Loudoun County, Virginia

Department of General Services
801 Sycolin Road, S.E., Suite 300, Leesburg, VA 20175
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September 30, 2020

Commonwealth of Virginia
Department of Environmental Quality
Northern Regional Office
13901 Crown Ct.
Woodbridge, VA 22193

Re: VPDES General Permit for Small Municipal Separate Storm Sewer Systems;
Permit Number: VAR040067

Submitted in accordance with permit requirements is the Permit Year 2 Annual Report; Reporting Period: July 1, 2019 – June 30, 2020.

"Certification" of the report is included immediately following the title page. A copy of the Delegation of Authority by the County Administrator to certify such reports is enclosed herewith.

Ernest N. Brown
Director
Department of General Services

Enclosures:

1. Permit Year 2 Annual Report, July 1, 2019 – June 30, 2020, Permit Number: VAR040067

Certification

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.

Ernest N. Brown **Name**	Director, Department of General Services **Title**
Responsible Official Signature	**Date**
VAR040067 **Permit Number**	Loudoun County **MS4 Name**

VIRGINIA GENERAL VPDES PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
PERMIT NUMBER: VAR040067

LOUDOUN COUNTY, VIRGINIA

Permit Year 2 Annual Report
Reporting Period: July 1, 2019 – June 30, 2020

Submitted October 1, 2020

Loudoun County
Department of General Services
801 Sycolin Road, S.E., Suite 300
P.O. Box 7100
Leesburg, VA 20177
703-771-5552

Certification

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.

Ernest N. Brown	Director, Department of General Services
Name	**Title**
Responsible Official Signature	**Date**
VAR040067	Loudoun County
Permit Number	**MS4 Name**

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DEQ Annual Report Crosswalk

This crosswalk is provided to aid in checking compliance with the MS4 General Permit.

9VAC25-890-40. General permit.			Loudoun County		
Location	Language	Note	Annual Report Section	Page	Notes
D. Annual reporting requirements					
D.1.	The permittee shall submit an annual report to the department no later than October 1 of each year in a format as specified by the department. The report shall cover the previous year from July 1 to June 30.		NA	NA	See Report.
D.2.	The annual report shall include the following general information:		BMP D	12	
D.2.a.	The permittee, system name, and permit number		Report Cover	NA	
D.2.b.	The reporting period for which the annual report is being submitted		Report Cover	NA	
D.2.c.	A signed certification as per Part III K		Certification Page	2	
D.2.d.	Each annual reporting item as specified in the MCM in Part I E		NA	NA	
D.2.e.	An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program's effectiveness and whether or not changes to the MS4 program plan are necessary.		BMP E	12	
D.3.	For permittees receiving initial coverage under this general VPDES permit for the discharge of stormwater, the annual report shall include a status update on each component of the MS4 program plan being developed. Once the MS4 program plan has been updated to include implementation of a specific MCM in Part I E, the permittee shall follow the reporting requirements established in Part I D 2.		NA	NA	This permit section does not apply to Loudoun County.
D.4.	For those permittees with requirements established under Part II A, the annual report shall include a status report on the implementation of the Chesapeake Bay TMDL action plan in accordance with Part II A of this permit including any revisions to the plan.		BMP F	13	
D.5.	For those permittees with requirements established under Part II B, the annual report shall include a status report on the implementation of the local TMDL action plans in accordance with Part II B including any revisions of the plan.		BMP G	16	

9VAC25-890-40. General permit.			Loudoun County		
Location	Language	Note	Annual Report Section	Page	Notes
D.6.	For the purposes of this permit, the MS4 program plan and annual report shall be maintained separately and submitted to the department as required by this permit as two separate documents.		NA	NA	Program Plan and AR are maintained as separate documents and are available upon request.
E. Minimum Control Measures					
E.1.g.	The annual report shall include the following information:	Public Education and Outreach			
E.1.g.(1)	A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program plan		BMP 1B	18	
E.1.g.(2)	A list of strategies used to communicate each high-priority stormwater issue.		BMP 1D	20	
E.2.f.	The annual report shall include the following information:	Public Participation			
E.2.f.(1)	A summary of any public input on the MS4 program received [(including stormwater complaints) and how the permittee responded		BMP 2A	22	
E.2.f.(2)	A webpage address to the permittee's MS4 program and stormwater website		BMP 2B	23	
E.2.f.(3)	A description of the public involvement activities implemented by the permittee		BMP 2C	23	
E.2.f.(4)	A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality		BMP 2C	23	
E.2.f.(5)	The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities		NA	NA	The county did not collaborate with any other MS4 permittees.
E.3.e.	The annual report shall include:	IDDE			
E.3.e.(1)	A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year		BMP 3A	26	

9VAC25-890-40. General permit.			Loudoun County		
Location	Language	Note	Annual Report Section	Page	Notes
E.3.e.(2)	The total number of outfalls screened during the reporting period as part of the dry weather screening program		BMP 3E	28	
E.3.e.(3)	A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:				
E.3.e.(3)(a)	The source of illicit discharge		BMP 3F	28	
E.3.e.(3)(b)	The date or dates that the discharge was observed, reported, or both		BMP 3F	28	
E.3.e.(3)(c)	Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe)		BMP 3F	28	
E.3.e.(3)(d)	How the investigation was resolved		BMP 3F	28	
E.3.e.(3)(e))	A description of any follow-up activities		BMP 3F	28	
E.3.e.(3)(f)	The date the investigation was closed		BMP 3F	28	
E.4.d.	The annual report shall include the following:	Construction Stormwater			
E.4.d.(1)	If the permittee implements a construction site stormwater runoff program in accordance with Part I E 4 a (3):		BMP 4A	29	
E.4.d.(1)(a)	A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control; and		BMP 4A	29	
E.4.d.(1)(b)	If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.		BMP 4A	29	
E.4.d.(2)	Total number of inspection conducted; and		BMP 4A	29	
E.4.d.(3)	The total number and type of enforcement actions implemented and the type of enforcement actions.		BMP 4A	29	
E.5.i.	The annual report shall include the following information:	Post-Development			
E.5.i.(1)	If the permittee implements a VSMP in accordance with Part I E 5 1 (1) and (2):		BMP 5E	32	
E.5.i.(1)(a)	The number of privately owned stormwater management facility inspections conducted; and		BMP 5E	32	

9VAC25-890-40. General permit.			Loudoun County		
Location	Language	Note	Annual Report Section	Page	Notes
E.5.i.(1)(b)	The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action		BMP 5E	32	
E.5.i.(2)	Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;		BMP 5C	31	
E.5.i.(3)	A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;		BMP 5D	32	
E.5.i.(4)	A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; and		BMP 5A	31	
E.5.i.(5)	A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted.		BMP 5F	33	
E.6.q.	The annual report shall include the following:	Good Housekeeping/Pollution Prevention			
E.6.q.(1)	A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period;		BMP 6A	34	
E.6.q.(2)	A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period;		BMP 6B	34	
E.6.q.(3)	A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in accordance with Part I E 6 h during the reporting period;		BMP 6B	34	
E.6.q.(4)	A summary of any new turf and landscape nutrient management plans developed that includes:		BMP 6E	37	

9VAC25-890-40. General permit.			Loudoun County		
Location	Language	Note	Annual Report Section	Page	Notes
E.6.q.(4)(a)	Location and the total acreage of each land area; and		BMP 6E	37	
E.6.q.(4)(b)	The date of the approved nutrient management plan; and		BMP 6E	37	
E.6.q.(5)	A list of the training events conducted in accordance with Part I E 6 m, including the following information:		BMP 6H	40	
E.6.q.(5)(a)	The date of the training event;		BMP 6H	40	
E.6.q.(5)(b)	The number of employees who attended the training event; and		BMP 6H	40	
E.6.q.(5)(c)	The objective of the training event		BMP 6H	40	
Part II. TMDL Special Conditions			BMP 6H	40	
A.	**Chesapeake Bay TMDL special condition.**				
A.13.	For each reporting period, the corresponding annual report shall include the following information:				
A.13.a.	A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year;		BMP F	13	
A.13.b.	If the permittee acquired credits during the reporting period to meet all of a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired;		BMP F	13	
A.13.c.	The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids; and		BMP F	13	
A.13.d.	A list of BMPs that are planned to be implemented during the next reporting period.		BMP F	13	
B.	**Local TMDL special condition**				
B.9.	For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.		BMP G	16	
C.	Reporting monitoring results.		NA	NA	
C.1	The operator shall submit the results of the monitoring as may be performed in accordance with this state permit with the annual report unless another reporting schedule is specified elsewhere in this permit.		NA	NA	

Part I: Discharge Authorization and Special Conditions

Part I of the MS4 General permit requires the MS4 operator to develop an MS4 Program Plan (Part 1 C), develop and submit an Annual MS4 Report (Part 1 D), and comply with the 6 Minimum Control Measures (Part 1 E). The following sections of this annual report show how Loudoun County satisfied these permit conditions for the reporting period July 1, 2019 to June 30, 2020 (Year 2).

BMP A: Develop an MS4 Program Plan

Permit Section: Part I C 1

Loudoun County developed and implemented a revised MS4 Program Plan that includes all permit parameters.

The revised program plan is dated May 1, 2019 and was posted to the Loudoun County stormwater website prior to May 30, 2019. A copy of this program plan is provided in Year 1 annual report.

BMP Status: This BMP is complete.

BMP B: MS4 Program Plan Development Schedule

Permit Section: Part I C 3

Loudoun County was previously covered under the General VPDES Permit that was effective July 1, 2013. Therefore, Loudoun County was required under this section to develop a revised MS4 Program Plan no later than six months after the effective date of the current MS4 permit (May 1, 2019), and to post the revised Program Plan to the website within 30 days of completion.

The revised program plan was dated May1, 2019 and posted to the Loudoun County stormwater website prior to May 30, 2019.

BMP Status: This BMP is complete.

BMP C: Revisions to the MS4 Program Plan

Permit Section: Part I C 4

The Program Plan shall be reviewed annually to ensure that all the BMPs are still achieving their intended goals. All program plan changes will be summarized in the annual report and the Program Plan amended as needed.

In Year 1 the program plan was updated. Each following permit year, the Program Plan will be reviewed and all updates shall be summarized in the annual report.

In Year 2, the Program Plan was reviewed, and only small editorial changes were needed. See Appendix A for the updated Program Plan.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP D: Develop and Submit an Annual Report to DEQ

Permit Section: Part I D 1 and 2, 3, and 4

Loudoun County will develop an MS4 Annual Report that summarizes permit compliance for the permit period; July 1 through June 30. The Annual Report will be submitted to DEQ by October 1 of each permit year.

This report satisfies this requirement.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP E: Evaluate Effectiveness of Program BMPs

Permit Section: Part I D 2 e

The County will ensure that, to the Maximum Extent Practicable (MEP), all program BMPs are achieving the objectives intended and to correct identified deficiencies and/or inefficiencies.

Each program BMP will be evaluated and critiqued annually to determine its effectiveness in achieving its stated objective, with recommendations for continuance or revision provided.

The first evaluation was completed in Year 2. In general, all the BMPs remained effective. However, the county may need to make some changes because of the COVID-19 crisis. This will be reviewed in Year 3 and any changes noted in the annual report.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP F: Status Report on the Implementation of the Chesapeake Bay TMDL Action Plan

Permit Section: Part I D 4; Part II A 13 a

The annual report shall include a status report on the implementation of the Chesapeake Bay TMDL action plan in accordance with Part II A of the permit including any revisions to the plan.

The Phase II Chesapeake Bay TMDL Action Plan was completed on November 1, 2019 and a copy was provided to DEQ on the same day. See Appendix B for a copy of the plan. The permit required a 15-day comment period, which was posted on October 18,2019 (Figure 1). A total of six comments were received.

Home › News & Announcements

County News

Posted on: October 18, 2019

Comments Sought on Stormwater Management Plan for Reducing Pollutants

Loudoun County is seeking public comments on a draft plan for reducing pollutants entering the Chesapeake Bay.

The draft "Phase II Chesapeake Bay TMDL Action Plan" outlines ways that the county intends to meet requirements for reducing the quantity of pollutants entering the Chesapeake Bay via the county's municipal separate storm sewer system (MS4). The county operates the MS4 under a permit from the state of Virginia and the permit requires the development and implementation of action plans for impaired waterways. TMDL refers to the allowed "Total Maximum Daily Load" of the pollutants allowed to enter a water body without violating water quality standards.

The Phase II plan builds on the county's "Phase 1 Chesapeake Bay TMDL Action Plan," which was approved by the Virginia Department of Environmental Quality in 2015.

The draft action plan is posted online at loudoun.gov/stormwater for review and public comment. Comments on the action plan are due by Thursday, October 31, 2019.

Comments can be sent by email or by phone at 703-777-0117.

More information about Loudoun County's Stormwater Management Program is available at loudoun.gov/stormwater.

# # #

Figure 1: Chesapeake Bay TMDL Action Plan New Release

As outlined in Part II A 13 a, for this reporting period, there were no BMPs implemented that were not reported to the DEQ BMP Warehouse.

During Permit Year 2, Loudoun County purchased 30 phosphorus credits as a means of achieving the required pollution reduction goals of the Chesapeake Bay TMDL (Appendix C).

The county continued working toward meeting the 40% pollution reduction requirements during Year 2 by working on the following BMPs:

1. Over-Treatment of stormwater management facilities (0 lbs. TP, 0 lbs. TN, 0 lbs. TSS). The county did not identify any BMPs with over treatment in Year 2.

2. Stormwater retrofit projects (24 lbs. TP, 209 lbs. TN, 10,500 lbs. TSS). The county completed one retrofit project and made progress on others. These are listed below.

    a. The Loudoun Valley Estates III constructed wetland project was started in August 2019 and completed in May 2020.

    b. Phil Bolen Stream Restoration. This project was sent for plan review in Year 2 and is estimated to go to design in Year 3.

    c. Countryside Stream Restoration. Design began in Year 2 and plan approval is expected in Year 3. This project was submitted for a SLAF grant.

    d. MD1745, dry pond to constructed wetland retrofit. Conceptual design was complete in Year 2 and this project as submitted for a SLAF grant. Design is projected for Year 3.

3. Development of Nutrient Management Plans (NMP) outside of the MS4 (6.13 ponds TN, and 0.12 pounds of TP). The county has met 100% of this goal.

4. Septic System Disconnects (29 lbs. TN). There is nothing additional to report for this goal in Year 2.

5. Nutrient Purchases (30 lbs. TP, 193.8 lbs. TN, 2,710.77 lbs. TSS). The county is on track to meet the TP goal for this BMP but is currently lagging in TN and TSS. The county will consider adding language to future nutrient credit purchase RFPs that will require a higher TN and TSS to TP ratio.

6. Goose Creek Debris Removal Project. This project was not part of the Chesapeake Bay TMDL Action Plan. However, it will provide significant stream bank erosion positional. This project was scoped in Year 2 and will executed in Year 3.

7. Landuse Changes (1.14 lbs. TP, 35.45 lbs. TN, 4,072.74 lbs. TSS). There were no landuse change projects planned in the Bay TMDL Action plan. However, the county is looking for opportunities for these projects. The county identified a tree planting opportunity during Year 2 and its calculated value is shown below.

Table 1 below shows Loudoun County's progress toward reaching the required reductions for this permit cycle.

Table 1: Summary of Status Towards Reaching the 40% Pollution Reductions

	Total Nitrogen (lbs./year)	Total Phosphorus (lbs./year)	Total Suspended Solids(lbs./year)
Existing Source Reduction to Meet 40%	6,214.46	723.18	600,725.96
+ New Source Offsets	-	-	-
+ Grandfathered Offsets	-	-	-
+ Total Required Reductions and Offsets	6,214.46	723.18	600,725.96
- BMPS Prior to July 1, 2019	3,074.64	596.18	405,606.33
- Over-Treatment of stormwater management facilities	0	0	0
- Stormwater retrofit projects	209	24	10,500
- Development of NMP outside of the MS4	6.13	0.12	0
- Septic System Disconnects	29.0	0	0
- Nutrient Credit Purchase	376.46	60	6,605.58
- Landuse Changes	21.48	1.14	398.88
= Remainder/(Excess) Toward 40% Target	2,467.75	41.74	177,615.17

The following BMPs are planned for the next reporting period:

1. Over-Treatment of stormwater management facilities. The county will evaluate this BMP in Year3 to see if it will remain part the TMDL Action Plan.

2. Stormwater retrofit projects

    a. Phil Bolen Stream Restoration. This project was sent for plan review in Year 2 and is estimated to go to design in Year 3.

    b. Countryside Stream Restoration. Design began in Year 2 and plan approval is expected in Year 3. This project was also submitted for a SLAF grant.

    c. MD1745, dry pond to constructed wetland retrofit. Conceptual design was complete in Year 2 and this project as submitted for a SLAF grant. Design is projected for Year 3.

3. Development of Nutrient Management Plans (NMP) outside of the MS4. We will continue to look for opportunities for additional nutrient management plans.

4. Septic System Disconnects. The county will reevaluate this goal in Year 3.

5. Nutrient Purchases. Loudoun County is planning to purchase at least 30 phosphorus with associated nitrogen and TSS credits in Year 3.

6. Landuse Changes. The county will continue to look these opportunities.

<u>BMP Status:</u> Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP G: Status Report on the Implementation of the Local TMDL Action Plans

Permit Section: Part I, D 5

As outlined in the MS4 4 permit, the local TMDL action plan was required to be updated and submitted to DEQ no later than May 1, 2020. In addition, there was a requirement to make the plan available for public comment no less than 15 days prior to submittal to DEQ. The revised plan was submitted to DEQ on May 1, 2020. A copy of the plan is provided in Appendix D. The draft plan was posted to the stormwater website on April 16, 2020 and the public was given the opportunity to provide comments on the plan.

The Local TMDL Action Plan identifies the following actions:

Sediment Reductions

Goose Creek

Muray's Ford Bridge Project	Complete
Phil Bolen Stream Restoration	Design
Landuse Change at the Landfill	Complete

Bull Run

Conklin Park Retrofit	Planned FY2023
Conklin Park Stream Restoration	Planned FY2023
Dulles South Retrofit	Planned FY2022

Bacteria Reductions

The Bull run segment identified in the TMDL was delisted as an impairment for bacteria. The segment remains delisted as of the 2018 Virginia Water Quality Assessment. Therefore, the strategies outlined in the TMDL Action Plan are designed to prevent re-listing of the impairment.

The table below, from the action plan, identifies a series of action items, the schedule for these actions and a summary of actions taken in Year 2.

Table 2: Status of Bacteria TMDL - Permit Year 2

Action Item	Description	Schedule	Year 2 Summary
Public Education and Action Plan	• 4.1.1 – Distribute English and Spanish versions of the "Scoop the Poop" brochure. • 4.1.2 – Participate in the Northern Virginia Clean Water Partners multi-media pollution prevention campaign. • 4.1.3 – Establish dog waste stations and signage at County parks. • 4.1.4 – Distribute leash dispensers and written materials to individuals who adopt dogs from a County facility or event.	In accordance with the schedule contained in the PEOP.	Complete. See MCM 1 for details.

Action Item	Description	Schedule	Year 2 Summary
MS4 Program Plan	• MCM #1 – Public Education and Outreach BMPs • MCM #2, BMP 2A – Public Involvement and Participation BMPs • MCM #3 – Illicit Discharge Detection and Elimination	Ongoing in accordance with the MS4 Program Plan.	Complete. See BMP B for details.
	• MCM #6, BMP 6H – Field Staff Training	Every 24 months in accordance with the MS4 Program Plan	Complete. See MCM 6 for details.
Chesapeake Bay TMDL Action Plan	• Track septic system conversions.	In accordance with the schedule contained in the Chesapeake Bay TMDL Action Plan.	No longer being done because the county can no longer take credit for this.
Northern Virginia Clean Water Partners	• Regional public education media campaign targeting dog owners.	Ongoing in accordance with the MS4; assessment of effectiveness annually with DEQ annual report.	Complete. See MCM 1 for details.
Implement Legal Authorities	• Pet Waste Removal – Section 612.19 County Code • Leash Law – Section 612.13 County Code • Connections to Sanitary Sewer – Section 1064.4 County Code • Septic Tank Pump Outs – Section 1066.07(b) County Code	Ongoing.	Complete.
Pet Waste Stations and Signage	• Maintain pet waste stations and signage at Byrne's Ridge Park, Conklin Community Park, Dulles South Multi-Purpose Facility, and South Riding Park	Ongoing in accordance with Section 4.1.3 of the PEOP.	Complete. See MCM 1 for details.
	• Assess whether to install additional pet waste stations and signage at Gwen Thompson Briar Patch Park, Potomac Lakes Sports Complex, and Sugarland Run Stream Valley Park. Implement where determined to be beneficial.	During FY2021; report findings to DEQ in the FY2021 annual report.	Future task.
County Facility Assessments	• Conduct on-site assessments of County properties identified as having high risk factors for bacteria in Table 3.D.	During FY2022; report findings to DEQ in the FY2022 annual report.	Future task.

<u>BMP Status:</u> Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

MCM 1: Public Education and Outreach BMPs

BMP 1A: Revise the Public Education and Outreach Program

Permit Section: Part I E 1 a

The County shall implement a Public Education and Outreach Program (PEOP) designed to:

1. Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;

2. Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and

3. Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

The PEOP developed under the previous permit, dated May 2016, shall be updated to the meet the current permit requirements.

During Permit Year 1, the PEOP was updated to meet the current permit requirements and a copy was provide in the Year 1 annual report.

During Year 2 the PEOP was implemented as outlined below and all goals were achieved.

NOTE: It shall be noted, that due to the ongoing COVID crisis, the ability to conduct public outreach activities may be reduced. The county will continue to review these outreach goals and will revise the PEOP as appropriate in future permit years.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 1B: Selection of the High-Priority Stormwater Issues

Permit Section: Part I E 1 b

As part of the development the PEOP (BMP 1A), the County shall identify no less than three high-priority stormwater issues to meet the goal of educating the public to the MEP.

The County selected the following high-priority stormwater issues to meet the goal of educating the public:

- Bacteria Impacts on Water Quality;

- Illicit Discharges;

- Nutrient Impacts on Water Quality; and
- Sediment Impacts on Water Quality.

