents, businesses and motorists.

You are Invited to Attend

The State Highway Administration will hold a public open house 5 - 7 p.m. Tuesday, January 21, 2025, in the Activities Building of Rocky Ridge Volunteer Fire Company, 13516 Motters Station Road, Rocky Ridge. The public open house will provide attendees an opportunity to view design details. Maps and displays will highlight the proposed improvements. State Highway Administration representatives will be available to listen to your feedback and answer project-related questions. This feedback may be used to improve and advance project development. There will be no formal presentation. You may arrive at any time during the open house hours and walk through the display area at your own pace.

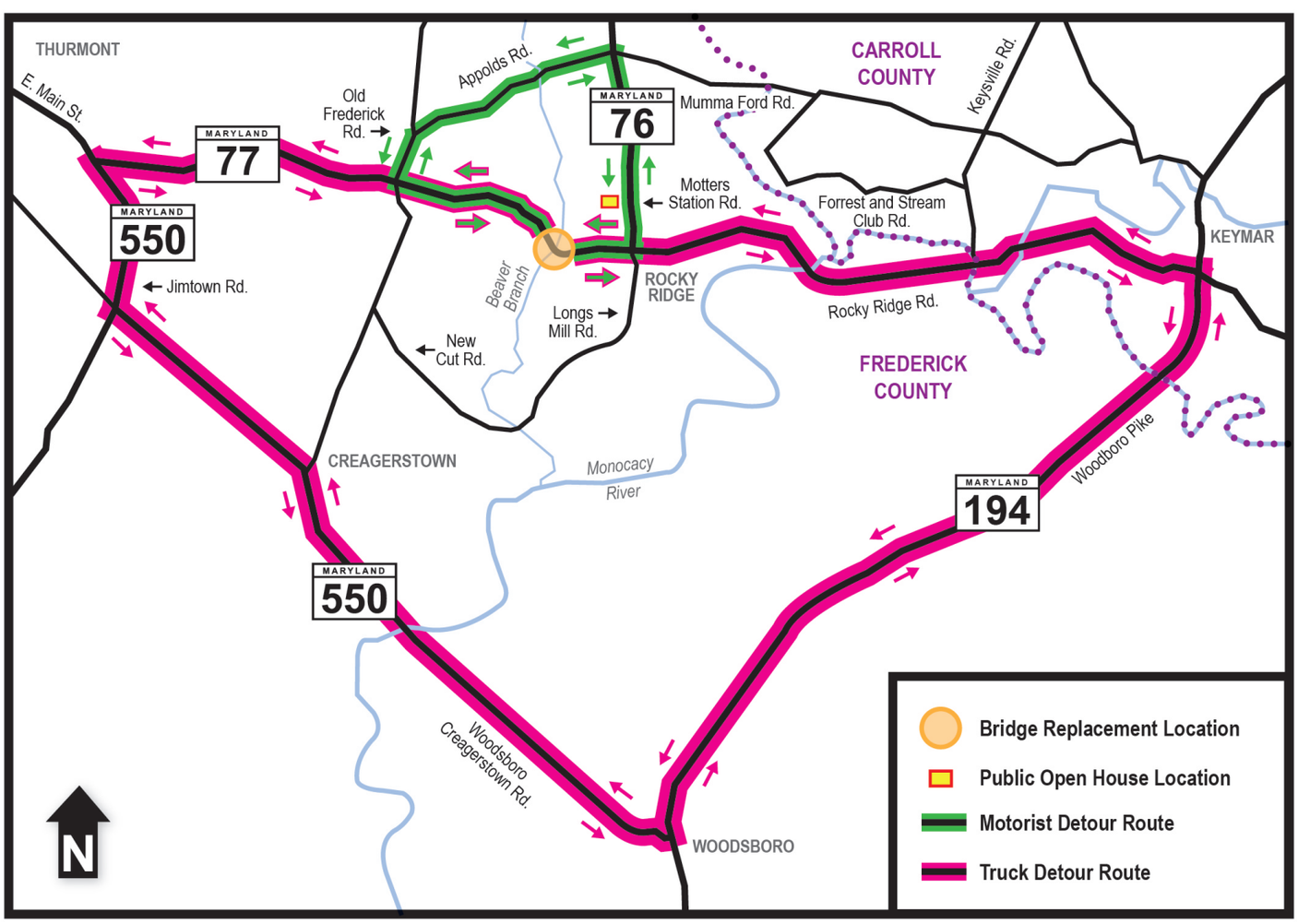
For More Information

For questions about the MD 77 Bridge Replacement Project, please contact:

