

## Annual Reporting for VA0088617

The permittee shall submit the annual report to the Department in accordance with the following schedule:

Reporting Period	Annual Report Due Date
April 1, 2015 through December 31, 2015	March 31, 2016
January 1, 2016 through December 31, 2016	March 31, 2017
January 1, 2017 through December 31, 2017	March 31, 2018
January 1, 2018 through December 31, 2018	March 31, 2019
January 1, 2019 through December 31, 2019	March 31, 2020
January 1, 2020 through March 31, 2020	March 31, 2021*

\*Report covers period from January 1, 2023 through December 31, 2023

Each annual report shall include the following background information:

The permittee and permit number of the program submitting the annual report;

Henrico County / VA0088617

Any modifications to the MS4 Program Plan as a result of the annual report;

None

The reporting dates for which the annual report is being submitted; and


January 1, 2023 through December 31, 2023

**Certification as per Part II.K.**

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

submitting false information, including the possibility of fine and imprisonment for knowing violations."

John Vithoukas, County Manager  
Name / Title

 3/26/2024  
Signature / Date

*For a municipality, state, federal, or other public agency signature by either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a public agency includes:*

- 1) The chief executive officer of the agency, or*
- 2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.*

**A summary of the implementation of each of the components established under Part I.B. and an evaluation of the effectiveness of each component. Additionally, the annual report shall include a summary of progress toward development of new MS4 Program components developed in accordance with the due dates as specified in the permit. The permittee should attempt to limit any component's narrative summary to no longer than two-pages plus any necessary tables and figures.**

#### Part I.B.1 - Planning

A stormwater retrofit project summary that includes potential stormwater management projects to be completed during the term of the permit is posted on the County's website. The information in the Annual Report Supplement and MS4 Program Plan adequately addresses the permit requirements.

#### Part I.B.2.a - Construction Site Runoff and Post Construction Runoff from Areas of New Development and Development on Prior Developed Lands

The County implements an Erosion and Sediment Control Program and a Stormwater Management Program that have been determined to be consistent with state law and regulations. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.b - Retrofitting on Prior Developed Lands

The status of the retrofit projects listed in part I.B.1 that are being conducted during this permit term is provided in the Annual Report Supplement. The information included in the summary adequately addresses the permit requirements.

#### Part I.B.2.c - Roadways

The various Departments / Divisions that are responsible for maintaining roads, streets, and parking lots are aware of proper management goals / objectives. Inventories of County-maintained roads, streets and parking lots have also been developed as well as the stormwater treatment details required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.d - Pesticide, Herbicide, and Fertilizer Application

County-maintained lands have been evaluated to determine where nutrients are applied to more than one contiguous acre and the Departments / Divisions responsible for the County-maintained lands have been made aware of proper management goals / objectives. Summaries of the implementation details are included in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.e - Illicit Discharges and Improper Disposal

The County continues to implement programs to identify and eliminate illicit discharges. The County also has a program to inspect sanitary sewer system. Community cleanups, litter prevention and collection programs, and development design requirements are in place to reduce floatables. Summaries of the implementation details are included in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.f - Spill Prevention and Response

The County continues to implement programs to prevent, contain, and respond to spills that may discharge into the MS4. These programs involve cooperation with various Departments / Divisions. The results of the implementation of these programs are included in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.g - Industrial and High Risk Runoff

The County continues to implement a program to identify and control pollutants in stormwater discharges to the MS4 from industrial and high risk runoff facilities. Summaries of the implementation details are included in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.h - Stormwater Infrastructure Management

The County continues to implement programs to maintain the County's stormwater infrastructure and to update the accuracy and inventory of the storm sewer system. The Departments / Divisions responsible for County maintained lands are aware of the management goals / objectives and summaries of the implementation details are included in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.i - County Facilities

County-maintained facilities have been evaluated to determine which ones are High Priority Municipal Facilities and the Departments/Divisions responsible for County facilities are aware of proper management goals / objectives. Summaries of the implementation details are included in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.j - Public Education / Participation

The various Departments / Divisions in the County implement many public education programs with the goal of increasing the stormwater knowledge of target audiences and changing behavior to result in pollutant reductions. Summaries of the program activities and the audiences reached are listed in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.k - Training

The various Departments / Divisions in the County conduct and makes available to County staff many training opportunities to address the topics required by the MS4 Permit. Summaries of the training opportunities and the number of staff attending are listed in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.l - Water Quality Screening Programs

The County implements both dry and wet weather screening programs in accordance with the requirements of the MS4 permit. Summaries of the implementation details are listed in the Annual Report Supplement as required by the MS4 Permit. Implementation of the programs listed in this section will adequately address the permit concerns for this MS4 program element.

#### Part I.B.2.m - Infrastructure Coordination

The Annual Infrastructure Coordination meeting between County and VDOT representatives occurred on December 1, 2021. During the meeting, all topics required by the MS4 Permit were discussed and the meeting summary is included in the Annual Report Supplement as required by the MS4 Permit.

### **A summary report of the monitoring programs listed under Part I.C**

Summaries of the results of the monitoring programs listed under Part I.C are included in the Annual Report Supplement.

### **A summary of the implementation of each component listed under Part I.D.**

The TMDL Action Plans required by Part I.D have been developed and are posted on the County's website. A summary of projects implemented during this reporting period are included in the Annual Report Supplement.

**The Specific Reporting Requirements identified in this state permit.**

The Specific Reporting Requirements are addressed in the Annual Report Supplements.

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.A.1  
AUTHORIZED DISCHARGES**

There are no Specific Reporting Requirements associated with this part of the MS4 Permit.

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.A.2  
PERMITTEE RESPONSIBILITIES**

**Each annual report shall include a current list of roles and responsibilities.**

The roles and responsibilities for the appropriate Departments and Divisions have been established and are provided in the applicable part of the MS4 Program Plan. Given the extent of the tasks associated with the MS4 Permit and the numerous Departments and Divisions that have a role in implementing the requirements of the MS4 Permit, the roles and responsibilities have not been repeated here. Please refer to the MS4 Program Plan for the current list of roles and responsibilities.

**Each annual report shall include a list of those circumstances of non-compliance outside of the permittee's control.**

Circumstance of Non-Compliance Outside County's Control From January 1, 2023 through December 31, 2023	Date
None	



**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.A.3  
LEGAL AUTHORITY**

There are no Specific Reporting Requirements associated with this part of the MS4 Permit.

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.A.4 MS4 PROGRAM RESOURCES

A copy of the fiscal year's budget including its proposed capital and operation and maintenance expenditures necessary to accomplish the activities required by this state permit shall be submitted with each annual report.

The County's Approved Budget for Fiscal Year 2023 - 2024 can be found at <https://henrico.us/pdfs/finance/ApprovedBudgetFY24/FY24%20Approved%20Budget%20-%20Full%20book.pdf> Given the size of the document, the budget has not been included in this Annual Report Supplement.

	Approved Overall Budget	Approved Funding for MS4 Program Compliance	Source(s) of Funding
<b>CAPITAL</b>	\$117,906,094	\$2,733,331.14	General Fund Enterprise Funds
<b>OPERATION AND MAINTENANCE</b>	\$200,718,287	\$10,767,257	General Fund Internal Service Fund Enterprise Funds

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.A.5**

**PERMIT MAINTENANCE FEES**

**A statement regarding payment of the applicable MS4 permit maintenance fee, including check date and check number shall be included with each annual report.**

**Note: Please do not include copies of checks or other bank records.**

A check (check # 1694197, dated August 24, 2023) for the MS4 Permit Maintenance Fee (\$8,800.00) was submitted on August 24, 2023 to:

Virginia Department of Environmental Quality  
Treasurer or Virginia - DEQ  
P. O. Box 1104  
Richmond, VA 23218

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.A.6 MS4 PROGRAM PLAN

Utilizing the last annual report prior to this state permit effective date as a baseline, the permittee's first annual report submitted under this state permit (Initial Report) shall include the necessary updates to describe implementation of this MS4 Program Plan and meet the conditions described in this section.

The current MS4 Program Plan can be found at <http://henrico.us/works/engineering-environmental-services/2015-ms4-permit-and-ms4-program-plan/>.

**NOTE:** For purposes of the next permit cycle, the fourth annual report submitted under this state permit will be considered the updated MS4 Program Plan to be reviewed as part of permit reissuance.

Noted.

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.A.7  
MS4 PROGRAM REVIEW AND UPDATES**

All modifications and proposed modifications shall be reported in accordance with this section of the permit.

The current MS4 Program Plan can be found at <http://henrico.us/works/engineering-environmental-services/2015-ms4-permit-and-ms4-program-plan/>.

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**HENRICO COUNTY MS4 PROGRAM PLAN  
PART I.A.7  
ANNUAL REPORT SUPPLEMENT  
JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

# **HENRICO COUNTY MS4 PROGRAM PLAN**

## **PART I.B.1 PLANNING**

The permittee shall provide a current web link to the analysis no later than 12 months after the effective date of this state permit with each annual report.

The stormwater management retrofit project summary can be found at <http://henrico.us/works/engineering-environmental-services/stormwater-retrofit-projects-summary/>.

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**HENRICO COUNTY MS4 PROGRAM PLAN  
PART I.B.1  
ANNUAL REPORT SUPPLEMENT  
JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.a**

**MS4 PROGRAM IMPLEMENTATION  
CONSTRUCTION SITE RUNOFF AND POST CONSTRUCTION  
RUNOFF FROM AREAS OF NEW DEVELOPMENT AND  
DEVELOPMENT ON PRIOR DEVELOPED LANDS**

Each annual report shall contain the number of regulated land disturbing activities approved and the total number of acres disturbed.

Number of Regulated Land Disturbing Activities Approved between January 1, 2023 and December 31, 2023	Total Number of Acres Disturbed
86	400.91

Each annual report shall contain the number of land disturbing activity inspections conducted and the number and type of each enforcement action taken.

ESC and SWM Inspection and Enforcement Actions conducted between January 1, 2023 December 31, 2023	Number of Actions
ESC Inspection - Complete	5,443
ESC Inspection - Follow-Up	158
Pre-Construction Meeting	120
SWPPP - Complete	578
SWPPP - Follow-Up	12
Notice to Comply	47
Stop Work Order	19

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**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.a**

**ANNUAL REPORT SUPPLEMENT**

**JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

## **HENRICO COUNTY MS4 PROGRAM PLAN**

**Each annual report shall include a summary of actions taken by the permittee to implement Part I.B.2.a)1) through 3) of this state permit.**

No other actions such as additional staff, revised roles/responsibilities, etc. were taken between January 1, 2023 and December 31, 2023, to implement the local ESC and SWM programs.



**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.b**

**MS4 PROGRAM IMPLEMENTATION  
RETROFITTING ON PRIOR DEVELOPED LANDS**

Each annual report shall include a status update for those projects for which implementation began during the reporting period.

**Retrofit Projects for which Implementation\* began  
between January 1, 2023 and December 31, 2023**

None

\* For purposes of this reporting requirement, implementation means the construction or installation of the retrofit project.

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.c**  
**MS4 PROGRAM IMPLEMENTATION**  
**ROADWAYS**

The permittee shall include a copy of the written protocols identified in Part I.B.2.c)(2) with the annual report due March 31, 2019.

The written protocols were included in the annual report that was due March 31, 2019.

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.d**

**MS4 PROGRAM IMPLEMENTATION  
PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION**

Each annual report submitted after March 31, 2016 shall report on compliance with the turf and landscape nutrient management plan implementation schedule and include a list of the permittee’s properties for which turf and landscape nutrient management plans have been implemented during the reporting year and the cumulative total of acreage under turf and landscape nutrient management plans.

MS4 Municipal Management Areas (MMMA) on which Turf and Landscape Nutrient Management Plans were implemented between January 1, 2023 and December 31, 2023		
MMMA	MMMA Description (if applicable)	Acreage Covered
	None	
TOTAL		

Turf and Landscape Nutrient Management Compliance	
Total acres requiring coverage by a Turf and Landscape Nutrient Management Plan	269.5
Total acres managed by a Turf and Landscape Nutrient Management Plan	269.5
Percentage of identified acres requiring coverage by a Turf and Landscape Nutrient Management Plan that is covered by a Turf and Landscape Nutrient Management Plan	100

**HENRICO COUNTY MS4 PROGRAM PLAN**

Each annual report shall include the number of acres managed under Integrated Pest Management Plans.

Acres managed under Integrated Pest Management Plans	177.163
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**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.e**

**MS4 PROGRAM IMPLEMENTATION  
ILLICIT DISCHARGES AND IMPROPER DISPOSAL**

Each annual report shall include a list of illicit discharges identified, the source, a description of follow-up activities and whether the illicit discharge has been eliminated.

Illicit Discharges Identified between January 1, 2023 and December 31, 2023		
IDDE00900		
Possible Sewage spill from a private contractor.	<p>01/27/2023 - Conducted a site visit and spoke with the resident of 1 Sedgwick. I identified a discolored sheen on her driveway and on the adjacent roadway.</p> <p>01/27/2023 - Contacted First Call Environmental. They are in process of dispatching a unit to clean up the waste.</p> <p>02/01/2023 - Met with 1st Call onsite and provided instructions regarding the impacted area and the clean-up method. 1st Call power-washed the impacted area and collected the spoils associated with the spill.</p>	Illicit discharge eliminated
IDDE00901		
Hydraulic oil leak along the roadway	02/01/2023 -Treated/cleaned the impacted areas with petroleum absorbent.	Illicit discharge eliminated
IDDE00902		
Motor Oil Spill	02/18/2023 -Treated the impacted area with oil absorbent and petroleum absorbent pad. Contacted	Illicit discharge eliminated

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**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.e**

**ANNUAL REPORT SUPPLEMENT**

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## HENRICO COUNTY MS4 PROGRAM PLAN

	the homeowner and shared with them a few helpful strategies that would prevent any future spills of this nature. I also provided the homeowner with a few absorbent pads.	
<b>IDDE00903</b>		
Wastewater Discharge	<p>03/09/2023- Contacted Henrico FMO and was told this had been going on for ~6 months. They are working with Community Revitalization, Building Inspections, and DEQ to resolve the issue. I let them know that we are working to determine if the private storm system hits county-owned MS4.</p> <p>03/10/2023- Met onsite with DEQ, Community Rev., and Building Insp. to look at where they are dumping the material. They said that they are evicting current tenants (hotel is treated as a long-term rental situation) by 6 pm and wouldn't allow anyone back in until they had repaired their lines. Still pulling plans to determine ownership of all structures in the system.</p> <p>03/10/2023- Contacted Henrico FMO to let them know that there is a potential for county MS4 to be impacted by the dumping of wastewater in this private system. They are compiling sections of code to cite, and they will be including the illicit discharge section of Henrico County Code. No further action required by MS4 group.</p>	Illicit discharge eliminated
<b>IDDE00904</b>		
Antifreeze spill along roadway	04/27/2023- Treated area with absorbent pads. There was no evidence of antifreeze entering the adjacent inlet.	Illicit discharge eliminated
<b>IDDE00905</b>		
Motor oil in curbside ditch	<p>04/18/2023- Received a call from Road Maintenance regarding oil within a Channel.</p> <p>04/19/2023- Received a call from William Lacy of</p>	Illicit discharge eliminated

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**HENRICO COUNTY MS4 PROGRAM PLAN  
PART I.B.2.e  
ANNUAL REPORT SUPPLEMENT  
JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

**HENRICO COUNTY MS4 PROGRAM PLAN**

	Road Maintenance indicating a oil within the channel. William contacted Clean Harbors to remove the impacted soil. Clean Harbors removed the soil on 4/21/23.	
<b>IDDE00906</b>		
Home heating oil tank leak	05/01/2023- Dominion Energy called to say a home heating oil tank was leaking on private property. 05/01/2023- Forwarded to DEQ Petroleum Group	Illicit discharge eliminated
<b>IDDE00907</b>		
Paint dumped into storm drain	05/24/2023- POSSE complaint on 05/24/2023 about neighbor pouring paint/paint thinner down inlet. Complaint says location was at 4901 Parkcrest Ct, but actually in backyard of 5905 Park Commons Loop. Grate on inlet/inside of inlet shows visible white stain. Adjacent inlet shows no signs of stain. All facilities in MS4 chain at this location are private. IN000000044027  06/08/2023- Took photos of IN000000044027. No evidence of white stain in any other MS4 facilities. All MS4 structures in system are private.	Illicit discharge eliminated
<b>IDDE00908</b>		
Creek bank discoloration	06/08/2023- Resident noticed brown/green seepage from creek bank in back of property. New sewer line installed, crossing under creek. Says seepage started only after this work was performed.  06/08/2023- Investigated creek bank at the rear of the property. Previous sewer installation is evident. Seepage coming from bank area adjacent to sewer tie in. Is mostly brown in color with iridescent shine from oxidizing bacteria. No sewer smell present. Took photos.	Illicit discharge eliminated

**HENRICO COUNTY MS4 PROGRAM PLAN**

**PART I.B.2.e**

**ANNUAL REPORT SUPPLEMENT**

**JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

## HENRICO COUNTY MS4 PROGRAM PLAN

IDDE00909		
Commercial grease bin sprung a leak	<p>06/20/2023- Complaint came in as a grease spill from the Food Lion grease bin located in the dumpster area at the rear of the building. Coordinated with the property management company and Food Lion representatives to have the spill cleaned up and the source of the spill removed. Hepaco responded and vacuumed the spilled grease and the remaining grease in bin. They also degreased the area with an environmentally friendly degreaser and pressure washed the impacted area. Spoils from pressure washing and degreasing were captured using a vactor. Booms were used to block the nearest inlet during pressure washing. Grease did not reach the storm sewer. Cleanup was completed on 6/20/2023.</p>	Illicit discharge eliminated
IDDE00910		
Driveway staining	<p>06/21/2023- Voicemail was forwarded from Catherine McCarthy, stating that a strange stain began to form /at the end of her driveway. I contacted the resident and informed her I would be conducting an inspection of the area.</p> <p>06/22/2023- Conducted site inspection and determined the stain discharge had a slight sewage smell. Contacted DPU and they indicated they would send someone out to inspect the area.</p>	Illicit discharge eliminated
IDDE00911		
Deisel leak from commercial vehicle	<p>07/11/2023- Potential Fuel Spill along the exit ramp from Mechanicsville Turnpike 360 W onto the 64 E offramp.</p> <p>07/12/2023- Received an email via Posse stating there was a potential fuel spill along the exit ramp. Conducted a field inspection and noticed staining along the ramp. Notified DEQ of my findings. I also forwarded the correspondence email to Andrew Peal</p>	Illicit discharge eliminated

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**HENRICO COUNTY MS4 PROGRAM PLAN  
PART I.B.2.e  
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**HENRICO COUNTY MS4 PROGRAM PLAN**

IDDE00912		
DPU water main break	7/11/2023- Conducted site inspection and instructed DPU personnel to place inlet protection in front of impacted inlets along Parham. DPU was releasing water from a hydrant adjacent to the water main break, so I conducted a chlorine test at the base of DPU's de-chlorination device. The test results came back positive for chlorine. I notified DPU and they stated they would address the issue. A chlorine test was also conducted at the outfall of the adjacent BMP, test results were negative at that location. Contacted DEQ and notified them of the spill due to the BMP depositing into state waters. DEQ instructed me to notify DPU to install a turbidity curtain at the outfall leading to the Rocky Branch Stream. DEQ stated they would be performing a site inspection the next morning. I provided vendor information to DPU in the attempt obtain a turbidity curtain or have a contractor give a quote for installation.	Illicit discharge eliminated
IDDE00913		
Concrete washout failure	07/17/2023- Conducted site inspection and noticed spoils from concrete washout. Advised crew to cleanup impacted area. Crew conducted cleanup of the gutter pan. Conducted inspection of the impacted DI and didn't observe any impacts. Contacted DEQ to notify them of the event.	Illicit discharge eliminated
IDDE00914		
Motor oil spill	07/27/2023- Received notification from a DPW construction inspector that a 55-gallon drum had overflowed and impacted roughly a 2' area surrounding the drum. The inspector temporarily secured the barrel with a cover until the drum can be removed. The inspector is also working with the contractor to remove the impacted soil and have it hauled to a designated site.	Illicit discharge eliminated

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**HENRICO COUNTY MS4 PROGRAM PLAN  
PART I.B.2.e  
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	08/07/2023- I was notified by county personnel that First Call removed contaminated soil from the site. No further actions are required.	
IDDE00915		
Petroleum tank disposal	08/07/2023- Provided Ms. Harris with information regarding the proper disposal of an empty petroleum tank. I also provided DEQ's petroleum storage tank fund website along with a list of companies that could assist her with the disposal.	Illicit discharge eliminated
IDDE00916		
Vehicle obstruction	08/14/2023- Emailed the resident the correct point of contact regarding the matter.	Illicit discharge eliminated
IDDE00917		
Hydraulic leak from recycling truck	07/05/2023- Spoke with the resident and conducted a site visit. Treated the area with oil absorbent. I also notified Road Maintenance of the spill due to impacts in the ROW.	Illicit discharge eliminated
IDDE00918		
Raw sewage odor	10/13/2023- Upon arriving onsite, I noticed the smell of sewage in the area. I then conducted an inspection of the MS4 facilities in the general area along Parham and did not notice anything abnormal. I contacted Rodney Thomas with DPU to inform him of my findings. Mr. Thomas stated he would be sending someone out to inspect the area.	Illicit discharge eliminated
IDDE00919		
Unknown liquid discharge	12/19/2023- Unknown liquid observed flowing out of abandoned sewer line into Upham Brook.  12/19/2023- DEQ has been notified of the event and DPU is currently conducting further investigation into the matter.	Illicit discharge eliminated
IDDE00920		
Discolored soil adjacent to DPU	07/12/2023- Resident expressed concerns regarding discoloration of soil adjacent to utility project. Resident also expressed concerns of abnormal flow	Illicit discharge eliminated

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project	<p>from the channel adjacent to his property.</p> <p>Conducted a site inspection and it was determined that discoloration was caused by iron oxide. Conducted a chlorine test of the channel flow which displayed negative results. Information was relayed to the resident onsite.</p>	
IDDE00921		
Elevated chlorine level concerns	<p>07/14/2023- Contacted Church Run Community pool to inquire about any recent pool discharges/draining events. They relayed to me that there weren't any recent events. I relayed the information to DPU for follow-up.</p> <p>Test downstream did not indicate any abnormal chlorine levels</p>	Illicit discharge eliminated
IDDE00922		
Illegal dumping	<p>07/24/2023- Received complaint about illegal dumping. Contacted community maintenance regarding the illegal dumping. Contacted road maintenance due to the debris being in the right-of-way.</p>	Illicit discharge eliminated
IDDE00923		
Illegal dumping	<p>08/21/2023- Received a complaint about contractor dumping spoils into the gutter-pan. Contacted the contractor and required them to properly clean and remove any spoils remaining along the gutter pan. Contacted DEQ and provided them with the procedures used during cleanup and removal.</p>	Illicit discharge eliminated
IDDE00924		
Illegal dumping	<p>08/22/2023- Received complaint about illegal dumping into a drop inlet. Conducted site visit to confirm dumping activity, once confirmed DEQ was contacted. (Private Infrastructure)</p>	Illicit discharge eliminated

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**HENRICO COUNTY MS4 PROGRAM PLAN**  
**PART I.B.2.e**  
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## HENRICO COUNTY MS4 PROGRAM PLAN

IDDE00925		
Possible sewage discharge	<p>08/31/2023- Resident expressed concerns of a sewage smell coming from the creek.</p> <p>08/31/2023- Conducted site inspection and observed recent utility in the area.</p> <p>08/31/2023- Notified DPU and they stated they would send someone out to inspect.</p> <p>08/31/2023- Contacted DEQ to notify them of my inspection and correspondence with DPU</p> <p>08/31/2023- Met with the resident to notify them of the actions being taken to resolve the issue.</p>	Illicit discharge eliminated
IDDE00926		
Insects in manhole	<p>09/06/2023- Resident concerned about cockroaches in the manholes adjacent to their property.</p> <p>09/06/2023- Relayed resident concerns to DPU.</p>	Illicit discharge eliminated
IDDE00927		
Elevated E. coli concerns	<p>10/06/2023- Received concerns from residents adjacent to the West End Manor Pond.</p> <p>10/06/2023- Collaborated with the county Water Quality Research Specialist to meet with the resident who expressed concerns. We relayed to the residents our most recent test results in the area. Our Water Quality Specialist informed the resident that we monitor the area regularly and the levels were not dangerously out of range. We also met with residents and provided a few practices to deter unwanted wildlife which could potentially be causing elevated levels.</p> <p>10/06/2023- Relayed information to DEQ regarding resident concerns along with our monitoring data.</p>	Illicit discharge eliminated

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**HENRICO COUNTY MS4 PROGRAM PLAN**  
**PART I.B.2.e**  
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## HENRICO COUNTY MS4 PROGRAM PLAN

IDDE00928		
Sewage concerns	10/13/2023- Conducted site inspection of the MS4 structures. Did not notice anything abnormal. 10/13/2023- Sewage smell was detected and I relayed my findings to DPU.	Illicit discharge eliminated
IDDE00929		
Possible sewage being dumped into the MS4	11/14/2023- Conducted site inspection of the MS4 structures in the area. I did not detect any signs of sewage being deposited into any structures.	Illicit discharge eliminated
IDDE00930		
Erosion/Sink hole adjacent to storm sewer	11/06/2023- Observed sinkholes around several structures.  11/06/2023- Notified DEQ of my inspection. (Private infrastructure)	Illicit discharge eliminated

Sewer Discharges between January 1, 2023 and December 31, 2023		
01/07/23	Blockage/Spill of the sewer main between manholes (SMH#196SW062) and (SMH# 196SW046) at 8910 Quiocassin Road. The blockage caused a 210-gallon sewage spill/overflow from a monitoring manhole (ID unknown ) behind a Food Lion Store.	The area affected was cleaned and lime was applied.
01/21/23	Blockage/Spill of the sewer main between manholes (SMH# 402SE017) and (SMH# 402SE018) at 11260 W Broad Street located in front of the parking lot. The blockage was caused by excessive grease discharge from one or more restaurants and	The sewer line was jetted to remove the grease. Enforcement efforts were made

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	<p>resulted in a 1,500-gallon sewage spill/overflow from manhole (SMH# 007165) in the parking lot of Home Depot at 11260 W. Broad Street.</p>	<p>of contributing restaurants. These restaurants are subject to continued monitoring. The area of the overflow was cleaned.</p>
02/02/23	<p>An intermittent sewer spill was identified on a 24-inch Henrico County force main in the vicinity of 2540 Charles City Road. This force main comes from the Gillies Creek Sewage Pumping Station. Three days of excavations exposing more than 20 feet of the force main were done looking for the source of the leak. The excavation was backfilled, but no leak location could be determined. A 300-gallon spill was discharged to an unnamed pond connected to a tributary of Almond Creek.</p>	<p>Monitoring of the force main continues but a leak has not returned. The area of the overflow was cleaned.</p>
02/16/23	<p>An intermittent sewer spill was identified on a 24-inch Henrico County force main at 2150 Charles City Road. A pit was excavated, and a liner was used to capture the overflow for removal by vacuum-drained equipment. Repairs were completed and captured sewage was sent for proper disposal. A discharge of 2,205 gallons to an unnamed pond connected to a tributary of Almond Creek occurred during the incident.</p>	<p>Repair work on the force main was completed. Captured overflow from the pit was sent for disposal. The area of the overflow was cleaned.</p>
02/17/23	<p>Blockage/Spill of the sewer main between manholes (SMH# 162SE065) and (SMH# SMH007277) at 201 W. Washington St. The spill resulted from a residential discharge of rags and grease to the sewer system. The</p>	<p>The line was pressure-jetted to remove the grease and rags. The area of the</p>