The rationale behind the selection of these issues is discussed in detail in the PEOP.

In Year 2, these high-priority stormwater issues were reviewed and determined to be issues that still need public education and outreach.

BMP Status: Year 1 the revised PEOP identified the high-priority stormwater issues
Year 2 these high- priority stormwater issues remain unchanged
This BMP is ongoing.

BMP 1C: Elements to Include in the PEOP

Permit Section: Part I E 1 c

The high-priority public education and outreach program shall include the following:

1. Clearly identify the high-priority stormwater issues;
2. Explain the importance of the high-priority stormwater issues;
3. Include measures to actions the public can take to minimize the impact of the high-priority stormwater issues; and
4. Provide a contact and telephone number, website, or location where the public can find out more information.

The PEOP includes all of the required elements.

BMP Status: This BMP is complete.

BMP 1D: Communicate High-Priority Stormwater Issues

Permit Section: Part I E 1 d

This section of the GP requires the use of two or more of the strategies listed in Table 1 of the MS4 General Permit (Figure 2) per year to communicate to the public the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.

The Loudoun County PEOP was revised during Permit Year 1 to include all of the parameters outlined within this GP section. The PEOP will continue to be implemented in the following permit years.

Table 1
Strategies for Public Education and Outreach

Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, or newspaper
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials

Figure 2: MS4 General Permit Table 1.

Traditional Written Materials

In the previous permit, the County developed the following written materials in English and Spanish, which will continue to be use throughout this permit cycle:

- "A Resident's Guide to Sediment Reduction for a Cleaner Environment" brochure;
- "Good Cleaning Practices for the Food Industry" poster;
- "Good Cleaning Practices for Pool Operations" poster;
- "Good Cleaning Practices for Outdoor Washing Activities" poster;
- "Good Cleaning Practices for Vehicle Equipment Repair" poster; and
- "A Business and Homeowner's Guide to Loudoun County's Illicit Discharge Program" brochure.

The materials are provided to homeowners and HOAs upon request and are also utilized to help promote good housekeeping practices. These can be found on the stormwater website (www.loudoun.gov/stormwater).

Stormwater-related brochures were distributed to established standard delivery points three (3) times during Permit Year 2. All distributions were done at four (4) County library locations (Cascades, Ashburn, Sterling, and Gum Springs). Materials were also provided at the Public Information Office located in the County's Government Center. Generally, there are 15-20 brochures provided at each location. Over 300 brochures were distributed throughout Year 2.

The distribution of these brochures was affected by the COVID-19 pandemic because many of these facilities were closed for a portion of the permit year.

In addition, over 400 doggie clean up bag packs were distributed to the animal shelter and various HOA offices.

The following brochures were provided at the noted locations:

- "A Resident's Guide for a Cleaner Environment;"
- "A Resident's Guide to Lawn Care for a Cleaner Environment;"
- "A Resident's Guide to Automotive Care for a Cleaner Environment;" and
- "Scoop the Poop."

Media Materials

As members of the Northern Virginia Clean Water Partners (NVCWP), the County participates in the annual regional stormwater education campaign "Only Rain Down the Drain". This partnership provides consistent messaging on a variety of stormwater topics such as fertilizer and pesticide use, pet waste disposal, and motor oil recycling.

During Permit Year 2, the NVCWP continued a series of public service announcements (PSAs), which were broadcast on a variety of regional cable TV channels, in both English and Spanish, as well as banner ads on the internet. The campaign started in April 2013 and features the well-known national symbol of non-point source pollution, the rubber ducky. Listed below are the regional results of this effort. Additional details are included in Appendix E.

Total Household Television Impressions	2,242,313
Total Digital Impressions (internet banner ads and in-stream video ads)	544,812
Total social media impressions (Facebook and Twitter)	118,055
Engagements with social media posts (Facebook and Twitter, May-July 2020)	18,262
Visits to the website (www.onlyrain.org)	7,220
Survey Responses	500

The County maintains a stormwater website (www.loudoun.gov/stormwater) as outlined below.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

MCM 2: Public Involvement and Participation BMPs

BMP 2A: Public Involvement and Participation Procedures

Permit Section: Part I E 2 a

Under this GP requirement, the county is required to develop and implement procedures for the following:

1. Reporting mechanism for the public to report, at a minimum, the following:
    a. Illicit discharges, improper disposal, or spills to the MS4
    b. Complaints regarding disturbing activities
    c. Other stormwater pollution concerns;
2. Public input on the MS4 Program Plan;
3. Receiving public input or complaints;
4. Responding to public input received on the MS4 Program Plan or complaints; and
5. Maintaining documentation of public input received on the MS4 program and associated MS4 Program Plan and the County's response.

The county has several reporting mechanisms available to the public for notification of illicit discharges, improper disposal, spills, complaints regarding land disturbing activates, stormwater pollution concerns, public input and comments. These are listed below:

- Loudoun Express Request (LEx). This is a web based system that allows the public to submit a request to the county via a computer or mobile application (link).

- Loudoun County Stormwater website – www.loudoun.gov/stormwater (link)

- Loudoun County Stormwater Complaint line – 703.777.0117

- Email the Loudoun County Stormwater Team – stormwater@loudoun.gov

- Email the Department of Building and Development – bad@loudoun.gov

- Building and Development Engineering hotline – 571.252.0857

In Year1, the county documented its procedures for receiving public input for the Program Plan and complaints in a memo titled "Procedures for Public Involvement and Participation in the Stormwater Program", Version 1, dated 8/21/2019.

During this reporting period, there were no comments received on the Program Plan

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 2B: Develop and Maintain a Stormwater Website

Permit Section: Part I E 2 b

The County shall develop and maintain a website dedicated to the MS4 Program and stormwater pollution prevention. The following information shall be posted to the webpage:

1. The effective MS4 permit and coverage letter;
2. The most current MS4 Program Plan;
3. The annual report for each year of the term covered by the permit not later than 30 days after submittal to DEQ;
4. A mechanism for the public reporting as outlined in BMP 1B above; and
5. Methods for how the public can provide input into the MS4 program plan.

Loudoun County developed a dedicated stormwater website (www.loudoun.gov/stormater) a number of years ago and continues to update the website as needed (link). The following information is posted to the website:

1. The effective MS4 permit and coverage letter, dated October 31, 2018;
2. The most current MS4 Program Plan;
3. The annual report for each year of the term covered by the permit not later than 30 days after submittal to DEQ;
4. A mechanism for the public reporting as outlined in BMP 1B above (LEx); and
5. Methods for how the public can provide input into the MS4 program plan (see BMP 1B).

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 2C: Public Involvement Opportunities

Permit Section: Part I E 2 c

The County shall implement four activities a year from two or more of the categories listed in the general permit Table 2 (see Figure 3).

The county conducted four activities during the permit cycle that involved the public. These are summarized below and included educational events, disposal events, and pollution prevention.

Table 2
Public Involvement Opportunities

Public involvement opportunities	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoration	Stream or watershed clean-up day, adopt-a-water way program,
Educational events	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, watershed walks, participation on environmental advisory committees
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.

Figure 3: MS4 General Permit Table 2.

NOTE: It shall be noted, that due to the ongoing COVID crisis, the ability to conduct public involvement activities may be reduced. The county will continue to review these outreach goals and will revise the program plan as appropriate in future permit years.

Household Hazardous Waste Collection Events

Household hazardous waste collection events are held periodically throughout the year on weekends at various locations around the County. During these events, residents are encouraged to collect household hazardous wastes from around their home and drop them off at the event site. The drop off is free to the homeowner. Table 3 below lists the household hazardous waste events held in Permit Year 2.

Table 3: Household Hazardous Waste Events - Permit Year 2

Date	Location	Number of Participants	Tons Collected
July 13, 2019	Lovettsville Elementary School	280	8.5
September 21, 2019	Harmony Park and Ride, Hamilton	315	10.8
October 12, 2019	751 Miller Drive, Leesburg	610	13.9
November 16, 2019	Claude Moore Park, Sterling	455	12.5
March 21, 2020	751 Miller Drive, Leesburg	500	15.9
April 25, 2020	Harmony Park and Ride, Hamilton	Canceled*	NA
May 30, 2020	Ashburn North Park and Ride, Ashburn	Canceled*	NA
June 27, 2020	Freedom High School, South Riding	580	16.8
	TOTAL	2,740	78.4

* Canceled due to the COVID-19 outbreak.

Loudoun County Elementary School Water Walks

In spring 2020, DGS staff participated in a workshop and along with the elementary science teachers walked students around the school site to review stormwater management systems in place on the school grounds. DGS staff provided the schools with “Water Walk Maps” showing the locations of various stormwater features and drainage patterns. Additionally, DGS provided school with suggestions regarding potential projects they could do to improve the water quality around their schools (rain gardens, etc.). The dates and locations of Water Walks are provided below:

February 24, 2020	John W. Tolbert Elementary School
February 25, 2020	Belmont Station Elementary School
February 26, 2020	Ashburn Elementary School
March 2, 2020	Waxpool Elementary School
March 3, 2020	Forest Grove Elementary School
March 4, 2019	Mountain View Elementary School

A clean water and erosion and sedimentation education presentation was planned for the spring of 2020 at Madison’s Trust Elementary School, but that had to be canceled due to the COVID-19 crisis.

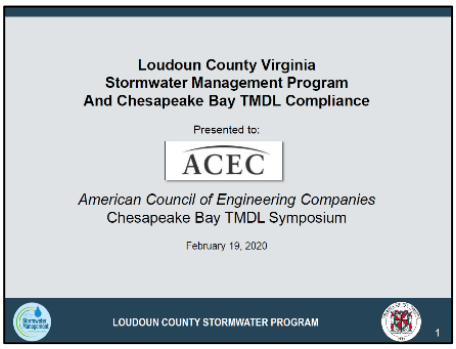
Storm Drain Marking Program

Loudoun County began a storm drain marking program several years ago. Through the program interested parties can obtain “No Dumping” markers and a detailed installation guideline, as well as a geographic area in need of marking. These projects are typically done by youth group organizations as part of a community service project.

In Year 2 a total of 954 storm drain markers were distributed to various groups, Boy Scouts, Girl Scout, and schoolteachers, that conducted storm drain marking projects throughout the County. To date, the program has installed approximately 12,100 storm drain markers.

Presentations

One staff member attended the American Conference of Engineering Companies of Metropolitan Washington Chesapeake Bay Symposium, held February 19, 2020 in Silver Spring, MD. The symposium featured speakers from several Phase I and Phase II MS4 permittees from Maryland, Northern Virginia, and the District. The discussion was based on meeting Bay TMDL requirements, funding for programs, novel and collaborative approaches for nutrient reduction, and potential future needs from the consulting community.



The staff member presented on "Loudoun County, Virginia Stormwater Management Program and Chesapeake Bay TMDL Compliance".

Two Stormwater Team staff attended the Virginia Lakes and Watershed Association annual conference in Richmond, Virginia (March 9-10). At the conference, the two presented on "Retrofit Projects in Residential Communities: Channeling the Softer Skills of Stormwater Management".

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

MCM 3: Illicit Discharge Detection and Elimination

BMP 3A: Develop an Accurate MS4 Map

Permit Section: Part I E 3 a (1)

The county shall develop and maintain an accurate MS4 Map of the stormwater system. Loudoun County utilizes various GIS data layers for all stormwater asset management. Every 6 months, in January and June, a copy of the MS4 map will be generated utilizing the most up to date versions of the stormwater GIS data layers, as outlined below.

1. A map of the stormwater system owned or operated by the permittee within the Census Urbanized Area identified by the 2010 decennial census that includes:
    a. MS4 outfalls discharging to surface waters;
    b. A unique identifier for each mapped item;
    c. The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;
    d. MS4 regulated service area; and
    e. Stormwater management facilities owned or operated by the permittee.

The county generated a copy of the stormwater system within the MS4 in June of 2020.

In addition, the county was required to submit a GIS-compatible shape file of the MS4 map by July 1, 2019 [Part I E 3a (3)]. This was submitted to DEQ on June 24, 2019.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 3B: Maintain MS4 Outfall Data Information Table

Permit Section: Part I E 3 a (2)

The county will maintain specific and required information related to each MS4 outfall and conduct annual updates to the County's outfall data table that includes the following information for each outfall or point of discharge:

1. A unique identifier as specified on the stormwater system map;
2. The latitude and longitude of the outfall or point of discharge;
3. The estimated regulated acreage draining to the outfall or point of discharge;
4. The name of the receiving water;
5. The 6th Order Hydrologic Unit Code of the receiving water;
6. An indication as to whether the receiving water is listed as impaired in the Virginia 2016 305(b)/303(d) Water Quality Assessment Integrated Report;
7. The predominant land use for each outfall discharging to an impaired water; and
8. 8. The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.

The county updates the stormwater data when new mapping data is provided. The MS4 outfall data table is provided in Appendix F. The most up to date stormwater information can be obtained by contacting the Loudoun County Stormwater Team.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 3C: Notification to Downstream MS4 Permit Holders of Interconnections.

Permit Section: Part I E 3 a (5)

The MS4 shall notify downstream MS4 operators, in writing, of any physical interconnections to the County's MS4. As required in Part I E 3 d (2), the written notification to downstream interconnected MS4s will be provided upon request.

No additional interconnections with adjacent MS4s were added during this permit year. Notifications of previously known interconnections were submitted in Year 1. The list of MS4s interconnected with the Loudoun County MS4 are as follows; Fairfax County, Town of Herndon, Town of Leesburg, Washington Dulles Airport, Northern Virginia Community College, and VDOT.

During this permit cycle there were no requests received for notification of downstream MS4 permitees.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 3D: Written IDDE Procedures

Permit Section: Part I E 3 c

The MS4 shall develop written procedures to detect, identify, and address unauthorized non-stormwater discharges to the MS4. As required in Part I E 3 d (3), the revised IDDE procedures will be provided upon request.

Written IDDE Procedures were developed to satisfy the previous MS4 GP. These procedures were followed in Year 1 and concurrently, the county updated the IDDE procedures to comply with the new MS4 GP and were provided with the Year 1 annual report.

During Year 2, these procedures were reviewed, and no revisions were required.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 3E: Conduct System Screening for Illicit Discharge Detection

Permit Section: Part I, E 3 c (2)

The county shall develop a program to effectively and efficiently identify, to the MEP, illicit discharges to the County's MS4. In support of this goal the county conducts dry weather screening of MS4 outfalls per the established IDDE procedures.

For this permit cycle, the county followed the established IDDE procedures. The results of this effort are summarized below.

The county conducted dry weather screening (Appendix G) on a total of 337 regulated MS4 outfalls. Of those outfalls investigated, 311 were found to be "clear" of dry weather flow, 20 were found to be "suspect", and 6 were found to be "illicit". To date, the suspect and illicit discharges have been reviewed. All illicit discharges have been eliminated or are under active investigations as outlined in the County's SOP. Suspect discharges have been reviewed and a plan has been implemented for further investigation.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 3F: Investigate and Address Illicit Discharges

Permit Section: Part I E 3 c (3), (4), and (5)

The county will utilize County's IDDE procedures to address suspected illicit discharges discovered through dry weather screening, observations of County staff, or calls and reports from the general public.

During Permit Year 2, 23 suspected illicit discharges were reported to DGS. To date, 17 of these reports have been resolved and 6 of these cases remain under investigation. This report includes a summary of each investigation (Appendix H) conducted and each summary includes the following details:

1. Date(s) suspected discharge observed and/or reported;
2. Results of the investigation, including the source, if identified;
3. Any follow-ups to the investigation;
4. Resolution of investigation; and
5. Date investigation completed/closed.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

MCM 4: Construction Site Stormwater Runoff Control

BMP 4A: Administer County E&S Program

Permit Section: Part I E 4 a (1) and (5)

The County shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840). It shall be the goal of the County to maintain a rating of "consistent" for the County's E&S Program during permit cycle.

During the reporting period, the County remained fully consistent with the requirements of the Virginia Erosion and Sediment Control Law and Regulations, with the most recent rating of "consistent" issued via the Virginia Department of Conservation and Recreation (DCR) letter dated November 15, 2007, which is included in Appendix I.

Additionally for this reporting period, Loudoun County has followed, to the MEP, all of their established department approved standards and specifications for erosion and sediment control for land disturbing projects that are covered by Virginia Erosion and Sediment Control Law and Regulations. During this reporting period, Loudoun County did not have any land disturbing projects that did not conform the County's approved standards and specifications.

The County's Department of Building and Development is responsible for administering the County's E&S Program. Table 4 provides a summary of land-disturbing activities for Permit Year 2, as required by the Section of the GP.

Table 4: Summary of Land-Disturbing Activities - Permit Year 2

Item	Quantity (Period 7/1/2019-6/30/2020)
Total Number of E&S Inspections	13,711
Total Number of Enforcement Actions	148
Number of Notices to Comply	148
Number of Notices to Comply Corrected	135
Number of Stop Work Orders	27
Number of Stop Work Orders Corrected	4
Number of Grading Permit Non-Filers Identified	27

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 4B: MCM 4 Items to Include in the Program Plan

Permit Section: Part I E 4 c

Part I E 4 c for the MS4 GP outlines specific elements that are to be included in the MS4 Program Plan. All of the requirements outlined in this section of the GP have been incorporated into the County' MS4 Program Plan (Appendix A).

The elements that are required to be incorporated are as follows:

1. The local ordinance for the Loudoun County Erosion and Sediment Program.
2. A description of the legal authorities utilized to ensure compliance with Part I E 4.
3. Written inspection erosion and sedimentation control procedures.
4. Written erosion and sedimentation control enforcement procedures.
5. The roles and responsibilities of each of the permittee's departments in implementing the construction site stormwater runoff control requirements in Part I E 4.

BMP Status: This BMP is complete.

BMP 4C: MCM 4 Items to Include in the Annual Report

Permit Section: Part I E 4 d

See BMP 4A above.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

MCM 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands

BMP 5A: Administer County VSMP Program

Permit Section: Part I, E 5 a (1)

The County will, to the MEP, administer it's Virginia Stormwater Management Program (VSMP) consistent will all applicable state regulations. See Appendix J for the required written statement from the VSMP Administrator that the County was in compliance with Part I, E 5 a (1).

BMP Status: Year 1 complete.
Year 2 complete.
This BMP is ongoing.

BMP 5B: Develop and Maintain Written Inspection and Maintenance Procedures for Stormwater BMPs

Permit Section: Part I, E 5 b (1)

In Year 1, the existing inspection and maintenance procedures were reviewed, revised, and a new procedures document was implemented, which is titled "*Stormwater Best Management Practice (BMP) Facility Inspection and Maintenance Procedure*, version 1, August 21, 2019". The updated procedure document was provided in the Year 1 Annual Report.

During Year 2, this document was reviewed, and no changes or updates were needed.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 5C: Inspect Permanent Post-Construction Stormwater BMPs

Permit Section: Part I E 5 b (2)

The County will perform annual inspections of the permanent post-construction stormwater management BMPs either owned by the County or within the County and situated outside of the VDOT maintained right-of-way, Dulles Greenway property and right-of-way, Dulles International Airport property and right-of-way, the County's incorporated towns, and are not a separately permitted facility.

The County conducts annual inspections on post-construction stormwater BMPs in the MS4 service area. Structural inspections are conducted annually on 1/3 of the wet ponds and dry ponds. Bioretention BMPs that have significant structural components also receive an annual structural inspection. All underground BMPs are inspected annually. The remaining BMPs get a preventative maintenance inspection. The results of the Year 2 post-construction stormwater

BMP inspections are summarized below, and the details of each inspection are provided in Appendix K.

In Year 2, structural inspections were conducted on 114 wet and dry ponds and 94 bioretention BMPs. Also, there were 115 underground inspections conducted. The remaining BMPs, 532, received preventative maintenance inspections. Of the inspections conducted this permit cycle, 53 are private BMPs (Appendix K). The private BMP inspections resulted in 2 enforcement actions taken. A description of the significant maintenance/repair for the public BMPs is provided in Appendix K.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 5D: Provide Long-Term Maintenance for Operator-Owned BMPs

Permit Section: Part I E 5 b (3)

The MS4 can provide for the long-term maintenance, as necessary, so that permanent stormwater facilities for which the County has primary maintenance responsibility are functioning to their original design capabilities.

See BMP 5C for description of inspections conducted and Appendix K for a summary of details.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 5E: Require Adequate Long-Term Maintenance for Privately Maintained BMPs

Permit Section: Part I E 5 c (1), and (2)

Ensure, to the MEP, that permanent stormwater facilities for which the County does not have primary maintenance responsibility (i.e. private facilities) are receiving adequate long-term maintenance to function at their original design capability. The County will notify property owners responsible for maintaining stormwater management facilities of those deficiencies, discovered during County inspections, keeping the facility from functioning to their original design capability utilizing enforcement procedures outlined in Chapter 1096, Codified Ordinances of Loudoun County.

See BMP 5C for description of inspections conducted and Appendix K for a summary of details.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 5F: Maintain an Electronic Database of All Permanent Stormwater Management Facilities

Permit Section: Part I E 5 d, e, f, and g.

The County shall maintain an electronic database of all known stormwater management facilities (public and private). The database will include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A. The electronic database shall be updated no later than 30 days after a new stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction as required in Part II, or discovered if it is an existing stormwater management facility.

Loudoun County has maintained a GIS database of the stormwater infrastructure for many years. The county also has a program that identifies new areas of development and then surveys the new stormwater infrastructure.

See BMP 5A above for the written conformation statement regarding the submittal of the required information into the Virginia Construction Stormwater General Permit database.

In accordance with Part I E 5 g, the county electronically reported BMPs implemented between July 1 and June 30 using the DEQ BMP Warehouse on September 30, 2020.

BMP Status: Year 1 review completed.
Year 2 review completed.
This BMP is ongoing.

BMP 6: Pollution Prevention/Good Housekeeping for Municipal Operations

BMP 6A: Maintain and Implement Written Procedures

Permit Section: Part I E 6 a

The County shall maintain existing written procedures and implement new procedures, as needed, at county-owned facilities within the MS4. The written procedures shall be designed as outlined in Part I E 6 a.