Christopher Arendt, Project Manager
Maryland Department of Transportation
State Highway Administration, Office of Structures
707 N. Calvert St., Baltimore, MD 21202
Phone: 410-545-8337 Toll-Free: 1-888-375-1084
Email: carendt@mdot.maryland.gov

For questions about this project or other projects in the area, please contact:

Elizabeth Harris, Community Relations Manager
Maryland Department of Transportation
State Highway Administration
District 7 Office, 5111 Buckeystown Pike, Frederick, MD 21704
Phone: 301-624-8157 Toll-Free: 1-800-635-5119
Email: eharris8@mdot.maryland.gov



MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 77 Bridge Replacement Project

Attend The Public Open House!

WHEN

Tuesday, January 21, 2025
5 - 7 p.m.

Inclement Weather Date:
Tuesday, February 4, 2025

If county public school activities are canceled or if the snow emergency plan is in effect, the public open house will be held on the inclement weather date.

WHERE

Rocky Ridge Volunteer Fire Company Activities Building

13516 Motters Station Road
Rocky Ridge, MD 21778

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF STRUCTURES
707 N. CALVERT ST.
MAIL STOP C-203
BALTIMORE, MD 21202

Request for Assistance

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Maryland Relay
Dial 7-1-1

Find Us on the Web

For additional information about the MD 77 Bridge Replacement Project, please visit the project portal at: **https://bit.ly/MDOTSHA-MD77-Bridge-Over-Beaver-Branch**

You may also use the QR code shown to the right.

Scan Here

Find Us on the Web

@MDOTSHA
@MDSHA
MarylandStateHighwayAdmin
MDStateHighwayAdmin

Scan Here

Appendix E: TMDL Assessment Report

The SHA has prepared this FY25 TMDL Assessment Report with tables in accordance with conditions in Part IV.E.5 of the MS4 Permit. **Table V.A.1.e**, **Parts 1** and **2**, are provided below in accordance with conditions in Parts IV.E.5.a, IV.E.5.b, and V.A.1.e of the MS4 Permit. These tables present adjusted pollutant load reduction targets and FY25 progress toward attainment of stormwater wasteload allocations (WLAs) for all nutrient, sediment, and trash TMDLs. Progress toward attainment of benchmarks and applicable WLAs developed under EPA approved TMDLs is also documented in the *Chesapeake Bay Progress* and *Local TMDL Progress* tables of the MS4 Geodatabase – Part 1 submitted with the FY25 MS4 Annual Report.

The SHA adaptively manages its Coordinated TMDL Implementation Plan through prompt review and incorporation of new regulatory guidance and progress modeling tools, rigorous tracking of restoration needs by watershed, and continuous investigation for new opportunities to implement effective BMPs and to collaborate with private and public sector partners. The plan is accessible online at the following web address:

https://roads.maryland.gov/mdotsha/pages/index.aspx?PageId=336

Nutrient and Sediment TMDLs

In FY25, SHA used its updated Automated Modeling Tool, approved for use by MDE in FY23, to model loads and load reductions for all nutrient and sediment TMDLs with WLA requirements. Target and progress load reduction amounts reported by SHA in this Appendix and in the MS4 Geodatabase – Part 1 comply with guidance provided by MDE in its July 30, 2021, comments that stated credit must be temporarily removed for any 'failed' BMPs until proper performance is attained and verified. Credit for 542 restoration BMPs was temporarily or permanently removed from SHA credit accounting in FY25. The SHA-modeled load reduction targets are also adjusted for BMPs built prior to the 'baseline year' established for a given 8-digit watershed TMDL that are temporarily or permanently removed from the portfolio.

The SHA is currently updating its original nutrient and sediment TMDL implementation plans following MDE's guidance documents titled *General Guidance for Local TMDL SW-WLA Watershed Implementation Plans* and *Guidance for Developing Local Nutrient and Sediment TMDL (Total Maximum Daily Load) Stormwater Wasteload Allocation (SW-WLA) Watershed Implementation Plans (WIPs)*. The Updated Coordinated TMDL Implementation Plan will provide SHA's updated TMDL strategies and will be submitted with SHA's FY26 MS4 Annual Report.