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	blockage caused a 420-gallon overflow from manhole (SMH# 162SE065) that entered an unnamed tributary of the Chickahominy River.	overflow was cleaned.
05/17/23	A sewage Overflow/Spill occurred from a manhole (SMH# 047SW017) at 2051 Jennie Scher Road. The discharge was onto the surrounding grass area but did not enter nearby Gillies Creek. The 1,260-gallon overflow resulted due to a storm with heavy rain.	The surrounding area was cleaned, and lime was applied. No adverse effect was noted.
06/27/23	Sewage seepage from a suspected leak was identified at a 24-inch force main near 2540 Charles City Road. A County contractor excavated two large locations looking for the source of the discharge. The County was unable to recreate the pumping conditions that occurred prior to detection of the seepage. The overflow was 3,550 gallons into an unnamed pond connected to a tributary of Cornelius Creek. Sustained rainfall and high discharges to the pumping station caused the seepage.	The area affected was cleaned. The County is monitoring the area proactively during storms in a continuing effort to locate the leak when it reappears.
07/12/23	A sewage Overflow/Spill occurred from a manhole (MH# 325NE010, located in the easement near 3924 Lantern Vw Place. The overflow was caused by a grease and rag blockage between manholes (MH# 325NE010) and (MH# 325NE011). The 6,600-gallon spill entered an unnamed tributary of Stoney Run.	The line was pressure-jetted to remove the blockage of grease and rags. The area affected was cleaned.
07/16/23	A sewage Overflow/Spill occurred from an upstream manhole (MH# 052NE009) near	The area affected was cleaned and

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	Almond Creek Pumping Station (5700 Old Osborne Turnpike). A 26,400-gallon spill into Almond Creek was caused by a protracted rainfall event.	lime was applied.
07/23/23	A sewage Overflow/Spill occurred from a manhole MH# 264SE031 located at approximately 1210 Haverhill Road. The spill was caused by a mud and debris blockage between manholes (MH# 264SE031) and (MH# 264SE039). A 1,650-gallon spill entered Flippen Creek. Subsequent evaluation discovered a hole in the sewer pipe and was the location allowing entry of the mud and debris that caused the blockage.	The blockage was promptly pressure-jetted the sewer to re-established flow. A hole in the sewer pipe was located and repaired. The area affected was cleaned.
07/24/23	A sewage Overflow/Spill occurred from manhole (MH# 052NE009) at 5700 Old Osborne Turnpike located upstream from the Almond Creek Pumping Station. A protracted rainfall event caused the 1,700-gallon overflow.	The area affected was cleaned and lime was applied.
08/09/23	A sewage Overflow/Spill occurred from manhole (SMH# 331NW003) located in front of 2413 Fruehauf Road. The 910-gallon overflow resulted from a grease blockage in a downstream sewer main between manholes (SMH# 331NW013) and (SMH# 331NW078). The spill entered an unnamed tributary of Hungary Creek. The Blockage was removed, and the overflow ceased.	The area affected was cleaned.
09/23/23	A sewage Overflow/Spill occurred from a manhole (#SMH008541) located at the River Road Sewage Pumping Station	The affected area has been cleaned up and treated

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	(10020 River Road). Excessive rainfall resulting from Tropical Storm Ophelia was the cause 872,000-gallon overflow.	with lime.
09/23/23	A sewage Overflow/Spill occurred from a manhole (#MH052NE009) located at the Almond Creek Sewage Pumping Station (5700 Old Osborne Turnpike). Excessive rainfall resulting from Tropical Storm Ophelia was the cause 10,200-gallon overflow.	The affected area has been cleaned up and treated with lime.
09/23/23	A sewage Overflow/Spill occurred from a manhole (#MH047SW017) located at the Gillies Creek Sewage Pumping Station (2051 Jennie Scher Road). Excessive rainfall resulting from Tropical Storm Ophelia was the cause 77,300-gallon overflow.	The affected area has been cleaned up and treated with lime.
10/13/23	A sewage Overflow/Spill occurred from manhole (MH# 194NW053) at 610 N. Parham Road. The 485-gallon spill was caused by a point structural failure in the sewer segment between manholes (MH# 194NW053) and (MH# 194NW054). The location is on the bank of Westham Creek.	The affected area has been cleaned up and treated with lime. No adverse effects from the spill have been observed.
10/15/23	A sewage Overflow/Spill occurred from manhole (MH# 143NW042) at 1107 Essex Avenue. The spill was caused by a grease blockage between (MH# 143NW051) and (MH# 143NW042). The 655-gallon spill entered Little Westham Creek.	The affected area has been cleaned up and treated with lime. It was added to the 6-month inspection and cleaning program.

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11/12/23	A sewage Overflow/Spill occurred from a manhole (MH# 398SE042) at 1801 Ryandale Road. The 1,800-gallon spill was caused by a blockage comprising grease and roots between (MH# 398SE042) and (MH# 398SE043).	The affected area has been cleaned up.
12/10/23	A sewage Overflow/Spill occurred from three manholes (SMH# 047SW017), (SMH# 006405) and (SMH# 006419) located at Gillies Creek Sewage Pumping Station (2051 Jennie Scher Road). The 1,830,000-gallon spill resulted from excessive rainfall.	The affected area has been cleaned up.
12/11/23	A sewage Overflow/Spill occurred from a manhole (SMH# 00851) located at River Road Sewage Pumping Station (10020 River Road). The 1,413,700-gallon spill resulted from excessive rainfall.	The affected area has been cleaned up.
12/11/23	A sewage Overflow/Spill occurred from a manhole (SMH# 052NE009) located at Almond Creek Pumping Station (5700 Old Osborne Turnpike). The 95,515-gallon overflow resulted from a blockage and excessive wet weather conditions.	The Blockage was cleared, and the affected area has been cleaned up.
12/11/23~5:00 PM	A sewage Overflow/Spill occurred from two manholes (SMH# 108SW004) and (SMH# 010500) located in the vicinity of 5821 Wilkinson Road and north of 4800 Vawter Ave. The 161,274-gallon spill resulted from excessive wet weather conditions.	The affected area has been cleaned up.
12/17/23	A sewage Overflow/Spill occurred from a manhole (SMH# 052NE009) located at Almond Creek Sewage Pumping Station (5700 Old Osborne Turnpike). The 18,134-gallon overflow resulted from excessive	The affected area has been cleaned up.

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	rainfall	
12/17/23	A sewage Overflow/Spill occurred from a manhole (#SMH 008541) located at River Road Sewage Pumping Station (10020 River Road). The 770,070-gallon spill resulted from excessive rainfall.	The affected area has been cleaned up.
12/17/23	A sewage Overflow/Spill occurred from a manhole (SMH# 047SW017) located at Gillies Creek Sewage Pumping Station (2051 Jennie Scher Road). The 561,380-gallon spill resulted from excessive rainfall.	The affected area has been cleaned up.
12/18/23	A sewage Overflow/Spill occurred from a manhole (SMH# 108SW008) located at Strawberry Hill Sewage Pumping Station (4800 Vawter Avenue). The 117,100-gallon spill resulted from excessive rainfall.	The affected area has been cleaned up.
12/19/23	The sewage Overflow/Spill occurred at 601 Parham Road. The spill 1,090-gallon spill resulted from a blockage between two manholes (SMH# 194NW053) and (SMH# 194NW054). A hole in the pipe caused a blockage due to debris accumulation in the sewer.	The hole in the sewer pipe was repaired and the affected area has been cleaned up.
12/27/23	A sewage Overflow/Spill occurred from a manhole (SMH# 052NE009) located at Almond Creek Sewage Pumping Station (5700 Old Osborne Turnpike). The 5,550-gallon overflow resulted from excessive rainfall.	The affected area has been cleaned up.
12/27/23	A sewage Overflow/Spill occurred from a manhole (SMH# 052NE009) located at Almond Creek Sewage Pumping Station (5700 Old Osborne Turnpike). The 5,550-gallon overflow resulted from excessive	The affected area has been cleaned up.

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	rainfall.	
12/27/23	A sewage Overflow/Spill occurred from a manhole (SMH# 108SW008) located at Strawberry Hill Sewage Pumping Station (4800 Vawter Avenue). The 9,875-gallon spill resulted from excessive rainfall.	The affected area has been cleaned up.

**Each annual report shall include the amount of linear feet of sanitary sewer inspected during the reporting year.**

Length of Sanitary Sewer Inspected between January 1, 2023 and December 31, 2023	447,603
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**The initial annual report shall include a description of the procedures the permittee will implement to reduce floatables as required by Part I.B.2.e)3).**

**Public Works**

DPW requires trash racks on all curb inlets in proposed shopping centers, fast food restaurants, convenience stores, auto parts stores, and other facilities where significant trash, debris and other contaminants may be generated. Due to flooding and safety issues, trash racks are not permitted on any inlets in the public right-of-way. The minimum design standards for the trash racks are specified in Chapter 15 of the Henrico County Environmental Compliance Manual.

Henrico County employs SOAR 365 to remove litter from County rights-of-way. The pick-up is performed daily, and progress is tracked in pounds of litter removed as well as the number of bags of litter removed. SOAR 365 is also used bi-weekly on the West and East End maintenance yards to reduce floatables from entering the MS4. Program effectiveness is evaluated based on the pounds of litter removed, as this decreases the quantity of floatables entering the MS4. Between 01/01/2023 and 12/31/2023, SOAR 365 removed

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331,692.58 pounds or 9,224.75 bags of litter and 158 tires from county rights-of-way and maintenance facilities.

### Public Utilities

- Division of Solid Waste implemented programs:
  - **Community Clean-ups** – a program designed to allow older neighborhoods with an opportunity to remove trash/debris from their property. There is a qualification process for neighborhoods to be selected. This program was restarted in September 2021 after a pause for COVID-19 pandemic.
  - **Hazardous Material Disposal** – a program where residents can bring their oil/antifreeze/paints/solvents to the Public Use Areas for disposal.
  - **Bulky Waste Program** – a program where residents can request a pickup of large items, brush, etc. from their property for a fee. This program was restarted in July 2021 after a pause for COVID-19 pandemic.
  - **Christmas Tree Disposal** – an annual program offering Christmas tree collection to residents. During 2023, a total of 5 tons of trees were collected and ground into mulch.
- **Keep Henrico Beautiful implemented programs:**
  - **Because We Care (BWC) Program** - a program where groups or individuals can sign up to adopt any County road, park community or school within the County. We had two BWC Orientation events during 2023 where sign ups were done.
  - **Litter Removal Education** - a program where we discuss the importance of Keeping Henrico Beautiful by not littering. We had 12 events during 2023 where we discussed litter reduction and prevention.
  - **“Magic of Recycling”** – Litter prevention program that targets kids grades K-2.
  - **Don’t Trash Central Virginia** – This is a partnership with PLAN RVA and several other localities. We are promoting a litter free Central Virginia using a Social Media approach.
  - **Clean Business Award** – a program where Keep Henrico Beautiful selects one business from each magisterial district that promotes a litter-

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free Henrico and is well maintained. The Award was issued on June 27, 2023.

- **Land Lover Award** – a program where Keep Henrico Beautiful selects one residential property from each magisterial district that is attractively landscaped, well maintained, utilizes a recycling program and uses best management practices such as rain barrels. The Awards were issued on June 27, 2023 for the Magisterial District winners.
- **Land Lover Series** – a partnership with Henrico County Libraries to educate the public on sustainable practices for their homes and yards. Includes composting, pollinator gardens, native plants, tree maintenance, etc.
- **Stream Clean Ups** – a Partnership with Henricopolis to utilize volunteers and county staff to clean up local streams of litter. A clean up of Horse Creek was done on March 18, 2023.
- **DPU Native Plant Demonstration Garden** – created outside of Public Utilities' Woodman Road office building. Plants are identified for any visitors and will be used as educational tool for native plant information on social media.
- **Native Plant Festival** – the second year of this event again brought in environmental groups and focused on native plants and watershed management. The name of the festival held on October 21, 2023 was changed Plant Native! The festival also featured a new Podcast.
- **Stewart the Turtle and Choose to Reuse** – promotional campaign aimed at getting people to say no to plastic bags and use reusable options instead. A Choose to Reuse page was added to our website and we are giving out reusable bags at grocery stores. Stuart the Turtle will begin making public appearances in 2024.

**Each following annual report shall include a list of sites monitored, a summary of the monitoring protocols used, and a summary of the monitoring results and analyses.**

This reporting language was originally included in a draft version of the MS4 Permit and was related to a "floatables monitoring" condition. Prior to finalization of the MS4 Permit, the "floatables monitoring" condition was eliminated after DEQ reviewed the federal rule making document and determined this condition was not required. However, the reporting language was moved to Part I.B.2.e without being

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edited to remove reference to the "monitoring" that was no longer required. When this oversight was discovered, DEQ agreed that the reporting element could be interpreted to read:

*Each following annual report shall include a summary of the County's efforts to reduce floatables and an evaluation of the effectiveness of those efforts.*

Therefore, the following revised Specific Reporting Requirement is addressed in this Annual Report.

**Each following annual report shall include a summary of the County's efforts to reduce floatables and an evaluation of the effectiveness of those efforts.**

Although the reductions can't be quantified, observations of several sites on which trash racks have been installed display that the County's trash rack program appears to be effective at reducing floatables.

DPW removed 331,692.58 pounds or 9,224.75 bags of litter from the County ROW using SOAR365.

Department of Public Utilities views its program to reduce floatables as a continuing success. During this reporting period, Public Utilities have removed the following from our community:

1. Public Utilities collected 86 tons of tires.
2. Solid Waste Division collected 20,897 gallons of used oil/antifreeze at our public use areas.
3. Solid Waste Division collected 5,220 gallons of oil-based paint & solvents at our public use areas.
4. Keep Henrico Beautiful collected 253 bags of trash from our roadsides, communities, schools, and parks with their programs. A total of 214 volunteers spent a combined 275.5 hours of time during their collection events.

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**MS4 PROGRAM IMPLEMENTATION  
SPILL PREVENTION AND RESPONSE**

Each annual report shall include a list of spills, the source (identified to the best of the permittee’s ability), and a description of follow-up activities taken.

Spills that Occurred between January 1, 2023 and December 31, 2023	
DATE	Provide description of spill, list the material spilled and the quantity, and address what cleanup methods were used.
01/12/2023	DPU -WRF 1,000-gal Non-potable Water spill. NW corner of ENR tank #1 in between elect ETFs & MHS and retaining wall. Contractor (Adams Robinson) hit u/g 2" PVC NPW piping while excavating for new electrical duct bank. Drained into adjacent trench (earth), and small WRF storm drain inlet nearby. Adams Robinson reporting as part their SWPPP for the construction site.
01/27/2023	DPU -WRF < 2-gal MicroC 2000 (Glycerin) and NPW South end of ENRs 11 & 12. Failed supplemental carbon feed piping (previously identified for replacement). Very little residual came out of the pipe, everything was already isolated. This type of leak/spill will happen when a flange is over the ground and pipe is being repaired. Lime was applied to the affected area.
02/03/2023	DPU -WRF 5-gal Sodium Hydroxide (50% solution) at Caustic Building fill connection. The delivery driver knocked the catch bucket over. Closed SWO 001 spill gate to contain all product in storm sewer. DPU Operations assisted to power wash/scrub affected paved surface in front of fill connection. Vacuumed downstream from storm sewer.
02/03/2023	DPW – EERD Approximately 2-3 gallons of diesel fuel was spilled at fueling station then tracked onto the yard by

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	unknown county equipment. Oil dry was applied to the area to absorb free material. Used oil dry disposed of into Clean Harbors barrels.
02/06/2023	DPU -WRF 10-gal Non-potable Water Yard hydrant at SC-4 and SC-7. There was minimal runoff, and all the NPW that was discharged was absorbed into the surrounding ground/ soil. None went to the WRF storm sewer system.
02/03/2023	DPU Solid Waste First Call Environmental was called to respond to a spill release at 5176 Windsor Road. Area cleaned by FCE Staff. No known impacts to stormwater or the conveyance system.
02/03/2023	DPU Solid Waste First Call Environmental was called to respond to a spill release at 810 Wilmer Avenue. Area cleaned by FCE Staff. No known impacts to stormwater or the conveyance system.
02/07/2023	A loosely strapped 25-gallon sprayer on the side of a utility vehicle trailer fell off the trailer, breaking the drain plug and spray wand and resulting in ~20 gallons of a weak water/glyphosate solution spilling onto the asphalt and soil at the corner of Brook Rd. and Wilkinson Rd. Report lists clean up as impossible.
02/07/2023	A loosely strapped 25-gallon sprayer on the side of a utility vehicle trailer fell off the trailer, breaking the drain plug and spray wand and resulting in ~20 gallons of a weak water/glyphosate solution spilling onto the asphalt and soil at the corner of Brook Rd. and Wilkinson Rd. Report lists clean up as impossible.
03/13/2023	DPW – WERD Truck #626 leaked approximately 1 gallon of engine oil in Bay A. Oil dry was applied to absorb any additional engine oil. Oil dry was disposed of into Clean Harbors barrels.
03/24/2023	DPU -WRF <1-gal Filter backwash water EFF-VTP-5&6 (BWR pumps). New ARV leaking on VTP 20" above ground DI piping, force main to PTF INF piping J-box. Dripping puddled a little, then absorbed in earth and by vegetation, and evaporated/dried on concrete sidewalk. No runoff to adjacent road storm water curb and gutter. WRF Maint I&E noticed when working on FE/FIT

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	and 3" isolation valve closed to stop leaking.
04/04/2023	DPU Solid Waste First Call Environmental was called to respond to a spill release at 15 South Holly Avenue. Area cleaned by FCE Staff. No known impacts to stormwater or the conveyance system.
04/18/2023	DPU -WRF 200–300-gal Potable water/concrete wash-out residue North of CCT #1 in between CCT and FB #3/Filter Effluent Channel. No run-off went to storm sewer or creek. Leakage was slow and infiltrated into the soil. No cleanup performed (nothing to clean up). The water that leaked out was potable water with some flowable fill residue, light gray tint. Flowable fill used to fill nearby u/g void.
04/26/2023	DPU Solid Waste First Call Environmental was called to respond to a spill release at 1704 Winona Blvd. Area cleaned by FCE Staff. No known impacts to stormwater or the conveyance system.
04/26/2023	DPU Solid Waste First Call Environmental was called to respond to a spill release at 2603 Darnell Road. Area cleaned by FCE Staff. No known impacts to stormwater or the conveyance system.
05/04/2023	DPU -WRF 50-gal Non-potable Water NPW connected to FCB pumps for testing, NPW filled vent lines. Operator unfamiliar with piping design. NPW overflowed through vent lines out of the building and ran along curb/gutter. No clean up necessary. Absorption berms placed around curb inlet. Operators reminded to review piping systems before atypical testing.
05/05/2023	DPW – EERD Hydraulic line ruptured on paver #756 near 100 W Read St during resurfacing work. Oil dry was applied to area to absorb any residual material. Pillows and pads were placed beneath hydraulic line. Used oil dry, pillows, and pads were disposed of into Clean Harbors barrels.
06/05/2023	DPW – WERD Unknown county equipment spilled less than 1/2 gal of hydraulic fluid onto asphalt between bays A and B. Oil dry was applied to area to absorb any residual material. Used oil dry disposed of into Clean Harbors barrels.

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06/09/2023	DPW – WERD Approximately 1-2 gallons of hydraulic fluid leaked from unknown equipment onto pavement and gravel near entrance to riprap storage area. Impacted gravel was removed from area. Oil dry was applied to area to absorb any residual material from pavement. Used oil dry and impacted gravel were disposed of into Clean Harbors barrels.
07/06/2023	DPW – EERD Truck #20061 spilled less than one gallon of transmission fluid onto Glen Carter St. Oil dry was applied to the spill area. Absorbent pads were used to collect any additional material.
07/12/2023	DPW – EERD Approximately 3 gallons of hydraulic fluid leaked from truck #23007 onto pavement in front of 2612 Red Wing Ln. Oil dry was applied to spill area. Absorbent pads were used to catch any additional material. Used oil dry and pads were disposed of into Clean Harbors barrels.
08/17/2023	DPW – EERD Tractor #777 leaked 2-3 gal of hydraulic fluid onto pavement and gravel near indoor storage building while being moved to wait for repairs to be made. Oil dry was applied to spill area. Impacted gravel and soil were removed. Oil dry and impacted gravel/soil were placed into Clean Harbors barrels for disposal.
08/18/2023	DPU -WRF < 3-gal Polymer In front of Polymer F/C at SH Bldg. During polymer delivery, the driver spilled polymer on the ground while disconnecting the hose. Spillage occurred at the truck F/C and at SH F/C. Operators applied stay dry to two separate polymer piles outside of secondary containment. Driver appeared to be using bucket and spill pan, however, likely did not perform blowback before disconnection.
08/23/2023	DPW – WERD Approximately 1-2 gal of hydraulic fluid leaked from spreader S119 onto asphalt area next to Bay B. Oil dry was applied to area to absorb any residual material. Used oil dry disposed of into Clean Harbors barrels.
08/29/2023	DPW – WERD Truck #601 spilled approximately 5 gallons of hydraulic fluid into Bay C and asphalt area around the

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	<p>bay. Oil dry was applied to area to absorb any residual material. Used oil dry was disposed of into Clean Harbors barrels.</p>
09/13/2023	<p>DPU -WRF &lt;5-gal Lubricant from Heavy Equipment Leak/stain appears to be from heavy equipment that tracked from spoils pile south of Biosolids Pad along the road leading to the Nutrient Upgrade Project. Adams Robinson employees attempted to absorb and clean up leak using fine granite aggregate and a rotating brush on the front of a skid loader. Leak doesn't appear to have impacted storm water assets. Liquid appears to be inert, however very large staining remains.</p>
09/18/2023	<p>Gradall #20031 leaked approximately seven gallons of hydraulic fluid in Bay 2 and onto asphalt area nearby. Around 5 sq ft of gravel/soil were impacted. Oil dry was applied to spill area. Impacted gravel and soil were removed and disposed of into Clean Harbors barrels.</p>
09/18/2023	<p>DPU -WRF &lt;5-Gal Hydraulic Oil Republic Services truck blew a hydraulic hose while unloading dumpster at PTF. Area drains to plant. Republic employee utilized WRF Spill Kit (Kitty Litter/Spill Socks) to mitigate spill. Nothing went to Plant Drain. Maintenance will refill Spill Kit.</p>
09/28/2023	<p>DPU -WRF ~10-gal Hauled Digester Sludge/Non-Potable Water Brockwell driver accidentally hit the release valve at back of trailer releasing ~10 gallons of sludge to the asphalt adjacent to Return Flow Pump Station Wet Well. He did not contact anyone and hooked up to a non-potable water hydrant. He then proceeded to rinse, causing spill to enter grass and eventually Storm Water Outfall #2 swale. Estimated 10 gallons of mixture reached outfall swale. Republic employee utilized WRF Spill Kit (Kitty Litter/Spill Socks) to mitigate spill. Nothing went to Plant Drain. Maintenance will refill Spill Kit. Sandbags were deployed immediately to slow flow heading towards outfall #2 swale, followed by heavy amounts of lime. The driver was informed to call Ryan Smeltz, Dylan Carlton or Admin number to report any spills that occur. This language is in their LHW Permit. The driver discussed the incident with</p>

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**PART I.B.2.f**

**ANNUAL REPORT SUPPLEMENT**

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	his supervisor and a second release valve will be installed to prevent "accidental" release in future. All spill information is located under individual folder, including pictures, Spill Notification Form and communication to personnel.
10/18/2023	DPU -WRF ~100,000-gal Non-Potable Water Below ground NPW pipe break (6" line) near Supplemental Carbon Facility. Isolated section of pipe to stop leak. Close stormwater outfall 001 spill gate to capture additional NPW flow (pump back to plant sewer). Switch entire plant to potable water – turn off NPW system. DPU annual water/sewer repair contractor (GL Howard) then performed repair to 6" line.
10/19/2023	DPU -WRF ~300-gal Untreated wastewater. While performing valve replacement online at Return Flow Pump Station, the valve was isolated but there was no way to fully bleed off residual line pressure. When the line was opened, the contents of pipe spilled onto ground util pressure was zero. The spill was immediately absorbed into the ground – no clean up necessary. Lime was applied to the area. No observed environmental impacts.
10/19/2023	DPU Solid Waste First Call Environmental was called to respond to a spill release at 161 Hawksnest Court. Area cleaned by FCE Staff. No known impacts to stormwater or the conveyance system.
11/13/2023	DPU -WRF 1-gal Antifreeze hose on Republic Services truck blew while removing grit dumpster at PTF (Preliminary Treatment Facility). The driver used WRF spill mats and stay-dry to clean up spill. Response was appropriate and no concerns with discharge to storm water. PTF drains to head of plant process (sanitary sewer – not storm).
11/13/2023	DPU -WRF ~100-gal Non-Potable Water Seal water line popped off Plant Drain Pump. NONE REQUIRED - clean NPW - no solids/debris. Grass around PS was barely wet.
11/29/2023	DPU -WRF ~10,500-gal Non-Potable Water Secondary Clarifier #10 - PVC spray bar piping sheared off at hydrant.

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## HENRICO COUNTY MS4 PROGRAM PLAN

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	Scouring and silt deposits were cleaned up at area around pipe breakage.
12/1/2023	DPU -WRF ~44,600-gal Non-Potable Water Underground NPW yard piping failure behind (south of) Secondary Process Control Building. Sandbags and berms were used to mitigate inflow to stormwater asset. Standing water was captured and pumped to plant sewer.
12/24/2023	DPU -WRF ~50–100-gal Sodium Hypochlorite Between Filter Control Building (FCB) and NaOCl Bulk Storage Tanks. First Call Environmental responded on 12/25/23 to perform emergency clean-up of product pooled on surface. WRF staff performed environmental monitoring and confirmed no impact to stormwater or groundwater. Contaminated soils to be excavated and stockpiled on WRF Solids Pad for characterization and disposal.

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**PART I.B.2.g**  
**MS4 PROGRAM IMPLEMENTATION**  
**INDUSTRIAL AND HIGH-RISK RUNOFF**

The annual report due March 31, 2016 shall include a list of all known industrial and high risk dischargers including any non-VPDES regulated industrial and commercial stormwater dischargers determined by the permittee as contributing a significant pollutant load and that discharge to the MS4 system, a schedule of inspections and procedures for inspecting outfalls.

Industrial and High Risk Dischargers Determined to be Contributing a Significant Pollutant Load to the MS4 between January 1, 2023 and December 31, 2023		
Industrial and High Risk Discharger	VPDES Permit (Permit # or None)	Outfalls to the following to MS4 Structure(s)
No Industrial and High Risk Dischargers were found to be contributing a significant pollutant load to the MS4.		

No fewer than fifty MS4 structures that Industrial and High-Risk Runoff Facilities discharge into will be inspected during each permit year and each will be inspected at least once during the permit cycle. In addition, Industrial and High-Risk Runoff Facilities outfalls with a history of contributing significant pollutant loading to the MS4 during the previous permit year will be re-inspected the following permit year. These outfalls will be subject to the established inspection procedure, including evaluations of identified flows and maintenance and repair needs.