The county currently maintains the list of Standard Operating Procedures (SOPs) provided in Table 5. In Year 2, the SOPs were reviewed and none of them need to be updated.

Table 5: List of Standard Operating Procedures

Name	Effective Date
Land Disturbing SOP	November 2019
Landscaping and Grounds Maintenance SOP	November 2019
Loading-Unloading SOP	November 2019
Material Storage SOP	November 2019
Non-Stormwater Discharges SOP	November 2019
Pool Operation SOP	November 2019
Road, Street and Parking Lot SOP	November 2019
Small Equipment SOP	November 2019
Spill Response SOP	November 2019
Storm Sewer System Cleaning & Maintenance SOP	November 2019
Vehicle Fueling SOP	November 2019
Vehicle-Equipment Maintenance/Repair SOP	November 2019
Vehicle-Equipment Storage SOP	November 2019
Vehicle-Large Equipment Washing SOP	November 2019
Waste Management SOP	November 2019

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 6B: Develop and Implement SWPPPs for Identified "High Priority" Facilities

Permit Section: Part I E 6 c, d, and g

The County will continue to implement the SWPPPs that were developed under the previous permit. The County shall also follow all parameters within each existing SWPPP. Table 5 lists out the current Loudoun County SWPPPs and provides a summary of the annual site inspections and the findings from the inspections.

In Year 2, we removed the SWPPP for the Fire and Rescue Training Academy because they are no longer processing vehicles for training purposes. All the vehicles provided for training purposes are delivered free of all vehicle fluids. Loudoun County Fire and Rescue maintains a written Burn Plan for the operation of the Burn Building located at the Training Academy. The plan outlies the required operation of a by-pass valve, which diverts water to the sanitary sewer system during training activities. The by-pass value remains open to the stormwater system when there are no training activities at the Burn Building.

Table 5: Loudoun County SWPPP Information – Year 2

Location	Annual Inspection date	Issues Observed	Actions Completed	SWPPP Revisions Needed	SWPPP Revisions Made	Additional notes
Central Warehouse & Maint. Facility	12/3/2019	Potential leak at brine tank Replace mulch at temporary wash pad	No leak at tank. Mulch replaced.	No	None needed	
Potomac Lakes Sportsplex	12/2/2019	Portable toilet	Relocated to a different location away from the potential flood zone.	No	None needed	DGS working with PRCS staff to design and construct a permeant wash pad
		Unlabeled material buckets	Identification labels added.			
		Spill kits	Added to field equipment			
Claude Moore Park	12/10/2019	Replace surge stone at control structure at ME2316A	PW staff completed needed maintenance.	Yes	Temporary wash pad added	
		Add lock to gate access at ME2316	PW staff completed needed maintenance.			
Fire, Rescue and Emergency Training Center						[1] Removed as a SWPPP location
PRCS Trailside Maintenance Facility	12/17/2019	Unlabeled outside material buckets	Identification labels added.	No	None needed	

[1] Removed because a SWPPP is no longer required for this site.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 6C: Annual Review for New County Owned or Operated "High Priority" Facilities

Permit Section: Part I E 6 e

No later than June 30 of each permit year, the County shall conduct a review of County owned or operated facilities within the MS4 to determine if the facility has a high potential for discharging pollutants as described in Part I.E.6.c. If the facility is determined to be a high-priority facility with a high potential to discharge pollutants, develop a SWPPP meeting the requirements of Part I.E.6.d no later than December 31 of that same permit year.

The County conducted a review of all County owned or operated facilities located within the MS4 boundary. There were no high-priority facilities added to the MS4 during Permit Year 2.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 6D: SWPPP Review after Reports of Unauthorized Discharges

Permit Section: Part I E 6 f

The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part III G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

During this reporting period, there were no unauthorized discharges to the MS4 at any of the County's SWPPP locations.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 6E: Maintain and Implement Turf and Landscape Nutrient Management Plans

Permit Section: Part I E 6 i

The permittee shall maintain and implement turf and landscape NMPs that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. The County will maintain current NMPs as applicable and conduct an annual

review of county owned or operated facilities within the MS4 service area to establish the need for new NMPs.

During this permit cycle the required plans were updated as noted below. The list of all NMPs is provided in Table 6 below. No new plans were added during this cycle.

Table 6: Identified Acres Requiring Turf and Landscape NMPs

Facility Name	Area (Acreage)	Plan Expiration Date	Latitude	Longitude
Ashburn Library	1.05	9/24/2025	39.2	-77.3
Cascades Library & Senior Center	1.12	9/24/2025	39.1	-77.23
Bickel Ford Fields	3.17	7/15/2022	39.01	-77.28
Bles Park	9.09	2/1/2022	39.04	-77.26
Byrnes Ridge Park	20.96	4/1/2022	38.55	-77.33
Conklin Park	6.1	4/1/2022	38.54	-77.31
Greg Crittenden Park	3.89	7/15/2022	39.01	-77.29
Lyndora Park	5.86	7/15/2022	38.59	-77.29
Ray Muth Sr. Park	9.35	11/1/2022	39.2	-77.27
Scott Jenkins Park	11.72	11/1/2022	39.8	-77.38
Trailside Park	6.69	7/15/2022	39.03	-77.3
Claude Moore Park	16.43	11/1/2022	39.00	-77.24
Potomac Lakes Sportsplex	20.24	11/1/2022	39.3	-77.22
East Gate Park	3.36	4/1/2022	38.54	-77.29
Dulles South PSC*	1.6	4/15/2022	38.55	-77.31
Eastern Sheriff Substation*	0.9	4/15/2022	39	-77.23
East Gate park & Ride*	1.8	4/15/2022	38.54	-77.29
Harmony Park & Ride*	1.3	4/15/2022	39.9	-77.38
Kincora Fire Station*	0.9	4/15/2022	39.1	-77.25
Lansdowne Fire Station*	1.1	4/15/2022	39.4	-77.29
Moorefield Fire and Rescue*	1.05	4/15/2022	39	-77.29
Stone Ridge Park & Ride*	1	4/15/2022	38.56	-77.33
Western Sheriff's Office*	1.6	4/15/2022	39.8	-77.46
Purcellville Fire Station*	2.2	4/15/2022	39.8	-77.41
Middleburg Fire Station*	0.6	4/15/2022	38.58	-77.44
Lovettsville Library*	0.2	4/15/2022	39.16	-77.38
Loudoun Heights Fire Station*	2.4	4/15/2022	39.14	-77.43
Franklin Park*	14.92	4/15/2022	39.7	-77.44
Ashburn Sheriff*	1.8	4/15/2022	39.3	-77.27
Total Acreage	**152.40**			

* This facility has a newly implemented NMP in Year 1.

BMP Status: Year 1 activities complete.
Year 2 activities complete.
This BMP is ongoing.

BMP 6F: Prohibition on the Use of Deicing Agents Containing Nitrogen or Phosphorus

Permit Section: Part I E 6 k

The permittee shall not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.

Loudoun County does not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.

BMP Status: This BMP is complete.

BMP 6G: Require Municipal Contractors to Use Appropriate Control Measures and Procedures for Stormwater Discharges

Permit Section: Part I E 6 l

Require, to the MEP, that municipal contractors use appropriate control measures and procedures for stormwater discharges to the County's MS4. Develop and include verbiage in the appropriate standard agreements for municipal contractors, requiring appropriate control measures/procedures and pollution prevention protocols for stormwater discharges to the County's MS4.

In Permit Cycle 2, Year 4 of a previous permit, DGS developed and implemented pollution prevention protocols for County contractors to protect water quality and added the following language to each scope of work for stormwater maintenance/restoration related projects.

The Contractor must:

1. *Take every precaution to prevent the discharge of sediment from disturbed areas. The use of silt sox, silt fence, and dewatering geotextile bags shall be in place or used before the disturbance occurs.*
2. *Have spill containment materials onsite at all times to contain and prevent hydraulic fluid, and or fuel leaks, spills and accidental releases from contaminating the surrounding work environment. Leaking or nonfunctioning machinery and equipment must be promptly repaired or removed from the site.*
3. *Be responsible for concrete subcontractors to ensure disposal of waste or excess concrete is done in accordance with applicable laws and practices. This includes washing out of concrete trucks.*
4. *Contact the County Project Manager if questions or problems occur with the Pollution Prevention Requirements*

BMP Status: This BMP is complete.

BMP 6H: Develop a Training Plan Associated with Stormwater

Permit Section: Part I E 6 m

During Year 1, the County developed a new training plan as outlined in Part I E 6 m.

The new training plan was partially implemented in Year2. The BMP Facility inspection training was completed on October 30, 2019 and was attended by stormwater and public works staff (Appendix L). In addition, four stormwater team members and one staff person from public works took the two-day DEQ Stormwater Inspector training course (November 13 and 14).

The stormwater team coordinated Pollution Prevention and Good Housekeeping at four county locations: Claude Moore Park, Public Works Shop, Potomac Lakes, and Trailview. A combination of stormwater, public works, and park staff participated in this training (Appendix L). Staff reviewed the stormwater pollution prevention plans for these facilities and reviewed the existing SOPs.

The COVID-19 crisis made the coordination of the Excal Visual Training difficult because of the challenges of coordinating inter-departmental schedules and staffing. Therefore, the Excal Visual training was not conducted during this permit cycle. We will review this training requirement and adjust the training plan, if needed moving forward.

BMP Status: Year 1 completed the update of the new training plan.
Year 2 partially completed.
This BMP is ongoing.

Appendix A

Loudoun County MS4 Program Plan
Version 2

LOUDOUN COUNTY SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STORMWATER MANAGEMENT PROGRAM PLAN

For July 2018 – June 2023

Loudoun County
Department of General Services
PO Box 7100
801 Sycolin Road, S.E.
Suite 300
Leesburg, VA 20175

Version 2
October 1, 2020

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Introduction / Overview

The following document represents Loudoun County's (County) Stormwater Management Program to comply with the Virginia General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). This MS4 Program enables the County to meet the following goals:

- Reduce the discharge of pollutants to the "maximum extent practicable" (MEP)
- Protect water quality
- Satisfy the appropriate water quality requirements of the State Water Control Law

The MS4 Program Plan addresses Parts I, II, and III of the MS4 General Permit.

To arrive at appropriate and cost-effective best management practices (BMPs), the County reviewed existing stormwater management operations, ordinances, and programming as they relate to the compliance requirements of the MS4 General Permit. Further, in consideration of Virginia's MEP threshold, the County examined each proposed BMP to determine whether the County had the legal, technical, administrative, and financial ability to ensure effective implementation. The County's financial considerations included potential budget implications for each proposed BMP, such as the resources required and any existing synergies between tasks. Based on those findings and current budget allocations, the County can support the Program through appropriations from the General Fund and the Capital Improvement Program.

For each selected BMP, the County has identified:

1. Roles and responsibilities
2. A description of the BMP or strategy
3. Applicable standard operation procedures
4. Measurable goals
5. The appropriate County department responsible
6. Applicable documents by reference

Existing Program

The County manages stormwater through a comprehensive local program featuring the following primary functions:

1. Design review and inspection of new construction
    a. Ensures quality and quantity control of increased stormwater is adequately addressed
2. Erosion and sediment control/management on open construction sites
3. Virginia Stormwater Management Program (VSMP) Authority
4. Inspection, repair, and maintenance of existing stormwater facilities
5. Management of the MS4 Permit

The program is administered by two departments: Building and Development (B&D) and Department of General Services (DGS) with support from Fire and Rescue (Table 1). B&D performs design review/inspection of new construction and manages the Erosion and Sedimentation Control (E&S) Program. Since July 1, 2014, Loudoun County has been established as a VSMP Authority, and the VSMP Administrator is functionally located within B&D. DGS provides for inspection, repair, and maintenance of existing stormwater facilities and

manages the MS4 General Permit.

Stormwater Management is governed by a series of ordinances and documents referenced throughout this MS4 Program Plan (Appendix A) which guide the planning, development, implementation, maintenance, and enforcement of stormwater management practices and facilities within the County.

This program plan is divided into two Parts, which follow the corresponding Parts outlined in the MS4 General Permit. Each BMP described herein has noted the corresponding permit section for ease of cross-referencing.

Table 1: Loudoun County MS4 General Permit Program Areas

County Department	MS4 Roles and Responsibilities
Department of General Services (DGS)	Ensuring compliance with DEQ MS4 General Permit Development of and updates to the MS4 Program Plan Development of the MS4 Annual Reports Compliance with MCM 1 of the MS4 GP Compliance with MCM 2 of the MS4 GP Compliance with MCM 3 of the MS4 GP (see Fire and Rescue below) Compliance with MCM 5 of the MS4 GP (see B&D below) Compliance with MCM 6 of the MS4 GP Compliance with MS4 GP Part II – TMDL Special Conditions, Chesapeake Bay TMDL Compliance with MS4 GP Part II – TMDL Special Conditions, Local TMDL
Department of Building and Development (B&D)	Compliance with MCM 4 of the MS4 GP Compliance with MCM 5 of the MS4 GP (VSMP Authority)
Fire and Rescue Department	Compliance with MCM 3 of the MS4 GP. Fire and Rescue is responsible for emergency response and reporting related to discharges to the stormwater system that occur because of traffic accidents or hazardous materials response.

Part I: Discharge Authorization and Special Conditions

Part I of the MS4 General Permit requires the MS4 operator to develop an MS4 Program Plan (Part 1 C), develop and submit an Annual MS4 Report (Part 1 D), and comply with the 6 Minimum Control Measures (Part 1 E). These sections of the MS4 Program Plan outline how Loudoun County will comply with each of these permit requirements.

BMP A: Develop an MS4 Program Plan

Permit Section: Part I C 1

Objective: Develop and implement a MS4 Program Plan that includes the parameters specified in Part I C 1.

Measurable Goal**:** Development of the MS4 Program Plan.

Necessary Documents**:** MS4 General Permit.

Responsible Party: DGS shall be responsible for drafting and updating the MS4 Program Plan. See Table 1.

Schedule**:** May 1, 2019. The revised MS4 Program Plan shall be completed no later than six months after the effective date of the permit (6 months from November 1, 2018).

May 30, 2019. Due date to post the revised MS4 Program Plan to the Stormwater website.

Items to Report: Completed Program Plan.

BMP B: MS4 Program Plan Development Schedule

Permit Section: Part I C 3

Objective: Loudoun County was previously covered under the General VPDES Permit that was effective July 1, 2013. Therefore, Loudoun County is required under this section to develop a revised MS4 Program Plan no later than six months after the effective date of the current MS4 permit, which is May 1, 2019. In addition, within 30 days of completing the MS4 Program Plan, the plan shall be posted to the website.

Measurable Goal**:** Development of revised MS4 Program Plan.

Necessary Documents**:** MS4 General Permit (Appendix A).

Responsible Party: DGS (Table 1).

Schedule**:** May 1, 2019. The revised MS4 Program Plan shall be completed no later than six months after the effective date of the permit, which is November 1, 2018.

May 30, 2019. Due date to post the revised MS4 Program Plan to the Stormwater website.

Items to Report: Dates of plan completion and posting to the website.

BMP C: Revisions to the MS4 Program Plan

Permit Section: Part I C 4

Objective: Review the effectiveness of the MS4 Program Plan. The MS4 Program Plan shall be reviewed annually to ensure that all of the BMPs are still achieving their intended goals. All program plan changes will be summarized in the annual report and the MS4 Program Plan amended as needed.

Measurable Goal: Annual review of the MS4 Program Plan.

Necessary Documents: MS4 Program Plan.

MS4 Annual Report.

Responsible Party: DGS (Table 1).

Schedule: Each year, the MS4 Program Plan will be reviewed and all updates shall be summarized in the annual report.

Items to Report: Updates to the MS4 Program Plan shall be summarized in the annual report.

Method of Evaluation: Review of the MS4 Program Plan.

BMP D: Develop and Submit an Annual Report to DEQ

Permit Section: Part I D 1 and 2, 3, and 4

Objective: Develop an MS4 Annual Report that summarizes permit compliance for the permit period; July 1 through June 30. The MS4 annual report will be submitted to DEQ by October 1 of each permit year.

Measurable Goal: Annual report is completed and submitted to DEQ annually no later than October 1 of each year.

Necessary Documents: MS4 General Permit (Appendix A).

MS4 Program Plan.

Responsible Party: DGS (Table 1) shall be responsible for drafting and submitting the MS4 Annual Report to DEQ.

Schedule: MS4 Annual report will be submitted to DEQ on or before October 1 of each year each permit year.

Items to Report: Report items outlined in Part I D 2.

Method of Evaluation: Completion of the MS4 Annual Report.

BMP E: Evaluate Effectiveness of Program BMPs

Permit Section: Part I D 2 e

Objective: Ensure that, to the MEP, all program BMPs are achieving the objectives intended; to correct identified deficiencies and/or inefficiencies.

Measurable Goal**:** Each program BMP will be evaluated/critiqued annually to determine its effectiveness in achieving its stated objective, with recommendations for continuance or revision provided.

Necessary Documents**:** MS4 Program Plan.

Responsible Party: DGS (Table 1).

Schedule**:** The first evaluation shall be conducted during Permit Year 2 with future implementation through the end of the permit cycle.

Items to Report: The MS4 Annual Report will include when the evaluation was completed. It will also include a summary of any changes.

BMP F: Status Report on the Implementation of the Chesapeake Bay TMDL Action Plan

Permit Section: Part I D 4

Objective: The MS4 Annual Report shall include a status report on the implementation of the Chesapeake Bay TMDL Action Plan in accordance with Part II A of this permit including any revisions to the plan.

Measurable Goal**:** Annual reporting on the status of the Chesapeake Bay TMDL Action Plan.

Necessary Documents**:** Loudoun County Chesapeake Bay TMDL Action Plan (Appendix A).

Loudoun County Chesapeake Bay TMDL Action Plan, Phase II (Appendix A).

Responsible Party: DGS (Table 1).

Schedule**:** Provide in each annual report.

Items to Report: Status on meeting the Chesapeake Bay reduction goals.

BMP G: Status Report on the Implementation of the Local TMDL Action Plans

Permit Section: Part I, D 5

Objective: The MS4 Annual Report shall include a status report on the implementation of the local TMDL action plans in accordance with Part II B including any revisions to the plan.

Measurable Goal**:** Annual reporting on the status of the local TMDL Action Plans.

Necessary Documents**:** Loudoun County Local TMDL Action Plans (Appendix A).

Responsible Party: DGS (Table 1).

Schedule**:** Provide in each annual report.

Items to Report: Status on meeting the local TMDL reduction goals.

MCM 1: Public Education and Outreach BMPs

BMP 1A: Revise the Public Education and Outreach Program

Permit Section: Part I E 1 a

Objective: The permittee shall implement a Public Education and Outreach Program (PEOP) designed to:

1. Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;
2. Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
3. Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

The PEOP (Appendix A) developed under the previous permit, dated May 2016, shall be updated to the meet the current permit requirements.

Measurable Goal: Development of a public education and outreach program that meets the current permit requirements.

Necessary Documents: Existing Public Education and Outreach Plan (Appendix A).

Responsible Party: DGS (Table 1).

Schedule: Plan to be revised in Year 1 and implemented in successive years.

Items to Report: Completion of the PEOP.

Method of Evaluation: Implementation of the PEOP and annual review of the PEOP.

BMP 1B: Selection of the High-Priority Stormwater Issues

Permit Section: Part I E 1 b

Objective: As part of the development the PEOP (BMP 1A), the County shall identify no less than three high-priority stormwater issues to meet the goal of educating the public to the MEP.

Measurable Goal: Development of at least three high-priority stormwater issues.

Necessary Documents: Public Education and Outreach Plan (Appendix A).

Responsible Party: DGS (Table 1).

Schedule: Three high-priority stormwater issues developed under the previous MS4 permit will be reviewed and modified, as needed, during Year 1. The finalized high-priority stormwater issues will be implemented in successive years.

Items to Report: A list of the high-priority stormwater issues and a list of the strategies used to communicate each high-priority stormwater issue.

Method of Evaluation: Annual review of the effectiveness of each high-priority stormwater water issue.

BMP 1C: Elements to Include in the PEOP

Permit Section: Part I E 1 c

Objective: The high-priority public education and outreach program shall include the following:

1. Clearly identify the high-priority stormwater issues;
2. Explain the importance of the high-priority stormwater issues;
3. Include measures to actions the public can take to minimize the impact of the high-priority stormwater issues; and
4. Provide a contact and telephone number, website, or location where the public can find out more information.

Measurable Goal: Development of the PEOP.

Necessary Documents: Public Education and Outreach Plan (Appendix A).

Responsible Party: DGS (Table 1).

Schedule: PEOP will be updated in Year 1 and implemented in successive years.

Items to Report: A list of the high-priority stormwater issues and a list of the strategies used to communicate each high-priority stormwater issue.

Method of Evaluation: Annual review of the effectiveness of each high-priority stormwater water issue.

BMP 1D: Communicate High-Priority Stormwater Issues

Permit Section: Part I E 1 d

Objective: To use two or more of the strategies listed in Table 1 of the MS4 General Permit (Figure 1) per year to communicate to the public the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.

Measurable Goal: Development of the PEOP.

Necessary Documents: Existing Public Education and Outreach Plan.

Responsible Party: DGS (Table 1).

Schedule: PEOP will be developed in Year 1 and implemented in successive years.

Items to Report: Report strategies from MS4 General Permit Table 1 utilized.

Method of Evaluation: Review of the effectiveness of each high-priority stormwater water issue.

Table 1
Strategies for Public Education and Outreach

Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, or newspaper
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials

Figure 1: MS4 General Permit Table 1

MCM 2: Public Involvement and Participation BMPs

BMP 2A: Public Involvement and Participation Procedures

Permit Section: Part I E 2 a

Objective: The County shall develop and implement procedures for the following:

1. Reporting mechanism for the public to report, at a minimum, the following:
    a. Illicit discharges, improper disposal, or spills to the MS4
    b. Complaints regarding land disturbance activities
    c. Other stormwater pollution concerns;
2. Public input on the MS4 Program Plan;
3. Receiving public input or complaints;
4. Responding to public input received on the MS4 Program Plan or complaints; and
5. Maintaining documentation of public input received on the MS4 program and associated MS4 Program Plan and the County's response.