Two new restoration projects were credited within local TMDL watersheds where SHA has a WLA responsibility during FY25. One bioswale located in the Cabin John Creek local TMDL watershed was transferred to the TMDL Program, and one forest planting project was completed within the Catoctin Creek local TMDL watershed. In addition, four bioswale projects were credited in FY25 to replace previously claimed pollutant load reductions from BMPs that were impacted by new development projects. Even though new restoration projects were completed in FY25, SHA load reduction progress reported for FY25 in **Table V.A.1.e - Part 1** decreased for several TMDLs relative to progress reported in Appendix E of the FY24 MS4 Annual Report.

Table V.A.1.e - Part 1: Progress Toward Attainment of Applicable Nutrient and Sediment WLAs Developed Under EPA Approved TMDLs

Watershed Name	County	Pollutant	FY25 Progress CBP WM P6		
			SHA Reduction Target	Reduction Achieved	% Total Reduction Target Achieved
Chesapeake Bay Watershed TMDL WLAs					
Chesapeake Bay	MS4-Wide	Nitrogen	N/A[1]	34,017	N/A[1]
		Phosphorus	N/A[1]	11,752	N/A[1]
Local 8-digit Watershed TMDL WLAs					
Anacostia River – Nontidal[2]	MO, PG	Nitrogen	34,794	729	2.1%
		Phosphorus	4,454	298	6.7%
		Sediment	13,440,780	592,940	4.4%
Anacostia River – Tidal[2]	PG	Nitrogen	2,009	0	0.0%
		Phosphorus	255	0	0.0%
		Sediment	845,678	0	0.0%
Antietam Creek	WA	Phosphorus	800	91	11.4%
		Sediment	4,326,278	138,885	3.2%
Baltimore Harbor Non-Tidal	AA, BA	Sediment	2,495,387	228,999	9.2%
Baltimore Harbor Tidal[3]	AA, BA, CR, HO	Nitrogen	20,661	5,368	26.0%
Baltimore Harbor Tidal[3]	AA, BA, CR, HO	Phosphorus	2,061	1,001	48.6%
Bynum Run	HA	Sediment	301,858	56,775	18.8%
Cabin John Creek	MO	Sediment	893,995	1,897,372	212.2%
Catoctin Creek	FR	Phosphorus	198	461	233.1%
		Sediment	2,367,249	976,144	41.2%
Conococheague Creek	WA	Sediment	1,042,709	45,863	4.4%
Double Pipe Creek	CR, FR	Phosphorus	1,093	21	1.9%
		Sediment	1,438,291	20,231	1.4%
Gwynns Falls	BA	Sediment	1,752,124	38,980	2.2%
Jones Falls	BA	Sediment	1,007,220	20,275	2.0%
Liberty Reservoir	BA, CR	Phosphorus	1,287	15	1.1%
		Sediment	3,690,152	23,715	0.6%
Little Patuxent River	AA, HO	Sediment	4,288,484	3,691,047	86.1%

Table V.A.1.e - Part 1: Progress Toward Attainment of Applicable Nutrient and Sediment WLAs Developed Under EPA Approved TMDLs

Watershed Name	County	Pollutant	FY25 Progress CBP WM P6		
			SHA Reduction Target	Reduction Achieved	% Total Reduction Target Achieved
Loch Raven Reservoir	BA, CR, HA	Phosphorus	374	846	226.2%
Lower Gunpowder Falls	BA	Sediment	912,887	1,329,300	145.6%
Lower Monocacy River	CR, FR, MO	Phosphorus	1,803	1,643	91.1%
Lower Monocacy River[2]	FR, MO	Sediment	7,619,664	1,924,987	25.3%
Marsh Run	WA	Sediment	299,060	12,731	4.3%
Mattawoman Creek	CH, PG	Nitrogen	7,736	758	9.8%
		Phosphorus	1,189	159	13.3%
Non-Tidal Back River	BA	Nitrogen	2,011	336	16.7%
		Phosphorus	382	120	31.6%
		Sediment	3,164,777	256,805	8.1%
Other West Chesapeake	AA	Sediment	380,425	2,658	0.7%
Patapsco River LN Branch	AA, BA, HO	Sediment	2,803,954	1,583,006	56.5%
Patuxent River Lower	AA, CH, PG	Sediment	1,159,104	28,010	2.4%
Patuxent River Middle	AA, PG	Sediment	1,638,424	49,866	3.0%
Patuxent River Upper	AA, HO, PG	Sediment	660,965	80,266	12.1%
Piscataway Creek	PG	Sediment	1,685,725	497,982	29.5%
Port Tobacco River	CH	Sediment	614,813	5,045	0.8%
Potomac River MO County	MO	Sediment	2,115,933	18,807	0.9%
Potomac River WA County	WA	Sediment	559,457	159,760	28.6%
Prettyboy Reservoir	BA, CR	Phosphorus	37	395	1,063.6%
Rock Creek	MO	Phosphorus	418	21	5.0%
		Sediment	1,283,159	42,719	3.3%
Rocky Gorge Reservoir	HO, MO, PG	Phosphorus	100	2	1.7%
Seneca Creek	MO	Sediment	2,685,902	488,245	18.2%
South River	AA	Sediment	780,450	3,037,310	389.2%
Swan Creek	HA	Sediment	221,069	778	0.4%