**Each annual report shall report on implementation of the inspection schedule and include a list of the facilities and/or facility outfalls inspected during the reporting period.**

During the permit year, fifty outfalls from Industrial and High-Risk Dischargers were inspected.

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Inspections of Outfalls from Industrial and High Risk Dischargers  
conducted between January 1, 2023 and December 31, 2023

Industrial and High Risk Discharger	Outfall Location	Inspection Date	Determined to be Contributing Significant Pollutant Load to the MS4?
IC1257	MN000000039460	05/01/2023	No
IC2549	MN000000039979	04/26/2023	No
IC0694	MN000000039102	04/20/2023	No
IC1195	MN000000070212	03/03/2023	No
IC0044	IN000000046409	03/03/2023	No
IC1057	MN000000072319	03/02/2023	No
IC2458	MN000000072319	03/02/2023	No
IC0537	IN000000020685	02/09/2023	No
IC1207	IN000000025645	01/31/2023	No
IC0008	MN000000038759	05/08/2023	No
IC0008	EN000000003334	05/08/2023	No
IC0437	MH000000004429	06/28/2023	No
IC0006	IN000000024880	06/29/2023	No
IC0006	MH000000003753	06/29/2023	No
IC0003	MN000000024775	07/03/2023	No
IC0007	IN000000016228	07/03/2023	No
IC0003	IN000000016226	07/03/2023	No
IC0003	IN000000016231	07/03/2023	No
IC0005	IN000000025371	07/06/2023	No
IC0013	MH000000008957	07/06/2023	No
IC0013	MH000000008958	07/06/2023	No
IC2015	IN000000024873	07/06/2023	No
IC1980	IN000000023802	07/06/2023	No
IC0001	IN000000024676	07/27/2023	No
IC0001	MH000000003732	07/27/2023	No
IC0871	IN000000024076	07/27/2023	No
IC1191	MN000000039168	07/31/2023	No
IC0878	MN000000079704	07/31/2023	No

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#### PART I.B.2.g

#### ANNUAL REPORTING REQUIREMENTS

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IC0003	IN000000016236	08/01/2023	No
IC0036	IN000000023806	08/01/2023	No
IC2015	MH000000003754	08/07/2023	No
IC0008	MN000000038755	08/10/2023	No
IC1560	MN000000078639	08/10/2023	No
IC0873	MN000000026105	12/19/2023	No
IC0232	MN000000079975	12/20/2023	No
IC1081	MN000000086194	11/17/2023	No
IC0922	MN000000036249	11/03/2023	No
IC2094	IN000000024958	09/08/2023	No
IC2534	MN000000040620	08/28/2023	No
IC1073	IN000000015492	08/18/2023	No
IC1202	IN000000015492	08/18/2023	No
IC0164	IN000000040144	08/16/2023	No
IC0561	IN000000046361	08/15/2023	No
IC0561	IN000000026734	08/15/2023	No
IC1161	IN000000026734	08/15/2023	No
IC1560	MN000000078640	08/10/2023	No
IC2002	MN000000038755	08/10/2023	No
IC1114	IN000000025222	08/10/2023	No
IC0888	MH000000006812	06/13/2023	No
IC0888	IN000000008183	06/13/2023	No

Inspections of Industrial and High Risk Dischargers determined to be contributing significant pollutant load to the MS4 conducted between January 1, 2023 and December 31, 2023		
Industrial and High Risk Discharger ID#	Inspection Date	Results of Inspection
No Industrial and High Risk Dischargers /were found to be contributing a significant pollutant load to the MS4. Therefore, no Industrial and High Risk Dischargers were inspected during the permit year.		

Each annual report shall include a list of referrals to the Department.

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Industrial and High Risk Dischargers referred to the Virginia Department of Environmental Quality between January 1, 2023 and December 31, 2023

Industrial and High Risk Discharger	Referral Date	Reason for Referral
No Industrial and High Risk Dischargers were referred to the Virginia Department of Environmental Quality during the permit year. VPDES Industrial Stormwater Permitted Facilities located in Henrico County are listed below.		

DMRs received from VPDES Industrial Stormwater Permitted Facilities\* as of December 31, 2022

Permitted Facility	VPDES Permit #	DMR Date Received
Alfa Laval Incorporated	VAR051131	No DMRs Received
Amazon.com Services LLC -RIC4	VAR052549	No DMRs Received
AMF Bakery Systems	VAR050885	No DMRs Received
Amware Pallet Services, LLC- Symbia- Richmond	VAR052533	No DMRs Received
BFI Waste Systems of Virginia LLC- BFI Old Dominion Landfill	VAR052236	No DMRs Received
Bunge Oils Incorporated	VAR050595	No DMRs Received
CHEP Recycled Pallet Solutions LLC	VAR052375	No DMRs Received

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Coca Cola Sandston	VAR050709	No DMRs Received
CSX Transportation Inc. – Bryan Park Terminal	VAR051056	No DMRs Received
Ennis-Flint Incorporated	VAR051550	No DMRs Received
Gillies Creek Industrial Recycling	VAR052249	No DMRs Received
Henkel Corporation	VAR050574	No DMRs Received
Henrico County DPU Springfield Road Waste Management	VAR051025	No DMRs Received
Henrico County Water Reclamation Facility	VAR051633	No DMRs Received
Hilex Poly Company LLC	VAR051636	No DMRs Received
IMTT – Virginia LLC	VAR052455	No DMRs Received
Johns Manville	VAR051167	No DMRs Received
Lee Hy Paving Corporation	VAR051024	No DMRs Received
Mondelez Global LLC	VAR051209	No DMRs Received
Polykon Manufacturing LLC – Seppic Inc.	VAR052405	No DMRs Received

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Premier Fixtures LLC	VAR050656	No DMRs Received
Rolling Frito Lay	VAR051607	No DMRs Received
San J International	VAR050623	No DMRs Received
S.B. Cox Recycling Center MRF	VAR051869	No DMRs Received
The East End Landfill	VAR050624	No DMRs Received
TRANSFLO Terminal Services TTSI	VAR051821	No DMRs Received
WestRock CP LLC – Laburnum	VAR052154	No DMRs Received

\* The list of Permitted Facilities was obtained on February 07, 2023 from the VDEQ website.

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.B.2.h

### MS4 PROGRAM IMPLEMENTATION STORMWATER INFRASTRUCTURE MANAGEMENT

Each annual report shall include a progress report on efforts to repair failed storm sewer outfalls.

Progress Reports on Efforts to Repair Failed Storm Sewer Outfalls			
OUTFALL ID	DATE	ACTION	RESULT
EN000000000827	01/26/2023	MAINTENANCE ACTIVITY	REPAIR
EN000000000829	01/26/2023	MAINTENANCE ACTIVITY	REPAIR
EN000000010913	01/8/2023	MAINTENANCE ACTIVITY	REMOVE DEBRIS
EN000000011056	02/03/2023	MAINTENANCE ACTIVITY	INSTALLED RIPRAP
EN000000007455	02/25/2023	MAINTENANCE ACTIVITY	INSTALL RIPRAP
EN000000008474	02/25/2023	MAINTENANCE ACTIVITY	INSTALL RIPRAP
EN000000007117	03/23/2023	MAINTENANCE ACTIVITY	DEBRIS
EN000000005720	05/11/2023	SCREENING INSPECTION	REPAIR NEEDED
EN000000007945	06/27/2023	SCREENING INSPECTION	REPAIR NEEDED
EN000000006830	07/6/2023	SCREENING INSPECTION	REPAIR NEEDED
EN000000013095	07/11/2023	MAINTENANCE ACTIVITY	REPAIRED
EN000000010993	08/01/2023	SCREENING INSPECTION	REPAIR NEEDED
EN000000008054	08/09/2023	SCREENING INSPECTION	CLOGGED OUTFALL
EN000000006466	08/18/2023	SCREENING INSPECTION	COLLAPSED PIPE
EN000000011056	09/30/2023	MAINTENANCE ACTIVITY	REPAIR
EN000000011452	09/30/2023	MAINTENANCE ACTIVITY	REPAIR
EN000000008135	09/30/2023	MAINTENANCE ACTIVITY	REPAIR
EN000000005298	12/14/2023	MAINTENANCE INSPECTION	OVERGROWN VEGETATION
EN000000012836	12/20/2023	MAINTENANCE INSPECTION	DEBRIS
EN000000008003	12/29/2023	SCREENING INSPECTION	REPAIR REQUIRED
EN000000003107	12/20/2023	MAINTENANCE INSPECTION	SEDIMENTATION

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### PART I.B.2.h

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Each annual report shall include a list of activities including inspections, maintenance, and repair of stormwater infrastructure operated by the permittee as required in Part I.B.2.h)1), including the total number of stormwater facilities operated by the permittee, the type and number of stormwater facilities inspected and maintained; the linear feet of storm sewer system owned and/or operated by the permittee, and the linear feet of storm sewer system inspected.

MS4 Infrastructure Inspected* between January 1, 2023 and December 31, 2023		
MS4 Infrastructure Type	Unit	Inspected
Inlets	each	2,638
Manholes	each	438
Junction Boxes	each	32
End Treatments	each	952
Mains	linear feet	1,456,129

\* includes Screening Inspections, Screening Inspection Follow-Ups, Construction Acceptance Inspections, Maintenance Evaluations, and Repair and/or Maintenance Activities

During this permit year (January 1, 2023 and December 31, 2023), 16.36% of the MS4 infrastructure was inspected.

Since the effective date of the MS4 Permit (April 1, 2015 thru December 31, 2023), 97.18% of the MS4 infrastructure has been inspected.

Inspection, Maintenance, and Repair Actions conducted on MS4 Infrastructure between January 1, 2023 and December 31, 2023			
MS4 Infrastructure Type	Inspections	Maintenance	Repair
Inlets	2,694	2,119	8

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Manholes	444	161	0
Junction Boxes	33	4	0
End Treatments	967	31	0
Mains	14,688	1,412	4

On-Line* County-Operated SWM Facilities Inspected and/or Maintained between January 1, 2023 and December 31, 2023			
Type	Total	Inspected	Maintained
50/10 BASIN (5)	12	12	0
50/10 UNDERGROUND (6)	19	12	1
BAYFILTER (200)	1	1	0
BAYSEPARATOR (205)	1	1	0
BIORETENTION 1 (145)	5	3	1
BIORETENTION BASIN/TRENCH (10)	11	11	1
DRY DETENTION - POND (177)	3	0	0
DRY DETENTION - UNDERGROUND (178)	17	8	0
DRY SWALE 2 (151)	2	2	0
EXTENDED DETENTION BASIN (15)	32	32	1
EXTENDED DETENTION BASIN W/A SHALLOW MARSH (16)	2	2	1
EXTENDED DETENTION POND 1 (175)	1	1	1
FILTERRA (215)	29	27	4
GRASS CHANNEL (110)	1	1	0
GRASSED SWALE (20)	11	11	0
IMBRIUM JELLYFISH (250)	1	1	0
INFILTRATION BASIN/TRENCH (25)	5	4	2
PERMEABLE PAVEMENT 1 (135)	10	5	0
PROPRIETARY - SEE GIS NOTES (300)	4	0	0

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## HENRICO COUNTY MS4 PROGRAM PLAN

RETENTION BASIN (WET POND) (30)	7	7	0
SHEETFLOW TO VEGETATED FILTER OR CONSERVED OPEN SPACE 1 (105)	7	6	0
SHEETFLOW TO VEGETATED FILTER OR CONSERVED OPEN SPACE 2 (106)	7	3	2
STORMCEPTOR (225)	1	1	0
STORMFILTER (220)	5	4	0
STORMTREAT (230)	3	3	0
STORMWATER360 (235)	5	5	0
VEGETATED FILTER STRIP (40)	2	2	0
WET POND (170)	1	1	0
<b>Total</b>	<b>205</b>	<b>166</b>	<b>14</b>

\* Facilities with either an Active or Accepted status as of December 31, 2023

On-Line Privately-Operated SWM Facilities Discharging to the MS4 that were Inspected and/or Maintained between January 1, 2023 and December 31, 2023			
Type	Total	Inspected	Maintained
50/10 BASIN (5)	59	17	0
50/10 UNDERGROUND (6)	84	17	1
BAYSAVER (210)	1	0	0
BIORETENTION 1 (145)	1	1	0
BIORETENTION 2 (146)	1	0	0
BIORETENTION BASIN/TRENCH (10)	22	3	0
DRY DETENTION - POND (177)	4	0	0
DRY DETENTION - UNDERGROUND (178)	14	2	0
DRY SWALE 1 (150)	1	1	0
EXTENDED DETENTION BASIN (15)	202	48	3
EXTENDED DETENTION BASIN W/A SHALLOW MARSH (16)	46	8	1
FILTERING PRACTICE (160)	1	0	0

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FILTERRA (215)	199	50	33
GRASSED SWALE (20)	6	0	0
IMBRIUM JELLYFISH (250)	2	0	0
INFILTRATION BASIN/TRENCH (25)	8	0	0
RETENTION BASIN (WET POND) (30)	61	15	1
SAND FILTER (35)	63	13	0
STORMCEPTOR (225)	1	1	0
STORMTREAT (230)	6	0	1
STORMWATER360 (235)	20	3	1
VEGETATED FILTER STRIP (40)	1	0	0
<b>Total</b>	<b>803</b>	<b>179</b>	<b>41</b>

\* Facilities with either an Active or Accepted status

County-Owned/Operated Culverts and Pipes Inventoried as of December 31, 2023 and Inspected between January 1, 2023 and December 31, 2023	
Culverts and Pipes Inventoried (miles)	Culverts and Pipes Inspected between January 1, 2023 and December 31, 2023 (miles)
849.45	93.08

Each annual report shall provide a summary of actions taken by the permittee to address failure of privately maintained SWM facilities owners to abide by maintenance agreements.

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<p>The number of privately-maintained SWM facilities that:</p> <ul style="list-style-type: none"> <li>1) discharge to the MS4,</li> <li>2) needed <i>required</i> maintenance and/or repair based on a previous inspection, and</li> <li>3) are subject to a recorded maintenance agreement,</li> </ul> <p>where the owner(s) failed to perform <i>required</i> maintenance and/or repair as directed by the County.</p>	108
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A second maintenance letter documenting the required punchlist of repairs is sent the owners of these facilities. Owners have 30 days from receipt of the letter to contact the County BMP inspector with a plan for repairs and a tentative schedule. The owner is to contact the inspector at the start of any maintenance work and at its completion. The facility is re-inspected after completion of work. If no contact is made or no action is taken by the owner after the second punchlist, then these items are forwarded to the County Attorney's office for legal action.

**Each annual report shall include a list of activities including inspections performed and notifications of needed maintenance and repair of stormwater facilities not operated by the permittee as required by Part I.B.2.h)2).**

Facility ID	Action Date	Action Type
BMP00001	10/16/2023	MAINTENANCE INSPECTION
BMP00012	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00014	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00015	12/19/2023	MAINTENANCE INSPECTION
BMP00024	8/1/2023	MAINTENANCE INSPECTION
BMP00025	9/20/2023	MAINTENANCE INSPECTION
BMP00026	8/1/2023	MAINTENANCE INSPECTION
BMP00028	8/15/2023	MAINTENANCE INSPECTION

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BMP00032	8/15/2023	MAINTENANCE INSPECTION
BMP00040	8/23/2023	MAINTENANCE INSPECTION
BMP00045	12/19/2023	MAINTENANCE INSPECTION
BMP00048	12/19/2023	MAINTENANCE INSPECTION
BMP00051	10/30/2023	MAINTENANCE INSPECTION
BMP00053	11/7/2023	MAINTENANCE INSPECTION
BMP00068	3/14/2023	MAINTENANCE INSPECTION
BMP00079	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00080	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00081	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00083	8/10/2023	MAINTENANCE INSPECTION
BMP00084	10/16/2023	MAINTENANCE INSPECTION
BMP00088	1/18/2023	MAINTENANCE INSPECTION
BMP00098	2/20/2023	MAINTENANCE INSPECTION
BMP00101	10/4/2023	MAINTENANCE INSPECTION
BMP00102	10/4/2023	MAINTENANCE INSPECTION
BMP00104	10/26/2023	MAINTENANCE ACTIVITY
BMP00114	4/18/2023	MAINTENANCE INSPECTION
BMP00120	3/14/2023	MAINTENANCE INSPECTION
BMP00146	8/16/2023	MAINTENANCE INSPECTION
BMP00147	8/16/2023	MAINTENANCE INSPECTION
BMP00148	8/16/2023	MAINTENANCE INSPECTION
BMP00149	8/16/2023	MAINTENANCE INSPECTION
BMP00150	8/16/2023	MAINTENANCE INSPECTION
BMP00151	8/16/2023	MAINTENANCE INSPECTION
BMP00152	8/16/2023	MAINTENANCE INSPECTION
BMP00168	10/18/2023	MAINTENANCE INSPECTION
BMP00172	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00173	9/13/2023	MAINTENANCE INSPECTION
BMP00199	10/10/2023	MAINTENANCE INSPECTION
BMP00200	10/10/2023	MAINTENANCE INSPECTION
BMP00201	10/10/2023	MAINTENANCE INSPECTION
BMP00202	8/2/2023	MAINTENANCE INSPECTION
BMP00205	9/13/2023	MAINTENANCE INSPECTION

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BMP00210	11/29/2023	RECEIPT OF CERTIFICATION
BMP00213	1/11/2023	EDUCATION
BMP00240	4/5/2023	OWNER INSPECTION
BMP00240	4/5/2023	MAINTENANCE ACTIVITY
BMP00246	6/29/2023	MAINTENANCE INSPECTION
BMP00247	6/29/2023	MAINTENANCE INSPECTION
BMP00248	10/4/2023	MAINTENANCE INSPECTION
BMP00255	2/7/2023	MAINTENANCE INSPECTION
BMP00255	2/9/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00255	3/16/2023	MAINTENANCE INSPECTION
BMP00255	2/23/2023	MAINTENANCE ACTIVITY
BMP00257	8/15/2023	MAINTENANCE INSPECTION
BMP00258	8/15/2023	MAINTENANCE INSPECTION
BMP00264	4/18/2023	MAINTENANCE INSPECTION
BMP00276	4/18/2023	MAINTENANCE INSPECTION
BMP00277	4/18/2023	MAINTENANCE INSPECTION
BMP00278	10/10/2023	MAINTENANCE INSPECTION
BMP00280	8/2/2023	MAINTENANCE INSPECTION
BMP00284	10/4/2023	MAINTENANCE INSPECTION
BMP00286	9/6/2023	MAINTENANCE INSPECTION
BMP00287	9/6/2023	MAINTENANCE INSPECTION
BMP00289	4/18/2023	MAINTENANCE INSPECTION
BMP00290	3/14/2023	MAINTENANCE INSPECTION
BMP00291	3/14/2023	MAINTENANCE INSPECTION
BMP00292	9/20/2023	MAINTENANCE INSPECTION
BMP00293	9/13/2023	MAINTENANCE INSPECTION
BMP00294	2/14/2023	MAINTENANCE INSPECTION
BMP00295	2/14/2023	MAINTENANCE INSPECTION
BMP00297	8/30/2023	MAINTENANCE INSPECTION
BMP00298	3/16/2023	MAINTENANCE ACTIVITY
BMP00298	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00299	11/7/2023	MAINTENANCE INSPECTION
BMP00302	10/30/2023	MAINTENANCE INSPECTION
BMP00321	8/16/2023	MAINTENANCE INSPECTION

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BMP00325	1/13/2023	MAINTENANCE ACTIVITY
BMP00338	11/8/2023	MAINTENANCE INSPECTION
BMP00345	9/14/2023	MAINTENANCE INSPECTION
BMP00347	9/14/2023	MAINTENANCE INSPECTION
BMP00348	8/1/2023	MAINTENANCE INSPECTION
BMP00349	2/14/2023	MAINTENANCE INSPECTION
BMP00350	5/17/2023	MAINTENANCE INSPECTION
BMP00353	2/14/2023	MAINTENANCE INSPECTION
BMP00359	9/14/2023	MAINTENANCE INSPECTION
BMP00360	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00361	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00362	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00374	10/30/2023	MAINTENANCE INSPECTION
BMP00375	10/30/2023	MAINTENANCE INSPECTION
BMP00381	5/17/2023	MAINTENANCE INSPECTION
BMP00382	3/14/2023	MAINTENANCE INSPECTION
BMP00383	3/14/2023	MAINTENANCE INSPECTION
BMP00385	9/20/2023	MAINTENANCE INSPECTION
BMP00386	4/18/2023	MAINTENANCE INSPECTION
BMP00393	2/3/2023	MAINTENANCE INSPECTION
BMP00393	2/3/2023	ACCEPTANCE INSPECTION
BMP00394	4/18/2023	MAINTENANCE INSPECTION
BMP00395	8/1/2023	MAINTENANCE INSPECTION
BMP00396	8/1/2023	MAINTENANCE INSPECTION
BMP00405	1/18/2023	MAINTENANCE INSPECTION
BMP00410	1/18/2023	MAINTENANCE INSPECTION
BMP00426	6/29/2023	MAINTENANCE INSPECTION
BMP00429	8/15/2023	MAINTENANCE INSPECTION
BMP00430	1/18/2023	MAINTENANCE INSPECTION
BMP00431	10/10/2023	MAINTENANCE INSPECTION
BMP00432	8/2/2023	MAINTENANCE INSPECTION
BMP00433	10/30/2023	MAINTENANCE INSPECTION
BMP00442	8/2/2023	MAINTENANCE INSPECTION
BMP00448	9/13/2023	MAINTENANCE INSPECTION

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BMP00449	5/17/2023	MAINTENANCE INSPECTION
BMP00450	5/17/2023	MAINTENANCE INSPECTION
BMP00456	11/7/2023	MAINTENANCE INSPECTION
BMP00457	11/7/2023	MAINTENANCE INSPECTION
BMP00462	1/6/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00464	2/14/2023	MAINTENANCE INSPECTION
BMP00482	9/13/2023	MAINTENANCE INSPECTION
BMP00483	6/19/2023	MAINTENANCE ACTIVITY
BMP00483	6/19/2023	OWNER INSPECTION
BMP00483	4/18/2023	MAINTENANCE INSPECTION
BMP00488	11/2/2023	MAINTENANCE INSPECTION
BMP00499	12/15/2023	ACCEPTANCE INSPECTION
BMP00509	12/19/2023	MAINTENANCE INSPECTION
BMP00540	9/6/2023	MAINTENANCE INSPECTION
BMP00541	9/6/2023	MAINTENANCE INSPECTION
BMP00544	7/6/2023	MAINTENANCE INSPECTION
BMP00546	4/18/2023	MAINTENANCE INSPECTION
BMP00558	9/12/2023	MAINTENANCE INSPECTION
BMP00560	3/14/2023	MAINTENANCE INSPECTION
BMP00561	3/14/2023	MAINTENANCE INSPECTION
BMP00562	3/14/2023	MAINTENANCE INSPECTION
BMP00574	9/14/2023	MAINTENANCE INSPECTION
BMP00575	3/7/2023	MAINTENANCE ACTIVITY
BMP00575	3/7/2023	OWNER INSPECTION
BMP00576	3/7/2023	MAINTENANCE ACTIVITY
BMP00576	3/7/2023	OWNER INSPECTION
BMP00579	1/26/2023	MAINTENANCE ACTIVITY
BMP00581	9/30/2023	MAINTENANCE INSPECTION
BMP00582	1/18/2023	MAINTENANCE INSPECTION
BMP00583	1/18/2023	MAINTENANCE INSPECTION
BMP00584	1/18/2023	MAINTENANCE INSPECTION
BMP00585	1/18/2023	MAINTENANCE INSPECTION
BMP00586	1/18/2023	MAINTENANCE INSPECTION
BMP00587	1/18/2023	MAINTENANCE INSPECTION

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BMP00588	1/18/2023	MAINTENANCE INSPECTION
BMP00595	5/17/2023	MAINTENANCE INSPECTION
BMP00596	5/17/2023	MAINTENANCE INSPECTION
BMP00606	1/18/2023	MAINTENANCE INSPECTION
BMP00607	8/15/2023	MAINTENANCE INSPECTION
BMP00611	9/13/2023	MAINTENANCE INSPECTION
BMP00616	11/2/2023	MAINTENANCE INSPECTION
BMP00617	10/30/2023	MAINTENANCE INSPECTION
BMP00628	11/7/2023	MAINTENANCE INSPECTION
BMP00638	1/27/2023	MAINTENANCE ACTIVITY
BMP00640	7/6/2023	MAINTENANCE INSPECTION
BMP00643	2/16/2023	RETIREMENT
BMP00646	9/30/2023	MAINTENANCE INSPECTION
BMP00647	4/18/2023	MAINTENANCE INSPECTION
BMP00648	3/14/2023	MAINTENANCE INSPECTION
BMP00650	7/19/2023	MAINTENANCE INSPECTION
BMP00656	7/19/2023	MAINTENANCE INSPECTION
BMP00657	7/17/2023	MAINTENANCE INSPECTION
BMP00658	6/29/2023	MAINTENANCE INSPECTION
BMP00661	5/17/2023	MAINTENANCE INSPECTION
BMP00663	2/3/2023	OWNER INSPECTION
BMP00663	2/3/2023	MAINTENANCE ACTIVITY
BMP00664	2/3/2023	MAINTENANCE ACTIVITY
BMP00664	2/3/2023	OWNER INSPECTION
BMP00665	2/3/2023	OWNER INSPECTION
BMP00665	2/3/2023	MAINTENANCE ACTIVITY
BMP00666	2/7/2023	MAINTENANCE ACTIVITY
BMP00666	2/3/2023	OWNER INSPECTION
BMP00667	2/3/2023	OWNER INSPECTION
BMP00667	2/3/2023	MAINTENANCE ACTIVITY
BMP00668	2/3/2023	OWNER INSPECTION
BMP00668	2/3/2023	MAINTENANCE ACTIVITY
BMP00669	2/3/2023	OWNER INSPECTION
BMP00669	2/3/2023	MAINTENANCE ACTIVITY

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BMP00670	2/3/2023	OWNER INSPECTION
BMP00670	2/3/2023	MAINTENANCE ACTIVITY
BMP00671	2/3/2023	OWNER INSPECTION
BMP00671	2/3/2023	MAINTENANCE ACTIVITY
BMP00672	2/3/2023	OWNER INSPECTION
BMP00672	2/3/2023	MAINTENANCE ACTIVITY
BMP00673	2/3/2023	MAINTENANCE ACTIVITY
BMP00673	2/3/2023	OWNER INSPECTION
BMP00678	8/15/2023	MAINTENANCE INSPECTION
BMP00679	8/15/2023	MAINTENANCE INSPECTION
BMP00683	10/16/2023	MAINTENANCE INSPECTION
BMP00685	2/14/2023	MAINTENANCE INSPECTION
BMP00686	2/14/2023	MAINTENANCE INSPECTION
BMP00698	3/14/2023	MAINTENANCE INSPECTION
BMP00699	8/1/2023	MAINTENANCE INSPECTION
BMP00706	3/14/2023	MAINTENANCE INSPECTION
BMP00707	5/17/2023	MAINTENANCE INSPECTION
BMP00712	11/1/2023	MAINTENANCE INSPECTION
BMP00713	12/19/2023	MAINTENANCE INSPECTION
BMP00714	12/19/2023	MAINTENANCE INSPECTION
BMP00720	9/14/2023	MAINTENANCE INSPECTION
BMP00722	5/9/2023	OWNER INSPECTION
BMP00722	5/9/2023	MAINTENANCE ACTIVITY
BMP00724	8/16/2023	MAINTENANCE INSPECTION
BMP00730	2/14/2023	MAINTENANCE INSPECTION
BMP00747	5/17/2023	MAINTENANCE INSPECTION
BMP00751	9/14/2023	MAINTENANCE INSPECTION
BMP00755	9/6/2023	MAINTENANCE INSPECTION
BMP00758	8/10/2023	MAINTENANCE INSPECTION
BMP00767	7/26/2023	MAINTENANCE INSPECTION
BMP00768	11/2/2023	MAINTENANCE INSPECTION
BMP00769	11/2/2023	MAINTENANCE INSPECTION
BMP00775	1/18/2023	MAINTENANCE INSPECTION
BMP00776	1/18/2023	MAINTENANCE INSPECTION