Measurable Goal: Development of the procedures outlined above.

Necessary Documents: Applicable documents will be accessible through Stormwater website.

Responsible Party: DGS (Table 1).

Schedule: Develop procedures in Year 1.

Implement the procedures in Years 2, 3, 4, and 5.

Items to Report: Completion of the procedures outlined above.

Webpage for illicit discharge, improper disposal, or spills reporting (link)

Land disturbing activities complaints (link)

The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program (link).

Other potential stormwater pollution concerns can be reported via the Loudoun Express Request (LEx) (link).

A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality.

Method of Evaluation: Year 1: Completion of the procedures.

Years 2, 3, 4, and 5: Effectiveness of the procedures.

BMP 2B: Develop and Maintain a Stormwater Website

Permit Section: Part I E 2 b

Objective: The County shall develop and maintain a website dedicated to the MS4 Program and Stormwater Pollution Prevention.

The following information shall be posted to the webpage:

1. The effective MS4 permit and coverage letter;
2. The most current MS4 Program Plan;
3. The annual report for each year of the term covered by the permit not later than 30 days after submittal to DEQ;
4. A mechanism for the public reporting as outlined in BMP 1B above; and
5. Methods for how the public can provide input into the MS4 program plan.

Measurable Goal: Creation and maintenance of a stormwater website as outlined above.

Necessary Documents: Effective MS4 General Permit and coverage letter (Appendix A).

MS4 Program Plan.

Most recent MS4 Annual Report will be posted to the website.

Responsible Party: DGS (Table 1) will ensure that the website is up and running and will ensure that the required documents are posted to the website within the required timeframe.

Schedule: February 1, 2019 - Creation and implementation of the website 30 days after the effective date.

Ongoing maintenance of the website as needed.

November 1 each year. Post the MS4 Annual Report to the website 30 days after submittal to DEQ.

Items to Report: The County Stormwater website has been up and running for many years. The County will continue with the website.

Year 2, 3, 4, and 5: Post MS4 Annual Reports by November 1.

The Annual Report will include a summary of any public input on the MS4 program received, (including stormwater complaints) and how the county responded.

Method of Evaluation: Review effectiveness of the website.

BMP 2C: Public Involvement Opportunities

Permit Section: Part I E 2 c

Objective: The County shall implement four activities a year from two or more of the categories listed in the general permit Table 2 (see Figure 2).

Measurable Goal: Successfully completing or supporting four (4) water quality improvement efforts.

Necessary Documents: Dependent on the activities chosen for the particular permit year.

Table 2
Public Involvement Opportunities

Public involvement opportunities	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoration	Stream or watershed clean-up day, adopt-a-water way program,
Educational events	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, watershed walks, participation on environmental advisory committees
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.

Figure 2: MS4 General Permit Table 2

Responsible Party: DGS (Table 1).

Schedule: In the first quarter of each permit cycle, DGS will determine which Public Involvement Opportunities it will conduct or support.

Items to Report:
1. List of local activities in which County participated.
2. Identification of which activities met the MS4 General Permit, Table 2 criteria.

Method of Evaluation: Successful completion or support of four (4) activities as outlined above annually.

MCM 3: Illicit Discharge Detection and Elimination

BMP 3A: Develop an Accurate MS4 Map

Permit Section: Part I E 3 a (1)

Objective: Develop and maintain an accurate MS4 Map of the stormwater system. Loudoun County utilizes various GIS data layers for all stormwater asset management. Every 6 months, in January and June, a pdf copy of the MS4 map will be generated utilizing the most up to date versions of the stormwater GIS data layers, as outlined below.

Measurable Goal: Semi-Annual updates to the county MS4 map as follows:

1. A map of the stormwater system owned or operated by the permittee within the Census Urbanized Area identified by the 2010 decennial census that includes:
    a. MS4 outfalls discharging to surface waters;
    b. A unique identifier for each mapped item;
    c. The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;
    d. MS4 regulated service area; and
    e. Stormwater management facilities owned or operated by the permittee.

Necessary Documents: Loudoun County GIS Data.

Responsible Party: DGS (Table 1).

Schedule: January and June of each year. Publish a pdf copy of the MS4 map.

No later than July 1, 2019 [Part I E 3a (3)] the permittee shall submit to DEQ a GIS-compatible shapefile of the permittee's MS4 map.

Annually after the July 1, 2019 submission.

Items to Report: Confirmation statement, including dates, of stormwater map updates, digital copy of the current map.

Method of Evaluation: Review of system map to confirm it remains accurate and current.

BMP 3B: Maintain MS4 Outfall Data Information Table

Permit Section: Part I E 3 a (2)

Objective: Maintain specific and required information related to each MS4 outfall.

Measurable Goal: Annual updates to the County's outfall data table that includes the following information for each outfall or point of discharge:

1. A unique identifier as specified on the stormwater system map;
2. The latitude and longitude of the outfall or point of discharge;
3. The estimated regulated acreage draining to the outfall or point of discharge;
4. The name of the receiving water;
5. The 6th Order Hydrologic Unit Code of the receiving water;
6. An indication as to whether the receiving water is listed as impaired in the Virginia 2016 305(b)/303(d) Water Quality Assessment Integrated Report;
7. The predominant land use for each outfall discharging to an impaired water; and
8. The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.

Necessary Documents: Annual Outfall Data Information Table (Appendix A).

2016 303(d)/305(b) list.

Responsible Party: DGS (Table 1).

Schedule: No later than October 1 of each year.

Items to Report: Confirmation statement, including dates, of MS4 Outfall Data Information Table updates.

Method of Evaluation: Review of GIS Data Information Tables associated with County Stormwater System Map and MS4 Outfall Data Information.

BMP 3C: Notification to Downstream MS4 Permit Holders of Interconnections.

Permit Section: Part I E 3 a (5)

Objective: Notify downstream MS4 operators, in writing, of any physical interconnections to the County's MS4. As required in Part I E 3 d (2), the written notification to downstream interconnected MS4s will be provided upon request.

Measurable Goal: Written notification of any applicable downstream MS4 operators of stormwater systems physically interconnected with the Loudoun County MS4.

Necessary Documents: County Stormwater GIS Data.

Responsible Party: DGS (Table 1).

Schedule: Completion by end of Permit Year 1.

Items to Report: List of any written notifications to applicable downstream MS4 operators.

Method of Evaluation: Successful notification of any applicable downstream MS4 operators.

BMP 3D: Written Illicit Discharge Detection and Elimination (IDDE) Procedures

Permit Section: Part I E 3 c

Objective: Written procedures to detect, identify, and address unauthorized nonstormwater discharges to the MS4. As required in Part I E 3 d (3), the revised IDDE procedures will be provided upon request.

Measurable Goal: Implement the County's IDDE procedures to address suspected illicit discharges.

Necessary Documents: Existing IDDE Procedures (Appendix A).

Responsible Party: DGS (Table 1).

Schedule: Year 1 – Revise/update the IDDE procedures.

Ongoing program, with implementation of revised IDDE procedures by the start of Permit Year 2.

Items to Report: Total number of IDDE incidences found each permit year and a summary of how the issue was resolved.

Method of Evaluation: Review of IDDE procedure's success in detecting illicit discharges to the County's MS4.

BMP 3E: Conduct System Screening for Illicit Discharge Detection

Permit Section: Part I, E 3 c (2)

Objective: Effectively and efficiently identify, to the MEP, illicit discharges to the County's MS4.

Measurable Goal: Conduct dry weather screening of MS4 outfalls per the IDDE procedures (Appendix A).

Necessary Documents: IDDE Procedure (Appendix A).

Responsible Party: DGS (Table 1).

Schedule: Ongoing program, with implementation of revised IDDE procedures in Year 2.

Items to Report: Items to report are summarized in the IDDE Procedure document (Appendix A).

Total number of outfalls screened, screening results, and detail of any related follow-up actions.

Method of Evaluation: Review of IDDE procedures, including dry weather screening, and their success in detecting illicit discharges to the County's MS4.

BMP 3F: Investigate and Address Illicit Discharges

Permit Section: Part I E 3 c (3), (4), and (5)

Objective: Eliminate, to the MEP, illicit discharges to the MS4 based on the County's revised IDDE procedures established per Part I 3 c of the MS4 General Permit.

Measurable Goal: Implement the County's IDDE procedures to address suspected illicit discharges discovered through dry weather screening, observations of County staff, or calls and reports from the general public.

Necessary Documents: IDDE Procedure as outlined in Part I E 3 c
County Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County, §1096.04: Violations)

Responsible Party: DGS (Table 1).

Schedule: Ongoing program, with implementation of revised IDDE procedures in Year 2.

Items to Report: Summary of each investigation of any suspected illicit discharge as follows:

1. Date(s) suspected discharge observed and/or reported;
2. Results of the investigation, including the source, if identified;
3. Any follow-ups to the investigation;
4. Resolution of investigation; and
5. Date investigation completed/closed.

Method of Evaluation: Review of IDDE procedures and their success in finding and eliminating illicit discharges to the County's MS4.

MCM 4: Construction Site Stormwater Runoff Control

BMP 4A: Administer County E&S Program

Permit Section: Part I E 4 a (1) and (5)

Objective**:** Ensure, to the MEP, the administration and implementation of County E&S. The permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840).

Measurable Goal**:** Maintain a rating of "consistent" for the County's E&S Program during permit cycle.

Necessary Documents**:** Most current version of documents, as follows:

a. Facilities Standards Manual (FSM) (Appendix A)
b. E&S Ordinance (County Code Chapter 1220) (Appendix A)
c. Loudoun County Grading Permit Packet (Appendix A)
d. Plan Review Checklist (Appendix A)
e. Site Inspection Checklist (Appendix A)
f. Compliance and Enforcement Policies (Appendix A)

Responsible Party**:** B&D (Table 1).

Schedule**:** Ongoing program.

Items to Report**:** For each annual report, the following shall be tracked and submitted:

a. Total number of inspections conducted
b. Total number and type of enforcement actions implemented and the type enforcement actions.

BMP 4B: MCM 4 Items to Include in the Program Plan

Permit Section: Part I E 4 c

Objective**:** To include those required items of Part I E 4 c, which are applicable to Loudoun County. The applicable items to Loudoun County are:

1. If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program;

2. A description of the legal authorities utilized to ensure compliance with Part I E 4 a to control construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

3. Written inspection procedures to ensure the erosion and sediment controls are properly implemented and all associated documents utilized during inspection including the inspection schedule;

4. Written procedures for requiring compliance through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and

5. The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the construction site stormwater runoff control requirements in Part I E 4.

Measurable Goal**:** Not applicable.

Necessary Documents**:** Most current version of documents, as follows:

a. E&S Ordinance (County Code Chapter 1220)
b. Stormwater Ordinance (County Code Chapter 1096)

Responsible Party**:** Department of Building and Development (B&D) (Table 1).

DGS (Table 1).

Schedule**:** Not applicable.

Items to Report**:** The local ordinance for the Loudoun County Erosion and Sediment Program is the Codified Ordinances of Loudoun County Chapter 1220 (link).

The legal authorities utilized to ensure compliance with Part I E 4 are; the Codified Ordinances of Loudoun County, Chapters 1220 Erosion Control (link); 1096 Stormwater Management (link); and the MS4 General Permit (VAR040067).

B&D maintains SOPs for Erosion and Sedimentation Control inspection and enforcement (Appendix A).

Erosion and Sedimentation Control Program Enforcement Protocols, Dated September 6, 2002 (link).

B&D

- E&S plan review
- E&S inspections and enforcement
- VSMP permit compliance

DGS

- Post-construction BMP maintenance and inspection
- MS4 permit compliance

Method of Evaluation**:** Not applicable.

BMP 4C: MCM 4 Items to Include in the Annual Report

Permit Section: Part I E 4 d

Objective**:** To include those required items outlined in Part I E 4 d, which are required to be included in the annual report.

The annual report shall include the following:

1. Total number of inspections conducted; and
2. The total number and type of enforcement actions implemented and the type of enforcement actions.

Measurable Goal**:** Report the items listed above.

Necessary Documents**:** E&S inspections. Need to report the total number.

E&S enforcement actions. Need to report the total number.

Responsible Party**:** B&D (Table 1) is responsible for conducting the inspections and maintaining the required files.

DGS (Table 1) is responsible for reporting this information in the annual report.

Schedule**:** Ongoing.

Items to Report**:** Total number of E&S inspections conducted.

The total number and type of enforcement actions implemented and the type of enforcement actions.

Method of Evaluation**:** Not applicable.

MCM 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands

BMP 5A: Administer County VSMP Program

Permit Section: Part I, E 5 a (1)

Objective**:** The permittee shall address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program as follows:

If the permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c.

Measurable Goal**:** To the MEP Loudoun County will administer its VSMP consistent will all applicable state regulations.

Necessary Documents**:** Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County).
County stormwater facility inspection checklist.
County inspections and maintenance written procedures.

Responsible Party**:** B&D (Table 1).

Schedule**:** Daily plan review for land disturbance projects submitted to the County for approval.

Items to Report**:** Written statement that the County is in compliance with the state code outlined within this section.

Method of Evaluation**:** Annual review of the program to ensure compliance.

BMP 5B: Develop and Maintain Written Inspection and Maintenance Procedures for Stormwater BMPs

Permit Section: Part I, E 5 b (1)

Objective**:** Ensure, to the MEP, that the County's inspection and maintenance program for the post-construction stormwater management facilities is documented and followed by county staff and contractors.

Measurable Goal**:** The County will continue to follow the current inspection and maintenance procedures. In Year 1, the county will review its current procedures and

update them as needed. County will implement any changes to the procedures in the following permit years.

Necessary Documents**:** Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County)

County inspections and maintenance written procedures (Appendix A).

Responsible Party**:** DGS (Table 1).

Schedule**:** Year 1 – review existing procedures and update as needed.

Following permit years - ongoing program.

Items to Report**:** Compliance with procedures.

Method of Evaluation**:** Review the procedures to ensure they are still meeting the needs of the program.

BMP 5C: Inspect Permanent Post-Construction Stormwater BMPs

Permit Section: Part I E 5 b (2)

Objective**:** Ensure, to the MEP, that the County's permanent post-construction stormwater management facilities are functioning as designed for stormwater runoff quality and quantity management.

Measurable Goal**:** The County will perform annual inspections of the permanent post-construction stormwater management BMPs either owned by the County or within the County and situated outside of the VDOT maintained right-of-way, Dulles Greenway property and right-of-way, Dulles International Airport property and right-of-way, the County's incorporated towns, and are not a separately permitted facility.

Necessary Documents**:** Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County).

County stormwater facility inspection checklists.

County inspections and maintenance written procedures.

Responsible Party**:** DGS (Table 1).

Schedule**:** Ongoing.

Items to Report**:** The total number of private and public BMP inspections completed.

For private BMP inspections, the total number of enforcement actions will be noted.

For public BMP inspections, a description of the significant maintenance repair or retrofit activities shall be provided.

Method of Evaluation**:** Not applicable.

BMP 5D: Provide Long-Term Maintenance for Operator-Owned BMPs

Permit Section: Part I E 5 b (3)

Objective**:** Provide long-term maintenance, as necessary, so that permanent stormwater facilities for which the County has primary maintenance responsibility are functioning to their original design capabilities.

Measurable Goal**:** Maintenance performed, as necessary, so applicable stormwater facilities are functioning to original design capabilities.

Necessary Documents**:** Stormwater management facility inspection reports.
Summary of maintenance performed.

Responsible Party**:** DGS (Table 1).

Schedule**:** Ongoing program.

Items to Report**:** Total number of inspections conducted.

Description of the significant maintenance, repair, or retrofit activities. Routine maintenance activities (e.g. mowing, trash removal) are not required to be reported.

Method of Evaluation**:** Not applicable.

BMP 5E: Require Adequate Long-Term Maintenance for Privately Maintained BMPs

Permit Section: Part I E 5 c (1), and (2)

Objective**:** Ensure, to the MEP, that permanent stormwater facilities for which the County does not have primary maintenance responsibility (i.e. private facilities) are receiving adequate long-term maintenance to function at their original design capability.

Measurable Goal**:** Notify property owners responsible for maintaining stormwater management facilities of those deficiencies, discovered during County inspections, keeping the facility from functioning to their original design

capability utilizing enforcement procedures outlined in Chapter 1096, Codified Ordinances of Loudoun County.

Necessary Documents**:** Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County).

Inspection findings.

Private BMP Enforcement Procedures.

Responsible Party**:** DGS (Table 1).

Schedule**:** Ongoing.

Items to Report**:** Number of privately-owned stormwater management facility inspections conducted.

Number of and type of enforcement actions initiated.

Method of Evaluation**:** Review record of maintenance execution based on requirements conveyed in inspection reports submitted on facilities for which the property owner has primary maintenance responsibilities.

BMP 5F: Maintain an Electronic Database of All Permanent Stormwater Management Facilities

Permit Section: Part I E 5 d, e, f, and g.

Objective**:** Maintain the electronic database of all known stormwater management facilities (public and private). The database will include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A.

The electronic database shall be updated no later than 30 days after a new stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction as required in Part II, or discovered if it is an existing stormwater management facility.

The County shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.

Measurable Goal: Maintain the existing database.

Necessary Documents**:** Inventory of permanent structural stormwater management facilities discharging to the regulated small MS4.

2016 303(d)/305(b) list.
Most recent inspection results.

Responsible Party**:** DGS (Table 1).

Schedule**:** Within 30 days of facility completion/discovery.

Items to Report**:** For each stormwater management facility brought online and taken offline during each reporting year the following information is to be reported:

a. Facility unique identifier
b. Facility type
c. Geographic location (latitude and longitude)
d. Number of acres treated by the facility
    i. With breakdown of pervious and impervious acres
e. Date the facility was brought on line
f. Sixth order hydrologic unit code (HUC)
g. Operator- or privately-owned
    i. If privately-owned, whether maintenance agreement exists
h. Whether or not the stormwater management facility or BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both
i. Date of operator's most recent inspection

A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.

A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted.

Method of Evaluation**:** Conduct quality control (i.e., spot check) of database entries made within the permit year to ensure data accuracy.

MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations

BMP 6A: Maintain and Implement Written Procedures

Permit Section: Part I E 6 a

Objective**:** Maintain existing written procedures and implement new procedures, as needed, at county-owned facilities within the MS4. The written procedures shall be designed as follows:

1. Prevent illicit discharges;
2. Ensure the proper disposal of waste materials, including landscape wastes;
3. Prevent the discharge of wastewater or permittee vehicle wash water or both into the MS4 without authorization under a separate VPDES permit;
4. Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities;
5. Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices;
6. Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and
7. Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.

Measurable Goal**:** Update the written materials for county-owned facilities within the MS4 boundary.

Necessary Documents**:** *Existing Standard Operating Procedures* (Appendix A).
Land Disturbing SOP
Landscaping and Grounds Maintenance SOP
Loading-Unloading SOP
Material Storage SOP
Non-Stormwater Discharges SOP
Pool Operation SOP
Road, Street and Parking Lot SOP
Small Equipment SOP
Spill Response SOP
Storm Sewer System Cleaning & Maintenance SOP
Vehicle Fueling SOP
Vehicle-Equipment Maintenance/Repair SOP
Vehicle-Equipment Storage SOP
Vehicle-Large Equipment Washing SOP

Waste Management SOP

Responsible Party**:** DGS (Table 1).

Schedule**:** Year 1 – Review of existing SOPs.

Years 2, 3, 4, and 5 – Implementation.

Items to Report: Year 1 – Updated written procedures.

The written procedures will be provided upon request (Appendix A).

Method of Evaluation**:** Annual review of written procedures for appropriateness and need of new procedures.

BMP 6B: Develop and Implement SWPPPs for Identified "High Priority" Facilities

Permit Section: Part I E 6 c, d, and g

Objective**:** The County will continue to implement the SWPPPs that were developed under the previous permit.

Measurable Goal**:** The County shall follow all parameters within each existing SWPPP.

Necessary Documents**:** Facility SWPPPs (Appendix A).
Claude Moore Park SWPPP
PRCS Trailside Maintenance Facility SWPPP
Potomac Lakes Sportsplex SWPPP
Fire & Rescue EM Training Center SWPPP
Central Warehouse SWPPP

Responsible Party**:** DGS (Table 1).

Schedule**:** Ongoing.

Items to Report**:** Listing of the SWPPPs, dates of annual inspection, any findings, and corrective actions.

Method of Evaluation**:** Review the effectiveness of SWPPPs.

BMP 6C: Annual Review for New County Owned or Operated "High Priority" Facilities

Permit Section: Part I E 6 e

Objective**:** No later than June 30 of each permit year, conduct a review of County owned or operated facilities within the MS4 to determine if the facility has a high potential for discharging pollutants as described in Part I.E.6.c. If the facility is determined to be a high-priority facility with a high potential to discharge pollutants, develop a SWPPP meeting the requirements of Part I.E.6.d no later than December 31 of that same permit year.

Measurable Goal**:** Annual review of County owned or operated facilities and development of new SWPPPs as needed.

Necessary Documents**:** *Facility SWPPPs* (Appendix A).
Claude Moore Park SWPPP
PRCS Trailside Maintenance Facility SWPPP
Potomac Lakes Sportsplex SWPPP
Fire & Rescue EM Training Center SWPPP
Central Warehouse SWPPP

Responsible Party**:** DGS (Table 1).

Schedule**:** Annual review conducted by June 30 of each permit year.

If needed, development of new SWPPPs by December 31 of each permit year.

Items to Report**:** Annually – Report the results of the review.

If needed, provide copies of the newly developed SWPPPs.

List of the High Priority facilities owned and/or operated by the MS4 and whether or not they have a high potential to discharge.

Method of Evaluation**:** Annual review.

BMP 6D: SWPPP Review after Reports of Unauthorized Discharges

Permit Section: Part I E 6 f

Objective**:** The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part III G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

Measurable Goal**:** Investigate all unauthorized discharges to the MS4 at County owned or operated facilities with a SWPPP.

Necessary Documents**:** Facility SWPPPs.