Table V.A.1.e - Part 1: Progress Toward Attainment of Applicable Nutrient and Sediment WLAs Developed Under EPA Approved TMDLs

Watershed Name	County	Pollutant	FY25 Progress CBP WM P6		
			SHA Reduction Target	Reduction Achieved	% Total Reduction Target Achieved
Triadelphia Reservoir (Brighton Dam)	HO, MO	Phosphorus	105	4	3.9%
Upper Monocacy River	CR, FR	Phosphorus	67	172	256.5%
		Sediment	2,260,266	307,392	13.6%
West River	AA	Sediment	161,331	728	0.5%

Note: All reduction targets and achievements are in Edge-of-Stream (EOS) pounds per year. "% Total Reduction Target Achieved" is on a scale of 0% to 100%, where 100% indicates the TMDL reduction target was achieved and a value over 100% indicates SHA implementation is exceeding the reduction target.

1. MDE has not established a percent reduction requirement for SHA related to the Chesapeake Bay TMDL pollutants. In accordance with conditions in Part III of the MS4 Permit, SHA maintaining compliance with all conditions of the MS4 Permit constitutes adequate progress toward compliance with Maryland's receiving water quality standards and any EPA approved stormwater WLAs for the MS4 Permit term.
2. Nutrient and sediment local TMDLs for Anacostia River and the sediment local TMDL for Lower Monocacy River are at the subwatershed scale.
3. Nutrient local TMDLs for Baltimore Harbor Tidal include multiple 8-digit watersheds: Baltimore Harbor, Gwynns Falls, Jones Falls, Patapsco River Lower North Branch, and South Branch Patapsco River.

This decrease in reduction was due to the temporary and permanent removal of BMPs from the existing treatment and restoration portfolios for the applicable TMDL watersheds as described further in the 'Adaptive Management' section of this Appendix. As described above, SHA is reevaluating and revising its MDE-approved WLA progress benchmark and attainment dates due to the transition from modeling TMDL loads and load reductions using the Chesapeake Bay Program Watershed Model Phase 5.3.2 to Phase 6. Revised benchmark/attainment dates will be submitted to MDE for review and approval in the upcoming revision of the Coordinated TMDL Implementation Plan.

PCB and Bacteria TMDLs

The MDE stated in its 2022 guidance document, *General Guidance for Local TMDL Maximum Daily Load Stormwater Wasteload Allocation Watershed Implementation Plans*, that significant uncertainty remains surrounding associated load reductions and source contributions for bacteria and polychlorinated biphenyl (PCB) impairments. In February and August 2022, MDE published updated guidance documents for developing bacteria and PCB TMDL implementation plans. The MDE recommended that jurisdictions not model for bacteria and PCB local TMDLs, so SHA has excluded associated WLAs from all parts of Table V.A.1.e. In FY25, SHA continued updating its implementation plans for PCB and bacteria TMDLs in accordance with requirements established in the 2022 MDE guidance documents.