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BMP00777	1/18/2023	MAINTENANCE INSPECTION
BMP00778	1/18/2023	MAINTENANCE INSPECTION
BMP00779	1/18/2023	MAINTENANCE INSPECTION
BMP00780	1/18/2023	MAINTENANCE INSPECTION
BMP00781	1/18/2023	MAINTENANCE INSPECTION
BMP00782	1/18/2023	MAINTENANCE INSPECTION
BMP00785	10/4/2023	MAINTENANCE INSPECTION
BMP00786	10/4/2023	MAINTENANCE INSPECTION
BMP00788	8/1/2023	MAINTENANCE INSPECTION
BMP00789	8/1/2023	MAINTENANCE INSPECTION
BMP00794	8/1/2023	MAINTENANCE INSPECTION
BMP00799	7/19/2023	MAINTENANCE INSPECTION
BMP00800	7/19/2023	MAINTENANCE INSPECTION
BMP00801	7/19/2023	MAINTENANCE INSPECTION
BMP00805	3/1/2023	MAINTENANCE INSPECTION
BMP00805	3/1/2023	RETIREMENT
BMP00808	1/19/2023	MAINTENANCE INSPECTION
BMP00809	7/6/2023	MAINTENANCE INSPECTION
BMP00813	8/2/2023	MAINTENANCE INSPECTION
BMP00826	7/26/2023	MAINTENANCE INSPECTION
BMP00836	11/2/2023	MAINTENANCE INSPECTION
BMP00841	10/10/2023	MAINTENANCE INSPECTION
BMP00842	8/1/2023	MAINTENANCE INSPECTION
BMP00843	8/1/2023	MAINTENANCE INSPECTION
BMP00851	6/29/2023	MAINTENANCE INSPECTION
BMP00862	6/29/2023	MAINTENANCE INSPECTION
BMP00869	8/2/2023	MAINTENANCE INSPECTION
BMP00870	5/17/2023	MAINTENANCE INSPECTION
BMP00875	7/19/2023	MAINTENANCE INSPECTION
BMP00876	7/19/2023	MAINTENANCE INSPECTION
BMP00877	4/18/2023	MAINTENANCE INSPECTION
BMP00878	10/10/2023	MAINTENANCE INSPECTION
BMP00879	10/10/2023	MAINTENANCE INSPECTION
BMP00884	8/15/2023	MAINTENANCE INSPECTION

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BMP00890	11/7/2023	MAINTENANCE INSPECTION
BMP00905	1/13/2023	MAINTENANCE ACTIVITY
BMP00905	8/17/2023	MAINTENANCE INSPECTION
BMP00907	1/6/2023	MAINTENANCE ACTIVITY
BMP00911	7/6/2023	MAINTENANCE INSPECTION
BMP00920	8/15/2023	MAINTENANCE INSPECTION
BMP00921	8/23/2023	MAINTENANCE INSPECTION
BMP00934	5/30/2023	RETIREMENT
BMP00935	6/29/2023	MAINTENANCE INSPECTION
BMP00944	7/26/2023	MAINTENANCE INSPECTION
BMP00946	7/26/2023	MAINTENANCE INSPECTION
BMP00948	7/26/2023	MAINTENANCE INSPECTION
BMP00951	8/23/2023	MAINTENANCE INSPECTION
BMP00964	4/18/2023	MAINTENANCE INSPECTION
BMP00967	4/18/2023	MAINTENANCE INSPECTION
BMP00968	4/18/2023	MAINTENANCE INSPECTION
BMP00981	2/14/2023	MAINTENANCE INSPECTION
BMP00982	9/7/2023	MAINTENANCE INSPECTION
BMP00983	9/7/2023	MAINTENANCE INSPECTION
BMP00984	9/7/2023	MAINTENANCE INSPECTION
BMP00985	9/7/2023	MAINTENANCE INSPECTION
BMP00986	9/7/2023	MAINTENANCE INSPECTION
BMP00990	4/18/2023	MAINTENANCE INSPECTION
BMP00997	10/16/2023	MAINTENANCE INSPECTION
BMP00998	10/16/2023	MAINTENANCE INSPECTION
BMP00999	10/16/2023	MAINTENANCE INSPECTION
BMP01005	3/14/2023	MAINTENANCE INSPECTION
BMP01006	10/18/2023	MAINTENANCE INSPECTION
BMP01007	10/25/2023	MAINTENANCE INSPECTION
BMP01016	3/14/2023	MAINTENANCE INSPECTION
BMP01017	8/15/2023	MAINTENANCE INSPECTION
BMP01018	8/15/2023	MAINTENANCE INSPECTION
BMP01019	8/15/2023	MAINTENANCE INSPECTION
BMP01024	12/19/2023	MAINTENANCE INSPECTION

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BMP01026	5/17/2023	MAINTENANCE INSPECTION
BMP01041	11/7/2023	MAINTENANCE INSPECTION
BMP01042	11/7/2023	MAINTENANCE INSPECTION
BMP01043	3/14/2023	MAINTENANCE INSPECTION
BMP01050	10/18/2023	MAINTENANCE INSPECTION
BMP01051	8/10/2023	MAINTENANCE INSPECTION
BMP01056	2/14/2023	MAINTENANCE INSPECTION
BMP01058	2/14/2023	MAINTENANCE INSPECTION
BMP01063	9/6/2023	MAINTENANCE INSPECTION
BMP01076	5/17/2023	MAINTENANCE INSPECTION
BMP01077	5/17/2023	MAINTENANCE INSPECTION
BMP01078	1/4/2023	MAINTENANCE ACTIVITY
BMP01078	1/4/2023	MAINTENANCE INSPECTION
BMP01079	5/17/2023	MAINTENANCE INSPECTION
BMP01084	1/18/2023	MAINTENANCE INSPECTION
BMP01085	1/18/2023	MAINTENANCE INSPECTION
BMP01089	12/18/2023	MAINTENANCE INSPECTION
BMP01090	8/16/2023	MAINTENANCE INSPECTION
BMP01123	7/6/2023	MAINTENANCE INSPECTION
BMP01142	5/17/2023	MAINTENANCE INSPECTION
BMP01146	9/6/2023	ACCEPTANCE INSPECTION
BMP01146	9/6/2023	RECEIPT OF CERTIFICATION
BMP01146	10/24/2023	RECEIPT OF CERTIFICATION
BMP01149	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01155	1/18/2023	MAINTENANCE INSPECTION
BMP01157	9/13/2023	MAINTENANCE INSPECTION
BMP01162	7/6/2023	MAINTENANCE INSPECTION
BMP01167	6/29/2023	MAINTENANCE INSPECTION
BMP01168	2/14/2023	MAINTENANCE INSPECTION
BMP01176	8/1/2023	MAINTENANCE INSPECTION
BMP01177	8/1/2023	MAINTENANCE INSPECTION
BMP01180	8/10/2023	MAINTENANCE INSPECTION
BMP01183	11/2/2023	MAINTENANCE INSPECTION
BMP01184	10/4/2023	MAINTENANCE INSPECTION

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BMP01185	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01186	6/2/2023	OWNER INSPECTION
BMP01186	6/2/2023	MAINTENANCE ACTIVITY
BMP01186	1/6/2023	OWNER INSPECTION
BMP01186	1/6/2023	MAINTENANCE ACTIVITY
BMP01187	1/6/2023	OWNER INSPECTION
BMP01187	6/2/2023	MAINTENANCE ACTIVITY
BMP01187	1/6/2023	MAINTENANCE ACTIVITY
BMP01187	6/2/2023	OWNER INSPECTION
BMP01188	1/6/2023	OWNER INSPECTION
BMP01188	6/2/2023	OWNER INSPECTION
BMP01188	6/2/2023	MAINTENANCE ACTIVITY
BMP01188	1/6/2023	MAINTENANCE ACTIVITY
BMP01189	1/10/2023	MAINTENANCE ACTIVITY
BMP01189	1/6/2023	OWNER INSPECTION
BMP01191	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01192	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01198	3/14/2023	MAINTENANCE INSPECTION
BMP01200	2/1/2023	MAINTENANCE ACTIVITY
BMP01200	2/1/2023	OWNER INSPECTION
BMP01201	2/1/2023	OWNER INSPECTION
BMP01201	2/1/2023	MAINTENANCE ACTIVITY
BMP01202	2/1/2023	MAINTENANCE ACTIVITY
BMP01202	2/1/2023	OWNER INSPECTION
BMP01203	2/1/2023	MAINTENANCE ACTIVITY
BMP01203	2/1/2023	OWNER INSPECTION
BMP01204	2/1/2023	MAINTENANCE ACTIVITY
BMP01204	2/1/2023	OWNER INSPECTION
BMP01205	2/1/2023	OWNER INSPECTION
BMP01205	2/1/2023	MAINTENANCE ACTIVITY
BMP01206	2/1/2023	MAINTENANCE ACTIVITY
BMP01206	2/1/2023	OWNER INSPECTION
BMP01207	2/1/2023	OWNER INSPECTION
BMP01207	2/1/2023	MAINTENANCE ACTIVITY

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BMP01211	11/2/2023	MAINTENANCE INSPECTION
BMP01212	9/13/2023	MAINTENANCE INSPECTION
BMP01213	9/13/2023	MAINTENANCE INSPECTION
BMP01236	2/24/2023	OWNER INSPECTION
BMP01236	2/24/2023	MAINTENANCE ACTIVITY
BMP01237	9/6/2023	MAINTENANCE INSPECTION
BMP01241	7/12/2023	MAINTENANCE INSPECTION
BMP01245	8/2/2023	MAINTENANCE INSPECTION
BMP01246	2/14/2023	MAINTENANCE INSPECTION
BMP01247	2/14/2023	MAINTENANCE INSPECTION
BMP01248	2/14/2023	MAINTENANCE INSPECTION
BMP01249	7/19/2023	MAINTENANCE INSPECTION
BMP01250	7/19/2023	MAINTENANCE INSPECTION
BMP01251	7/19/2023	MAINTENANCE INSPECTION
BMP01252	7/19/2023	MAINTENANCE INSPECTION
BMP01254	11/7/2023	MAINTENANCE INSPECTION
BMP01255	11/7/2023	MAINTENANCE INSPECTION
BMP01258	2/7/2023	MAINTENANCE ACTIVITY
BMP01258	2/7/2023	OWNER INSPECTION
BMP01259	2/7/2023	MAINTENANCE ACTIVITY
BMP01259	2/7/2023	OWNER INSPECTION
BMP01260	2/7/2023	MAINTENANCE ACTIVITY
BMP01260	2/7/2023	OWNER INSPECTION
BMP01261	2/7/2023	OWNER INSPECTION
BMP01261	2/7/2023	MAINTENANCE ACTIVITY
BMP01262	2/7/2023	MAINTENANCE ACTIVITY
BMP01262	2/7/2023	OWNER INSPECTION
BMP01263	5/17/2023	MAINTENANCE INSPECTION
BMP01270	1/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01275	10/30/2023	MAINTENANCE INSPECTION
BMP01276	9/30/2023	MAINTENANCE INSPECTION
BMP01277	3/8/2023	MAINTENANCE ACTIVITY
BMP01277	3/8/2023	OWNER INSPECTION
BMP01278	3/8/2023	MAINTENANCE ACTIVITY

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BMP01278	3/8/2023	OWNER INSPECTION
BMP01279	3/8/2023	OWNER INSPECTION
BMP01279	3/8/2023	MAINTENANCE ACTIVITY
BMP01283	5/17/2023	MAINTENANCE INSPECTION
BMP01287	1/6/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01293	3/14/2023	MAINTENANCE INSPECTION
BMP01309	1/6/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01312	4/18/2023	MAINTENANCE INSPECTION
BMP01313	4/18/2023	MAINTENANCE INSPECTION
BMP01314	4/18/2023	MAINTENANCE INSPECTION
BMP01316	2/14/2023	MAINTENANCE INSPECTION
BMP01320	8/2/2023	MAINTENANCE INSPECTION
BMP01332	3/14/2023	MAINTENANCE INSPECTION
BMP01333	3/14/2023	MAINTENANCE INSPECTION
BMP01342	7/26/2023	MAINTENANCE INSPECTION
BMP01343	7/26/2023	MAINTENANCE INSPECTION
BMP01353	8/1/2023	MAINTENANCE INSPECTION
BMP01354	9/20/2023	MAINTENANCE INSPECTION
BMP01358	8/1/2023	MAINTENANCE INSPECTION
BMP01359	8/1/2023	MAINTENANCE INSPECTION
BMP01360	9/20/2023	MAINTENANCE INSPECTION
BMP01361	9/20/2023	MAINTENANCE INSPECTION
BMP01362	9/20/2023	MAINTENANCE INSPECTION
BMP01363	9/20/2023	MAINTENANCE INSPECTION
BMP01369	6/29/2023	MAINTENANCE INSPECTION
BMP01378	4/11/2023	RETIREMENT
BMP01379	3/8/2023	OWNER INSPECTION
BMP01379	3/8/2023	MAINTENANCE ACTIVITY
BMP01380	3/8/2023	OWNER INSPECTION
BMP01380	3/8/2023	MAINTENANCE ACTIVITY
BMP01382	3/8/2023	MAINTENANCE ACTIVITY
BMP01382	3/8/2023	OWNER INSPECTION
BMP01383	3/8/2023	MAINTENANCE ACTIVITY
BMP01383	3/8/2023	OWNER INSPECTION

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BMP01384	3/8/2023	OWNER INSPECTION
BMP01384	3/8/2023	MAINTENANCE ACTIVITY
BMP01385	3/8/2023	OWNER INSPECTION
BMP01385	3/8/2023	MAINTENANCE ACTIVITY
BMP01386	3/8/2023	OWNER INSPECTION
BMP01386	3/8/2023	MAINTENANCE ACTIVITY
BMP01387	3/8/2023	OWNER INSPECTION
BMP01387	3/8/2023	MAINTENANCE ACTIVITY
BMP01388	3/8/2023	MAINTENANCE ACTIVITY
BMP01388	3/8/2023	OWNER INSPECTION
BMP01389	3/8/2023	OWNER INSPECTION
BMP01389	3/8/2023	MAINTENANCE ACTIVITY
BMP01390	3/8/2023	OWNER INSPECTION
BMP01390	3/8/2023	MAINTENANCE ACTIVITY
BMP01397	10/16/2023	MAINTENANCE INSPECTION
BMP01428	7/6/2023	MAINTENANCE INSPECTION
BMP01429	6/6/2023	MAINTENANCE INSPECTION
BMP01433	9/23/2023	MAINTENANCE INSPECTION
BMP01487	11/2/2023	MAINTENANCE INSPECTION
BMP01516	2/12/2023	MAINTENANCE INSPECTION
BMP01536	6/27/2023	MAINTENANCE ACTIVITY
BMP01536	6/27/2023	OWNER INSPECTION
BMP01536	8/15/2023	MAINTENANCE INSPECTION
BMP01540	7/26/2023	MAINTENANCE INSPECTION
BMP01546	8/15/2023	MAINTENANCE INSPECTION
BMP01553	10/18/2023	MAINTENANCE INSPECTION
BMP01554	10/4/2023	MAINTENANCE INSPECTION
BMP01562	8/2/2023	MAINTENANCE INSPECTION
BMP01596	3/16/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01596	3/16/2023	ACCEPTANCE INSPECTION
BMP01596	3/9/2023	RECEIPT OF CERTIFICATION
BMP01670	4/19/2023	MAINTENANCE INSPECTION
BMP01670	4/19/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01670	4/19/2023	ACCEPTANCE INSPECTION

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BMP01681	8/30/2023	MAINTENANCE INSPECTION
BMP01682	8/30/2023	MAINTENANCE INSPECTION
BMP01683	8/30/2023	MAINTENANCE INSPECTION
BMP01690	1/6/2023	OWNER INSPECTION
BMP01696	2/14/2023	MAINTENANCE INSPECTION
BMP01701	10/30/2023	MAINTENANCE INSPECTION
BMP01709	8/30/2023	MAINTENANCE INSPECTION
BMP01718	5/9/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01718	6/1/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01718	6/1/2023	ACCEPTANCE INSPECTION
BMP01718	6/1/2023	RECEIPT OF CERTIFICATION
BMP01728	2/14/2023	MAINTENANCE INSPECTION
BMP01729	2/14/2023	MAINTENANCE INSPECTION
BMP01730	1/25/2023	RECEIPT OF CERTIFICATION
BMP01730	2/7/2023	ACCEPTANCE INSPECTION
BMP01737	8/1/2023	MAINTENANCE INSPECTION
BMP01738	5/31/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01738	5/31/2023	ACCEPTANCE INSPECTION
BMP01746	8/17/2023	RETIREMENT
BMP01764	1/6/2023	OWNER INSPECTION
BMP01765	1/6/2023	MAINTENANCE ACTIVITY
BMP01765	1/6/2023	OWNER INSPECTION
BMP01766	1/6/2023	OWNER INSPECTION
BMP01771	1/18/2023	MAINTENANCE INSPECTION
BMP01774	1/18/2023	MAINTENANCE INSPECTION
BMP01775	8/23/2023	RETIREMENT
BMP01779	6/2/2023	OWNER INSPECTION
BMP01779	6/2/2023	MAINTENANCE ACTIVITY
BMP01782	8/10/2023	MAINTENANCE INSPECTION
BMP01784	8/30/2023	MAINTENANCE INSPECTION
BMP01785	8/30/2023	MAINTENANCE INSPECTION
BMP01786	8/30/2023	MAINTENANCE INSPECTION
BMP01787	3/14/2023	MAINTENANCE INSPECTION
BMP01795	9/15/2023	RETIREMENT

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BMP01804	3/30/2023	CONSTRUCTION INSPECTION
BMP01804	7/13/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01804	8/25/2023	ACCEPTANCE INSPECTION
BMP01804	7/12/2023	RECEIPT OF CERTIFICATION
BMP01804	7/13/2023	ACCEPTANCE INSPECTION
BMP01804	7/13/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01804	7/12/2023	RECEIPT OF CERTIFICATION
BMP01804	7/13/2023	ACCEPTANCE INSPECTION
BMP01804	5/2/2023	RECEIPT OF CERTIFICATION
BMP01804	7/13/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01805	6/8/2023	RECEIPT OF CERTIFICATION
BMP01805	5/3/2023	RECEIPT OF CERTIFICATION
BMP01805	5/2/2023	RECEIPT OF CERTIFICATION
BMP01805	5/2/2023	RECEIPT OF CERTIFICATION
BMP01805	3/30/2023	CONSTRUCTION INSPECTION
BMP01805	7/13/2023	RECEIPT OF CERTIFICATION
BMP01806	9/30/2023	MAINTENANCE INSPECTION
BMP01807	9/30/2023	MAINTENANCE INSPECTION
BMP01814	8/1/2023	MAINTENANCE INSPECTION
BMP01822	9/20/2023	MAINTENANCE INSPECTION
BMP01823	5/17/2023	MAINTENANCE INSPECTION
BMP01824	5/17/2023	MAINTENANCE INSPECTION
BMP01845	5/17/2023	MAINTENANCE INSPECTION
BMP01863	8/30/2023	MAINTENANCE INSPECTION
BMP01865	4/19/2023	ACCEPTANCE INSPECTION
BMP01865	4/19/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01865	4/19/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01865	3/30/2023	RECEIPT OF CERTIFICATION
BMP01865	1/13/2023	REVISION TO APPROVED DESIGN
BMP01877	1/6/2023	ACCEPTANCE INSPECTION
BMP01883	10/18/2023	MAINTENANCE INSPECTION
BMP01889	5/5/2023	ACCEPTANCE INSPECTION
BMP01889	3/13/2023	RECEIPT OF CERTIFICATION
BMP01889	2/8/2023	RECEIPT OF CERTIFICATION

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BMP01889	5/5/2023	CONSTRUCTION INSPECTION
BMP01987	3/2/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01987	2/6/2023	CONSTRUCTION INSPECTION
BMP01987	2/13/2023	RECEIPT OF CERTIFICATION
BMP01987	3/2/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP01987	3/2/2023	RECEIPT OF CERTIFICATION
BMP01987	3/2/2023	ACCEPTANCE INSPECTION
BMP01992	5/16/2023	OWNER INSPECTION
BMP01992	5/16/2023	MAINTENANCE ACTIVITY
BMP02041	2/14/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02041	2/14/2023	ACCEPTANCE INSPECTION
BMP02041	2/14/2023	RECEIPT OF CERTIFICATION
BMP02058	1/5/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02058	1/5/2023	ACCEPTANCE INSPECTION
BMP02058	1/5/2023	ACCEPTANCE INSPECTION
BMP02064	11/9/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02064	11/9/2023	ACCEPTANCE INSPECTION
BMP02064	11/9/2023	RECEIPT OF CERTIFICATION
BMP02065	11/9/2023	RECEIPT OF CERTIFICATION
BMP02065	11/9/2023	ACCEPTANCE INSPECTION
BMP02066	11/9/2023	RECEIPT OF CERTIFICATION
BMP02066	11/9/2023	ACCEPTANCE INSPECTION
BMP02067	11/9/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02067	11/9/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02067	11/9/2023	ACCEPTANCE INSPECTION
BMP02067	11/9/2023	RECEIPT OF CERTIFICATION
BMP02070	7/24/2023	RECEIPT OF CERTIFICATION
BMP02073	2/23/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02073	2/24/2023	ACCEPTANCE INSPECTION
BMP02073	2/24/2023	RECEIPT OF CERTIFICATION
BMP02077	8/28/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02077	8/29/2023	RECEIPT OF CERTIFICATION
BMP02077	9/15/2023	MAINTENANCE INSPECTION
BMP02077	9/15/2023	MAINTENANCE ACTIVITY

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BMP02077	9/15/2023	ACCEPTANCE INSPECTION
BMP02087	10/4/2023	ACCEPTANCE INSPECTION
BMP02087	6/22/2023	RECEIPT OF CERTIFICATION
BMP02094	8/3/2023	CONSTRUCTION INSPECTION
BMP02114	10/20/2023	RECEIPT OF CERTIFICATION
BMP02114	11/3/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02114	11/3/2023	ACCEPTANCE INSPECTION
BMP02114	11/3/2023	RECEIPT OF CERTIFICATION
BMP02115	6/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02115	5/18/2023	CONSTRUCTION INSPECTION
BMP02115	5/18/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02115	6/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02115	5/18/2023	RECEIPT OF CERTIFICATION
BMP02115	6/26/2023	ACCEPTANCE INSPECTION
BMP02116	6/26/2023	ACCEPTANCE INSPECTION
BMP02116	5/18/2023	CONSTRUCTION INSPECTION
BMP02116	6/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02116	5/10/2023	RECEIPT OF CERTIFICATION
BMP02117	6/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02117	5/18/2023	CONSTRUCTION INSPECTION
BMP02117	5/10/2023	RECEIPT OF CERTIFICATION
BMP02117	6/26/2023	ACCEPTANCE INSPECTION
BMP02118	5/11/2023	ACCEPTANCE INSPECTION
BMP02118	5/10/2023	RECEIPT OF CERTIFICATION
BMP02119	1/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02119	1/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02119	1/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02119	1/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02119	1/26/2023	ACCEPTANCE INSPECTION
BMP02122	2/3/2023	ACCEPTANCE INSPECTION
BMP02123	2/3/2023	ACCEPTANCE INSPECTION
BMP02126	12/4/2023	CONSTRUCTION INSPECTION
BMP02126	12/5/2023	RECEIPT OF CERTIFICATION
BMP02126	12/6/2023	RECEIPT OF CERTIFICATION

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BMP02126	12/6/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02127	12/7/2023	RECEIPT OF CERTIFICATION
BMP02127	12/7/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02127	12/7/2023	ACCEPTANCE INSPECTION
BMP02127	7/11/2023	RECEIPT OF CERTIFICATION
BMP02127	4/26/2023	CONSTRUCTION INSPECTION
BMP02128	7/11/2023	RECEIPT OF CERTIFICATION
BMP02128	12/7/2023	ACCEPTANCE INSPECTION
BMP02128	4/26/2023	CONSTRUCTION INSPECTION
BMP02128	12/7/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02128	12/7/2023	RECEIPT OF CERTIFICATION
BMP02129	12/7/2023	ACCEPTANCE INSPECTION
BMP02129	4/26/2023	CONSTRUCTION INSPECTION
BMP02129	7/11/2023	RECEIPT OF CERTIFICATION
BMP02129	12/7/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02129	12/7/2023	RECEIPT OF CERTIFICATION
BMP02130	10/24/2023	RECEIPT OF CERTIFICATION
BMP02130	10/4/2023	CONSTRUCTION INSPECTION
BMP02130	10/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02130	10/9/2023	RECEIPT OF CERTIFICATION
BMP02130	10/24/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02130	10/27/2023	ACCEPTANCE INSPECTION
BMP02147	3/20/2023	ACCEPTANCE INSPECTION
BMP02147	3/20/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02148	3/20/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02148	3/20/2023	ACCEPTANCE INSPECTION
BMP02148	3/20/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02149	3/20/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02149	3/20/2023	ACCEPTANCE INSPECTION
BMP02150	3/20/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02150	3/20/2023	ACCEPTANCE INSPECTION
BMP02151	3/20/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02151	3/20/2023	ACCEPTANCE INSPECTION
BMP02155	8/9/2023	CONSTRUCTION INSPECTION

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BMP02156	8/9/2023	CONSTRUCTION INSPECTION
BMP02160	9/7/2023	ACCEPTANCE INSPECTION
BMP02160	9/7/2023	RECEIPT OF CERTIFICATION
BMP02160	8/9/2023	CONSTRUCTION INSPECTION
BMP02161	2/23/2023	ACCEPTANCE INSPECTION
BMP02161	2/23/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02161	2/23/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02161	2/22/2023	RECEIPT OF CERTIFICATION
BMP02161	2/23/2023	ACCEPTANCE INSPECTION
BMP02161	2/23/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02161	2/23/2023	ACCEPTANCE INSPECTION
BMP02161	2/23/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02162	2/15/2023	RECEIPT OF CERTIFICATION
BMP02162	5/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02162	5/4/2023	ACCEPTANCE INSPECTION
BMP02162	3/17/2023	CONSTRUCTION INSPECTION
BMP02162	5/4/2023	RECEIPT OF CERTIFICATION
BMP02164	3/3/2023	ACCEPTANCE INSPECTION
BMP02164	3/3/2023	RECEIPT OF CERTIFICATION
BMP02166	9/19/2023	RECEIPT OF CERTIFICATION
BMP02181	1/3/2023	ACCEPTANCE INSPECTION
BMP02181	1/3/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02181	1/3/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02182	8/1/2023	CONSTRUCTION INSPECTION
BMP02182	10/26/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02182	8/11/2023	RECEIPT OF CERTIFICATION
BMP02182	10/24/2023	RECEIPT OF CERTIFICATION
BMP02182	10/26/2023	ACCEPTANCE INSPECTION
BMP02182	10/24/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02185	9/14/2023	RECEIPT OF CERTIFICATION
BMP02185	6/15/2023	RECEIPT OF CERTIFICATION
BMP02185	8/30/2023	RECEIPT OF CERTIFICATION
BMP02185	9/14/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02185	10/18/2023	ACCEPTANCE INSPECTION