Responsible Party**:** DGS (Table 1).

Schedule**:** As needed.

Items to Report**:** Report unauthorized discharges as outline in Part III G.

Method of Evaluation**:** Review reports and SWPPPs as needed.

BMP 6E: Maintain and Implement Turf and Landscape Nutrient Management Plans (NMPs)

Permit Section: Part I E 6 i

Objective**:** The permittee shall maintain and implement turf and landscape NMPs that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.

Measurable Goal**:** Maintain current NMPs as applicable. Annual review of county owned or operated facilities within the MS4 service area to establish the need for new NMPs.

Necessary Documents**:** County Facilities Nutrient Management Plans (Appendix A).

Responsible Party**:** DGS (Table 1) with assistance from Parks, Recreation & Community Services (PRCS).

Schedule**:** By the end of Year 1 conduct a review of the existing NMPs and a review of county owned or operated facilities that meet the requirements of Part I E 6 i.

Update the plans and create new plans as needed in the following permit years.

Items to Report: Listing of current NMPs and their expiration date and any new NMPs added within the permit year (Appendix A).

Method of Evaluation**:** Updating of NMPs that require updates and creation of NMPs where applicable.

BMP 6F: Prohibition on the Use of Deicing Agents Containing Nitrogen or Phosphorus

Permit Section: Part I E 6 k

Objective**:** The permittee shall not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.

Measurable Goal**:** Do not use deicing agents that contain the chemicals described in Part I E 6 k.

Necessary Documents**:** Manufacturer's MSDS for the deicing chemicals used by the Public Works Crew.

SOP – Road, Street, and Parking Lot Maintenance, Version 2, dated May 1, 2019.

Responsible Party**:** DGS (Table 1).

Schedule**:** Not applicable.

Items to Report: Statement that the chemical outlined in Part I E 6 k or not used by the County.

Method of Evaluation**:** Not applicable.

BMP 6G: Require Municipal Contractors to Use Appropriate Control Measures and Procedures for Stormwater Discharges

Permit Section: Part I E 6 l

Objective**:** Require, to the MEP, that municipal contractors use appropriate control measures and procedures for stormwater discharges to the County's MS4.

Measurable Goal**:** Develop and include verbiage in the appropriate standard agreements for municipal contractors, requiring appropriate control measures/procedures and pollution prevention protocols for stormwater discharges to the County's MS4.

Necessary Documents**:** Loudoun County Standard Contract. Loudoun County Standard Stormwater Contracting Scopes of Work.

Responsible Party**:** DGS (Table 1), with assistance from the County Purchasing Department and County Attorney's Office.

Schedule**:** In the previous contract, the county added language it its standard contract and to the detailed scope of work template documents specifically for stormwater maintenance contracts.

Items to Report**:** Report annually that the verbiage remains in these documents.

Method of Evaluation**:** DGS will confirm annually that the appropriate verbiage is contained within these documents.

BMP 6H: Develop a Training Plan Associated with Stormwater

Permit Section: Part I E 6 m

Objective**:** The permittee shall develop a training plan in writing for applicable staff that ensures the following:

1. Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months;

2. Employees performing road, street, and parking lot maintenance receive training in pollution prevention and good housekeeping associated with those activities no less than once per 24 months;

3. Employees working in and around maintenance, public works, or recreational facilities receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months;

4. Employees and contractors hired by the permittee who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia. Certification by the Virginia Department of Agriculture and Consumer Services (VCACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement;

5. Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;

6. Employees and contractors implementing the stormwater program obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations; and

7. Employees whose duties include emergency response have been trained in spill response. Training of emergency responders such as firefighters and law-enforcement officers on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.

Measurable Goal**:** Update of the training plan and successful completion of training classes/modules.

Necessary Documents**:** Training Plan.

Responsible Party**:** DGS (Table 1), with assistance from Department of PRCS and B&D.

Schedule**:** Continue with existing plan in Year 1.

Update existing training plan to meet Part I E 6 m during Year 1 and implement in Year 2.

Items to Report**:** Maintain documentation of each training event conducted by the permittee to fulfill the requirements of Part I E 6 m for a minimum of three years after the training event. The documentation shall include the following information:

1. The date of the training event;
2. The number of employees attending the training event; and
3. The objective of the training event.

The training plan can be found here (link).

Method of Evaluation**:** Annual review of the Training Plan.

Appendix A

Listing of Loudoun County MS4 Documents Incorporated by Reference

Document Name	Version	Date
Chapter 1096 of the Loudoun County Codified Ordinances	As amended	October 10, 2018
Chapter 1220 of the Loudoun County Codified Ordinances	As amended	December 12, 2017
General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems	VAR040067	November 1, 2018
Loudoun County, Virginia Phase II Chesapeake Bay TMDL Action Plan	Final	November 1, 2019
Loudoun County, Virginia Comprehensive TMDL Action Plan for Benthic TMDLS for the Goose Creek Watershed, Benthic TMDL Development for Bull Run, Bacteria TMDLs for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run, Bull Run and the Occoquan River	Final	May 1, 2020
Public Education and Outreach Plan	Final	August 2014 May 2016 (Revised)
Public Education and Outreach Plan	Version 2	June 10, 2019
MS4 Permit Coverage Letter	Final	October 31, 2018
MS4 Map	Final	July 2020
MS4 Outfall Table	Final	October 1, 2020
Illicit Discharge Detection and Elimination (IDDE) Procedure	Version 2	June 10, 2019
Good Housekeeping Standard Operating Procedures (multiple)	Final	June 12, 2015
Loudoun County Facility SWPPPs (multiple)	Final	June 30, 2017
Facilities Standards Manual	As amended	January 15, 2018
Loudoun County Grading Permit Packet	Final	February 11, 2019 (Revised)
Training Schedule and Program	Version 2	September 4, 2019

Loudoun County Nutrient Management Plans Incorporated by Reference Location

Plan Name	Total Acres on Which Nutrients are Applied	Plan Start Date	Plan End Date	Location Address	Location Coordinates (NAD 83, Deg Min Sec)
Bles Park	9.1	4/1/2019	4/1/2022	44830 Riverside Parkway, Ashburn, VA 20147	39° 04' 07" -77° 26' 57"
Byrnes Ridge Park	21.0	4/1/2019	4/1/2022	24915 Mineral Springs Circle, South Riding, VA 20105	38° 55' 43" -77° 33' 08"
Conklin Park	6.1	4/1/2019	4/1/2022	25701 Donegal Drive, Chantilly, VA 20152	38° 54' 29" -77° 31' 25
Ray Muth Sr. Park	5.4	11/1/2019	11/1/2022	20971 Marblehead Drive, Ashburn, VA 20148	39° 2' 9" -77° 27' 38"
Scott Jenkins Park	2.2	11/1/2019	11/1/2022	39464 Colonial Highway, Hamilton, VA 20158	39° 8' 12" -77° 38' 20"
Trailside Park	2.8	7/15/2019	7/15/2022	Claiborne Parkway, Ashburn, VA 20147	39° 3' 8" -77° 30' 18"
Lyndora Park	2.5	7/15/2019	7/15/2022	Lucketts Bridge Circle, Ashburn VA, 20148	38° 59' 18" -77° 29' 31"
Greg Crittenden Memorial Park	1.6	7/15/2019	7/15/2022	21401 Windmill Dr, Ashburn, VA 20147	39° 1' 56" -77° 29' 49"
Chick Ford & Ryan Bickel Fields	1.5	7/15/2019	7/15/2022	21597 Ashburn Village Blvd, Ashburn, VA 20147	39° 2' 15" -77° 28' 30"
Cascades Library and Senior Center	1.1	9/24/2020	9/24/2025	21030 Whitfield Place Potomac Falls, VA 20165	39° 1' 59" -77° 23' 41"
Ashburn Library NMP	1.1	9/24/2020	9/24/2025	43316 Hay Road, Ashburn VA 20147	39° 2' 45" -77° 30' 9"
Claude Moore Park	9.8	11/1/2019	11/1/2022	46105 Loudoun Park Lane, Sterling, VA 20164	39° 0' 53" -77° 24' 15"
Potomac Lakes Sportsplex	20.1	11/1/2019	11/1/2022	20280 Cascades Parkway, Sterling, VA 20165	39° 3' 14" -77° 22' 42"
East Gate Park	3.4	4/1/2019	4/1/2022	43664 Tall Cedars Parkway, Chantilly, VA 20152	38° 54' 44" -77° 29' 33"
Dulles South PSC	1.6	4/15/2019	4/15/2022	25216 Loudoun County Prkwy Chantilly, VA 20152	38° 55' 10" -77° 31' 1"
Eastern Sheriff Substation	0.9	4/15/2019	4/15/2022	46620 E Frederick Drive Sterling, VA 20164	38° 0' 57" -77° 23' 12"
East Gate Park & Ride	1.8	4/15/2019	4/15/2022	43664 Tall Cedars Pkwy Chantilly, VA 20152	38° 54' 42" -77° 29' 30"
Harmony Park & Ride	1.3	4/15/2019	4/15/2022	39464 E Colonial Highway Hamilton, VA 20158	39° 8' 11" -77° 38' 6"
Kincora Fire Station	0.9	4/15/2019	4/15/2022	45900 Russel Branch Prkwy Ashburn, VA 20147	39° 1' 49" -77° 25' 59"
Lansdowne Fire Station	1.1	4/15/2019	4/15/2022	19485 Sandridge Way Leesburg, VA 20176	39° 4' 37" -77° 29' 1"
Moorefield Fire and Rescue	1.05	4/15/2019	4/15/2022	43495 Old Ryan Road Ashburn, VA 20148	39° 0' 32" -77° 29' 47"

Plan Name	Total Acres on Which Nutrients are Applied	Plan Start Date	Plan End Date	Location Address	Location Coordinates (NAD 83, Deg Min Sec)
Stone Ridge Park & Ride	1.0	4/15/2019	4/15/2022	24281 Millstream Drive Aldie, VA 20105	38° 56’ 16” -77° 33’ 21”
Western Sheriff's Office	1.6	4/15/2019	4/15/2022	47 West Loudoun Street Round Hill, VA 20141	39° 8’ 1” -77° 46’ 39”
Purcellville Fire Station	2.2	4/15/2019	4/15/2022	500 North Maple Avenue Purcellville, VA 20132	39° 8’ 37” -77° 41’ 49”
Middleburg Fire Station	0.6	4/15/2019	4/15/2022	910 West Washington Street Middleburg, VA 20117	38° 58’ 3” -77° 44’ 49”
Lovettsville Library	0.2	4/15/2019	4/15/2022	12 North Light Street Lovettsville, VA 20180	39° 16’ 27” -77° 38’ 1”
Loudoun Heights Fire Station	2.4	4/15/2019	4/15/2022	13345 Harpers Ferry Road Purcellville, VA 20132	39° 14’ 55” -77° 43’ 39”
Franklin Park	14.92	4/15/2019	4/15/2022	17501 Franklin Park Drive Purcellville, VA 20132	39° 7’ 55” -77° 44’ 38”
Ashburn Sheriff	1.8	4/15/2019	4/15/2022	20272 Savin Hill Drive Ashburn, VA 20147	39° 3’ 13” -77° 27’ 35”

Appendix B

Phase II Chesapeake Bay TMDL Action Plan

Loudoun County, Virginia

Phase II Chesapeake Bay TMDL Action Plan

Submittal to DEQ – November 1, 2019

Loudoun County
Department of General Services
801 Sycolin Road, S.E., Suite 300
Leesburg, Virginia 20175

Prepared with assistance by:
Wood Environment & Infrastructure Solutions
Chantilly, Virginia

Prepared in Compliance with Municipal Separate Storm Sewer System (MS4) Permit No. VAR040067

CERTIFICATION

"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."

Name	Title	Date

Final Phase II Chesapeake Bay TMDL Action Plan
Loudoun County, Virginia

November 1, 2019

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Final Phase II Chesapeake Bay TMDL Action Plan
Loudoun County, Virginia

November 1, 2019

1. Introduction

1.1. Purpose

This Phase II Chesapeake Bay TMDL Action Plan builds on Loudoun County's Phase I Chesapeake Bay TMDL Action Plan approved by the Virginia Department of Environmental Quality (DEQ) in 2015. The plan documents how the County intends to meet the "Chesapeake Bay TMDL Special Condition" in Part II A of the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) that became effective November 1, 2018 (2018 MS4 permit). A draft Phase II Chesapeake Bay TMDL Action Plan was submitted to DEQ in May 2018. In accordance with the 2018 MS4 permit, the final plan must be submitted to DEQ no later than 12 months after the effective date of the permit.

The County's MS4 permit requires the development and implementation of action plans for impaired streams where a Total Maximum Daily Load (TMDL) assigns a waste load allocation (WLA) to the County that has been approved by the State Water Control Board. A TMDL establishes the maximum amount of a pollutant that can enter a water body without violating water quality standards.

In December 2010, the U.S. Environmental Protection Agency (U.S. EPA) established a TMDL for the Chesapeake Bay. Pollutants of concern (POCs) identified for the Chesapeake Bay include total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS). Virginia subsequently adopted a Watershed Implementation Plan (WIP) that establishes the framework for meeting the Chesapeake Bay TMDL. The Virginia WIP states that MS4 permit holders will implement a phased approach for meeting reduction targets over three five-year permit cycles in accordance with the following: 5% by the end of the first permit cycle (June 30, 2018); 40% by the end of the second permit cycle (2023); and, 100% by the end of the third permit cycle (2028).

Loudoun County met the 5% reduction requirement for the first permit cycle. This Phase II Chesapeake Bay TMDL Action Plan establishes the County's 40% reduction target and identifies the Best Management Practices (BMPs) for achieving the target in accordance with the 2018 MS4 permit, the Chesapeake Bay TMDL Special Condition Guidance developed by DEQ (Guidance Memo No 15-2005) dated May 18, 2015, and other guidance received by DEQ.

1.2. Summary of Required Reductions and BMPs to Achieve Reductions

Loudoun County's 40% reduction calculation is presented in Section 3. This includes: reductions from existing sources as of June 30, 2009; offsets to account for any increases in pollutant loads due to new sources initiating construction between July 1, 2009 and June 30, 2014; and, offsets to account for any grandfathered projects commencing construction after July 1, 2014.

Reductions and offsets are calculated based on the extent of the MS4 service area within the 2010 Census Urbanized Area. The County updated its MS4 service area map as part of the Phase II action plan development process. The map is presented in Appendix A. The updated MS4 service area has a total drainage area of 17,166.67 acres, consisting of 5,654.88 impervious acres and 11,511.79 pervious acres. This results in the following total reductions required to meet the 40% target: 6,214.46 pounds/year for TN; 723.18 pounds/year for TP; and, 600,725.96 pounds/year for TSS.

The MS4 permit requires the County to offset any increases from new sources initiating construction between July 1, 2009 and June 30, 2014 that disturbed one acre or greater as a result of the utilization of an average land cover condition greater than 16% impervious cover for the design of post-development stormwater management facilities. In addition, the County must offset any grandfathered projects that disturb one acre or greater that begin construction after July 1, 2014 and where the project utilizes an average land cover condition greater than 16%. The County adopted Chapter 1096 "Stormwater Management Ordinance" of the Codified Ordinances of Loudoun County in 2003. The water quality design criteria of the ordinance required a phosphorus loading rate of 0.45 pounds/acre/year, which is equivalent to 16% impervious cover. Effective July 1, 2014, the County increased the standard to a phosphorus loading rate of 0.41 pounds/acre/year, which is equivalent to 60% forest, 30% pasture, and 10% impervious cover. As a result, no new source or grandfathered project offsets are necessary.

The County has selected a range of BMPs to achieve the required POC reductions. These are summarized below and detailed in Section 4 through Section 6.

- Over-Treatment by Facilities Installed to Meet Development Requirements. This includes pollutant reduction in excess of what is required for land disturbing activities under the County's Stormwater Management Ordinance. Over-treatment is tracked by the County and reported on an annual basis.[1]
- County Stormwater Retrofits. This includes County-initiated stormwater quality retrofit projects as well as retrofits above regulatory minimums initiated as a result of proffers to the County by developers. Projects may include new structural facilities, design enhancements to existing facilities, or stream restoration projects.

[1] The County also tracks any under-treatment, which is subtracted from over-treatment credit.

- Nutrient Management Plans (NMPs). This includes NMPs implemented where nutrients are applied to under an acre within the MS4 service area and anywhere (over or under an acre) in areas outside of the MS4 service area.
- Street/Parking Lot Sweeping. This includes pollutant reductions associated with sweeping of County properties within the MS4 service area.
- Septic System Disconnects. This includes homes or businesses that are disconnected from individual septic systems starting January 1, 2006 within the MS4 service area. Credit is available for TN only.
- Nutrient Purchases. This includes purchased credit in accordance with § 62.1-44.19:21 of the Code of Virginia.
- Land Use Changes: This includes land use changes that result in a pollutant load reduction. Eligible land use changes include: (1) impervious to forest, mixed open, and turf; (2) turf to forest and mixed open; and, (3) mixed open to forest.
- Other BMPs. The County reserves the right to implement other BMPs that are allowed in accordance with DEQ's Guidance Memo No 15-2005. These will be described in the County's MS4 annual reports to DEQ.

The 2018 MS4 permit requires the County to report total POC reductions achieved prior to July 1, 2018 to meet the 5% reduction target and to then demonstrate how the County will achieve additional reductions to meet the 40% reduction target. Table 1.A summarizes required reductions, reductions achieved prior to July 1, 2018, additional reductions planned through the end of the second permit cycle, and anticipated percent progress toward achieving the 100% reduction target.

Table 1.A – Summary of Required Reductions and Implemented and Planned BMPs

	Total Nitrogen (lbs/year)	Total Phosphorus (lbs/year)	Total Suspended Solids (lbs/year)
Existing Source Reductions to Meet 40% Target	6,214.46	723.18	600,725.96
+ New Source Offsets	-	-	-
+ Grandfathered Offsets	-	-	-
= Total Required Reductions and Offsets	6,214.46	723.18	600,725.96
- BMPs Prior to July 1, 2018	3,074.64	596.18	405,606.33
- BMPs July 1, 2018 and On	3,386.37	723.83	242,147.26
= Remainder/(Excess) Toward 40% Target	(246.54)	(596.83)	(47,027.64)
Progress Toward 100% Target	41.6%	73.0%	43.1%

Any reductions in excess of 40%, whether identified in this plan or reported to DEQ in the County's MS4 annual reports, will be applied to the third permit cycle requirements.

1.3. Permit Compliance Crosswalk

Table 1.B provides each of the requirements for this action plan from Part II A 11 of the 2018 MS4 permit and the specific sections where the requirements are addressed.

Table 1.B – Action Plan and Permit Compliance Crosswalk

Action Plan Section	MS4 Permit	MS4 Permit Requirement
Section 2	Part II A 11 a	Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, 4, and 5.
Section 3	Part II A 11 b	The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, 4, and 5.

Action Plan Section	MS4 Permit	MS4 Permit Requirement
Section 5	Part II A 11 c	The total reductions achieved as of July 1, 2018 for each pollutant of concern in each river basin.
Section 5 and Appendix B	Part II A 11 d	A list of BMPs implemented prior to July 1, 2018 to achieve reductions associated with the Chesapeake Bay TMDL including: (1) The date of implementation; and, (2) The reduction achieved.
Section 6 and Appendix C	Part II A 11 e	The BMPs to be implemented by the permittee prior to the expiration of this permit to meet the cumulative reductions calculated in Part II A 3, 4, and 5, including as applicable: (1) Type of BMP; (2) Project name; (3) Location; (4) Percent removal efficiency for each pollutant of concern; and, (5) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 8 for each pollutant of concern.
Section 8 and Appendix D	Part II A 11 f	A summary of any comments received as a result of public participation required in Part II A 12 below, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to the Chesapeake Bay TMDL Action Plan as a result of public participation.

2. Program and Legal Authority

The County has adopted an MS4 Program Plan that documents implementation of all MS4 permit requirements, including the programmatic and legal authorities required to meet the "Chesapeake Bay TMDL Special Condition." The full MS4 Program Plan can be found at https://www.loudoun.gov/stormwater. Table 2.A provides a summary of elements of the six minimum control measures (MCMs) implemented by the County that relate to controlling total nitrogen, total phosphorus, and total suspended solids.

Table 2.A – MS4 Program Plan Components Related to the Chesapeake Bay TMDL

Minimum Control Measure	MS4 Program Plan Elements Related to Controlling TN, TP, and TSS
Public Education and Outreach on Stormwater Impacts	The County has identified nutrient impacts on water quality as one of its three high-priority pollutants for the focus of its public education and outreach plan (PEOP). The PEOP was also updated in the last permit cycle to include actions aimed at reducing sediment impacts. Plan elements include the development and distribution of educational materials (print and electronic), target audience training, and participation in the multi-media (radio, cable, and digital) campaign of the Northern Virginia Regional Commission's Clean Water Partners.
Public Involvement and Participation	The County has designed a program to engage the public by meeting all public notice requirements and promoting at least four watershed management activities annually.
Illicit Discharge Detection and Elimination	The County has implemented an Illicit Discharge Detection and Elimination (IDDE) program designed to prevent, identify, and eliminate sources of pollutants, including nutrients and sediment.
Construction Site Stormwater Runoff Control	The County's construction site stormwater runoff control program, implemented through the Erosion Control Ordinance (Chapter 1220), is fully consistent with the water quality control requirements of the Virginia Erosion and Sediment Control Act and the Virginia Stormwater Management Act, and their attendant regulations.
Post-Construction Stormwater Management	The County's construction site stormwater runoff control program, implemented through the Stormwater Management Ordinance (Chapter 1096), is fully consistent with the water

Minimum Control Measure	MS4 Program Plan Elements Related to Controlling TN, TP, and TSS
	quality control requirements of the Virginia Stormwater Management Act and its attendant regulations.
Pollution Prevention and Good Housekeeping for Municipal Operations	The County has designed a program to prevent pollution from County facilities through the development of stormwater pollution prevention plans (SWPPPs), standard operating procedures (SOPs), and training. The program includes a specific action to develop nutrient management plans (NMPs) for all County owned and/or operated properties where nutrients are applied to more than one contiguous acre.