Following MDE's PCB guidance document titled *Guidance for Developing Local PCB TMDL Stormwater Wasteload Allocation Watershed Implementation Plans*, SHA's current PCB

implementation plan update focuses on identifying PCB sources within SHA's ROW, spatially and by source type, through desktop analysis. If potential sources are identified that are determined to be SHA's responsibility, SHA will determine strategies to monitor, eliminate, or remediate the sources. The SHA shares PCB TMDLs with several MS4 counties including Anne Arundel, Baltimore, Harford, Howard, Montgomery and Prince George's. Given that SHA is a unique urban stormwater permittee with generally linear ROW and does not contain watersheds within its jurisdictional bounds, SHA coordinated with MDE during FY25 to obtain geospatial data from county MS4 jurisdictions to assist with the PCB desktop source analysis. Throughout FY25, SHA coordinated with MDE for clarification and guidance regarding requirements for SHA's Phase I Source Trackdown monitoring efforts. The SHA will continue to coordinating with MDE in FY26 for the development of the of the SHA PCB monitoring plan. The updated PCB TMDL implementation plan will be submitted with SHA's FY27 MS4 Annual Report.

Following MDE's bacteria guidance document titled *Guidance for Developing Bacteria TMDL Stormwater Wasteload Allocation Watershed Implementation Plans*, SHA's current bacteria implementation plan update focuses on identifying bacteria sources within SHA's ROW, spatially and by source type, through desktop analysis. If potential sources are identified that are determined to be SHA responsibility, SHA will determine strategies to confirm the sources and then eliminate or remediate them if necessary. The SHA shares bacteria TMDLs with several MS4 counties, including Anne Arundel, Baltimore, Carroll, Howard, and Prince George's. Given that SHA is a unique urban stormwater permittee with generally linear ROW and does not contain watersheds within its jurisdictional bounds, SHA is coordinating with the county MS4 jurisdictions to obtain spatial data and monitoring data to assist with the bacteria desktop source analysis. Per SHA communication with, and guidance provided by, MDE during FY25, the updated bacteria TMDL implementation plan will be submitted by Year 3 of SHA's next MS4 permit term (estimated delivery with the FY28 MS4 Annual Report).

Trash TMDLs

As reported in the FY23 MS4 Annual Report, SHA evaluated its data sources used for reporting SHA annual trash reductions from SHA maintenance staff and contractor cleanups, as well as the data sources used for reporting trash removed from SHA inlet/pipe cleaning and routine maintenance of SWM facilities. Results of the evaluation suggested that data tracking procedures for routine maintenance of SWM facilities were not designed for the purpose of documenting and reporting those activities for restoration credit/progress toward attainment of trash TMDL WLAs. Programmatic improvements are required to capture sufficient information to credit this activity for TMDL compliance. Annual trash reduction amounts from SHA maintenance staff and contractor cleanups statewide have been relatively constant year-to-year over the course of the MS4 Permit term; however, there continues to be significant variance in the year-to-year implementation levels of these activities within the specific watersheds where SHA has established trash TMDL WLAs.

The SHA is developing an updated trash TMDL implementation plan in accordance with MDE's *General Guidance for Local TMDL Stormwater Wasteload Allocations Watershed Implementation Plans*, which will describe the strategies and approaches used to address reduction requirements. The SHA is assessing opportunities for enhancements and will work

with the Office of Maintenance (OOM) to start collecting information for better trash reduction tracking. The updated trash implementation plan will be submitted with SHA's FY26 MS4 Annual Report.

To ensure the accuracy of SHA progress reported for trash TMDL WLAs in **Table V.A.1.e – Part 2** below, SHA includes both historic and current trash reductions from SHA maintenance staff and contractor cleanups. To adaptively manage SHA attainment of its trash TMDL WLAs, the SHA Office of Environmental Design, Water Programs Division (WPD) performed an assessment and summary of data deficiencies for SHA tracking methods for trash reduction activities at the watershed scale and for the purpose of demonstrating trash TMDL progress. The WPD also developed tracking enhancement recommendations for the SHA OOM and plans to collaborate during FY26 to enhance OOM tracking of trash reduction data at the watershed scale for improved annual progress evaluation and reporting for SHA trash TMDL WLAs.

Adaptive Management

As described in the *Restoration Plans* section of the FY23 MS4 Annual Report, there are many scenarios that can temporarily or permanently decrease the creditability of, or credit yield from, a given BMP claimed for TMDL restoration compliance. These scenarios have been identified in recent fiscal years as recurring and potentially predictable. In accordance with conditions in Parts IV.E.2.b.iv and IV.E.5.e of the MS4 Permit, SHA has worked to develop adaptive management programs that can reduce, over time, the impact of said recurring/predictable scenarios on annual variances observed in the BMP and credit amounts SHA reports as verified MS4 Permit and TMDL restoration progress in each MS4 Permit Annual Report.