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BMP02185	8/30/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02185	5/25/2023	CONSTRUCTION INSPECTION
BMP02185	10/18/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02185	6/15/2023	RECEIPT OF CERTIFICATION
BMP02186	9/18/2023	RECEIPT OF CERTIFICATION
BMP02186	9/18/2023	ACCEPTANCE INSPECTION
BMP02197	7/25/2023	RETIREMENT
BMP02205	8/8/2023	RECEIPT OF CERTIFICATION
BMP02205	8/24/2023	RECEIPT OF CERTIFICATION
BMP02205	3/17/2023	CONSTRUCTION INSPECTION
BMP02205	3/10/2023	RETIREMENT
BMP02205	8/23/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02205	8/24/2023	ACCEPTANCE INSPECTION
BMP02217	2/3/2023	ACCEPTANCE INSPECTION
BMP02217	2/3/2023	INVENTORIED
BMP02219	7/18/2023	RECEIPT OF CERTIFICATION
BMP02219	10/17/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02219	5/25/2023	CONSTRUCTION INSPECTION
BMP02219	2/16/2023	INVENTORIED
BMP02219	7/18/2023	RECEIPT OF CERTIFICATION
BMP02219	10/25/2023	RECEIPT OF CERTIFICATION
BMP02219	10/25/2023	ACCEPTANCE INSPECTION
BMP02219	10/25/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02221	2/22/2023	INVENTORIED
BMP02222	2/22/2023	INVENTORIED
BMP02225	2/27/2023	INVENTORIED
BMP02227	3/3/2023	INVENTORIED
BMP02228	3/8/2023	RETIREMENT
BMP02228	3/6/2023	INVENTORIED
BMP02229	3/8/2023	INVENTORIED
BMP02230	3/17/2023	INVENTORIED
BMP02231	3/17/2023	INVENTORIED
BMP02232	3/24/2023	INVENTORIED
BMP02233	3/24/2023	INVENTORIED

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BMP02234	3/24/2023	INVENTORIED
BMP02235	4/6/2023	INVENTORIED
BMP02236	4/6/2023	INVENTORIED
BMP02237	4/10/2023	INVENTORIED
BMP02238	4/10/2023	INVENTORIED
BMP02239	4/11/2023	INVENTORIED
BMP02240	5/4/2023	ACCEPTANCE INSPECTION
BMP02240	5/4/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02240	5/4/2023	RECEIPT OF CERTIFICATION
BMP02240	6/1/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02240	4/21/2023	INVENTORIED
BMP02240	6/1/2023	RECEIPT OF CERTIFICATION
BMP02240	6/1/2023	ACCEPTANCE INSPECTION
BMP02241	5/1/2023	INVENTORIED
BMP02242	5/1/2023	INVENTORIED
BMP02243	5/2/2023	INVENTORIED
BMP02244	5/2/2023	INVENTORIED
BMP02245	5/8/2023	INVENTORIED
BMP02245	10/2/2023	RECEIPT OF CERTIFICATION
BMP02245	11/2/2023	RECEIPT OF CERTIFICATION
BMP02245	11/2/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP02245	11/2/2023	ACCEPTANCE INSPECTION
BMP02246	5/10/2023	INVENTORIED
BMP02247	6/7/2023	INVENTORIED
BMP02248	6/7/2023	INVENTORIED
BMP02249	6/12/2023	INVENTORIED
BMP02250	6/12/2023	INVENTORIED
BMP02251	6/12/2023	INVENTORIED
BMP02252	6/12/2023	INVENTORIED
BMP02253	6/13/2023	INVENTORIED
BMP02255	6/28/2023	INVENTORIED
BMP02256	6/30/2023	INVENTORIED
BMP02260	7/31/2023	INVENTORIED
BMP02263	8/28/2023	INVENTORIED

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BMP02265	9/12/2023	INVENTORIED
BMP02266	9/15/2023	INVENTORIED
BMP02267	10/2/2023	INVENTORIED
BMP02267	12/15/2023	RECEIPT OF CERTIFICATION
BMP02292	12/1/2023	INVENTORIED
BMP02293	12/1/2023	INVENTORIED
BMP02294	12/1/2023	INVENTORIED
BMP02295	12/1/2023	INVENTORIED
BMP02298	12/11/2023	INVENTORIED
Facility ID	Action Date	Action Type
BMP00001	10/16/2023	MAINTENANCE INSPECTION
BMP00012	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00014	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00015	12/19/2023	MAINTENANCE INSPECTION
BMP00024	8/1/2023	MAINTENANCE INSPECTION
BMP00025	9/20/2023	MAINTENANCE INSPECTION
BMP00026	8/1/2023	MAINTENANCE INSPECTION
BMP00028	8/15/2023	MAINTENANCE INSPECTION
BMP00032	8/15/2023	MAINTENANCE INSPECTION
BMP00040	8/23/2023	MAINTENANCE INSPECTION
BMP00045	12/19/2023	MAINTENANCE INSPECTION
BMP00048	12/19/2023	MAINTENANCE INSPECTION
BMP00051	10/30/2023	MAINTENANCE INSPECTION
BMP00053	11/7/2023	MAINTENANCE INSPECTION
BMP00068	3/14/2023	MAINTENANCE INSPECTION
BMP00079	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00080	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00081	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00083	8/10/2023	MAINTENANCE INSPECTION
BMP00084	10/16/2023	MAINTENANCE INSPECTION
BMP00088	1/18/2023	MAINTENANCE INSPECTION
BMP00098	2/20/2023	MAINTENANCE INSPECTION
BMP00101	10/4/2023	MAINTENANCE INSPECTION
BMP00102	10/4/2023	MAINTENANCE INSPECTION

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BMP00104	10/26/2023	MAINTENANCE ACTIVITY
BMP00114	4/18/2023	MAINTENANCE INSPECTION
BMP00120	3/14/2023	MAINTENANCE INSPECTION
BMP00146	8/16/2023	MAINTENANCE INSPECTION
BMP00147	8/16/2023	MAINTENANCE INSPECTION
BMP00148	8/16/2023	MAINTENANCE INSPECTION
BMP00149	8/16/2023	MAINTENANCE INSPECTION
BMP00150	8/16/2023	MAINTENANCE INSPECTION
BMP00151	8/16/2023	MAINTENANCE INSPECTION
BMP00152	8/16/2023	MAINTENANCE INSPECTION
BMP00168	10/18/2023	MAINTENANCE INSPECTION
BMP00172	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00173	9/13/2023	MAINTENANCE INSPECTION
BMP00199	10/10/2023	MAINTENANCE INSPECTION
BMP00200	10/10/2023	MAINTENANCE INSPECTION
BMP00201	10/10/2023	MAINTENANCE INSPECTION
BMP00202	8/2/2023	MAINTENANCE INSPECTION
BMP00205	9/13/2023	MAINTENANCE INSPECTION
BMP00210	11/29/2023	RECEIPT OF CERTIFICATION
BMP00213	1/11/2023	EDUCATION
BMP00240	4/5/2023	OWNER INSPECTION
BMP00240	4/5/2023	MAINTENANCE ACTIVITY
BMP00246	6/29/2023	MAINTENANCE INSPECTION
BMP00247	6/29/2023	MAINTENANCE INSPECTION
BMP00248	10/4/2023	MAINTENANCE INSPECTION
BMP00255	2/7/2023	MAINTENANCE INSPECTION
BMP00255	2/9/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00255	3/16/2023	MAINTENANCE INSPECTION
BMP00255	2/23/2023	MAINTENANCE ACTIVITY
BMP00257	8/15/2023	MAINTENANCE INSPECTION
BMP00258	8/15/2023	MAINTENANCE INSPECTION
BMP00264	4/18/2023	MAINTENANCE INSPECTION
BMP00276	4/18/2023	MAINTENANCE INSPECTION
BMP00277	4/18/2023	MAINTENANCE INSPECTION

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BMP00278	10/10/2023	MAINTENANCE INSPECTION
BMP00280	8/2/2023	MAINTENANCE INSPECTION
BMP00284	10/4/2023	MAINTENANCE INSPECTION
BMP00286	9/6/2023	MAINTENANCE INSPECTION
BMP00287	9/6/2023	MAINTENANCE INSPECTION
BMP00289	4/18/2023	MAINTENANCE INSPECTION
BMP00290	3/14/2023	MAINTENANCE INSPECTION
BMP00291	3/14/2023	MAINTENANCE INSPECTION
BMP00292	9/20/2023	MAINTENANCE INSPECTION
BMP00293	9/13/2023	MAINTENANCE INSPECTION
BMP00294	2/14/2023	MAINTENANCE INSPECTION
BMP00295	2/14/2023	MAINTENANCE INSPECTION
BMP00297	8/30/2023	MAINTENANCE INSPECTION
BMP00298	3/16/2023	MAINTENANCE ACTIVITY
BMP00298	1/11/2023	PUNCHLIST DEVELOPMENT AND DISTRIBUTION
BMP00299	11/7/2023	MAINTENANCE INSPECTION
BMP00302	10/30/2023	MAINTENANCE INSPECTION
BMP00321	8/16/2023	MAINTENANCE INSPECTION

The MS4 service area map including outfalls and information included in Part I.B.2.h)3) shall be submitted no later than 18 months after the effective date of this state permit. The information shall be submitted as an electronic file in one of the following formats shapefile, geodatabase, .xls, .xlsx, .csv, .mdx, .dbf, delimited text, XML, or other file approved by the Department.

The requested information was delivered to DEQ on September 27, 2016.

The fourth annual report shall include an updated list of all information requested in Part 1.B.2.h)5).

Noted.

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**PART I.B.2.i**  
**MS4 PROGRAM IMPLEMENTATION**  
**COUNTY FACILITIES**

There are no Specific Reporting Requirements associated with this part of the MS4 Permit for this permit year.

## HENRICO COUNTY MS4 PROGRAM PLAN

### PART I.B.2.j

### MS4 PROGRAM IMPLEMENTATION PUBLIC EDUCATION / PARTICIPATION

Each annual report shall include a list of permittee public outreach and education activities and the estimated number of individuals reached through the activities. An evaluation of program effectiveness, as outlined in the MS4 Program Plan with recommendations for future changes shall also be included.

Public Outreach and Education Goals and Activities			
Department / Division	Activity	Date	# of Individuals / Households Reached
Goal: Promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials into the MS4			
DPW - EESD	Illicit Discharge Reporting	01/01/2023 - 12/31/2023	31
DPW – EESD	Environmental educational mailing sent to residents in response to complaints, educating them on proper pet waste disposal, trash and landscape debris disposal, pollution prevention and an only rain down the drain message.	1/24/2023	396
DPW-ESD	Car Wash Brochures	05/03/2023	110,000
Community Revitalization	Code enforcement activities, related to specific obligations under the MS4 Program, conducted in conformance with the County’s zoning and environmental ordinances to identify and resolve code violations (inoperable vehicles, tag & tows, trash & debris, outside	Multiple	3228

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	storage, and junk storage) negatively impacting communities and the environment		
Henricopolis	Rain Barrel Outreach	January 1, 2023 – December 31, 2023	21
Henricopolis	Soil Test Voucher Program	January 1, 2023 – December 31, 2023	543
Goal: Continue to promote individual and group involvement in local water quality improvement initiatives including the promotion of local restoration and clean-up projects, programs, groups, meetings and other opportunities for public involvement			
DCR/CCP	Woodland Cemetery Cleanup	01/14/2023	17 Volunteers
		01/28/2023	14 Volunteers
		02/11/2023	13 Volunteers
		02/25/2023	15 Volunteers
		03/04/2023	17 Volunteers
		03/11/2023	18 Volunteers
		03/18/2023	19 Volunteers
		03/25/2023	15 Volunteers
		04/22/2023	16 Volunteers
		04/29/2023	14 Volunteers
		05/13/2023	8 Volunteers
		06/03/2023	4 Volunteers
		06/24/2023	4 Volunteers
		07/15/2023	6 Volunteers
		07/29/2023	4 Volunteers
		08/12/2023	4 Volunteers
		08/26/2023	2 Volunteers
10/07/2023	6 Volunteers		
10/28/2023	8 Volunteers		
11/18/2023	5 Volunteers		
		12/03/2023	5 Volunteers

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DCR	Assistance Program	09/22/2023	3 Volunteers
		11/3/2023	8 Volunteers
		11/17/2023	10 Volunteers
		12/15/2023	6 Volunteers
DPU – KHB	Horse Creek Litter Cleanup/Water Quality Stream Improvement Activities	03/18/23	5 Henrico Residents
DPU – KHB	James River Litter Cleanup/Water Quality Improvement Activities	09/09/23	29 Henrico Residents
DPU – KHB	James River Week Love Our River	09/12/23	9 Henrico Residents
DPU – KHB	James River Week Story Time	09/14/23	5 Henrico Residents
DPU – KHB	James River Week Conservation Photographer	09/16/23	9 Henrico Residents
Goal: Develop an outreach program with public and private golf courses located within Henrico County that discharge to the permittee's MS4 that would encourage implementation of integrated management practice (IMP) plans and techniques to reduce runoff of fertilizer and pesticides			
Rec & Parks	MS4 Outreach for Private Golf Course Owners / Operators	12/12/2023	10
Goal: Promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes			
Goal: Promote and publicize the proper disposal of pet waste and household yard waste			
Community Revitalization	To maintain healthy and attractive neighborhoods, community cleanups are designated for older,	Multiple	18

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	at-risk neighborhoods to remove bulky yard debris such as furniture, trash, or appliances.		
Goal: Promote and publicize the use of the permittee's litter prevention program			
DPU – KHB	School presentations to classes on litter prevention/recycling	January 1, 2023 – December 31, 2023	29 Classroom Presentations of 1159 Henrico Students
DPU – KHB	Educational booth at events – recycling education, litter prevention, pet waste disposal and waste disposal	January 1, 2023 – December 31, 2023	Participated in 6 Festivals/ Events Attended by 3425 Henrico Residents
DPU – KHB	Land Lover Series Presentations	January 1, 2023 – December 31, 2023	120 Residents
DPU – KHB	Podcasts that included discussions of litter prevention/reduction	January 1, 2023 – December 31, 2023	5 Podcasts with 676 Henrico Residents
DPU – KHB	Litter prevention/reduction activities with County Residents	January 1, 2023 – December 31, 2023	11 Activities with 1423 Henrico Residents
Goal: Promote and publicize methods for residential car washing that minimize water quality impacts			
DPW-EESD	Car Wash Brochures	05/03/2023	110,000
Goal: Promote and publicize the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators and distributors			
Extension Service	Pesticide Safety (Hybrid) <i>Virginia Greenhouse Growers Assoc.</i>	1/20/2023	8
Extension Service	Invasive Plants Virginia Cooperative Extension Winter In-service	2/6/2023	19
Extension	Commercial Pesticide Applicator		

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Service	Recertification Program (Virtual) <i>CVNLA Short Course</i>	2/10/2023	58
Extension Service	Environmentally Friendly Lawns <i>Henrico Extension MG Intern Training</i>	2/14/2023	16
Extension Service	Environmental Fate of Pesticides (Virtual) <i>Virginia Sports Turf Management Assoc.</i>	2/14/2023	25
Extension Service	Environmentally Friendly Lawns <i>Hanover Extension MG Intern Training</i>	2/21/2023	20
Extension Service	M-A-T-E Recertification Program <i>Virginia Turfgrass Council</i>	2/22/2023	62
Extension Service	Environmental Fate of Pesticides <i>Richmond Area Vegetable Growers Conference</i>	2/23/2023	27
Extension Service	Pesticide Safety and the PMG <i>Henrico Master Gardener Interns</i>	2/28/2023	16
Extension Service	Core Pesticide Review Course	3/15/2023	36
Extension Service	3A Pesticide Review Course	3/22/2023	27
Extension Service	Landscapes, IPM, the Home Gardener and Water Quality <i>Gardening in the Northern Neck Symposium</i>	3/25/2023	221
Extension Service	Ornamental and Turf Disease Update <i>RVA Government Employee Recertification</i>	3/27/2023	27
Extension Service	3B Pesticide Review Course	3/29/2023	28
Extension Service	VDOT Spary Equipment, Calibration and Safety <i>VDOT CAT 6 Recertification Program</i>	4/11/2023	8
Extension Service	Environmental Fate of Pesticides (Virtual) <i>Virginia Sports Turf Management Assoc.</i>	6/6/2023	18
Extension Service	VDACS Legal Update <i>Virginia Pest Management Assoc.</i>	9/12/2023	20

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Extension Service	Ornamental Pest Update and Pesticide Formulations <i>Henrico PPAR</i>	11/28/2023	17
Extension Service	Ornamental Pest Update and Pesticide Formulations <i>Hanover PPAR</i>	12/19/2023	5
Goal: Encourage private property owners to implement voluntary stormwater management techniques and/or retrofits			
Henricopolis	Virginia Conservation Assistance Program	Jan 1, 2023 – December 31, 2023	49 site visits
DPW – Road Maintenance	Mission Tomorrow	10/10 - 10/12/2023	12,000
DPW – Road Maintenance	Fall Energy Fair	10/13/2023	150

### Evaluations of Program Effectiveness

#### Public Utilities

DPU believes their outreach program is effective in getting the word out to our citizens. We utilize many different methods to ensure our residents are notified. We utilize social media, we hold programs within our schools, and we attend neighborhood/community functions.

#### Fire

With new updated information and procedures that Henrico County Div. of Fire intends to implement pertaining to MS4 and environmental needs, the Division of Fire intends to continue and improve upon the information being provided to county employees and the public.

It is the opinion that the displaying of the MS4 posters can provide some of the needed information and provide a constant reminder to employees and

## **HENRICO COUNTY MS4 PROGRAM PLAN**

the public the importance of understanding, following, and maintaining the procedures and information pertaining to the environment and the needs to protect it. By providing access to the stations, and information pertaining to fire safety and other needs. This may be accomplished through a question-and-answer session, lecture, show & tell, and/or display of information.

### **Community Revitalization**

Participation in neighborhood meetings, code enforcement, and community programs like the annual cleanups and revitalization projects are critical to programmatic success and sustaining environmental quality. Program effectiveness can be evaluated through these efforts; for example, we have assisted in detecting illicit discharge, achieved compliance towards BMP cleanups, and increased citizens' awareness of environmental and zoning ordinances. These activities are in partnership with field inspectors proactively identifying code violations impacting communities and quality of life.

### **Recreation and Parks**

Henrico County Recreation & Parks connected with the private and public golf courses in an effort to educate Golf Directors and Superintendents on best practices and nutrient management plans. As a result of the outreach, information packets were extended to the following golf courses:

Belmont Golf Club  
The Crossings Golf Club;  
Glenwood Golf Club;  
Lakeside Park Club;  
The Dominion Club;  
The First Tee at Belmont; and  
Country Club of Virginia.

The outreach effort reached approximately 6 individuals and we believe the information was well received. This was a great opportunity to connect with local golf courses and establish a positive relationship for future educational sessions and communication.

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Program goals are listed below:

- raise awareness about the importance of implementing a nutrient management plan;
- discuss best practices for golf courses; and
- answer questions pertaining to the county’s MS4 permit.

Recommendations for Future Changes

Currently, we have no recommendations for future changes.

Extension Service

<b>Pesticide Applicator Recertification Sessions</b>
<p>During 2023, 218 commercial pesticide applicators were trained for recertification by the Henrico Extension Office. A total of 218 commercial applicators gained additional knowledge in pesticide safety and Integrated Pest Management (IPM) practices related to ornamental plants and turf. As a result of this pesticide safety education, 369 commercial applicators successfully maintained their pesticide applicator certification to legally apply pesticides in Virginia.</p> <p>Additionally, during 2023, 57 private certification pesticide applicators were trained for recertification by the Henrico Extension Office. A total of 57 private applicators gained additional knowledge in pesticide safety and Integrated Pest Management (IPM) practices related to ornamental plants and crops. As a result of this pesticide safety education, 34 private category applicators successfully maintained their pesticide applicator certification to legally apply pesticides in Virginia.</p>
<b>Initial Pesticide Applicator Certification Sessions</b>
<p>During 2023, 91 individuals seeking commercial pesticide applicator status were trained for initial certification testing by the Henrico Extension Office through 3 different training programs. A total of 91 individuals seeking commercial pesticide applicator certification gained knowledge in pesticide safety and Integrated Pest Management (IPM) practices related to ornamental plants and turf.</p>

## **HENRICO COUNTY MS4 PROGRAM PLAN**

### **SMART Lawns Program**

A total of eight-seven (87) Henrico households with residential lawns were enrolled in the Henrico Extension SMART Lawns program in 2023. One hundred twenty-nine (129) soil samples were submitted, and eighty-seven (87) urban nutrient management plans were written and distributed to program participants. A total of 758,921 square feet (17.42 acres) of residential turf in Henrico County were brought under a nutrient management plan that is in full compliance with DCR urban nutrient management planning criteria.

### **Community Revitalization**

Participation in neighborhood meetings, code enforcement, and community programs like the annual cleanups and revitalization projects are critical to programmatic success and sustaining environmental quality. Program effectiveness can be evaluated through these efforts; for example, we have assisted in detecting illicit discharge, achieved compliance towards BMP cleanups, and increased citizens' awareness of environmental and zoning ordinances. These activities are in partnership with field inspectors proactively identifying code violations impacting communities and quality of life.

### **Public Works**

DPW EESD - Due to COVID-19, many of the County's opportunities to educate the public in person were put on hold. As a result of this, efforts were made to address public education virtually, through mailings, and on social media. These alternative formats allowed us to continue our public education and outreach in an effective manner.

DPW Road Maintenance believes the outreach programs are effective in getting information out to our citizens. Various methods are used to notify as many citizens as possible, with the majority of outreach coming from community events and individual notification. Due to COVID-19, in-person outreach was limited in 2023.

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The leaf program's mailing method for communicating leaf pickup was the primary outreach program this year. Leaf collection program effectiveness is assessed annually by the total number of customer-placed vacuum leaf orders received and completed, the total number of violation orders processed and completed, and customer feedback. Recommendations for future changes will be based on the assessment of program effectiveness and updates will be made as necessary to improve the program overall.

Henrico County employs SOAR 365 to remove litter from County right-of-ways. The pick-up is performed daily, and progress is tracked in pounds of litter removed as well as the number of bags of litter removed. SOAR 365 is also used bi-weekly on the West and East End maintenance yards to reduce floatables from entering the MS4. Program effectiveness is evaluated based on the pounds of litter removed, as this decreases the quantity of floatables entering the MS4. Between 01/01/2023 and 12/31/2023, SOAR 365 removed 331,692.58 pounds or 9,224.75 bags of litter and 158 tires from county right-of-ways and maintenance facilities.

**Each annual report shall provide a summary of voluntary retrofits completed on private property used to demonstrate pollutant reduction requirements. Note that any voluntary project for which the permittee seeks to use for pollutant reduction requirements must be tracked and reported.**

Voluntary Retrofits Completed on Private Property Used to Demonstrate Compliance with Pollutant Reduction Requirements	0
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**Each annual report shall provide a summary of voluntary stormwater management techniques encouraged on private property.**

## HENRICO COUNTY MS4 PROGRAM PLAN

Voluntary Stormwater Management Techniques Encouraged on Private Property			
Department / Division	Activity	Date	# of Individuals / Households / Reaches
Henricopolis	<p>Below are 11 different voluntary stormwater BMPs that Henricopolis can provide technical and financial assistance for County property owners. For more information, refer to <a href="http://henrico.us/services/virginia-conservation-assistance-program/">http://henrico.us/services/virginia-conservation-assistance-program/</a></p> <p style="text-align: center;"> <u>Basic BMPs</u>                      Impervious Surface Removal  <u>Intermediate Level BMPs</u>                      Conversion Landscaping                      Rain Gardens                      Dry Well                      Rainwater Harvesting                      Vegetated Stormwater Conveyance  <u>Advanced BMPs</u>                      Bioretention                      Infiltration Basin                      Constructed Wetlands                      Permeable Pavement                      Green Roofs                 </p>	Jan 1, 2023 – December 31, 2023	53 inquiries; 1 practice completed

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**PART I.B.2.k**  
**MS4 PROGRAM IMPLEMENTATION**  
**TRAINING**

Each annual report shall include a list of training events, the date and the estimated number of individuals attending each event.