The County has reviewed its MS4 Program Plan and legal authorities and finds that no additional legal authorities are required for compliance with the "Chesapeake Bay TMDL Special Condition" at this time.

3. Load and Cumulative Reduction Calculations

The following sections describe the methodology used by the County to determine the existing POC load and cumulative target reduction calculations in accordance with Part II A 3, 4, and 5 of the 2018 MS4 permit.

3.1. MS4 Service Area Delineation

Reductions and offsets are calculated based on the extent of the MS4 service area within the 2010 Census Urbanized Area. Loudoun County has maintained a map of storm sewer pipes and outfall locations in a GIS environment for many years. The outfall database was updated during the previous MS4 permit cycle to include the estimated MS4 acres served by each outfall. Outfall drainage areas were hand-delineated by a qualified engineer and are maintained by the County on a continuous basis.

Outfalls in the County's database are classified into eight maintenance categories.[2] The County has conservatively opted to assume responsibility for drainage to all outfalls in its database. In accordance with DEQ's Guidance Memo No 15-2005, MS4 service areas accounted for by other permit holders are excluded. This includes the Town of Leesburg, the Northern Virginia Community College – Loudoun Campus (NVCC-Loudoun), and VDOT. While Leesburg's MS4 service area is drainage-area based, NVCC-Loudoun's is based on the property boundary[3] and VDOT's is based on the right-of-way. The County coordinated with VDOT to obtain the latest MS4 service areas in GIS and obtained the NVCC-Loudoun parcel boundary from the County parcel database. The County reserves the right to further refine its MS4 service area based on outfall-specific assessments and determinations.

The County excluded parcels subject to a Virginia Pollutant Discharge Elimination System (VPDES) industrial stormwater permit[4] and forested areas. The County obtained a list of VPDES industrial stormwater permit holders from DEQ and removed those permit holders within the MS4 service area. Table 3.A shows the list of excluded VPDES permit holders.

The County's MS4 service area map is presented in Appendix A. Based on the above analysis, the County has determined that a total of 17,166.67 acres is served by the regulated MS4.

[2] Maintenance is usually the responsibility of the property owner; however, the County often has an easement on the outfall and/or associated storm sewer pipe.
[3] Chesapeake Bay TMDL Action Plan, Northern Virginia Community College, June 30, 2015.
[4] In accordance with DEQ Guidance Memo No 15-2005, this includes land regulated under any General VPDES permit that addresses industrial stormwater, including the General VPDES Permit for Stormwater Associated with Industrial Activity (VAR05), the General VPDES Permit for Concrete Products Facilities (VAG11), and the Nonmetallic Mineral Processing General Permit (VAR84).

Table 3.A – VPDES Permit Holders in the Loudoun County MS4

Permit Holder	Type	Number	Address	City
MWAA - Washington Dulles International Airport	Individual	VA0089541	45025 Aviation Dr Ste 400	Sterling
Loudoun Composting	Individual	VA0091430	44150 Wade Dr	Chantilly
Titan Virginia Ready Mix LLC - Sterling	Concrete	VAG110103	22963 Concrete Plz	Sterling
Virginia Concrete Company Inc - Chantilly Plant	Concrete	VAG110089	25086 Tanner Ln	Pleasant Valley
Aggregate Industries MAR - Chantilly	Concrete	VAG110318	25232 Willard Rd	Chantilly
Superior Concrete - Dulles	Concrete	VAG110094	44146 Wade Dr	Chantilly
Virginia Concrete Company Inc - Sterling	Concrete	VAG110084	44809 Old Ox Rd	Sterling
Virginia Concrete Company Inc - Sterling	Concrete	VAG110088	44866 Old Ox Rd	Sterling
GE Aviation Dowty Propellers	Industrial Stormwater	VAR052219	114 Powers Ct	Sterling
TTM Technologies North America LLC	Industrial Stormwater	VAR051145	1200 Severn Way	Sterling
Waste Management of Virginia - Sterling	Industrial Stormwater	VAR051088	1505 Moran Rd	Sterling
US Postal Service-Dulles Vehicle Maintenance Facility	Industrial Stormwater	VAR051068	22363 Randolph Dr	Sterling
Virginia Paving Company - Loudoun Plant	Industrial Stormwater	VAR050922	23232 Shaw Rd	Sterling
William A Hazel Incorporated - Recycling Facility	Industrial Stormwater	VAR052245	25020 Willard Rd	Chantilly
Virginia Paving Company - Chantilly	Industrial Stormwater	VAR050863	25094 Tanner Ln	Chantilly
Trowbridge Steel Company Incorporated	Industrial Stormwater	VAR050906	44886 Old Ox Rd	Sterling
Loudoun Quarries Division	Nonmetallic Mineral Mining	VAG840095	23070 Shaw Rd	Sterling
Chantilly Crushed Stone Incorporated	Nonmetallic Mineral Mining	VAG840106	25052 Tanner Ln	Chantilly

3.2. Pervious and Impervious Surface Delineation

A GIS approach was used to determine the County's regulated urban impervious and regulated urban pervious acres. Planimetric impervious cover is based on 2009 GIS data. Impervious cover surfaces include buildings, roads, parking lots, sidewalks, recreational surfaces, and other similar features.

To calculate the 2009 impervious regulated area, the 2009 planimetric impervious cover features were clipped using the MS4 boundary polygon layer and the resulting acres were totaled. Regulated pervious acres were calculated by subtracting the regulated impervious acres from the total MS4 acres.

Based on the above analysis, the County has determined that the 17,166.67 acres in the MS4 service area is divided into 5,654.88 impervious acres and 11,511.79 pervious acres.

3.3. Reduction Requirements

The County is located within the Potomac River Basin. Therefore, reduction requirements are calculated in accordance with Part II A 3, Table 3b of the 2018 MS4 permit.

Table 3.B presents the estimated existing source loads and the 40% reduction requirement in accordance with the MS4 permit and the Chesapeake Bay TMDL Special Conditions Guidance.

Table 3.B – Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Potomac River Basin

Pollutant	Subsource	A. Loading Rate (lbs/ac/yr)	B. Existing Developed Land 2009 (acres)	C. Loading (lbs/yr)	D. MS4 Required Bay Total L2 Loading Rate Reduction	E. Percentage of L2 Required Reduction by 2023	F. 40% Cumulative Reduction Required by 2023	G. Sum of 40% Cumulative Reduction (lbs/yr)
TN	Imp.	16.86	5,654.88	95,341.28	0.0900	0.40	3,432.29	6,214.46
TN	Perv.	10.07	11,511.79	115,923.73	0.0600	0.40	2,782.17	
TP	Imp.	1.62	5,654.88	9,160.91	0.1600	0.40	586.30	723.18
TP	Perv.	0.41	11,511.79	4,719.83	0.0725	0.40	136.88	
TSS	Imp.	1,171.32	5,654.88	6,623,674.04	0.2000	0.40	529,893.92	600,725.96
TSS	Perv.	175.80	11,511.79	2,023,772.68	0.0875	0.40	70,832.04	

3.4. New Source Offset

Part II A 4 of the 2018 MS4 permit requires the County to offset 40% of increases from new sources initiating construction between July 1, 2009 and June 30, 2014 that disturb one acre or greater as a result of the utilization of an average land cover condition greater than 16% impervious cover for the design of post-development stormwater management facilities. The County adopted Chapter 1096 "Stormwater Management Ordinance" of the Codified Ordinances of Loudoun County in 2003. The water quality design criteria of the ordinance required a phosphorus loading rate of 0.45 pounds/acre/year, which is equivalent to 16% impervious cover. Effective July 1, 2014, the County increased the standard to a phosphorus loading rate of 0.41 pounds/acre/year, which is equivalent to 60% forest, 30% pasture, and 10% impervious cover. Therefore, no new source offset is required.

3.5. Grandfathered Projects Offset

Part II A 5 of the 2018 MS4 permit requires the County to offset any grandfathered projects that disturb one acre or greater that begin construction after July1, 2014 and where the project utilizes an average land cover condition greater than 16%. As noted in Section 3.4, the County adopted post-construction stormwater management requirements in 2003 that define the average land cover condition as 16%. Therefore, no grandfathered source offset is required.

3.6. Total Reduction and Offset Requirements

Table 3.C presents the total reduction and offset requirements that the County must achieve during the second MS4 permit cycle.

Table 3.C – Total Reduction and Offset Requirements

Reductions and Offsets	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Existing Source Reductions to Meet 40% Target	6,214.46	723.18	600,725.96
+ New Source Offsets	-	-	-
+ Grandfathered Offsets	-	-	-
= Total Reductions and Offsets	**6,214.46**	**723.18**	**600,725.96**

4. Overall Pollutant Reduction Strategy

The County's overall strategy for achieving POC reductions includes a combination of BMPs as described below:

- Over-Treatment by Facilities Installed to Meet Development Requirements. This includes pollutant reductions achieved in excess of what is required for land disturbing activities under the County's Stormwater Management Ordinance. Over-treatment is tracked by the County and reported on an annual basis.[5] For each development plan, the County tracks the post-development TP load, the TP removal required, and the TP removal achieved. The County takes credit for the difference between TP removal required and TP removal achieved. The methodology described in Appendix V.E of the DEQ guidance is used by the County to determine the reduction credit for TN and TSS.
- County Stormwater Retrofits. This includes County-initiated stormwater quality retrofit projects as well as retrofits above regulatory minimums initiated as a result of proffers to the County by developers. Projects may include new structural facilities, design enhancements to existing facilities, or stream restoration projects. The methodology described in Appendices V.A, V.B, and V.C are used by the County to calculate pollutant reduction credit.
- Nutrient Management Plans (NMPs). This includes NMPs implemented where nutrients are applied to under an acre within the MS4 service area and anywhere (over or under an acre) in areas outside of the MS4 service area. Credit is only available for TP and TN and is calculated in accordance with Appendix V.K of the DEQ guidance.
- Street/Parking Lot Sweeping. This includes pollutant reductions associated with sweeping of County properties within the MS4 service area. Based on communications with DEQ, it is anticipated that the methodology described in Appendix V.G of the DEQ guidance will be replaced by the methodology described in Recommendations of the Expert Panel to Define Removal Rates for Street and Storm Drain Cleaning Practices (May 19, 2016). As a result, the County will utilize the Expert Panel recommendations to calculate pollution reduction credit.
- Septic System Disconnects. This includes homes or businesses that are disconnected from individual septic systems starting January 1, 2006 within the MS4 service area. Credit is available for TN only. To calculate credit, the 2010 U.S. Census is used to determine the County's average number of people per household of 2.7. The average is then multiplied by the TN edge of stream loading value of 3.6 lbs/TN/year/person. Credit for commercial or institutional disconnects is calculated on a case-by-case basis.
- Nutrient Purchases. This includes purchased credit in accordance with § 62.1-44.19:21 of the Code of Virginia.

[5] The County also tracks any under-treatment, which is subtracted from over-treatment credit.

- Land Use Changes: This includes land use changes that result in a pollutant load reduction. Eligible land use changes include: (1) impervious to forest, mixed open, and turf; (2) turf to forest and mixed open; and, (3) mixed open to forest. Based on communications with DEQ, the methodology described in Table V.H.1 of DEQ's Guidance Memo No 15-2005 will be replaced with a new table. As a result, the County will utilize the new table provided in draft form by DEQ to calculate pollution reduction credit from land use changes both inside and outside of the MS4. The County will make adjustments as necessary if the draft table changes.
- Other BMPs. The County reserves the right to implement other BMPs that are allowed in accordance with DEQ's Guidance Memo No 15-2005. The guidance document specifically references the work of the Chesapeake Bay Urban Stormwater Workgroup, which includes credits for urban nutrient management and homeowner best management practices such as rainwater harvesting, downspout disconnection, permeable hard-scapes, tree planting, and impervious cover removal. Any reductions will be described in the County's MS4 annual reports to DEQ.

5. BMPs Implemented During the First Permit Cycle

Progress made toward achieving pollutant reductions during the first permit cycle is documented in this section. A list of BMPs, including the date of implementation and the reductions achieved, is included in Appendix B as required in Part II A 4 of the 2018 MS4 permit.

5.1. Over-Treatment by Facilities Installed to Meet Development Requirements

The County achieved pollutant reductions during the first permit cycle as a result of over-treatment by stormwater management facilities installed to meet the requirements for new development under the County's Stormwater Management Ordinance. A list of plans used in the over-treatment analysis, including the date of implementation and the reductions achieved, is included in Appendix B.

5.2. County Stormwater Retrofits

The County implemented several stormwater retrofit projects during the first permit cycle. These are described in Figure 5.A. Detailed pollutant reduction spreadsheets for these projects, including all required information in the 2018 MS4 permit, is provided in Appendix B in a format consistent with the Chesapeake Bay TMDL Special Conditions Guidance.

Figure 5.A – Description of Completed County-Initiated Stormwater Retrofit

Gwen Thompson Briar Patch Park Retrofits	Description
	Gwen Thompson Briar Patch Park was retrofit in 2016 with a constructed wetland facility. The retrofit treats 27.11 acres of impervious cover.

Murray's Bridge Removal Project	Description
	The Murray's Bridge removal project occurred in 2014 on Goose Creek. The bridge was abandoned in place in 1970. The remainder of the bridge was impeding flow and causing bank erosion on both sides. A report by Wetland Studies and Solutions, Inc. estimated erosion reduction rates as a result of the removal of the bridge and the stabilization of stream banks. The picture on the left shows the abutment and resulting erosion prior to stabilization.

Riverside High School Retrofits	Description
	Two Level 1 bioretention facilities and six dry swales were installed at Riverside High School in 2015 per proffered conditions above regulatory requirements. Together, the retrofits treat 4.55 acres of impervious cover.

Sterling Business Park Pervious Pavement	Description
	Pervious pavement was installed at Sterling Business Park per proffered conditions above regulatory requirements. The pervious pavement treats 0.15 acre of impervious cover.

Sterling BMW Retrofit	Description
	A Downstream Defender hydrodynamic separator unit was installed at Sterling BMW per proffered conditions above regulatory requirements. The facility treats 1.82 acres of impervious cover.

Countryside/McPherson Circle Retrofit	Description
	A CDS hydrodynamic separator unit was installed at McPherson Circle near Brookmeade Court per proffered conditions above regulatory requirements. The facility treats 1.66 acres of impervious cover.

5.3. Nutrient Management Plans

The County did not achieve any credit through NMPs during the first permit cycle.

5.4. Street/Parking Lot Sweeping

The County achieved pollutant reductions during the first permit cycle as a result of its street/parking lot sweeping program. The average amount swept from 2015-2017 was 17,500 pounds per year. However, the County expects new guidelines from DEQ to require use of the methodology described in Recommendations of the Expert Panel to Define Removal Rates for Street and Storm Drain Cleaning Practices (May 19, 2016) to calculate credit. The minimum standard applicable to the County (practice SPC-6) requires a vacuum assisted sweeper at a frequency of four passes per year. The County does not currently meet this standard. Therefore, credit for street sweeping has been set to zero.

5.5. Septic System Disconnects

The County achieved pollutant reductions during the first permit cycle as a result of septic system disconnects. Septic disconnects from January 1, 2006 through the end of the first permit cycle along with the TN reduction calculations are shown in Appendix B.

5.6. Nutrient Purchases

The County did not purchase any credit during the first permit cycle.

5.7. Land Use Changes

The County achieved pollutant reductions during the first permit cycle as a result of land use changes. These included three tree planting projects to convert turf to forested land use. One project (Eagle Ridge Middle School) is located within the MS4 service area, while two projects (Belle Terra HOA and Loudoun County Landfill) are located outside of the MS4 service area. Calculations, including accounting for baseline conditions for changes outside of the MS4, are shown in Appendix B.

5.8. Other BMPs

The County did not implement other BMPs as provided for in the Chesapeake Bay TMDL Special Condition Guidance during the first permit cycle.

Table 5.A – Summary of Compliance with First Permit Cycle Requirements

BMPs	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Over-Treatment	2,611.42	516.19	361,670.86
County Stormwater Retrofits	369.44	69.19	39,862.74
Nutrient Management Plans	-	-	-
Street/Parking Lot Sweeping	-	-	-
Septic System Disconnects	58.32	-	-
Nutrient Purchases	-	-	-
Land Use Changes	35.45	10.80	4,072.74
Other BMPs	-	-	-
Total BMPs	3,074.64	596.18	405,606.33
First Permit Cycle (5%) Reductions and Offsets	776.81	90.40	75,090.75
Remainder/(Excess) Toward 5% Target	(2,297.83)	(505.78)	(330,515.58)

6. BMPs Planned for the Second Permit Cycle

This section describes the BMPs that will be implemented during the second permit cycle to achieve the cumulative 40% POC reduction target as required in Part II A 11 e of the 2018 MS4 permit.

6.1. Over-Treatment by Facilities Installed to Meet Development Requirements

The County will continue to document pollutant reductions as a result of over-treatment by stormwater management facilities installed to meet the requirements for new development under the County's Stormwater Management Ordinance. The average annual reduction achieved from FY2016-FY2018 was 440 lbs/year for TN, 43 lbs/year for TP, and 40,000 lbs/year for TSS. However, these figures are expected to decline over the next few years. In FY2019, the County experienced negative credit as a result of two previous over-treatment projects being used for new development. The County is conservatively assuming reductions for the remainder of the second permit cycle (FY20-FY23) in the amount of 50 lbs/year for TN, 10 lbs/year for TP, and 5,000 lbs/year for TSS. Actual reductions will be reported in annual reports to DEQ.

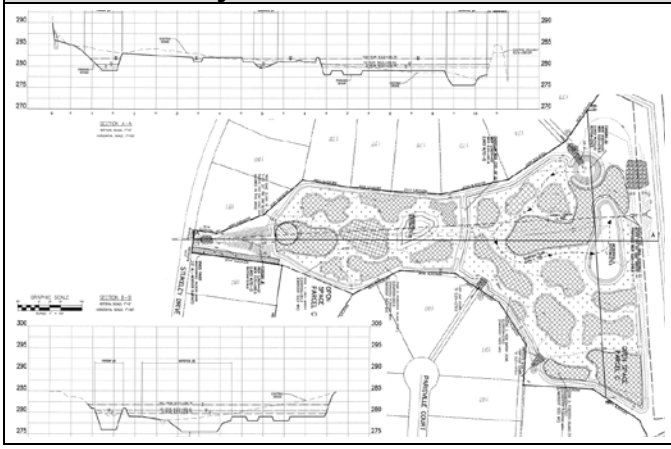
Table 6.A – Summary of Reductions from Over-Treatment

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	2,611.42	516.19	361,670.86
Planned for Second Permit Cycle	206.46	39.88	18,885.70
Total	2,817.88	556.07	380,556.56

6.2. County Stormwater Retrofits

The County plans to construct multiple projects that will be completed during the second permit cycle. Five of these projects are in the planning or design phase. Detailed pollutant reduction spreadsheets for these projects are provided in Appendix C in a format consistent with the Chesapeake Bay TMDL Special Conditions Guidance. An additional four projects are in the conceptual phase. Estimated pollutant reductions for each project are included in Appendix C. The County reserves the right to substitute conceptual projects with equivalent projects based on further analysis. Projects are summarized in Figure 6.A

Figure 6.A – Description of Planned County-Initiated Stormwater Retrofits

Loudoun Valley Estates Pond Retrofit	**Description**
	This pond was originally built as an extended detention dry pond. The retrofit involves converting the facility to a constructed wetland. The facility drains 72.85 acres, including 17 acres of impervious area. This project is being funded in part by a Virginia Stormwater Local Assistance Fund grant and has been reviewed by DEQ.

Phil Bolen Memorial Park Stream Restoration	**Description**
	This project involves the restoration of 1,350 linear feet of an un-named tributary of Sycolin Creek at the Phil Bolen Memorial Park. The current stream is in a highly degraded condition. The project will stabilize and restore the channel with a gravel/cobble riffle/pool morphology typical of Virginia Piedmont streams.

Countryside Stream Restoration	**Description**
	This project involves the restoration of ~1,700 linear feet of Horsepen Run near River Bend Middle School. Horsepen drains directly to the Potomac River. The current stream is in a highly degraded condition.

Trailside Park (Upper) Stream Restoration	Description
	This project involves the restoration of ~900 linear feet of a tributary of Beaverdam Run within Trailside Park. The current stream is in a highly degraded condition.

Sterling Commercial Pond Retrofit (MD1745)	Description
	This pond was originally built as an extended detention dry pond to serve a highly commercial/industrial area. The project involves converting the pond to a constructed wetland. The facility drains 116.64 acres, including 64.12 acres of impervious area.

Additional Proposed Projects	Description
Conklin Park Retrofit	Retrofit of existing stormwater pond to a constructed wetland.
Conklin Park Stream Restoration	Restoration of approximately 1,300 LF of highly degraded stream.
Bles Park Stream Restoration	Restoration of approximately 1,300 LF of highly degraded stream.
Dulles South Retrofit	Retrofit of existing stormwater pond to a constructed wetland.

Table 6.B – Summary of Reductions from County-Initiated Projects

	Project	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle		369.44	69.19	39,862.74
Planned for Second Permit Cycle	*Loudoun Valley Estates*	208.86	23.50	10,465.27
	Phil Bolen Stream Restoration	53.95	69.07	42,065.33
	Countryside Stream Restoration	366.98	184.73	58,266.49
	Trailside Park Stream Restoration	46.34	25.85	7,357.19
	Sterling Commercial (MD1745)	635.82	77.66	10,612.49
	Additional Proposed Projects	810.00	153.00	46,200.00
	Subtotal	2,121.96	533.82	174,966.77
Total		**2,491.40**	**603.01**	**214,829.51**

6.3. Nutrient Management Plans

The County plans to take credit for four nutrient management plans (NMPs) implemented outside of the MS4. A list of NMPs, including the date of expected implementation and the reductions achieved, is included in Appendix C.