The SHA's adaptive management programs seek to:

- Improve communication and collaboration with SHA partners and stakeholders. In FY25, SHA met with Maryland Department of Natural Resources, Mount Saint Mary's University, the United States National Parks Service, and other stakeholders to discuss necessary amendments to interagency Memorandums of Understanding to extend respective agreement terms to persist SHA perpetual access and credit claiming rights for existing, offsite BMPs.
- Identify new scenarios that can impact the compliance, associated credit, and access to BMPs for the MS4 Permit and TMDL compliance, and track and assess new development and redevelopment projects for their potential impacts on TMDL BMPs. In FY25, SHA reviewed 223 projects that had the potential to impact SHA's BMPs claimed for TMDL pollutant load reductions.
- Evaluate standards, procedures, and BMP records to ensure the quality of data and to identify programmatic improvements. In FY25, SHA began construction on two tree planting sites that will pilot the Miyawaki planting method to determine if this design will establish tree canopy cover in a shorter time than traditional planting methods. In FY25, BMPs with deferred inspections and BMPs with failing status resulted in the temporary removal of 372.23 EIA restoration credits from the SHA annual accounting to demonstrate continued compliance with Part IV.E.2.a conditions of the MS4 permit.

Table V.A.1.e – Part 2: Progress Toward Attainment of Applicable Trash WLAs Developed Under EPA Approved Local TMDLs

Watershed	TMDL Baseline Year	County	Modeled Target (trash lbs removed/year)			Modeled FY25 Progress (trash lbs removed/year)				SHA Annual Reduction Achieved	% Total Annual Reduction Target Achieved
			[1]SHA Annual Reduction Requirement	[2]Annual Reduction Level to Maintain	[3]SHA Annual Reduction Target	[4]State Forces Inlet Cleaning	SHA/ Contract/ Inmate Pickups	[5]Sponsor-A-Highway	[5]Adopt - A-Highway		
Anacostia	2009	MO	6,044	103,030	109,074	0	128,953	TBD	TBD	128,953	118%
		PG	14,134	286,737	300,871	0	384,238	TBD	TBD	384,238	128%
Patapsco River Mesohaline – Jones Falls	2011	BA	1,419	70,491	71,910	3	180,078	TBD	TBD	180,082	250%
Patapsco River Mesohaline - Gwynns Falls	2011	BA	2,300	113,388	115,688	84	320,341	TBD	TBD	320,426	277%

Note: All reduction targets and achievements are in pounds per year. "% Total Annual Reduction Target Achieved" is on a scale of 0% to 100%, where 100% indicates the TMDL reduction target was achieved and a value over 100% indicates SHA implementation is exceeding the reduction target.

1. Required trash reduction amount established in the applicable EPA-approved trash TMDL document.
2. The trash reduction amount achieved by SHA maintenance staff and contractor clean ups during the TMDL Baseline Year established in the applicable EPA-approved trash TMDL document. Only annual reductions by SHA that exceed this amount should be accounted as progress toward trash TMDL WLAs established for SHA.
3. SHA Annual Reduction Target modeling assumes SHA must first reduce trash annually in an amount equal to trash removed by SHA during the TMDL Baseline Year and then exceed that amount by no less than the annual reduction requirement established for SHA in the applicable EPA-approved trash TMDL document.
4. It is estimated that approximately 5 pounds of trash is removed from an inlet during cleaning based on a literature review of inlet cleaning characterization studies.
5. Data is not collected for this program at the 8-digit watershed scale so SHA cannot yet claim associated trash reductions as progress toward its established trash TMDL WLAs.

As a component of its continuous restoration program during FY25, SHA continued partnership coordination efforts with the Maryland Department of Natural Resources, the City of Rockville, the United States Fish and Wildlife Service, and Howard County for shared design and construction projects for new BMP implementation. The SHA completed one forest planting BMP and advanced design for seven additional forest planting BMPs that will provide pollutant load reductions for the Catoctin Creek (MD 8-digit: 02140305) phosphorus and sediment local TMDL watershed. Five bioswale BMPs were added to the FY25 modeling: one BMP was transferred to the TMDL program and provides sediment reductions for the Cabin John Creek (MDE 8-digit: 02140207) local TMDL watershed, and four BMPs were added as replacements for credit in the Lower Monocacy River (MD 8-digit: 02140302) phosphorus TMDL watershed. Information for these 'construction complete' and 'proposed' BMPs is provided in the *BMP* and *AltBMPPoly* feature classes of the MS4 Geodatabase – Part 1 submitted with the FY25 MS4 Annual Report.