Training Topics and Events Attended Between January 1, 2023 and December 31, 2023		
Event	Date	# of Individuals
Topic: The permittee shall provide biennial training to appropriate field personnel in the recognition and reporting of illicit discharges		
Illicit Discharge Recognition and Reporting Webnet Training Div. of Fire	Multiple	618
DPU – Illicit Discharge Recognition and Reporting Training	Multiple	168
Quarterly Training provided during HPMF inspections by MMA	Quarterly	10
HazMat update: All Division of Fire operational personnel are trained to the level of Hazardous Materials Operations (HMO). The initial HMO program consists of 40 hrs. of tested content and is provided in the employee’s initial recruit training program. Annual recertification training is mandatory and ensures competency maintenance, including spill response procedures.	Multiple	618
SOP3.0 & 4.0 Detention Pond Cleaning, Ditch and Culvert Maintenance	01/01/2023-12/31/2023	101
SOP 6.0 Equipment Cleaning	01/01/2023-12/31/2023	99

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SOP 7.0 Grass Mowing	01/01/2023-12/31/2023	101
MS4 Good Housekeeping & Pollution Prevention - Webnet based training for all Park Services Employees	01/01/2023-12/31/2023	97
Park Services Annual Webnet-Based MS4 Spill Response Awareness	01/01/2023-12/31/2023	101
SOP 8.0 Pet Waste Removal	01/01/2023-12/31/2023	98
SOP 11.0 Snow Removal	01/01/2023-12/31/2023	97
SOP 16.0 Vehicle and Equipment Storage	01/01/2023-12/31/2023	98
SOP 15.0 Vehicles - Fueling	01/01/2023-12/31/2023	99
SOP 12.0 Transporting Equipment	01/01/2023-12/31/2023	99
CAM MS4 Training: Illicit Discharges	Multiple	59
Topic: The permittee shall provide biennial training to appropriate employees in good housekeeping and pollution prevention practices that are to be employed in and around County recreation facilities; maintenance and public works facilities; and roads, streets, and parking lots.		
MMA Annual and Quarterly SWPPP Training (DPW Maintenance)	12/20/2023	10
MMA Annual and Quarterly SWPPP Training ( Fire )	Multiple	10
DPU SWPPP Training - NEO	Multiple	25

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DPU Good Housekeeping Training	Multiple	168
Park Services Annual Webnet-Based SWPPP Training	01/01/2023-12/31/2023	99
Recreation & Park Services Annual Spill Response Awareness Webnet-based training	01/01/2023-12/31/2023	102
Park Services SOP 2.0 - Chemical Storage, Handling, Transporting and Spill Response Annual Webnet-based training	01/01/2023-12/31/2023	103
Recreation & Parks Services Good Housekeeping Webnet-based training	01/01/2023-12/31/2023	101
MMA Annual SWPPP Training (Schools Maintenance supervisors)	02/16/2024	40
CAM MS4 Training: Pollution Prevention	Multiple	59
<p>Topic: The permittee shall ensure that employees, and require that contractors, who apply pesticides and herbicides are properly trained or certified per the Virginia Pesticide Control Act (§3.2-3900 et seq. of the Code of Virginia). The requirements of the Virginia Pesticide Control Act are established by the Virginia Pesticide Control Board</p>		
<p>Opportunities related to this component were limited due to COVID.</p>		
<p>Topic: The permittee shall have a program to ensure that County plan reviewers, inspectors, program administrators and construction site operators (e.g. responsible land disturber) are trained and obtain the appropriate certifications to the extent required under the Virginia Erosion and Sediment Control Law and attendant regulations</p>		
DEQ Inspector for Erosion & Sediment Control	10/13/2023-11/1/2023	2
	07/11/2023-07/12/2023	1
	06/21/2023-06/22/2023	1
Wetland Delineation Course	05/08/2023-	2

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	05/11/2023	
DEQ Plants 2.0	04/11/2023	1
DEQ Overview of Wetlands for ESC and SWM Professionals	04/12/2023	1
VA DEQ Erosion & Sediment Control Program Administrator Training Course (virtual)	10/10/2023	1
VA DEQ ESC Program Administrator Prerequisites (virtual)	08/16/2023	1
Topic: The permittee shall have a program to ensure that the applicable County employees obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations to implement the modified stormwater management design criteria		
DEQ: SWM Plan Reviewer	05/23/2023-05/25/2023	2
DEQ Stormwater Management Inspector Certification Course (DPW – EESD)	07/18/2023-07/19/2023	1
	11/28/2023-11/29/2023	1
VA DEQ Stormwater Program Administrator Training Course (virtual)	10/11/2023	1
VA DEQ Stormwater Pollution Prevention Refresher (virtual)	02/15/2023	1
DEQ Stormwater Management Plan Reviewer	05/23/2023-05/25/2023	2
Phosphorus Webinar	05/18/2023	1
CE: Plants 2.0	05/09/2023	1
VA DEQ SWM Program Administrator Prerequisites (virtual)	08/21/2023	1
Topic: The appropriate emergency response employees shall have training in spill response.		
Recreation & Park Services General ESMS Awareness Webnet-based training	01/01/2023-01/01/202	99
Chemical Spill Response/OSHA Level II Training Registration	08/04/2023	5
ESMS Training – Oral presentation and	12/05/2023	8

## HENRICO COUNTY MS4 PROGRAM PLAN

### PART I.B.2.k

### ANNUAL REPORT SUPPLEMENT

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**HENRICO COUNTY MS4 PROGRAM PLAN**

Q&A session (Schools)		
SPCC Training –DGS Staff	08/01/2023	47
Topic: Other		
Virginia Water Monitoring Council	09/26/2023	4
Mid Atlantic Marine Debris Summit	12/06/2023- 12/07/2023	4

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.B.2.I

### MS4 PROGRAM IMPLEMENTATION WATER QUALITY SCREENING PROGRAMS

Each annual report shall include the total number of outfalls included as part of the permittee’s MS4, the number of outfalls screened during the reporting period, a list of locations upon which dry weather screening was conducted, the results, and any follow-up actions including maintenance and/or repair of infrastructure or outfalls performed as a result of the dry weather screening.

# of MS4 Outfalls	3,292
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# of Outfalls Screened between 1/1/2023 and 12/31/2023*	891
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\* includes all end treatments for which a Screening Inspection was conducted, not just those that are identified as MS4 Outfalls

Dry Weather Screening Conducted between 1/1/2023 and 12/31/2023		
MS4 Outfall	Findings	Follow-Up Action
EN000000013103	No Issues Identified	None Required
EN000000006741	No Issues Identified	None Required
EN000000011835	No Issues Identified	None Required
EN000000007904	No Issues Identified	None Required
EN000000004268	No Issues Identified	None Required
EN000000008526	No Issues Identified	None Required
EN000000000014	No Issues Identified	None Required
EN000000007479	No Issues Identified	None Required
EN000000000544	No Issues Identified	None Required
EN000000006757	No Issues Identified	None Required
EN000000008530	No Issues Identified	None Required
EN000000008532	No Issues Identified	None Required
EN000000003300	No Issues Identified	None Required

## HENRICO COUNTY MS4 PROGRAM PLAN

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EN00000009051	No Issues Identified	None Required
EN000000013191	No Issues Identified	None Required
EN000000010993	No Issues Identified	None Required
EN000000008318	No Issues Identified	None Required
EN000000003360	No Issues Identified	None Required
EN000000005436	No Issues Identified	None Required
EN000000008297	No Issues Identified	None Required
EN000000008348	No Issues Identified	None Required
EN000000001662	No Issues Identified	None Required
EN000000000569	No Issues Identified	None Required
EN000000001661	No Issues Identified	None Required
EN000000004954	No Issues Identified	None Required
EN000000001739	No Issues Identified	None Required
EN0000000011478	No Issues Identified	None Required
EN000000000124	No Issues Identified	None Required
EN000000000339	No Issues Identified	None Required
EN000000000353	No Issues Identified	None Required
EN000000000452	No Issues Identified	None Required
EN000000001704	No Issues Identified	None Required
EN000000001791	No Issues Identified	None Required
EN000000002388	No Issues Identified	None Required
EN000000002730	No Issues Identified	None Required
EN000000003323	No Issues Identified	None Required
EN000000003334	No Issues Identified	None Required
EN000000004592	No Issues Identified	None Required
EN000000004702	No Issues Identified	None Required
EN000000004751	No Issues Identified	None Required
EN000000004753	No Issues Identified	None Required
EN000000005459	No Issues Identified	None Required
EN000000006194	No Issues Identified	None Required
EN000000007012	No Issues Identified	None Required
EN000000008084	No Issues Identified	None Required
EN000000008088	No Issues Identified	None Required
EN000000009051	No Issues Identified	None Required

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**HENRICO COUNTY MS4 PROGRAM PLAN**  
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EN000000011432	No Issues Identified	None Required
EN000000012129	No Issues Identified	None Required
EN000000003266	No Issues Identified	None Required
EN000000013267	No Issues Identified	None Required
EN000000005536	No Issues Identified	None Required
EN000000013092	No Issues Identified	None Required
EN000000013161	No Issues Identified	None Required
EN000000002243	No Issues Identified	None Required
EN000000005441	No Issues Identified	None Required
EN000000005337	No Issues Identified	None Required
EN000000005335	No Issues Identified	None Required
EN000000013007	No Issues Identified	None Required
EN000000002290	No Issues Identified	None Required
EN000000013136	No Issues Identified	None Required
EN000000012705	No Issues Identified	None Required
EN000000005787	No Issues Identified	None Required
EN000000008854	No Issues Identified	None Required
EN000000008855	No Issues Identified	None Required
EN000000000236	No Issues Identified	None Required
EN000000008225	No Issues Identified	None Required
EN000000008980	No Issues Identified	None Required
EN000000008010	No Issues Identified	None Required
EN000000003852	No Issues Identified	None Required
EN000000013195	No Issues Identified	None Required
EN000000005436	No Issues Identified	None Required
EN000000013262	No Issues Identified	None Required
EN000000007244	No Issues Identified	None Required
EN000000003534	No Issues Identified	None Required
EN000000005720	No Issues Identified	None Required
EN000000011913	No Issues Identified	None Required
EN000000003267	No Issues Identified	None Required
EN000000005565	No Issues Identified	None Required
EN000000005902	No Issues Identified	None Required
EN000000007388	No Issues Identified	None Required

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## HENRICO COUNTY MS4 PROGRAM PLAN

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EN000000007906	No Issues Identified	None Required
EN000000007905	No Issues Identified	None Required
EN000000007903	No Issues Identified	None Required
EN000000007901	No Issues Identified	None Required
EN000000008356	No Issues Identified	None Required
EN000000002554	No Issues Identified	None Required
EN000000002014	No Issues Identified	None Required
EN000000002020	No Issues Identified	None Required
EN000000002027	No Issues Identified	None Required
EN000000002026	No Issues Identified	None Required
EN000000007514	No Issues Identified	None Required
EN000000005045	No Issues Identified	None Required
EN000000008133	No Issues Identified	None Required
EN000000000012	No Issues Identified	None Required
EN000000008022	No Issues Identified	None Required
EN000000005213	No Issues Identified	None Required
EN000000008236	No Issues Identified	None Required
EN000000008237	No Issues Identified	None Required
EN000000003426	No Issues Identified	None Required
EN000000003488	No Issues Identified	None Required
EN000000007887	No Issues Identified	None Required
EN000000007869	No Issues Identified	None Required
EN000000013220	No Issues Identified	None Required

Follow-Up Actions Performed as a Result of the Dry Weather Screening Conducted between 1/1/2023 and 12/31/2023	
MS4 Structure	Follow-Up Action
None	None

The annual report due March 31, 2016 shall include the written procedures for wet weather screening.

DPW will develop a list of MS4 structures subject to wet weather screening based on the areas of concern as identified by the County that are within the drainage area to

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**HENRICO COUNTY MS4 PROGRAM PLAN  
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## HENRICO COUNTY MS4 PROGRAM PLAN

the MS4 structure, including:

- (1) fertilizer storage yards,
- (2) mulch / soil storage yards,
- (3) building supply storage yards,
- (4) used automobile lots,
- (5) construction equipment storage areas,
- (6) automobile salvage yards, and
- (7) areas of previously identified spill / IDDE complaints.

DPW will screen no fewer than 25 of the MS4 structures identified as subject to wet weather screening each year between January 1, 2016 and December 31, 2019.

DPW will screen no fewer than 10 of the MS4 structures identified as subject to wet weather screening between January 1, 2020 and March 31, 2020.

The MS4 structures will be subject to the established inspection procedure, evaluating identified flows and maintenance and repair needs.

Depending on the information observed and gathered during the wet weather screening inspections, identified flows may need to be sampled to determine the source of the flow. Whether or not samples are collected, suspected illicit discharges will be forwarded to the IDDE investigator as a potential illicit discharge for follow-up.

**Each annual report shall include a list of locations upon which wet weather screening was conducted, the results, weather conditions at the time sample was collected to include date and approximate time of most recent storm event preceding sample collection, long term trends analyses, and any follow-up actions including maintenance and/or repair of infrastructure or outfalls performed as a result of the wet weather screening.**

The data does not lend itself to an analysis of any long-term trends at this time.



## HENRICO COUNTY MS4 PROGRAM PLAN

<b>Wet Weather Screening Conducted between 1/1/2023 and 12/31/2023</b>				
MS4 Structure	Last Significant Rainfall	Findings	Sample Collected	Weather Conditions at the time of Sample
EN000000006721	< 2 days	No Issues	No	N/A
EN000000004462	< 2 days	No Issues	No	N/A
EN000000003810	< 2 days	No Issues	No	N/A
EN000000010889	< 2 days	No Issues	No	N/A
EN000000005684	< 2 days	No Issues	No	N/A
EN000000001793	< 2 days	No Issues	No	N/A
EN000000011820	< 2 days	No Issues	No	N/A
EN000000004442	< 2 days	No Issues	No	N/A
EN000000001793	< 2 days	No issues	No	N/A
EN000000004918	< 2 days	No Issues	No	N/A
EN000000000011	< 2 days	No Issues	No	N/A
EN000000000370	< 2 days	No Issues	No	N/A
EN000000000601	< 2 days	No Issues	No	N/A
EN000000000410	< 2 days	No Issues	No	N/A
EN000000000507	< 2 days	No Issues	No	N/A
EN000000000508	< 2 days	No Issues	No	N/A
EN000000001476	< 2 days	No Issues	No	N/A
EN000000001533	< 2 days	No Issues	No	N/A
EN000000001410	< 2 days	No Issues	No	N/A
EN000000000816	< 2 days	No Issues	No	N/A
EN000000000937	< 2 days	No Issues	No	N/A
EN000000000978	< 2 days	No Issues	No	N/A

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**HENRICO COUNTY MS4 PROGRAM PLAN  
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EN000000001865	< 2 days	No Issues	No	N/A
EN000000002022	< 2 days	No Issues	No	N/A
EN000000001959	< 2 days	No Issues	No	N/A

Follow-Up Actions Performed as a Result of the Wet Weather Screening Conducted between 1/1/2023 and 12/31/2023	
MS4 Structure	Follow-Up Action
There are no follow-up actions as a result of wet weather screening as no issues were identified.	

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.B.2.m

### MS4 PROGRAM IMPLEMENTATION INFRASTRUCTURE COORDINATION

**Annual Coordination Meeting – The permittee shall meet annually with VDOT for purposes of overall coordination on priority issues for the permittee’s MS4 program plan (including operations and maintenance elements) and TMDL action planning relevant to the interconnectivity of the MS4s.**

The Annual Coordination Meeting was held in-person at VDOT Richmond District Complex with an option for virtual participation on December 13, 2023. In addition to representatives from VDOT and Henrico County, Chesterfield County staff were also present. The following participated:

Alex Forasté	VDOT
Matt Stafford	VDOT
Scott Crafton	VDOT
Michelle Fults	VDOT
Joe Felton	VDOT
Nancy Grandfield	VDOT
JJ Lightfoot	VDOT
Kun Dong	VDOT
Kendall Allen	VDOT
Owen Donovan	VDOT
Joe Parfitt	VDOT
Stacey Garrett	Henrico County
Robin Wilder	Henrico County
Deana Williams	Henrico County
Ashley Tucker	Chesterfield County
Grayson Hughes	Chesterfield County
Kimberly Mervine	Chesterfield County
Aidan Kalua’u	Chesterfield County

**Mapping – The permittee shall inform VDOT of the status of its mapping program, identifying any uncertainty regarding ownership or actual location of MS4 components associated with the physically-interconnected MS4s, and working to resolve such uncertainty. The permittee shall coordinate with VDOT to identify**

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## HENRICO COUNTY MS4 PROGRAM PLAN

### PART I.B.2.m

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## **HENRICO COUNTY MS4 PROGRAM PLAN**

**any areas within the permittee's municipal boundaries that drain to the VDOT MS4.**

VDOT, Chesterfield, and Henrico discussed their mapping efforts, including current and upcoming projects. All have mapping available as previously requested by the other attendees.

**Chesapeake Bay TMDL Action Plans – The permittee shall inform VDOT of the means, methods, and schedule by which the permittee will implement the reductions required by the Chesapeake Bay TMDL Special Condition (Part I.D.1) when those means and methods may impact the physically-interconnected MS4s. The parties are encouraged to cooperate with one another where the siting or design of best management practices (BMPs) may be accelerated or otherwise improved by mutual cooperation.**

Henrico's Chesapeake Bay TMDL Action Plan was discussed and is available for review.

**The permittee shall coordinate with VDOT to identify any areas within the permittee's municipal boundaries that drain to the VDOT MS4 and are unaccounted for in the Chesapeake Bay TMDL Action Plan developed by VDOT or the permittee. The unaccounted areas shall be quantified (acres) in the Chesapeake Bay TMDL Action Plan submitted by the permittee.**

Henrico's action plan quantifies the areas accounted for (and unaccounted for) in the load reduction calculations in accordance with its permit.

**Other TMDL Action Plans – The permittee shall inform VDOT of TMDL Action Plans and major milestones implemented for other (i.e., non-Chesapeake Bay) TMDLs when those plans may impact the physically-interconnected MS4s. The parties are encouraged to cooperate with one another where the siting or design of BMPs may be accelerated or improved by mutual cooperation.**

Henrico's other TMDL Action Plans are available on its website.

**Credit for TMDL Implementation – Permit specific BMP retrofit requirements shall**

## **HENRICO COUNTY MS4 PROGRAM PLAN**

not be double-counted in the calculation of load reductions. If the permittee undertakes the project, the permittee shall be entitled to full credit for the project, but may share credit with VDOT on mutually agreeable terms, which shall be in writing.

During the development of the TMDL Action Plans, Henrico did not include any projects that could potentially result in "double-counting" of pollutant reductions achieved in the physically-interconnected MS4.

**Illicit Discharge Detection & Elimination – The permittee shall continue to be responsible for implementing a program for illicit discharge detection and elimination, including dry weather field screening, for the permittee’s portion of the physically-interconnected MS4. As part of the annual coordination meeting, described in item (1) above, the permittee shall coordinate with VDOT on the identification of high risk industrial facilities. The permittee shall establish procedures for notifying VDOT when an illicit discharge is identified in the VDOT MS4.**

Henrico discussed its illicit detection and elimination (IDDE) program. When an illicit discharge that drains to the physically-interconnected MS4 is found, Henrico will notify VDOT and DEQ via email.

**Water Quality Monitoring – The permittee shall conduct water quality monitoring as required by Part I.B.2.l) and Part I.C of this state permit. The permittee shall make available to VDOT all monitoring data collected from areas where the physically-interconnected MS4 discharges to the VDOT MS4 or received flow from the VDOT MS4. The permittee and VDOT are encouraged to cooperate with one another to establish a joint monitoring network.**

The water quality monitoring provisions of the MS4 Permit were discussed and any monitoring data collected from areas that drain into or from the physically-interconnected MS4 is available to VDOT.

**PART I.C.1**

**MONITORING REQUIREMENTS  
BIOLOGICAL STREAM MONITORING**

**Each annual report shall include a summary of the monitoring results, analyses, and an interpretation of that data with respect to long-term patterns/trends.**

**Taxa Richness**

Taxa Richness is the number of different taxa represented in an ecological community. Taxa Richness is simply a count of the taxa, and it does not take into account the relative abundances of each taxa. At most sites, Taxa Richness for the 2022 sampling year was higher than that of the previous years' data. Taxa Richness was higher across all sampling sites during the spring sampling event than the fall sampling event. Taxa Richness is expected to decrease with increasing perturbation.

**EPT Index**

EPT Index is a subset of the above Richness measure. It is the number of taxa in the insect orders Ephemeroptera, Plecoptera, and Trichoptera, which are generally more environmentally sensitive. EPT Index has not changed dramatically at any site since monitoring for this program began in 2015. There was slight decrease of this metric at three of the five sites from the spring sampling event to the fall sampling event. EPT Index is expected to decrease with increasing perturbation.

**Dominant Taxon**

Dominant Taxon measures the percent abundance of individuals in the single most abundant taxon. This metric was higher during the fall sampling events of all sites. Dominant Taxon is expected to increase with increasing perturbation.

**Hilsenhoff Biotic Index**

The Hilsenhoff Biotic Index (HBI) estimates the overall tolerance of the community in a sampling area, weighted by the relative abundance of each taxonomic group. Organisms are assigned a tolerance number from 0 to 10 pertaining to the group's known sensitivity to organic pollutants - 0 being most sensitive, 10 being most tolerant. HBI values range from 0 to 10 as well. Low HBI values reflect a higher abundance of sensitive groups, thus a lower level of pollution. This measurement has remained fairly consistent at all sites throughout the duration of the monitoring.

**% Gatherers**

This measures the percent abundance of individuals in the sample whose primary functional mechanism for obtaining food (functional feeding group (FFG)) is to collect/gather depositional organic matter. Although generally within the range of previously recorded data, this percentage metric increased at three of the five sites from the spring sampling event to the fall sampling event. This percentage is expected to decrease with increasing perturbation for the stream.

**% Predators**

This measures the percent abundance of individuals in the sample whose primary functional mechanism for obtaining food (FFG) is to attack prey and ingest whole organisms or their parts. This measurement substantially increased at three of the five sites from the spring to the fall sampling event. Consistent values for this metric indicate a stable system and source of lower trophic level organisms able to support a healthy population of higher trophic level organisms.

**% Scrapers**

This measures the percent abundance of individuals in the sample whose primary functional mechanism for obtaining food (FFG) is to graze on substrate or periphyton-attached algae and associated material. This percentage metric decreased at three of the five sites between the spring sampling event and the fall sampling event. This metric is expected to decrease with increasing perturbation.

**Biological Condition Index**

The integrity of the Access Database used to calculate prior year's metric scores was compromised prior to the publishing of the 2016 Annual Report. Therefore, it is difficult to compare this year's Biological Condition Index data with prior years' data, and long term trends cannot be easily determined. Apart from Cornelius Creek and Hungary Creek having varying results, the Biological Condition Index has remained fairly consistent at most sites. Inconsistency in the Index may indicate the stream has the potential to support a substantial biological community, however habitat is not completely stable. Hungary Run was recently restored and is actively maturing which should result in more habitat stability over time.

**Habitat Suitability Index**

Habitat Suitability Index assesses the relative quality of each sites' habitat based on a local reference reach. All streams except for Stony Run had upward trends in their Habitat Suitability Index. This is likely an anomaly and will be watched closely in subsequent years.

# HENRICO COUNTY MS4 PROGRAM PLAN

Henrico County 2023 Bioassessment Metrics													
Spring 2023 Bioassessment	Cornelius Creek	Stony Run	Broadwater Creek	Hungary Creek	Upham Brook	Reference Reach	Spring 2023 Bioassessment	Cornelius Creek	Stony Run	Broadwater Creek	Hungary Creek	Upham Brook	Reference Reach
Taxa Richness	39	26	37	35	25	49	Taxa Richness	27	19	31	16	17	49
EPT Index	16	7	6	4	6	8	EPT Index	8	4	7	2	4	8
% Dominant Taxon	21.20	26.00	17.30	22.40	18.10	14.47	% Dominant Taxon	35.30	24.7	22.10	40.10	31.60	14.47
HBI	4.88	5.58	5.51	5.98	4.96	5.52	HBI	5.19	5.7	5.93	5.82	5.25	5.52
% Gatherers	37.13	32.69	16.60	20.05	18.46	37.82	% Gatherers	21.95	14.29	19.29	49.50	29.25	37.82
% Predators	5.70	5.68	6.76	13.28	6.05	10.77	% Predators	1.95	13.64	11.43	12.64	4.72	10.77
% Scrapers	24.70	9.17	36.99	9.24	23.05	14.38	% Scrapers	14.14	12.34	47.06	6.04	6.60	14.38
Fall 2023 Bioassessment	Cornelius Creek	Stony Run	Broadwater Creek	Hungary Creek	Upham Brook	Reference Reach	Fall 2023 Bioassessment	Cornelius Creek	Stony Run	Broadwater Creek	Hungary Creek	Upham Brook	Reference Reach
Taxa Richness	27	19	31	16	17	49	Taxa Richness	27	19	31	16	17	49
EPT Index	8	4	7	2	4	8	EPT Index	8	4	7	2	4	8
% Dominant Taxon	35.30	24.7	22.10	40.10	31.60	14.47	% Dominant Taxon	35.30	24.7	22.10	40.10	31.60	14.47
HBI	5.19	5.7	5.93	5.82	5.25	5.52	HBI	5.19	5.7	5.93	5.82	5.25	5.52
% Gatherers	21.95	14.29	19.29	49.50	29.25	37.82	% Gatherers	21.95	14.29	19.29	49.50	29.25	37.82
% Predators	1.95	13.64	11.43	12.64	4.72	10.77	% Predators	1.95	13.64	11.43	12.64	4.72	10.77
% Scrapers	14.14	12.34	47.06	6.04	6.60	14.38	% Scrapers	14.14	12.34	47.06	6.04	6.60	14.38



# HENRICO COUNTY MS4 PROGRAM PLAN

Henrico County 2023 Bioassessment Metric Scores

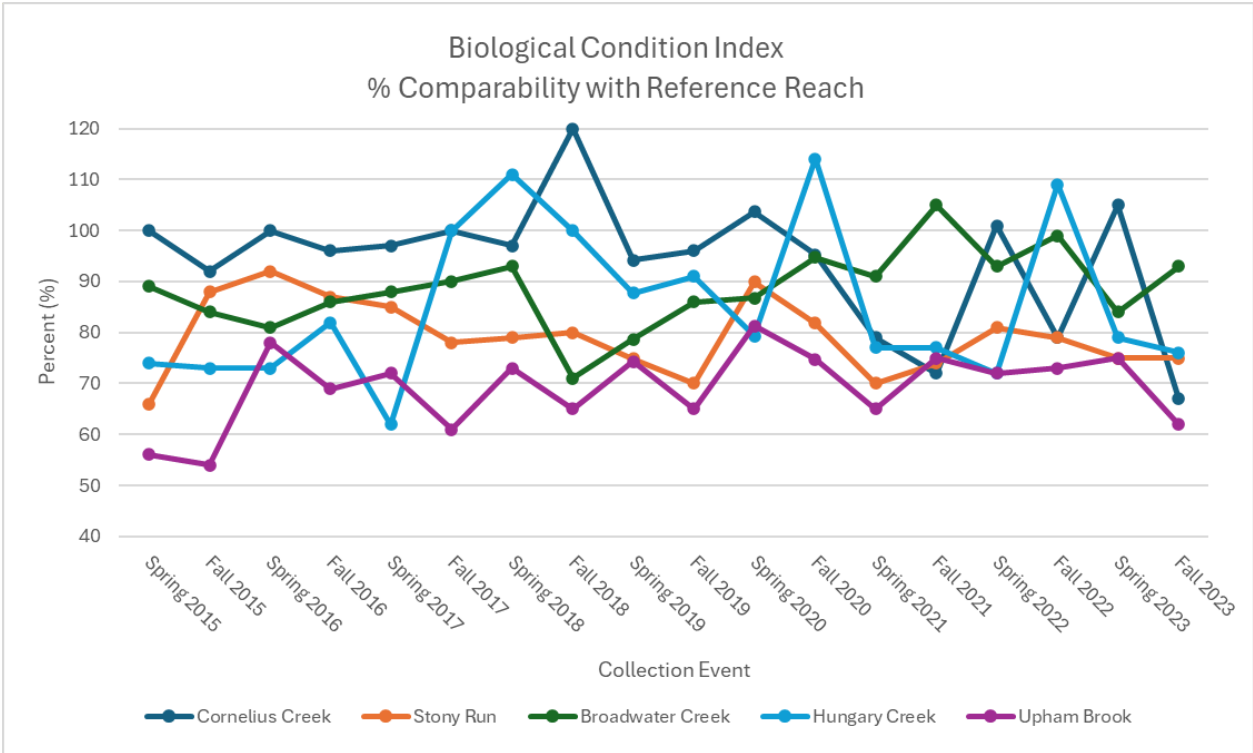
Spring Bioassessments	Cornelius Creek	Stony Run	Broadwater Creek	Hungary Creek	Upham Brook	Reference Reach
Taxa Richness	91	60	86	81	58	114
EPT Index	145	64	55	36	55	73
%Dominant Taxon	93	87	97	91	96	101
HBI	75	65	66	59	74	66
%Gatherers	98	86	44	53	49	100
%Predators	48	47	56	111	50	90
%Scrapers	50	19	75	19	47	29
Total:	86	61	68	64	61	82
%Comparability w/ Reference Reach:	105	75	84	79	75	
Biological Condition:	Non-Impaired	Slightly Impaired	Non-Impaired	Non-Impaired	Slightly-Impaired	

Fall Bioassessments	Cornelius Creek	Stony Run	Broadwater Creek	Hungary Creek	Upham Brook	Reference Reach
Taxa Richness	63	44	72	37	40	114
EPT Index	73	36	64	18	37	73
%Dominant Taxon	76	89	92	70	80	101
HBI	71	63	60	61	70	66
%Gatherers	58	38	51	130	77	100
%Predators	16	136	95	105	39	90
%Scrapers	29	25	96	12	13	29
Total:	55	62	76	62	51	82
%Comparability w/ Reference Reach:	67	75	93	76	62	
Biological Condition:	Slightly Impaired	Slightly Impaired	Non-Impaired	Slightly Impaired	Slightly Impaired	

Biological Condition Criteria  
 0-22% - Severely Impaired  
 23-50% - Moderately Impaired  
 51-78% - Slightly Impaired  
 79-100% - Non-impaired

# HENRICO COUNTY MS4 PROGRAM PLAN



# HENRICO COUNTY MS4 PROGRAM PLAN

## Table Spring 2023 Summary of Stream Habitat Assessment Results

### Henrico County Stream Bioassessment Program 05/01/2023 through 06/01/2023

	Scoring Range	Reference										
			<i>Poor to Optimal</i>	<i>Hhr-2001Lo</i>	<i>CRC07.S01</i>	<i>DSR04.S01</i>	<i>HLS17.S02</i>	<i>NHC13.S01</i>	<i>UPB17.S02</i>			
<b><u>Substrate and Instream Cover</u></b>												
Epifaunal substrate/available cover	0-20	17	16	17	16	17	18	15	12			
Pool substrate characterization	0-20	16	12	16	12	16	16	14	8			
Pool variability	0-20	17	16	9	16	9	16	9	10			
<b><u>Channel Morphology</u></b>												
Sediment deposition	0-20	14	12	17	12	17	15	13	13			
Channel flow status	0-20	16	12	15	12	15	17	15	14			
Channel alteration	0-20	18	19	18	19	18	20	18	13			
Channel sinuosity	0-20	15.5	11	11	11	11	16	14	8			
<b><u>Riparian and Bank Structure</u></b>												
Bank stability	0-10	8	3	6	3	6	8	9	6			
Bank stability	0-10	8.5	3	6	3	6	8	9	7			
Bank vegetation protection	0-10	7	8	10	8	10	9	9	4			
Bank vegetation protection	0-10	8	8	10	8	10	9	9	9			
Riparian vegetative zone width	0-10	10	10	4	10	4	9	10	1			
Riparian vegetative zone width	0-10	10	10	9	10	9	9	10	9			
<b>Total Score</b>		<b>165</b>	<b>140</b>	<b>148</b>	<b>140</b>	<b>148</b>	<b>170</b>	<b>154</b>	<b>114</b>			
<b>Percent of Reference Site</b>			<b>85</b>	<b>90</b>	<b>85</b>	<b>90</b>	<b>103</b>	<b>93</b>	<b>69</b>			
<b>Resulting Habitat Suitability</b>			Supporting		Supporting		Comparable	Comparable	Partially S.			