Table 6.C – Summary of Reductions from Nutrient Management Plans

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	0.00	0.00	
Planned for Second Permit Cycle	6.13	0.12	
Total	6.13	0.12	

6.4. Street/Parking Lot Sweeping

As noted previously, DEQ is in the process of changing its guidelines regarding street sweeping. The County does not currently meet the standard in Recommendations of the Expert Panel to Define Removal Rates for Street and Storm Drain Cleaning Practices (May 19, 2016). The County will assess its practices and include any reductions in the County's MS4 annual reports.

Table 6.D – Summary of Reductions from Street Sweeping

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	0.00	0.00	0.00
Planned for Second Permit Cycle	To be determined.	To be determined.	To be determined.
Total	0.00	0.00	0.00

6.5. Septic System Disconnects

The County will continue to take credit for septic disconnects. In addition to those reported during the first permit cycle, the County reported three additional disconnects in FY2019. Due to the variability in annual septic disconnects, the County is not making assumptions about additional credits. Rather, credit will be reported to DEQ in the County's MS4 annual reports.

Table 6.E – Summary of Reductions from Septic System Disconnects

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	58.32		
Planned for Second Permit Cycle	29.16		
Total	87.48		

6.6. Nutrient Purchases

The County purchased 30 pounds of TP and associated TN and TSS in FY2019 and intends to purchase at least 30 pounds of TP each year through FY2023 in accordance with § 62.1-44.19:21 of the Code of Virginia. The County will report any associated amount of TN and TSS (which differs based on the specific provider) in MS4 annual reports to DEQ. For planning purposes, the County is using a conservative TP:TN ratio of 1:7 and TP:TSS ratio of 1:370 based on the purchase made in FY2019 and a survey of credits purchased for private development in the Northern Virginia region.

Table 6.F – Summary of Reductions from Nutrient Purchases

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	0.00	0.00	0.00
Planned for Second Permit Cycle	1,022.66	150.00	48,294.79
Total	1,022.66	150.00	48,294.79

6.7. Land Use Changes

The County will continue to take credit for land use changes. Conversion details and applicable credit will be reported to DEQ in the County's MS4 annual reports.

Table 6.G – Summary of Reductions from Land Use Changes

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	35.45	10.80	4,072.74
Planned for Second Permit Cycle	To be determined.	To be determined.	To be determined.
Total	35.45	10.80	4,072.74

6.8. Other BMPs

The County will report other BMPs as provided for in the Chesapeake Bay TMDL Special Condition Guidance in MS4 annual reports to DEQ.

Table 6.H – Summary of Reductions from Other BMPs

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Achieved During First Permit Cycle	0.00	0.00	0.00
Planned for Second Permit Cycle	To be determined.	To be determined.	To be determined.
Total	0.00	0.00	0.00

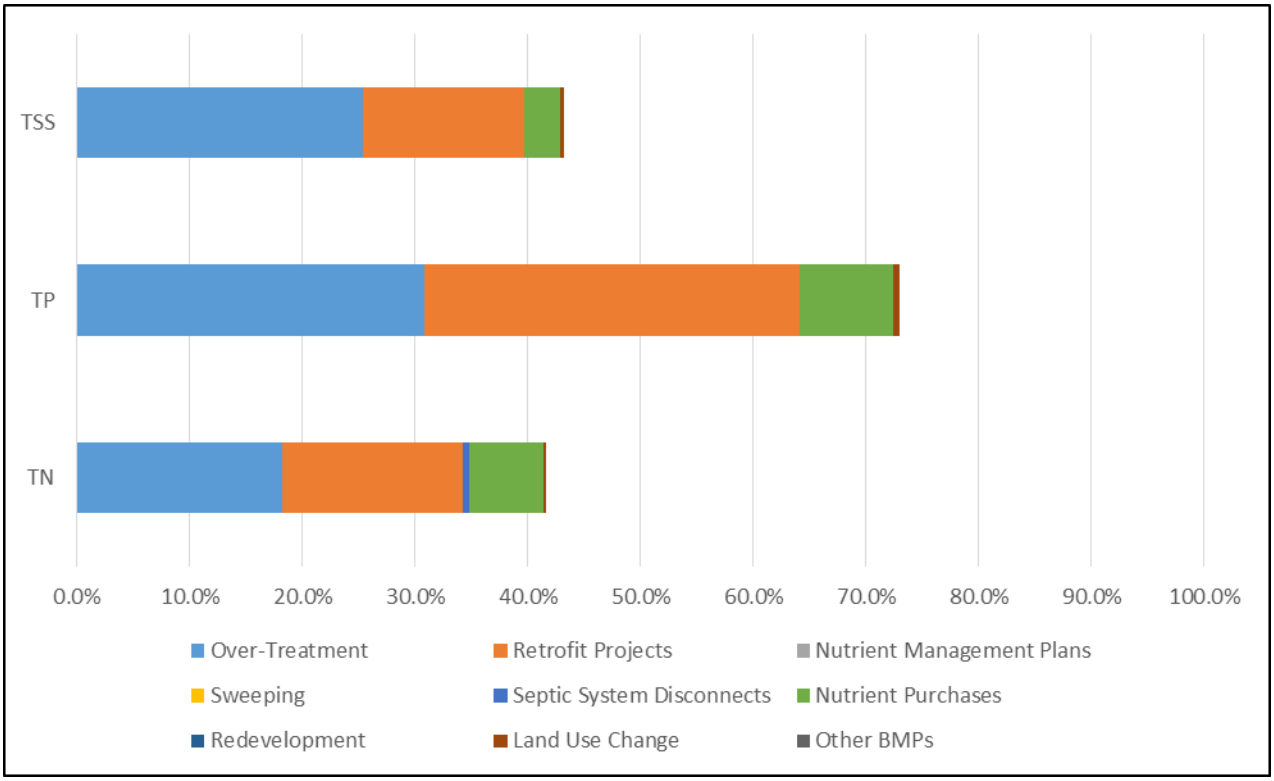
7. Compliance Summary

Tables 7.A and 7.B demonstrate how the County will meet the required reductions from Section 3 for each POC with the BMPs described in Sections 6.1 through 6.8.

Table 7.A – Compliance Summary – Table

	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Reductions from Existing Sources to Meet 40% Target	6,214.46	723.18	600,725.96
+ New Source Offsets	-	-	-
+ Grandfathered Offsets	-	-	-
= Total Reductions and Offsets	6,214.46	723.18	600,725.96
- Actual and Planned BMPs from Sections 5 and 6	6,461.00	1,320.01	647,753.60
Over-Treatment	2,817.88	556.07	380,556.56
County Stormwater Retrofits	2,491.40	603.01	214,829.51
Nutrient Management Plans	6.13	0.12	-
Street/Parking Lot Sweeping	-	-	-
Septic System Disconnects	87.48	-	-
Nutrient Purchases	1,022.66	150.00	48,294.79
Land Use Change	35.45	10.80	4,072.74
Other BMPs	-	-	-
= Remainder/(Excess)	(246.54)	(596.83)	(47,027.64)
Progress Toward 100% Target	41.6%	73.0%	43.1%

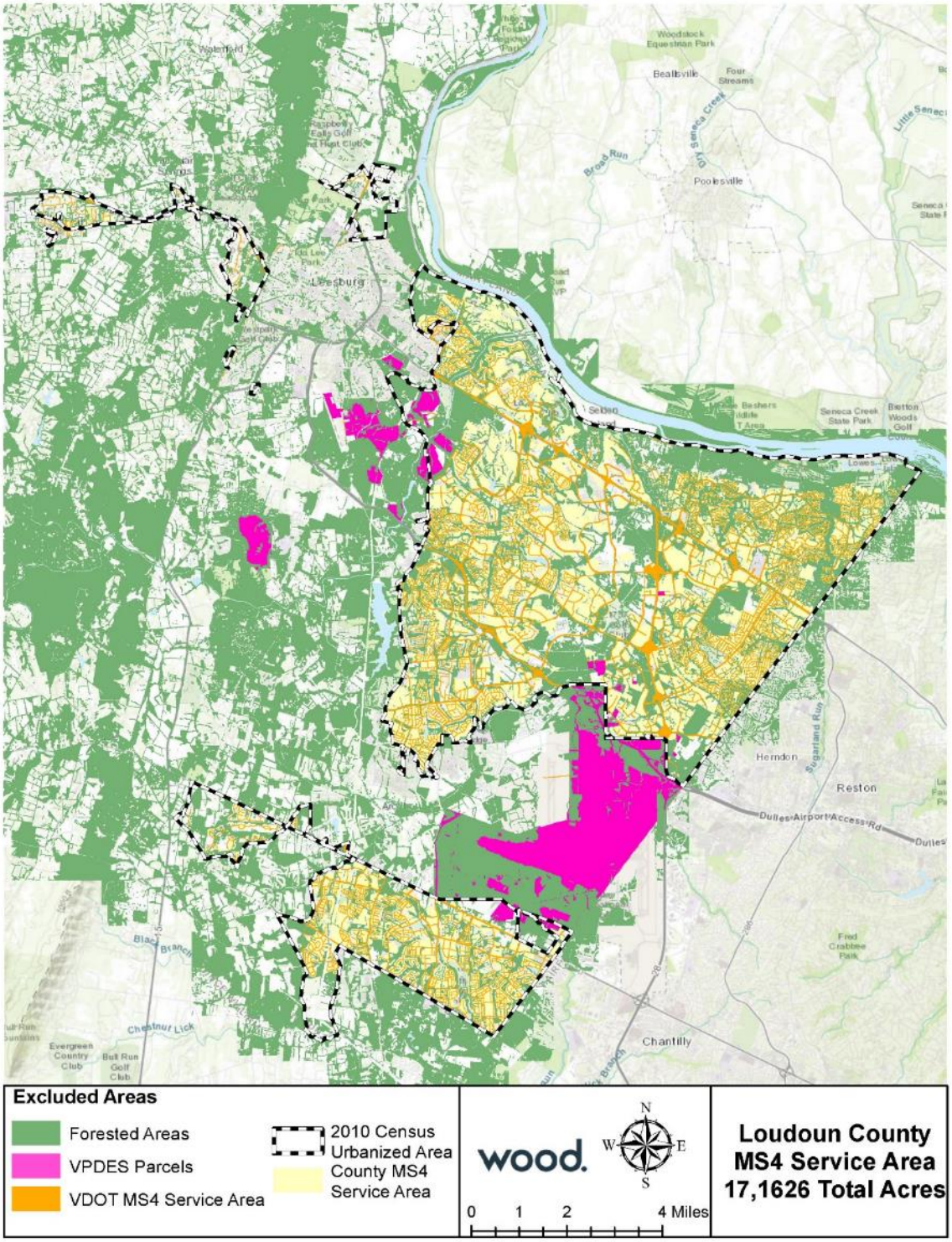
Figure 7.A – Compliance Summary – Chart



8. Public Comments

In accordance with Part II A 11 f of the 2018 MS4 permit, the County provided an opportunity for public comment on this plan. The plan was posted on the County's website and a public notice was distributed with instructions for how to provide comments. Three comments were received by the October 31, 2019 deadline. However, they did not necessitate changes to the plan. A snapshot of the public notice and the webpage are provide in Appendix D.

Appendix A – Loudoun County MS4 Service Area Delineation



Appendix B

List of BMPs Implemented During the First Permit Cycle

All calculations and supporting documentation were included in the initial Chesapeake Bay TMDL Action Plan and/or MS4 annual reports provided to DEQ.

BMP Under/Over Evaluation

FY2016

Plan Name	Number	BMP Type	Post Development TP Load	TP Reduction Required	TP Reduction Achieved	TP Credit	Proportion	TN Site Load	TN BMP Efficiency	TN Total Reduction	TN Credit	TSS Site Load	TSS BMP Efficiency	TSS Total Reduction	TSS Credit
Loudoun County ES28	STPL-2016-0033	Enhanced Extended Detention	73.94	30.69	30.85	0.16	1.0%	510.19	0.20	102.04	1.02	34692.65	0.60	20815.59	208.16
Beaumeade	CPAP-2013-0034	Retention	116.88	73.41	73.58	0.17	0.0%	806.47	0.30	241.94	0.00	54840.10	0.60	32904.06	0.00
Stone Ridge Association	CPAR-2015-0048	Retention	0.38	0	0.19	0.19	100.0%	2.62	0.30	0.79	0.79	178.30	0.60	106.98	106.98
Sugarland Day Care Center	STPL-2014-0027	Bioretention	2.78	1.0395	1.3448	0.3053	23.0%	19.18	0.64	12.28	2.82	1304.38	0.55	717.41	165.00
COPT	STMP-2015-0010	Retention	53.47	39.53	39.88	0.35	1.0%	368.94	0.30	110.68	1.11	25088.12	0.60	15052.87	150.53
Vine & Branches	STPL-2016-0018	Bioretention	8.46	4.65	5.07	0.42	8.0%	58.37	0.64	37.36	2.99	3969.43	0.55	2183.19	174.66
East Gate Self Storage	STPL-2016-0028	Wet Pond	70.17	41.02	41.65	0.63	2.0%	484.17	0.30	145.25	2.91	32923.76	0.60	19754.26	395.09
The Grange At Willowsford	CPAP-2013-0050	Extended Detention	46.4	3.47	4.15	0.68	16.0%	320.16	0.20	64.03	10.24	21770.88	0.60	13062.53	2090.00
Panda Stonewall	SPAM-2016-0033	Extended Detention	41.2	16.3	17.01	0.71	4.0%	284.28	0.20	56.86	2.27	19331.04	0.60	11598.62	463.94
Tanglewood North	CPAP-2014-0002	Extended Detention	8.16	1.52	2.33	0.81	35.0%	56.30	0.20	11.26	3.94	3828.67	0.60	2297.20	804.02
Loudoun Center	CPAP-2014-0026	Wet Pond	6.6	2	2.9	0.9	31.0%	45.54	0.30	13.66	4.23	3096.72	0.60	1858.03	575.99
Gateway Community Church	STPL-2014-0029	Extended Detention	10.1	2.55	4.03	1.48	37.0%	69.69	0.20	13.94	5.16	4738.92	0.60	2843.35	1052.04
Glascock Field	STPL-2015-0021	Wet Pond	6.56	2.33	3.85	1.52	39.0%	45.26	0.30	13.58	5.30	3077.95	0.60	1846.77	720.24
Centergate Self Storage	STPL-2015-0026	Wet Pond	20.9	8.48	10.46	1.98	19.0%	144.21	0.30	43.26	8.22	9806.28	0.60	5883.77	1117.92
Marbury Phase III	CPAR-2013-0052	Extended Detention	129.7	26.6	28.8	2.2	8.0%	894.93	0.20	178.99	14.32	60855.24	0.60	36513.14	2921.05
Willowsford	CPAP-2012-0082	Wet Pond	8.71	0	4.36	4.36	100.0%	60.10	0.30	18.03	18.03	4086.73	0.60	2452.04	2452.04
Longview Crest	CPAP-2015-0027	Conserved Open Space	15.54	0	5.18	5.18	100.0%	107.23	0.25	26.81	26.81	7291.37	0.70	5103.96	5103.96
Cryusone LLC	STMP-2016-0003	Wet Pond	31.31	13.5	18.69	5.19	28.0%	216.04	0.30	64.81	18.15	14690.65	0.60	8814.39	2468.03
Lenah Mill	CPAP-2014-0007	Wet Pond	74.14	11.16	29.84	18.68	63.0%	511.57	0.30	153.47	96.69	34786.49	0.60	20871.89	13149.29
Total						**45.9153**					**225**				**34118.94**

FY2017

Plan Name	Number	BMP Type	Post Development TP Load	TP Reduction Required	TP Reduction Achieved	TP Credit	Proportion	TN Site Load	TN BMP Efficiency	TN Total Reduction	TN Credit	TSS Site Load	TSS BMP Efficiency	TSS Total Reduction	TSS Credit
Remington Townhomes	STPL-2017-0004	Wet Pond	14.58	8.07	8.5	0.43	5.0%	100.60	0.30	30.18	1.51	6840.94	0.60	4104.56	205.23
Loudoun School for Gifted	STPL-2016-0014	Underground	2.62	1.24	1.38	0.14	10.0%	18.08	0.20	3.62	0.36	1229.30	0.60	737.58	73.76
Daycare Montessori	STPL-2017-0005	Wet Pond	2.69	1.49	1.57	0.08	5.0%	18.56	0.30	5.57	0.28	1262.15	0.60	757.29	37.86
Fairfax Christian School	STPL-2015-0031	Filterra	8.24	4.74	4.84	0.1	2.0%	56.86	0.40	22.74	0.45	3866.21	0.80	3092.97	61.86
Nicholson Farm	CPAP 2016-0018	Dry Swales	39.3	16.91	17.02	0.11	1.0%	271.17	0.45	122.03	1.22	18439.56	0.70	12907.69	129.08
Dulles South Middle School	STPL 2016-0024	Wet Pond	27.85	13.74	13.89	0.15	1.0%	192.17	0.30	57.65	0.58	13067.22	0.60	7840.33	78.40
Whitman Farm	CPAP-2016-0025	Wet Pond	46.71	23.98	24.32	0.34	1.0%	322.30	0.30	96.69	0.97	21916.33	0.60	13149.80	131.50
Whitman Braddock Road	CPAP-2016-0036	Dry Pond	11.54	2.56	3.04	0.48	16.0%	79.63	0.20	15.93	2.55	5414.57	0.60	3248.74	519.80
Aldie Estates	CPAP-2013-0020	Dry Pond	14.5	2.5	3.4	0.9	26.0%	100.05	0.20	20.01	5.20	6803.40	0.60	4082.04	1061.33
Willowsford	CPAP-2013-0046	Dry Pond	30.04	6.33	7.37	1.04	14.0%	207.28	0.20	41.46	5.80	14094.77	0.60	8456.86	1183.96
Goose Creek Club	CPAP-2016-0004	Bioretention	26.86	13.78	15.14	1.36	9.0%	185.33	0.25	46.33	4.17	12602.71	0.55	6931.49	623.83
Lenah Mill	CPAP-2014-0062	Dry Pond	64.177	13.02	19.04	6.02	32.0%	442.82	0.20	88.56	28.34	30111.85	0.60	18067.11	5781.48
Lenah Section 6	CPAP 2016-0034	Wet Pond	41.355	6.67	15.7	9.03	58.0%	285.35	0.30	85.61	49.65	19403.77	0.60	11642.26	6752.51
Brambleton HS	STPL-2016-0040	Wet Pond	75.75	37.96	50.58	12.62	25.0%	522.68	0.30	156.80	39.20	35541.90	0.60	21325.14	5331.29
Total						**32.8**					**140.28**				**21971.89**

FY2018

Number	BMP Type	Post Development TP Load	TP Reduction Required	TP Reduction Achieved	TP Credit	Proportion	TN Site Load	TN BMP Efficiency	TN Total Reduction	TN Credit	TSS Site Load	TSS BMP Efficiency	TSS Total Reduction	TSS Credit
STPL-2017-0030	Wet Pond	16.61	6.82	9.79	2.97	30.0%	114.61	0.30	34.38	10.31	7793.41	0.50	3896.71	1169.01
CPAP-2015-0009	Bioretention	5.4	2.46	3.24	0.78	24.0%	37.26	0.64	23.85	5.72	2533.68	0.55	1393.52	334.44
CPAP-2015-0013	Bioretention	55.49	-16.34	6.76	23.1	342.0%	382.88	0.64	245.04	838.04	26035.91	0.55	14319.75	48973.55
CPAP-2016-0013	Wet Pond	60.41	16.14	16.77	0.63	4.0%	416.83	0.30	125.05	5.00	28344.37	0.50	14172.19	566.89
CPAP-2017-0021	Manufactured	8.91	0.45	1.49	1.04	70.0%	61.48	0.30	18.44	12.91	4180.57	0.60	2508.34	1755.84
STMP-2017-0012	Wet Pond #2	53.96	36.1	36.73	0.63	2.0%	372.32	0.30	111.70	2.23	25318.03	0.60	15190.82	303.82
STMP-2018-0001	Wet Pond #2	106.5	73.64	80.42	6.78	8.0%	734.85	0.30	220.46	17.64	49969.80	0.60	29981.88	2398.55
STPL-2014-0017	Wet Pond	118.89	75.424	75.439	0.015	0.0%	820.34	0.30	246.10	0.00	55783.19	0.60	33469.91	0.00
STPL-2016-0007	Wet Pond	216.69	87.86	100.66	12.8	13.0%	1495.16	0.30	448.55	58.31	101670.95	0.60	61002.57	7930.33
STPL-2016-0021	Bioretention	2.16	0.56	0.56	0	0.0%	14.90	0.64	9.54	0.00	1013.47	0.55	557.41	0.00
STPL-2017-0029	Dry Swale	1.05	0.24	0.38	0.14	37.0%	7.25	0.55	3.99	1.48	492.66	0.60	295.60	109.37
					48.885					**951.64**				**63541.8**

County Retrofit Projects

Gwen Thompson Briar Patch Park Constructed Wetland

Gwen Thompson Briar Patch Park Constructed Wetland

Description:	New constructed wetland treating existing impervious area at Gwen Thompson Briar Patch Park, 21660 Sterling Boulevard, Sterling, Virginia. Part of a larger project with two bioretention facilities (A and B) and a constructed wetland.	
Completion Date:	Spring 2016	
Location:	Lat: 39.016420	Long: -77.388620
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	TN and TP = Appendix V.A - Virginia Stormwater Clearinghouse BMPs for Constructed Wetland #1	
	TSS = Appendix V.C - Chesapeake Bay Program Established Efficiencies	

Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
NA	NA	
	Total %	**0**

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	0	0	50	**50**
TN	0	0	25	**25**
TSS	0	0	60	**60**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	27.11	16.86	457.07	25.00	**114.27**
Regulated Urban Pervious		53.68	10.07	540.56	25.00	**135.14**
Regulated Urban Impervious	Total Phosphorus	27.11	1.62	43.92	50.00	**21.96**
Regulated Urban Pervious		53.68	0.41	22.01	50.00	**11.00**
Regulated Urban Impervious	Total Suspended Solids	27.11	1,171.32	31,754.49	60.00	**19,052.69**
Regulated Urban Pervious		53.68	175.80	9,436.94	60.00	**5,662.17**

TN Reduction (lbs/year)	**249.41**
TP Reduction (lbs/year)	**32.96**
TSS Reduction (lbs/year)	**24,714.86**