Program Funding

In accordance with conditions in Part IV.E.5.c of the MS4 Permit, SHA has provided, with the FY25 MS4 Annual Report, a Microsoft Excel workbook containing a summary table and comprehensive list of restoration BMPs completed from 2011 to June 30, 2025, separated by contract number. **Table IV.E.5.d – Part 1** is provided in accordance with conditions in Part IV.E.5.d of the MS4 Permit and shows the anticipated levels of capital funding allocated for TMDL compliance activities through State fiscal year 2031. This information is publicly accessible in the MDOT *Draft Consolidated Transportation Program (pg. 46 [a-20] and pg. 275 [SHA-SW-3])* for fiscal years 2026 to 2031, published on September 2, 2025, at the following web address: https://www.mdot.maryland.gov/tso/pages/Index.aspx?PageId=27

Table IV.E.5.d – Part 1: TMDL Compliance Funding Levels

Fiscal Year	Funding Level (Millions)
2026	$24.5
2027	$50.3
2028	$46.6
2029	$42.4
2030	$39.9
2031	$39.9
Total	**$243.5**

The estimated costs to achieve all SW-WLAs were included in SHA's TMDL implementation plans, which are publicly accessible at the following web address:

https://www.roads.maryland.gov/mdotsha/pages/Index.aspx?PageId=336

Table IV.E.5.d – Part 2 below presents estimated cost for restoration BMPs necessary to attain nutrient and sediment TMDL SW-WLAs established for SHA. Restoration costs for bacteria, PCB, and trash SW-WLAs are not included in **Table IV.E.5.d – Part 2** as the original TMDL implementation plan strategies are currently being revised.

The Updated Coordination TMDL Implementation Plan will include revised estimated costs to achieve all nutrient and sediment local TMDL SW WLAs and individual updated plans for trash, bacteria, and PCBs will also include estimated cost for monitoring and programmatic activities related to meeting the applicable SW-WLAs.

Table IV.E.5.d – Part 2: Nutrient and Sediment TMDL Restoration BMP Costs

Watershed Name	TMDL Pollutant(s)	Restoration BMP Cost (Millions)
Anacostia River Non-Tidal	TN, TP, TSS	$275.9
Anacostia River Tidal	TN, TP, TSS	$67.6
Antietam Creek	TP, TSS	$14.6
Back River	TN, TP	$115.3
Back River Non-Tidal	TSS	$5.4
Baltimore Harbor Non-Tidal	TSS	$9.2
Bynum Run	TSS	$1.9
Cabin John Creek	TSS	$4.4
Catoctin Creek	TSS	$11.8
Conococheague Creek	TSS	$6.5
Double Pipe Creek	TP, TSS	$21.1
Gwynns Falls	TSS	$4.5
Jones Falls	TSS	$5.2
Liberty Reservoir	TP, TSS	$21.8
Little Patuxent River	TSS	$25.7
Loch Raven Reservoir	TP	$11.0
Lower Gunpowder Falls	TSS	$11.6
Lower Monocacy River	TP, TSS	$42.9
March Run	TSS	$4.1
Mattawoman Creek	TN, TP	$67.8
Other West Chesapeake	TSS	$3.0
Patapsco River Lower North Branch	TSS	$34.3
Patuxent River Lower	TSS	$8.6
Patuxent River Middle	TSS	$9.5
Patuxent River Upper	TSS	$14.2
Piscataway Creek	TSS	$7.7
Port Tobacco River	TSS	$1.5
Potomac River Montgomery County	TSS	$5.6
Prettyboy Reservoir	TP	$3.5
Rock Creek	TP, TSS	$14.7
Rocky Gorge Reservoir	TP	$0.9
Seneca Creek	TSS	$10.1
South River	TSS	$31.1
Swan Creek	TSS	$1.7
Triadelphia Reservoir	TP	$0.7
Upper Monocacy River	TP, TSS	$21.1
West River Non-Tidal	TSS	$3.0