*Habitat Criteria*  
 >90% = Comparable to reference  
 75-89 = Supporting  
 60 - 74 = Partially supporting  
 <59 = non-supporting

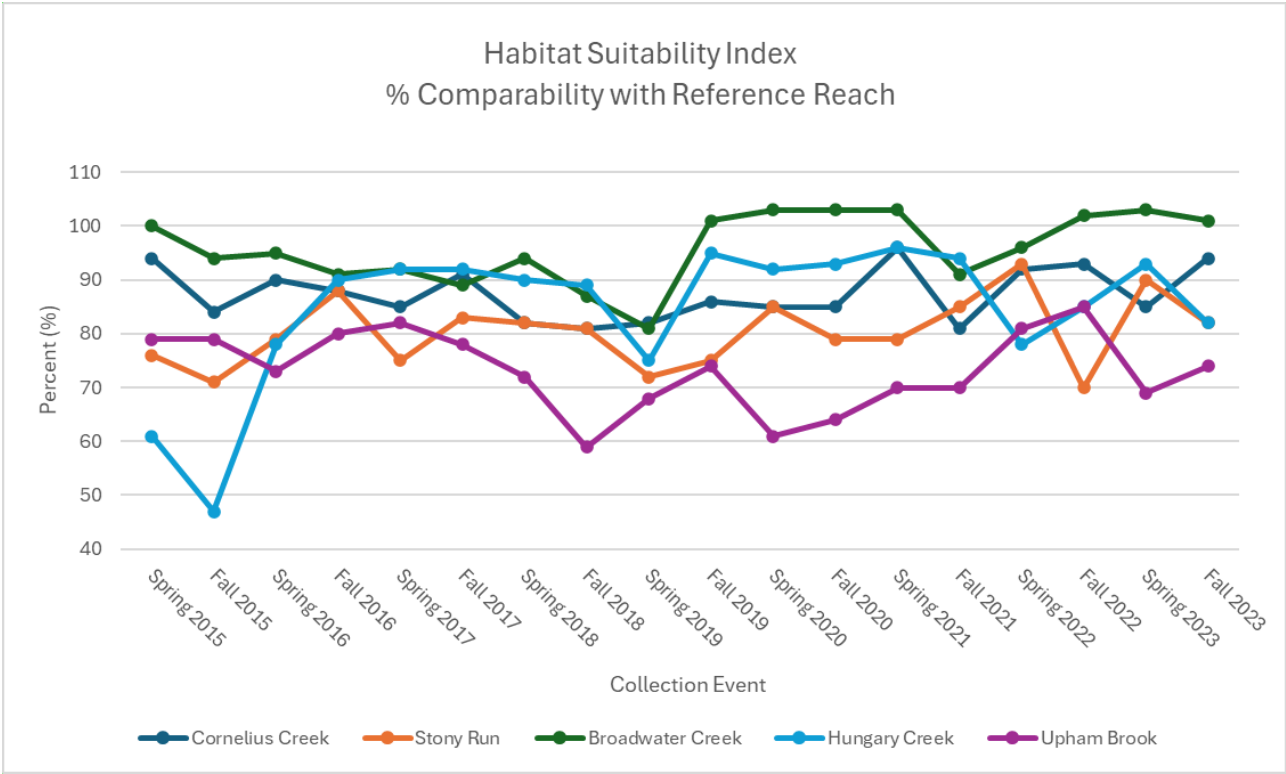
# HENRICO COUNTY MS4 PROGRAM PLAN

**Table Fall 2023**  
**Summary of Stream Habitat Assessment Results**  
**Henrico County Stream Bioassessment Program**  
**11/01/2023 through 12/01/2023**

	<i>Scoring Range</i>	<i>Reference</i>											
	<i>Poor to Optimal</i>	<i>Hnr2001Lo</i>	<i>CRC07.S01</i>	<i>DSR04.S01</i>	<i>HLS17.S02</i>	<i>NHC13.S01</i>	<i>UPB17.S02</i>						
<b><u>Substrate and Instream Cover</u></b>													
Epifaunal substrate/available cover	0-20	17	18	15	17	12	12					12	
Pool substrate characterization	0-20	16	17	15	16	9	15					15	
Pool variability	0-20	17	17	7	17	8	18					18	
<b><u>Channel Morphology</u></b>													
Sediment deposition	0-20	14	12	17	18	12	13					13	
Channel flow status	0-20	16	13	13	17	12	17					17	
Channel alteration	0-20	18	19	16	18	19	8					8	
Channel sinuosity	0-20	15.5	16	9	13	12	7					7	
<b><u>Riparian and Bank Structure</u></b>													
Bank stability	0-10	8	2	7	8	7	4					4	
Bank stability	0-10	8.5	2	6	8	8	5					5	
Bank vegetation protection	0-10	7	10	7	9	8	4					4	
Bank vegetation protection	0-10	8	10	9	9	8	9					9	
Riparian vegetative zone width	0-10	10	10	5	8	10	1					1	
Riparian vegetative zone width	0-10	10	9	9	9	10	9					9	
<b>Total Score</b>		<b>165</b>	<b>155</b>	<b>135</b>	<b>167</b>	<b>135</b>	<b>122</b>					<b>122</b>	
<b>Percent of Reference Site</b>		<b>94</b>	<b>94</b>	<b>82</b>	<b>101</b>	<b>82</b>	<b>74</b>					<b>74</b>	
<b>Resulting Habitat Suitability</b>		Comparable	Comparable	Supporting	Comparable	Supporting	Partially S.					Partially S.	

**Habitat Criteria**  
 >90% = *Comparable to reference*  
 75-89 = *Supporting*  
 60 - 74 = *Partially supporting*  
 <59 = *non supporting*

# HENRICO COUNTY MS4 PROGRAM PLAN



# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.C.2

### MONITORING REQUIREMENTS IN-STREAM MONITORING

Beginning with the annual report due March 31, 2017, each annual report shall include a summary of the monitoring results and analyses and an interpretation of that data with respect to long-term patterns/trends.

The tables below include the data collected during the 2023 reporting year.

<b>Cornelius Creek</b>	1/18/2023	3/23/2023	5/23/2023	7/12/2023	9/20/2023	11/28/2023
pH	-	6.29	6.77	6.91	7.68	7.45
Dissolved Oxygen (mg/l)	-	11.31	9.16	8.13	8.73	11.9
Temperature (°C)	5.8	10.8	18.2	23	18.4	5.8
Total Suspended Solids (mg/l)	2.2	1.2	3.7	1.4	1.9	<1
Ammonia as Nitrogen (mg/l)	BQL	BQL	<0.2	<0.2	<0.2	<.2
Nitrate plus Nitrite Nitrogen (mg/l)	1.37	1.66	1.07	0.91	0.78	1.33
Total Kjeldahl Nitrogen (mg/l)	0.29	0.45	<0.5	<0.5	<0.5	<0.5
Total Nitrogen (calculated) (mg/l)	1.66	1.66	1.07	0.91	0.78	1.33
Dissolved Phosphorus (mg/l)	BQL	BQL	<0.02	<0.02	<0.02	<0.02
Total Phosphorus (mg/l)	0.02	0.12	<0.1	<0.1	<0.1	<0.10
Escherichia coli (CFU/100ml)	57	99	387	96	59	51
Air Temperature (°F)	55	69	76	88	62	40

BQL: Below Quantitation Level

## HENRICO COUNTY MS4 PROGRAM PLAN

<b>Broadwater Creek</b>	1/18/2023	3/23/2023	5/23/2023	7/12/2023	9/20/2023	11/28/2023
pH	-	5.85	6.1	5.85	6.91	6.23
Dissolved Oxygen (mg/l)	-	11.99	8.25	7.69	7.69	9.34
Temperature (°C)	9.1	13.4	17	19.2	17.4	9.3
Total Suspended Solids (mg/l)	2.2	1.5	7	2.1	<1	5.6
Ammonia as Nitrogen (mg/l)	BQL	BQL	<0.2	<0.2	<0.2	<0.2
Nitrate plus Nitrite Nitrogen (mg/l)	0.76	1.06	0.96	1.36	1.3	1.06
Total Kjeldahl Nitrogen (mg/l)	0.25	0.48	0.52	<0.5	<0.5	0.8
Total Nitrogen (calculated) (mg/l)	1.01	1.06	1.48	1.36	1.3	1.86
Dissolved Phosphorus (mg/l)	0.01	BQL	<0.02	<0.02	<0.02	<0.02
Total Phosphorus (mg/l)	0.04	0.13	<0.1	<0.1	<0.1	0.12
Escherichia coli (CFU/100ml)	23	1050	84	172	68	10
Air Temperature (°F)	56	70	73	86	66	41

BQL: Below Quantitation Level

<b>Upham Brook</b>	1/18/2023	3/23/2023	5/23/2023	7/12/2023	9/20/2023	11/28/2023
pH	-	7.88	6.9	6.89	7.41	7.71
Dissolved Oxygen (mg/l)	-	14.07	6.99	5.35	6.02	10.56
Temperature (°C)	7.2	13.2	19.3	24.2	19	6.4
Total Suspended Solids (mg/l)	1.8	BQL	2.1	2.7	1	<1
Ammonia as Nitrogen (mg/l)	BQL	BQL	<0.2	<0.2	<0.2	<0.2
Nitrate plus Nitrite Nitrogen (mg/l)	0.68	0.21	0.31	0.38	0.34	0.33
Total Kjeldahl Nitrogen (mg/l)	0.27	BQL	<0.5	<0.5	<0.5	<0.5
Total Nitrogen (calculated) (mg/l)	0.85	0.21	0.31	0.38	0.34	0.33
Dissolved Phosphorus (mg/l)	0.03	0.02	0.02	0.07	0.04	0.18
Total Phosphorus (mg/l)	0.05	0.093	<0.1	0.1	<0.1	0.17
Escherichia coli (CFU/100ml)	400	365	108	72	74	60
Air Temperature (°F)	59	75	72	85	69	43

BQL: Below Quantitation Level

**HENRICO COUNTY MS4 PROGRAM PLAN**  
**PART I.C.2**  
**ANNUAL REPORT SUPPLEMENT**  
**JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

## HENRICO COUNTY MS4 PROGRAM PLAN

<b>Stony Run</b>	1/18/2023	3/23/2023	5/23/2023	7/12/2023	9/20/2023	11/28/2023
pH	-	7.8	6.93	7.06	7.77	7.69
Dissolved Oxygen (mg/l)	-	12.06	8.19	1.89	7.97	11.12
Temperature (°C)	7.8	16.3	19.1	23.1	20	7
Total Suspended Solids (mg/l)	2.3	11	2.1	13	12	<1
Ammonia as Nitrogen (mg/l)	BQL	BQL	<0.2	3.9	<0.2	<0.2
Nitrate plus Nitrite Nitrogen (mg/l)	0.43	0.23	0.31	<0.2	<0.2	0.24
Total Kjeldahl Nitrogen (mg/l)	0.32	0.27	<0.5	5.16	0.87	<0.5
Total Nitrogen (calculated) (mg/l)	0.75	0.23	0.31	5.16	0.87	0.24
Dissolved Phosphorus (mg/l)	BQL	0.02	<0.02	0.22	<0.02	0.03
Total Phosphorus (mg/l)	0.03	0.049	<0.1	0.52	<0.1	<0.1
Escherichia coli (CFU/100ml)	72	14	96	>2420	387	222
Air Temperature (°F)	61	77	72	83	71	43

BQL: Below Quantitation Level



**HENRICO COUNTY MS4 PROGRAM PLAN**

<b>Hungary Creek</b>	1/18/2023	3/23/2023	5/23/2023	7/12/2023	9/20/2023	11/28/2023
pH	-	6.76	6.39	6.76	7.32	7.66
Dissolved Oxygen (mg/l)	-	10.13	8.29	6.23	8.04	10.65
Temperature (°C)	10	19.1	18	22.1	18.5	6.7
Total Suspended Solids (mg/l)	6.7	2.9	1.9	5.8	1.7	2.5
Ammonia as Nitrogen (mg/l)	BQL	BQL	<0.2	<0.2	<0.2	<0.2
Nitrate plus Nitrite Nitrogen (mg/l)	0.4	0.28	0.24	0.25	0.35	0.27
Total Kjeldahl Nitrogen (mg/l)	0.47	0.19	<0.5	0.88	<0.5	<0.5
Total Nitrogen (calculated) (mg/l)	0.87	0.2	0.24	1.13	0.35	0.27
Dissolved Phosphorus (mg/l)	0.02	0.03	<0.02	0.03	0.02	<0.02
Total Phosphorus (mg/l)	0.06	BQL	<0.1	<0.1	<0.1	0.28
Escherichia coli (CFU/100ml)	230	387	488	727	579	201
Air Temperature (°F)	61	78.8	70	78	71	43

BQL: Below Quantitation Level

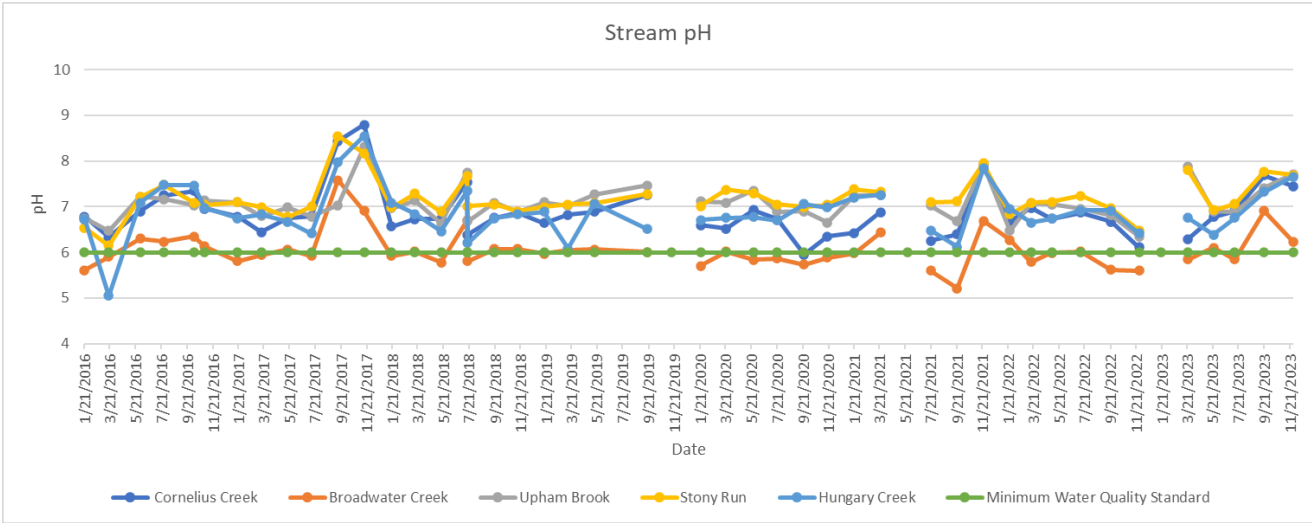
- : YSI reading error

Each data point on the following graphs represent the data collected during the permits reporting period. Where available, the appropriate Water Quality Standard is also included on the graph.

# HENRICO COUNTY MS4 PROGRAM PLAN

## Stream pH

Stream pH has been consistent throughout the duration of the monitoring period except for the fall of 2017 and 2019 where a spike in pH was observed across all sites. This could be due to a faulty sensor.

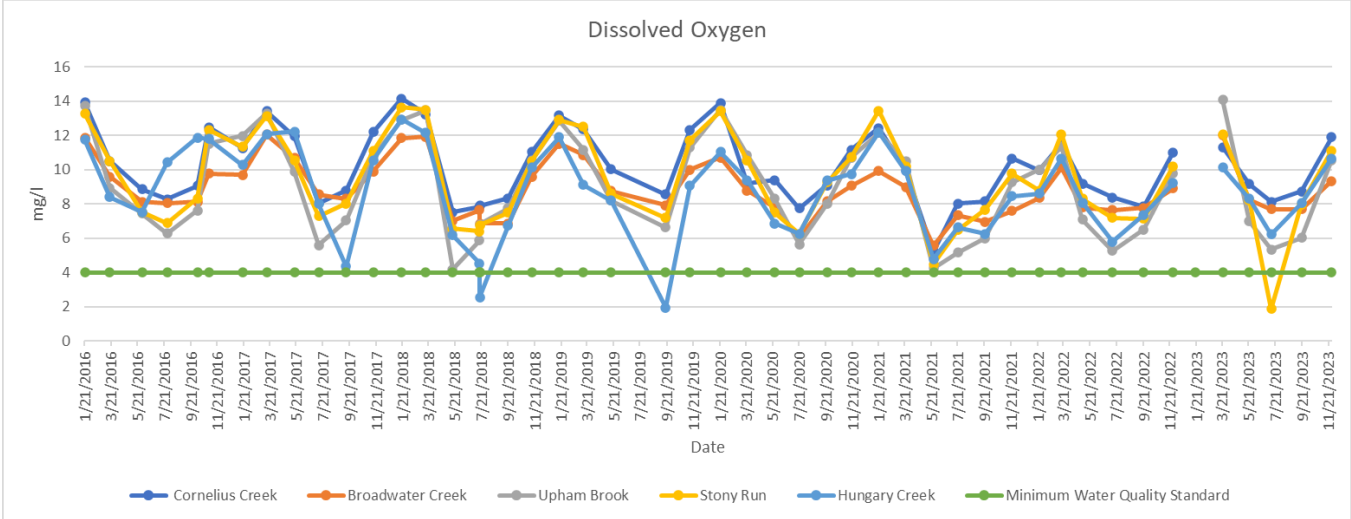


Note: Data unavailable for November 2019, May 2021, and January 2023 sampling event.

# HENRICO COUNTY MS4 PROGRAM PLAN

## Dissolved Oxygen

Aside from season variability noted across all sites, no discernable trend has been observed.

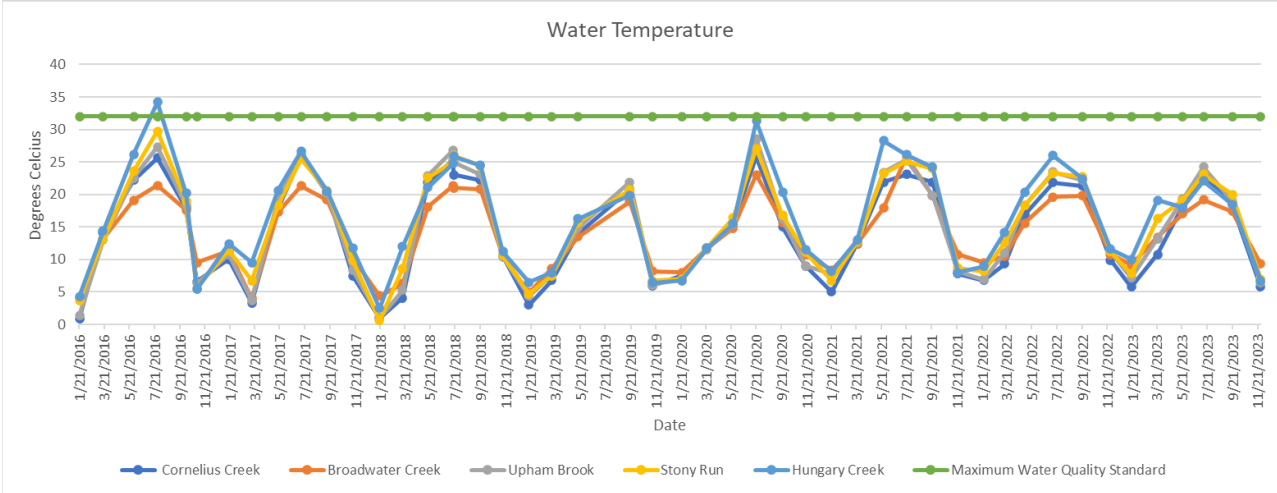


Note: Data unavailable for January 2023 sampling event.

# HENRICO COUNTY MS4 PROGRAM PLAN

## Water Temperature

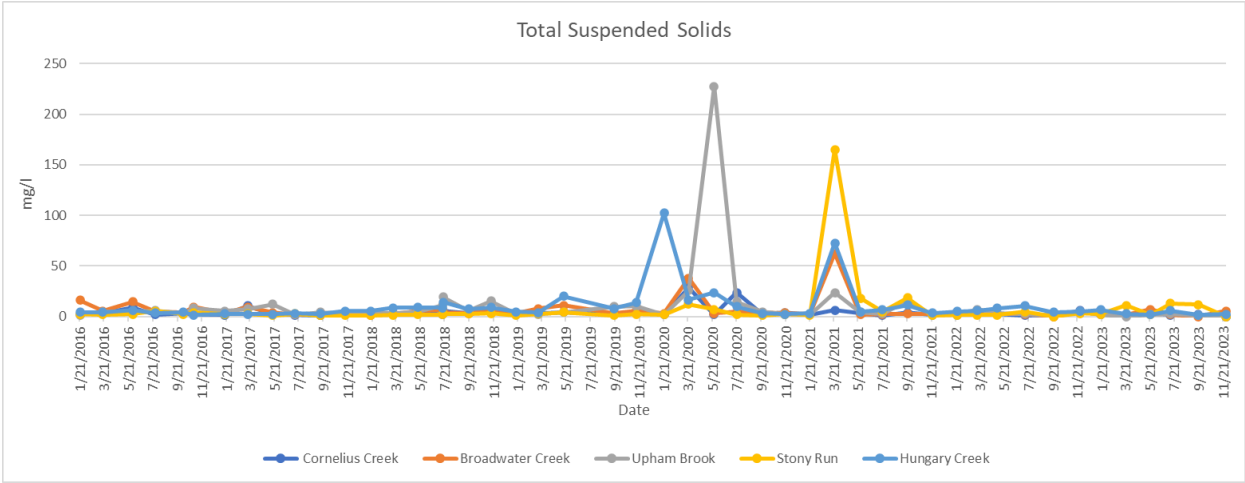
Aside from season variability noted across all sites, no discernable trend has been observed.



## Total Suspended Solids (TSS)

TSS has fluctuated between 0-50 mg/l across all sites throughout the duration of the monitoring, with the exception of a spike occurring at Hungary Creek and Upham Brook during the 2020 monitoring year and a spike during the March 2021 sampling event. These spikes appear to be correlated with significant precipitation events occurring recently before water samples were taken. The stream reaches located within highly urbanized environments could result in more intense flashy events causing upstream erosion and temporarily affecting stream turbidity. TSS spikes were only noted on singular collection events, and no long-term trends were identified.

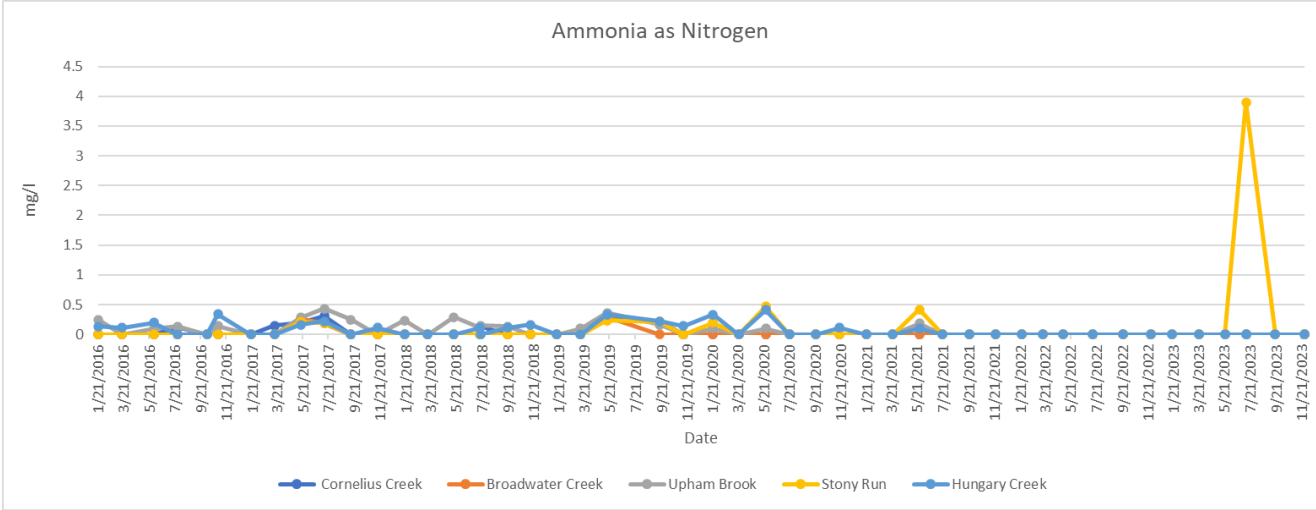
# HENRICO COUNTY MS4 PROGRAM PLAN



# HENRICO COUNTY MS4 PROGRAM PLAN

## Ammonia as Nitrogen

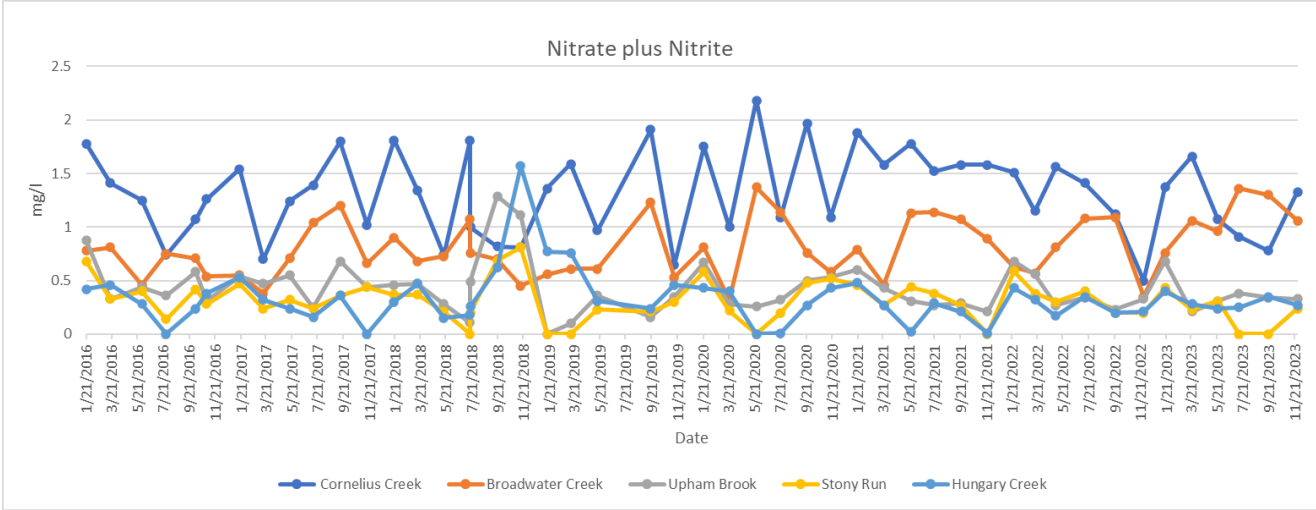
Ammonia as nitrogen has been variable across sites, but typically remaining within a range from 0 to 0.5 mg/l excluding a significant spike in July 2023 at Stony Run. This parameter has shown spikes through the summer months of some years. Seasonal spikes in ammonia could result from lower flow conditions experienced in the summer. All sites had below qualitative level for the 2022 and 2023 sampling events, excluding the spike in July 2023 at Stony Run.



# HENRICO COUNTY MS4 PROGRAM PLAN

## Nitrate plus Nitrite

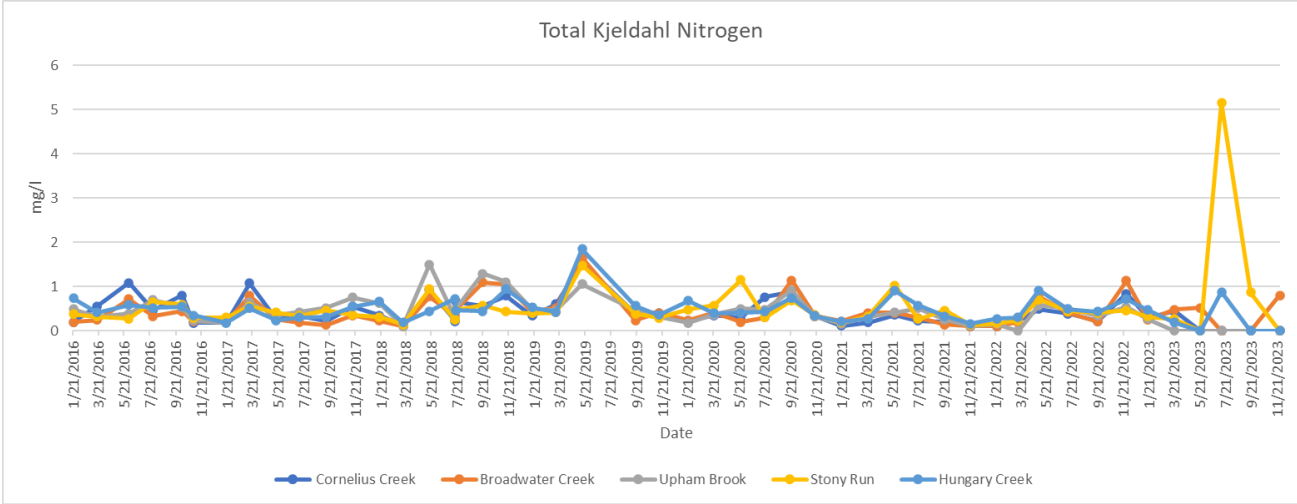
This parameter appears to fluctuate over time; however, it remains within a consistent range at each site. Cornelius Creek has notably higher values of Nitrate plus Nitrite. The watershed surrounding this reach of Cornelius Creek is dominated by agricultural lands, likely contributing a higher source of nitrogen fertilizer run-off.



# HENRICO COUNTY MS4 PROGRAM PLAN

## Total Kjeldahl Nitrogen

Total Kjeldahl Nitrogen appears to spike in the spring. This spike could result from the post-winter breakdown of organic material. This trend remained consistent during the 2022 sampling year. A significant spike was observed in July 2023 at Stony Run.

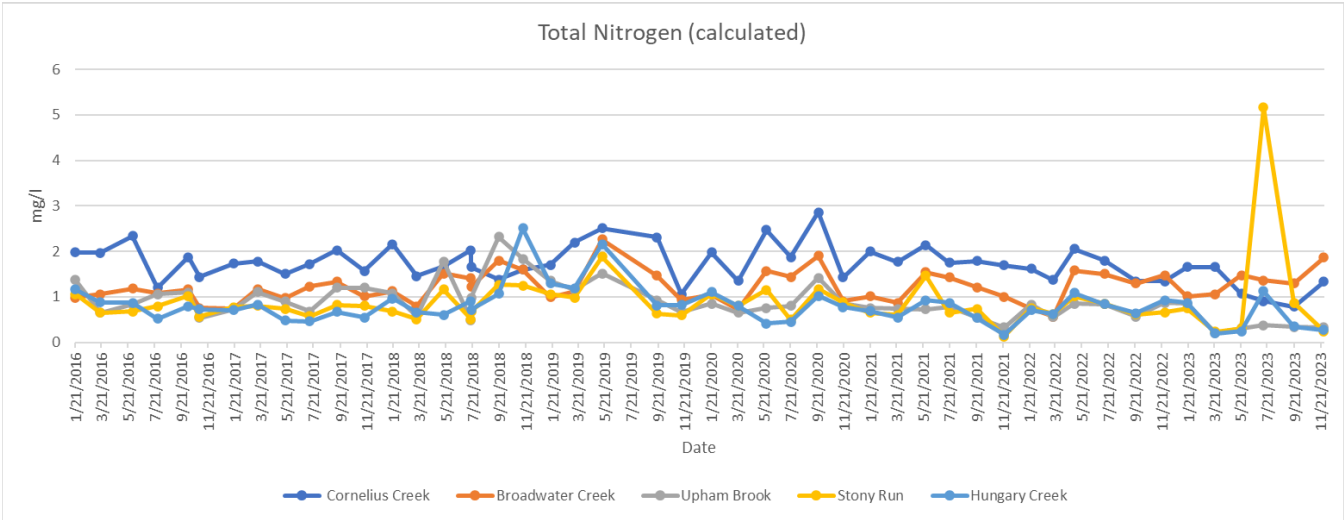




# HENRICO COUNTY MS4 PROGRAM PLAN

## Total Nitrogen

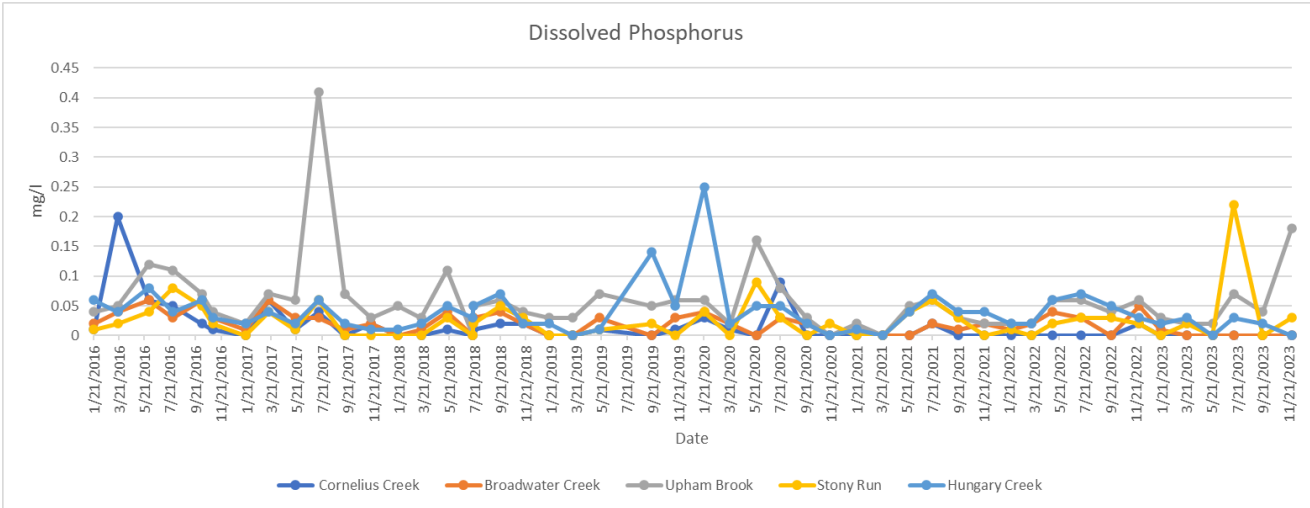
This parameter appears to fluctuate over time; however, it remains within a consistent range at each site. Cornelius Creek has recorded notably higher values of Total Nitrogen over the duration of the monitoring. The watershed surrounding this reach of Cornelius Creek is dominated by agricultural lands, likely contributing to a higher source of nitrogen fertilizer run-off. A significant spike was observed in July 2023 at Stony Run.



# HENRICO COUNTY MS4 PROGRAM PLAN

## Dissolved Phosphorus

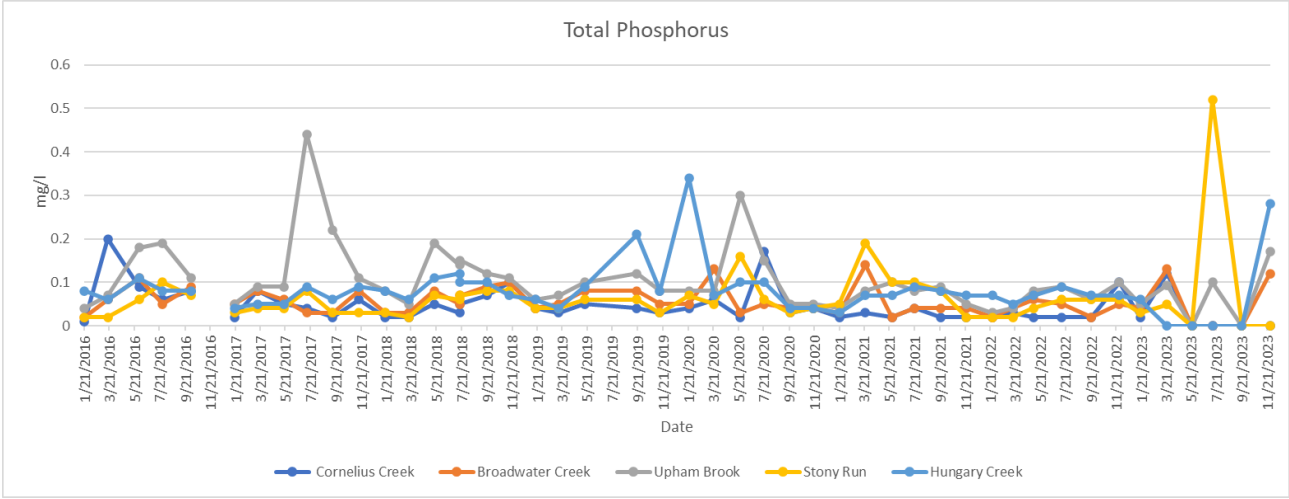
With the exception of a few spikes observed throughout the monitoring period, Dissolved Phosphorus has been consistent across time and sites. No discernable long-term trends have been identified.



# HENRICO COUNTY MS4 PROGRAM PLAN

## Total Phosphorus

With the exception of a few spikes observed throughout the monitoring period, Total Phosphorus has been consistent across time and sites. No discernable long-term trends have been identified.

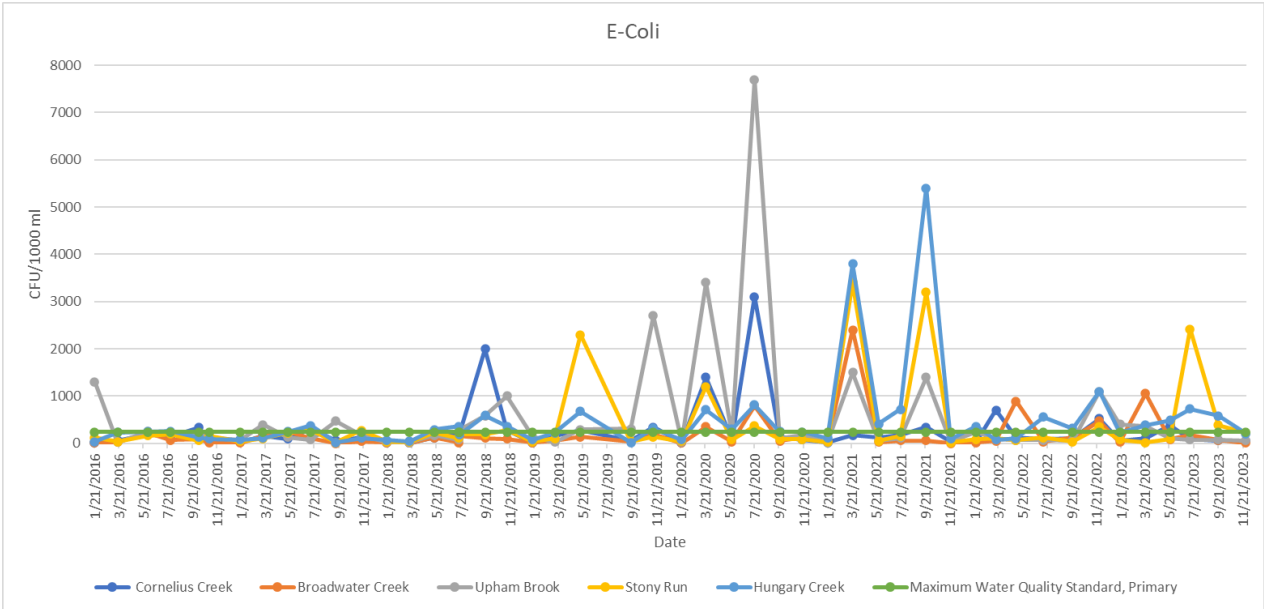


Note: Data unavailable for November 2016 sampling event.

# HENRICO COUNTY MS4 PROGRAM PLAN

## e-Coli

All sites have exhibited at least one spike in e-Coli over the monitoring period. No discernable trend has been observed across sites or over time. More data will be needed to identify any emerging long-term trends.



# **HENRICO COUNTY MS4 PROGRAM PLAN**

## **PART I.C.3**

### **MONITORING REQUIREMENTS STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING**

**Each annual report shall include a copy of the updated database in electronic format.**

A spreadsheet (.xls format) of the required data from the County's electronic database of stormwater management facilities has been included in the digital submittal of the MS4 Program Plan and Annual Report Supplements. The spreadsheet includes data for the stormwater management facilities brought online between January 1, 2023 and December 31, 2023.

**Each annual report shall include a summary of the program to ensure maintenance of private stormwater management facilities.**

It is the responsibility of the Department of Public Works to inspect all privately owned and operated facilities. All privately owned facilities will be inspected a minimum of once every 5 years. All inspections will be documented in the online database (APEX) and in GIS. Any issues found during an inspection will be documented and a punchlist of repairs will be sent to the owner of the facility through certified mail. Owners will have 30 days from receipt of the letter to contact the County BMP inspector with a plan for repairs and a tentative schedule. The owner will contact the inspector at the start of any maintenance work and at its completion. The facility will be re-inspected after completion of work. If no contact is made or action is taken by the owner within a reasonable amount of time, a second punchlist of repairs will be sent. If no contact is made or action taken by the owner after the second punchlist, then these items will be sent to the County Attorney's office for legal action. All inspections will be completed by the county BMP inspector or other qualified person (either a licensed professional or an individual holding the SWM inspector certification issued by DEQ). All owner inspections that are documented will also be recorded in APEX.

**Each annual report shall include a summary of the program to ensure maintenance of stormwater management facilities maintained by the permittee.**

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## **HENRICO COUNTY MS4 PROGRAM PLAN**

### **PART I.C.3**

#### **ANNUAL REPORT SUPPLEMENT**

**JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

## HENRICO COUNTY MS4 PROGRAM PLAN

On-Line* County-Operated SWM Facilities Inspected and/or Maintained between January 1, 2023 and December 31, 2023			
Type	Total	Inspected	Maintained
50/10 BASIN (5)	12	12	0
50/10 UNDERGROUND (6)	19	12	1
BAYFILTER (200)	1	1	0
BAYSEPARATOR (205)	1	1	0
BIORETENTION 1 (145)	5	3	1
BIORETENTION BASIN/TRENCH (10)	11	11	1
DRY DETENTION - POND (177)	3	0	0
DRY DETENTION - UNDERGROUND (178)	17	8	0
DRY SWALE 2 (151)	2	2	0
EXTENDED DETENTION BASIN (15)	32	32	1
EXTENDED DETENTION BASIN W/A SHALLOW MARSH (16)	2	2	1
EXTENDED DETENTION POND 1 (175)	1	1	1
FILTERRA (215)	29	27	4
GRASS CHANNEL (110)	1	1	0
GRASSED SWALE (20)	11	11	0
IMBRIUM JELLYFISH (250)	1	1	0
INFILTRATION BASIN/TRENCH (25)	5	4	2
PERMEABLE PAVEMENT 1 (135)	10	5	0
PROPRIETARY - SEE GIS NOTES (300)	4	0	0
RETENTION BASIN (WET POND) (30)	7	7	0
SHEETFLOW TO VEGETATED FILTER OR CONSERVED OPEN SPACE 1 (105)	7	6	0
SHEETFLOW TO VEGETATED FILTER OR CONSERVED OPEN SPACE 2 (106)	7	3	2
STORMCEPTOR (225)	1	1	0
STORMFILTER (220)	5	4	0
STORMTREAT (230)	3	3	0

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**HENRICO COUNTY MS4 PROGRAM PLAN**  
**PART I.C.3**  
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**JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**

## HENRICO COUNTY MS4 PROGRAM PLAN

STORMWATER360 (235)	5	5	0
VEGETATED FILTER STRIP (40)	2	2	0
WET POND (170)	1	1	0
<b>Total</b>	<b>205</b>	<b>166</b>	<b>14</b>

\* Facilities with either an Active or Accepted status as of December 31, 2023

The annual report due March 31, 2019 under this permit shall include an updated list of stormwater management facilities existing prior to the effective date of this permit.

Noted.

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.D.1

### TMDL ACTION PLAN AND IMPLEMENTATION CHESAPEAKE BAY SPECIAL CONDITION

The permittee shall submit the Chesapeake Bay TMDL Action Plan to the Department for review and acceptance with the annual report due March 31, 2017.

The Chesapeake Bay TMDL Action Plan was submitted to the Department as part of the annual report submitted in March 2017.

Beginning with the annual report due on March 31, 2018, the permittee shall include a list of control measures implemented during the reporting period and the cumulative progress toward meeting the compliance targets for total nitrogen, phosphorus, and total suspended solids.

An additional 14 septic-to-sewer connections were made during the reporting period for a total of 356 (342 have been reported previously). These additional connections result in a reduction of 125.5 pounds of TN reduction.

$$\text{TN Reduction} = 3.6 \text{ lbs/year/person} \times 2.49 \text{ persons/household} \times 14 \text{ households}$$

$$\text{TN reduction} = 125.5 \text{ lbs/year}$$

In addition to the septic-to-sewer connections detailed above, the following project was implemented during the reporting period:

Project	Pollutant Reductions (lbs/year)			Completion Date
	Nitrogen	Phosphorous	Total Suspended Solids	
Tuckahoe Park Stream Restoration	0	0	0	N/A
Old Nine Mile Rd Landfill Stream Restoration	0	0	0	N/A

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## HENRICO COUNTY MS4 PROGRAM PLAN

### PART I.D.1

#### ANNUAL REPORT SUPPLEMENT

JANUARY 1, 2023 THROUGH DECEMBER 31, 2023



# HENRICO COUNTY MS4 PROGRAM PLAN

## Cumulative Progress Toward Meeting Compliance Targets

Pollutant	Total Reduction Required During First Permit Cycle (lbs/yr)	Total Reductions Achieved to Date (lbs/yr)
Nitrogen	918.06	11,662.61
Phosphorus	176.93	2,280.48
Total Suspended Solids	102,340.90	706,958.96

No other control measures were implemented between January 1, 2023 and December 31, 2023. For purposes of this section of this report, *implemented* means completed.

**Beginning with the annual report due March 31, 2018, each annual report shall include a list of control measures that were implemented during the reporting cycle and the estimated reduction achieved by the control. For stormwater management controls, the report shall include the information required in Part I.C.3.a) and shall include whether an existing stormwater management control was retrofitted, and if so, the existing stormwater management control type retrofit used**

An additional 14 septic-to-sewer connections were made during the reporting period for a total of 356 (342 have been reported previously). These additional connections result in a reduction of 125.5 pounds of TN reduction.

$$\text{TN Reduction} = 3.6 \text{ lbs/year/person} \times 2.49 \text{ persons/household} \times 14 \text{ households}$$

$$\text{TN reduction} = 125.5 \text{ lbs/year}$$

In addition to the septic-to-sewer connections detailed above, the following project was implemented during the reporting period:

## HENRICO COUNTY MS4 PROGRAM PLAN

Project	Pollutant Reductions (lbs/year)			Completion Date
	Nitrogen	Phosphorous	Total Suspended Solids	
Tuckahoe Park Stream Restoration	0	0	0	N/A
Old Nine Mile Rd Landfill Stream Restoration	0	0	0	N/A

### Cumulative Progress Toward Meeting Compliance Targets

Pollutant	Total Reduction Required During First Permit Cycle (lbs/yr)	Total Reductions Achieved to Date (lbs/yr)
Nitrogen	918.06	11,662.61
Phosphorus	176.93	2,280.48
Total Suspended Solids	102,340.90	706,958.96

No other control measures were implemented between January 1, 2023 and December 31, 2023. For purposes of this section of this report, *implemented* means completed.

**Beginning with the annual report due March 31, 2018, each annual report shall include a list of control measures that are expected to be implemented during the next reporting period and the expected progress toward meeting the compliance targets for total nitrogen, total phosphorus, and total suspended solids.**

For purposes of this section of this report, *implemented* means completed.

The Hidden Creek Park Stream Restoration project is expected to be implemented during the reporting period of January 1, 2024 and December 31, 2024. This project will result in reductions of approximately:

- 482.12 pounds of nitrogen

## HENRICO COUNTY MS4 PROGRAM PLAN

- 78.45 pounds of total phosphorus, and
- 9,567.05 pounds of total suspended solids

The Adams Elementary School Stream Restoration project is expected to be implemented during the reporting period of January 1, 2024 and December 31, 2024. This project will result in reductions of approximately:

- 484 pounds of nitrogen
- 178.96 pounds of total phosphorus, and
- 20,513.14 pounds of total suspended solids

**The permittee shall include the following as part of its reapplication package due no later than October 3, 2019:**

- (a) Documentation that sufficient control measures have been implemented (or documentation detailing that implementation will be complete by the expiration date of this state permit) to meet the compliance target identified in this Special Condition. If temporary credits or offsets have been purchased in order to meet the compliance target, the list of temporary reductions utilized to meet the 5% reduction in this state permit and a schedule of implementation to ensure a permanent 5% reduction shall be provided; and**
- (b) A draft second phase Chesapeake Bay TMDL Action Plan designed to reduce the existing POC loads by an additional seven times the required reductions in loading rates using Table 2 of Part I.D.1.b) of this state permit unless alternative calculations have been provided by the Commonwealth;**
- (c) An additional 35% reduction in new sources developed between 2009 and 2014 and for which the land use cover condition was greater than 16%; and**
- (d) Accounting for any modification to the applicable loading rate provided to the permittee as a result of TMDL modification.**

The requested information was included in the permit reapplication package sent to DEQ on September 10, 2019. DEQ acknowledged receipt and deemed the reapplication package complete on September 27, 2019.

# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.D.2

### TMDL ACTION PLAN AND IMPLEMENTATION TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

The permittee shall submit the required TMDL Action Plans to the Department for review and acceptance with the annual report due March 31, 2017.

Drafts of the required TMDL Action Plans were part of the annual report submitted in March 2017.

Beginning with the annual report due on March 31, 2018, the permittee shall report on the implementation of the TMDL Action Plans and associated evaluation including the results of any monitoring conducted as part of the evaluation.

#### Chickahominy River Benthic TMDL Action Plan

BMPs, Programs, and/or Projects Implemented during the MS4 Permit Year	Implementation Details
Erosion and Sediment Control Program	This program continues to be administered and implemented in accordance with the requirements of the state law and regulations. Details can be found in the MS4 Annual Supplement for Part I.B.2.a.
Stormwater Management Program	This program continues to be administered and implemented in accordance with the requirements of the state law and regulations. Details can be found in the MS4 Annual Supplement for Part I.B.2.a.
Illicit Discharge Detection and Elimination Program	This program continues to be administered and implemented in accordance with the requirements of the MS4 Permit. Details can be found in the MS4 Annual Supplement for Part I.B.2.e.

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# HENRICO COUNTY MS4 PROGRAM PLAN

## PART I.D.2

### ANNUAL REPORT SUPPLEMENT

JANUARY 1, 2023 THROUGH DECEMBER 31, 2023

## HENRICO COUNTY MS4 PROGRAM PLAN

SWM Facility and MS4 Infrastructure Inspection and Maintenance Programs	These programs continue to be administered and implemented in accordance with state law, regulations and the MS4 Permit. Details can be found in the MS4 Annual Supplements for Parts I.B.2.h and I.C.3.
Public Education, Public Outreach, and Employee Training	These efforts continue to be implemented in accordance with the MS4 Permit, the MS4 Program Plan, and the Chickahominy River Benthic TMDL Action Plan. Details of these efforts can be found in the MS4 Annual Supplements for Parts I.B.2.j and I.B.2.k.

### Escherichia Coli TMDL Action Plan

BMPs and/or Programs Implemented during the MS4 Permit Year	Implementation Details
Illicit Discharge Detection and Elimination Program	This program continues to be administered and implemented in accordance with the requirements of the MS4 Permit. Details can be found in the MS4 Annual Supplement for Part I.B.2.e.
Public Education, Public Outreach, and Employee Training	These efforts continue to be implemented in accordance with the MS4 Permit, the MS4 Program Plan, and the Chickahominy River Benthic TMDL Action Plan. Details of these efforts can be found in the MS4 Annual Supplements for Parts I.B.2.j and I.B.2.k.