Riverside High School Bioretention

Riverside High School Bioretention						
Description:	Two Level 1 bioretention facilities installed per proffered conditions above regulatory requirements.					
Completion Date:	2015					
Location:	Lat: 39.092260	Long: -77.490029				
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)					
	TP and TN = Appendix V.A - Virginia Stormwater BMP Clearinghouse Level 1 Bioretention					
	TSS = Appendix V.C - Chesapeake Bay Program Established Efficiencies					
Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)						
BMP Type	**Modification Type**	**Downward Modification Applied (%)**				
NA	NA					
	Total %	**0**				
Efficiency for New Facility						
Pollutant	**Existing Facility Efficiency**	**Downward Modification * Existing Pond Efficiency**	**New Facility Efficiency**	**Total Efficiency**		
TP	0	0	55	**55**		
TN	0	0	64	**64**		
TSS	0	0	55	**55**		
Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin						
Subsource	**Pollutant**	**Total Existing Acres Served by MS4 (6/30/09)**	**2009 EOS Loading Rate (lbs/acre)**	**Estimated Total POC Load Based on 2009 Progress Run**	**New BMP Efficiency**	**Load Reduction**
Regulated Urban Impervious	Total Nitrogen	1.22	16.86	20.57	64.00	**13.16**
Regulated Urban Pervious		0.18	10.07	1.81	64.00	**1.16**
Regulated Urban Impervious	Total Phosphorus	1.22	1.62	1.98	55.00	**1.09**
Regulated Urban Pervious		0.18	0.41	0.07	55.00	**0.04**
Regulated Urban Impervious	Total Suspended Solids	1.22	1,171.32	1,429.01	55.00	**785.96**
Regulated Urban Pervious		0.18	175.80	31.64	55.00	**17.40**
		TN Reduction (lbs/year)	**14.32**			
		TP Reduction (lbs/year)	**1.13**			
		TSS Reduction (lbs/year)	**803.36**			

Riverside High School Dry Swales

Riverside High School Dry Swales

Description:	Six dry swales installed per proffered conditions above regulatory requirements.	
Completion Date:	2015	
Location:	Lat: 39.092260	Long: -77.490029
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	TP and TN = Appendix V.A - Virginia Stormwater BMP Clearinghouse Level 1 Dry Swale	
	TSS = Appendix V.C - Chesapeake Bay Program Established Efficiencies, Bioswale	

Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
NA	NA	
	Total %	0

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	0	0	52	**52**
TN	0	0	55	**55**
TSS	0	0	80	**80**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	3.33	16.86	56.14	55.00	**30.88**
Regulated Urban Pervious		0.36	10.07	3.63	55.00	**1.99**
Regulated Urban Impervious	Total Phosphorus	3.33	1.62	5.39	52.00	**2.81**
Regulated Urban Pervious		0.36	0.41	0.15	52.00	**0.08**
Regulated Urban Impervious	Total Suspended Solids	3.33	1,171.32	3,900.50	80.00	**3,120.40**
Regulated Urban Pervious		0.36	175.80	63.29	80.00	**50.63**

TN Reduction (lbs/year)	**32.87**
TP Reduction (lbs/year)	**2.88**
TSS Reduction (lbs/year)	**3,171.03**

Murray's Ford Bridge Removal and Bank Stabilization

Murray's Ford Bridge Removal and Bank Stabilization					
2014					
Latitude: 39.0387192		HUC: PL15			
Longitude: -775360684		Calculation Method: Expert Panel Protocol 1 based on Bank Erosion Hazard Index and Near-Bank Stress tools (WSSI, 2011).			
Assessment Length (ft)	**450.00**				
STEP 1	**TN**	**TP**	**TSS**		
Impervious 5% Rate Reduction (lbs/ac/yr) from Table 3b of 2013 Permit	0.07587000	0.01296000	11.71320000		
Pervious 5% Rate Reduction (lbs/ac/yr) from Table 3b of 2013 Permit	0.03021000	0.00148625	0.76912500		
Initial Sediment Reduction (tons/yr)			133.25		
Conversion to Pounds (2.28*TSS Tons for TN; 1.05*TSS Tons for TP; TSS*2,000)	303.81	139.91	266,500.00		
Apply Effectiveness of 50%	151.91	69.96	133,250.00		
Apply Delivery Factor of 0.181 for TSS in Piedmont			24,118.25		
Total Reduction Based on Protocol 1 (lbs)	151.91	69.96	24,118.25		
STEP 2	**Total**	**Impervious**	**Forested**	**Pervious**	**Total Urban**
Regulated Acres	390.44	104.41	-	286.03	390.44
Unregulated Acres	220,767.18	3,392.55	96,695.66	120,678.97	124,071.52
	221,157.62	3,496.96	96,695.66	120,965.00	124,461.96
STEP 3		**Portion of Reductions (lbs/yr)**			
	Land Ratio	**TN**	**TP**	**TSS**	
Regulated Urban	0.00	0.27	0.12	42.58	
Unregulated Urban	0.56	85.22	39.25	13,530.57	
Unregulated Forested	0.44	66.42	30.59	10,545.10	
STEP 4	**TN**	**TP**	**TSS**		
Required Baseline Reduction on Unregulated Impervious (lbs/yr)	5,147.86	879.35	794,752.33		
Required Baseline Reduction on Unregulated Pervious (lbs/yr)	72,914.23	3,587.18	1,856,344.26		
Total Required Baseline Reduction on Unregulated (lbs/yr)	78,062.09	4,466.53	2,651,096.59		
MS4 Credits	0.27	0.12	42.58		
Unregulated Urban Credits	-	-	-		
Unregulated Forested Credits	66.42	30.59	10,545.10		
Total Credits	**66.68**	**30.71**	**10,587.68**		

Sterling Business Park (Glenn Drive) Pervious Pavement Retrofit

Sterling Business Park (Glenn Drive) Pervious Pavement

Description:	New pervious pavement as proffer.	
Completion Date:	2017	
Location:	Lat: 38.998768	Long: -77.428720
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	TP and TN = Appendix V.A - Virginia Stormwater BMP Clearinghouse Permeable Pavement 1	
	TSS = Appendix V.C - Chesapeake Bay Program Established Efficiencies, Permeable Pavement w/o Sand, Veg; A/B Soils and Underdrain	

Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
NA	NA	
	Total %	0

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	0	0	59	**59**
TN	0	0	59	**59**
TSS	0	0	70	**70**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	0.15	16.86	2.53	59.00	**1.49**
Regulated Urban Pervious		0.06	10.07	0.60	59.00	**0.36**
Regulated Urban Impervious	Total Phosphorus	0.15	1.62	0.24	59.00	**0.14**
Regulated Urban Pervious		0.06	0.41	0.02	59.00	**0.01**
Regulated Urban Impervious	Total Suspended Solids	0.15	1,171.32	175.70	70.00	**122.99**
Regulated Urban Pervious		0.06	175.80	10.55	70.00	**7.38**

TN Reduction (lbs/year)	**1.85**
TP Reduction (lbs/year)	**0.16**
TSS Reduction (lbs/year)	**130.37**

Sterling BMW Downstream Defender Retrofit

Sterling BMW Downstream Defender

Description:	New Downstream Defender hydrodymanic separator unit.	
Completion Date:	2017	
Location:	Lat: 39.012322	Long: -77.440083
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	TP = Appendix V.A - Virginia Stormwater BMP Clearinghouse Webpage Practice 16, Hydrodynamic Devices	
	TN and TSS = Appendix V.C - Chesapeake Bay Program Established Efficiencies	

Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
NA	NA	
	Total %	0

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	0	0	20	**20**
TN	0	0	5	**5**
TSS	0	0	10	**10**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	1.82	16.86	30.69	5.00	**1.53**
Regulated Urban Pervious		0.12	10.07	1.21	5.00	**0.06**
Regulated Urban Impervious	Total Phosphorus	1.82	1.62	2.95	20.00	**0.59**
Regulated Urban Pervious		0.12	0.41	0.05	20.00	**0.01**
Regulated Urban Impervious	Total Suspended Solids	1.82	1,171.32	2,131.80	10.00	**213.18**
Regulated Urban Pervious		0.12	175.80	21.10	10.00	**2.11**

TN Reduction (lbs/year)	**1.59**
TP Reduction (lbs/year)	**0.60**
TSS Reduction (lbs/year)	**215.29**

Countryside/McPherson Circle CDS Retrofit

Countryside/McPherson Circle CDS

Description:	New CDS hydrodymanic separator unit.	
Completion Date:	2018	
Location:	Lat: 39.055485	Long: -77.417850
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	TP = Appendix V.A - Virginia Stormwater BMP Clearinghouse Webpage Practice 16, Hydrodynamic Devices	
	TN and TSS = Appendix V.C - Chesapeake Bay Program Established Efficiencies	

Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
NA	NA	
	Total %	0

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	0	0	20	**20**
TN	0	0	5	**5**
TSS	0	0	10	**10**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	1.66	16.86	27.99	5.00	**1.40**
Regulated Urban Pervious		2.6	10.07	26.18	5.00	**1.31**
Regulated Urban Impervious	Total Phosphorus	1.66	1.62	2.69	20.00	**0.54**
Regulated Urban Pervious		2.6	0.41	1.07	20.00	**0.21**
Regulated Urban Impervious	Total Suspended Solids	1.66	1,171.32	1,944.39	10.00	**194.44**
Regulated Urban Pervious		2.6	175.80	457.08	10.00	**45.71**

TN Reduction (lbs/year)	**2.71**
TP Reduction (lbs/year)	**0.75**
TSS Reduction (lbs/year)	**240.15**

Septic Disconnects

There were six residential septic disconnects within the County MS4 through FY18.

Septic Conversions Through June 30, 2018		
Reduction from Residential Septic Conversions		
TN Edge of Stream Loading	3.6	From DEQ.
Average number of people per	2.7	From Loudoun County.
Number of residential conversions:	6	Ensure that all records are captured in the list of conversions.
Residential TN Reduction (lbs/year) =	**58.32**	

Parcel Address	Parcel City/State	Lat	Long	Status Change Date	Type (R or C)
24914 Gum Spring	Chantilly, VA 20152	38.930068	-77.541122	5/19/2015	R
24914 Gum Spring	Chantilly, VA 20152	38.930068	-77.541122	5/24/2016	R
39255 Karlino Ct	Hamilton, VA 20158	39.13744	-77.644715	5/22014	R
43750 Partlow Rd	Ashburn, VA 20147	39.04049	-77.487066	6/26/2017	R
45580 Terminal D	Sterling, VA 20166	38.98667	-77.424497	8/27/2008	R
46531 Harry Byrd	Sterling, VA 20164	39.023284	-77.389948	4/5/2013	R

Land Use Changes

There were three land use changes within the County through FY18.

Site	Acres	Inside MS4? (Y or N)	Date Effective	TN Credit	TP Credit	TSS Credit	TN Baseline in Lbs/Ac/Yr	TP Baseline in Lbs/Ac/Yr	TSS Baseline in Lbs/Ac/Yr	Reduction Factor	Final TN Credit	Final TP Credit	Final TSS Credit	Description
Belle Terra HOA	2.88	N	2017	16.07	4.20	1,604.16	0.6042000	0.0297250	15.3825000	0.5	6.30	2.02	757.78	~984 trees; HOA paid for and maintains
Eagle Ridge Middle School	1.70	Y	2017	9.49	2.48	946.90	0.6042000	0.0297250	15.3825000	0.5	9.49	2.48	946.90	~700 hardwood seedlings
Loudoun Landfill	9.00	N	2015	50.22	13.14	5,013.00	0.6042000	0.0297250	15.3825000	0.5	19.67	6.30	2368.06	~680 trees per acre (mix of conifer and hardwood)

Appendix C

Calculations and Supporting Documents for BMPs Implemented and Planned During the Second Permit Cycle

Summary of BMPs Planned During the Second Permit Cycle

	Cumulative Reductions from Worksheets						
	Through FY18	FY19	FY20	FY21	FY22	FY23	Cycle Difference
Over-Treatment							
TN	2,611.42	2,617.88	2,667.88	2,717.88	2,767.88	2,817.88	206.46
TP	516.19	516.07	526.07	536.07	546.07	556.07	39.88
TSS	361,670.86	360,556.56	365,556.56	370,556.56	375,556.56	380,556.56	18,885.70
Retrofit Projects							
TN	369.44	578.30	632.26	999.24	1,951.40	2,491.40	2,121.96
TP	69.19	92.70	161.77	346.49	500.01	603.01	533.82
TSS	39,862.74	50,328.00	92,393.33	150,659.82	196,929.51	214,829.51	174,966.77
Nutrient Management Plans							
TN	-	6.13	6.13	6.13	6.13	6.13	6.13
TP	-	0.12	0.12	0.12	0.12	0.12	0.12
TSS	-	-	-	-	-	-	-
Sweeping							
TN	-	-	-	-	-	-	-
TP	-	-	-	-	-	-	-
TSS	-	-	-	-	-	-	-
Septic System Disconnects							
TN	58.32	87.48	87.48	87.48	87.48	87.48	29.16
TP	-	-	-	-	-	-	-
TSS	-	-	-	-	-	-	-
Nutrient Purchases							
TN	-	182.66	392.66	602.66	812.66	1,022.66	1,022.66
TP	-	30.00	60.00	90.00	120.00	150.00	150.00
TSS	-	3,894.79	14,994.79	26,094.79	37,194.79	48,294.79	48,294.79
Redevelopment							
TN	-	-	-	-	-	-	-
TP	-	-	-	-	-	-	-
TSS	-	-	-	-	-	-	-
Landuse Conversion							
TN	35.45	35.45	35.45	35.45	35.45	35.45	-
TP	10.80	10.80	10.80	10.80	10.80	10.80	-
TSS	4,072.74	4,072.74	4,072.74	4,072.74	4,072.74	4,072.74	-
Total Reductions							
TN	3,074.64	3,507.91	3,821.86	4,448.84	5,661.00	6,461.00	3,386.37
TP	596.18	649.69	758.76	983.49	1,177.01	1,320.01	723.83
TSS	405,606.33	418,852.09	477,017.42	551,383.91	613,753.60	647,753.60	242,147.26

BMP Under/Over Evaluation

FY2019

Over-Treatment

BMP Type	Date	Post Development TP Load	TP Reduction Required	TP BMP Efficiency	TP Reduction Achieved	TP Credit	Proportion	TN Site Load	TN BMP Efficiency	TN Total Reduction	TN Credit	TSS Site Load	TSS BMP Efficiency	TSS Total Reduction	TSS Credit
Bioretention 1	7/31/2018	5.86	1.52	55%	3.48	*1.96*	*56.0%*	*40.43*	0%	0.00	0.00	2749.51	0.00	0.00	0.00
Manufactured Treatment Device - Filtering		13.5	3.51	50%	7.42	*3.91*	*53.0%*	*93.15*	0%	0.00	0.00	6334.20	0.00	0.00	0.00
Wet Pond 1		30.29	7.87	50%	3.03	*-4.84*	*-160.0%*	*209.00*	0%	0.00	0.00	14212.07	0.00	0.00	0.00
Wet Pond 1	10/16/2018	6.42	2.76	50%	3.21	*0.45*	*14.0%*	*44.30*	30%	13.29	1.86	3012.26	0.50	1506.13	210.86
Wet Pond 1		14.26	6.12	50%	7.12	*1.00*	*14.0%*	*98.39*	30%	29.52	4.13	6690.79	0.50	3345.40	468.36
Grass Channel		3.25	1.40	23%	1.04	*-0.36*	*-34.0%*	*22.43*	28%	6.28	-2.14	1524.90	0.60	914.94	-311.08
Grass Channel		3.08	1.32	23%	0.99	*-0.33*	*-34.0%*	*21.25*	28%	5.95	-2.02	1445.14	0.60	867.08	-294.81
Wet Pond 2	8/26/2016	24.6	15.86	75%	18.42	*2.56*	*14.0%*	*169.74*	40%	67.90	9.51	11542.32	0.60	6925.39	969.55
Bioretention 2		32.38	18.45	90%	16.92	*-1.53*	*-9.0%*	*223.42*	90%	201.08	-18.10	15192.70	0.55	8355.99	-752.04
Bioretention 1	*5/10/2019*	*1.04*	*0*	*55%*	*0.57*	*0.57*	*100.0%*	*7.18*	*64%*	*4.60*	4.60	*487.97*	*0.55*	268.38	268.38
Bioretention 1		*2.56*	*0*	*55%*	*1.41*	*1.41*	*100.0%*	*17.66*	*64%*	*11.30*	11.30	*1201.15*	*0.55*	660.63	660.63
Grass Channel		*0.9*	*0*	*23%*	*0.21*	*0.21*	*100.0%*	*6.21*	*28%*	*1.74*	1.74	*422.28*	*0.60*	253.37	253.37
Extended Detention Pond 2	*8/2/2018*	*8.7*	*4.14*	*31%*	*3.05*	*-1.09*	*-36.0%*	*60.03*	*24%*	*14.41*	-5.19	*4082.04*	*0.60*	2449.22	-881.72
Filtering Practice 2	*8/2/2018*	*24.61*	*11.73*	*65%*	*15.99*	*4.26*	*27.0%*	*169.81*	*45%*	*76.41*	20.63	*11547.01*	*0.50*	5773.51	1558.85
Extended Detention Pond 2	11/20/2018	27.68	4.37	31%	6.2	1.83	30.0%	190.99	24%	45.84	13.75	12987.46	0.60	7792.48	2337.74
Bioretention 1	2/22/2019	5.12	1.63	55%	2.81	1.18	42.0%	35.33	64%	22.61	9.50	2402.30	0.55	1321.27	554.93
Wet Pond 1		11.23	3.58	50%	5.61	2.03	36.0%	77.49	30%	23.25	8.37	5269.12	0.50	2634.56	948.44
Wet Pond 1	6/14/2018	22.2	12.99	50%	14.43	1.44	10.0%	153.18	30%	45.95	4.60	10416.24	0.50	5208.12	520.81
						14.66					**62.54**				**6512.27**

Removals

Plan Name	Number	BMP Type	Date	Post Development TP Load	TP Reduction Required	TP BMP Efficiency	TP Reduction Achieved	TP Credit	Proportion	TN Site Load	TN BMP Efficiency	TN Total Reduction	TN Credit	TSS Site Load	TSS BMP Efficiency	TSS Total Reduction	TSS Credit
True North Data Center	CPAP-2017-0021	Manufactured			8.91	0.45	1.49	1.04	70.0%	61.48	0.30	18.44	12.91	4180.57	0.60	2508.34	1755.84
Lansdowne Town Center	CPAP-2005-0077 Related to CPAP-2005-0053 & CPAP-2001-0023	Ex. SWM/BMP pond A & B			29.98		43.73	13.74					43.17			5870.73	5870.73
Total								**14.78**					**56.08**				**7626.57**

Cumulative Over/Under

Excess Phosphorus Removal	-0.12	lb/year
Excess Nitrogen Removal	6.46	lb/year
Excess Total Suspended Solids Removal	-1114.3	lb/year

County Retrofit Projects

New County Project	TN Credit	TP Credit	TSS Credit	FY
Loudoun Valley Estates ED Pond Conversion to Construct	208.86	23.50	10,465.27	2019
Phil Bolen Park Stream Restoration	53.95	69.07	42,065.33	2020
Countryside Stream Restoration	366.98	184.73	58,266.49	2021
Trail Side Park Stream Restoration - Upper	46.34	25.85	7,357.19	2022
Sterling Commercial Retrofit - MD1745	635.82	77.66	10,612.49	2022
Proposed - SW Pond to Constructed Wetland Retrofit	74.00	14.00	7,100.00	2023
Proposed - Stream Restoration	236.00	44.00	5,300.00	2023
Proposed - Stream Restoration	230.00	45.00	5,500.00	2023
Proposed - SW Pond to Constructed Wetland Retrofit	270.00	50.00	28,300.00	2022

Loudoun Valley Estates

Loudoun Valley Estates ED Pond Conversion to Constructed Wetland

Description:	Existing extended detention pond converted to a constructed wetland.	
Completion Date:	Planned for Fall 2019	
Location:	Lat: 38.975131	Long: -77.494509
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	TN, TP, and TSS = Appendix V.B - Bay Program Retrofit Curves, Runoff Depth of 1.69 Inches	

Downward Modification Table Based on Defficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
Extended Detention Pond	Lack of Forebay	10
	Insufficient WQ Volume	10
	Length of Longest Flow Path	10
	Total %	**30**

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	20	14	60.6	**46.6**
TN	20	14	38.6	**24.6**
TSS	60	42	77.2	**35.2**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	17	16.86	286.62	24.60	**70.51**
Regulated Urban Pervious		55.85	10.07	562.41	24.60	**138.35**
Regulated Urban Impervious	Total Phosphorus	17	1.62	27.54	46.60	**12.83**
Regulated Urban Pervious		55.85	0.41	22.90	46.60	**10.67**
Regulated Urban Impervious	Total Suspended Solids	17	1,171.32	19,912.44	35.20	**7,009.18**
Regulated Urban Pervious		55.85	175.80	9,818.43	35.20	**3,456.09**

TN Reduction (lbs/year)	**208.86**
TP Reduction (lbs/year)	**23.50**
TSS Reduction (lbs/year)	**10,465.27**

Phil Bolen Stream Restoration

Phil Bolen Park Stream Restoration					
Anticipated Installation Date: 2020					
Latitude: 39.072495		HUC: PL15			
Longitude: -77.530271		Calculation Method: Interim/Default Rate			
Restoration Length (ft)	**1,350.00**				
STEP 1	**TN**	**TP**	**TSS**		
Impervious 5% Rate Reduction (lbs/ac/yr)	0.07587	0.01296	11.7132		
Pervious 5% Rate Reduction (lbs/ac/yr)	0.03021	0.00148625	0.769125		
Stream Restoration Interim Rates (lbs/ft)	0.075	0.068	44.88		
Total Reduction Based on Interim Rates (lbs)	101.25	91.80	60,588.00		
STEP 2	**Total**	**Impervious**	**Forested**	**Pervious**	**Total Urban**
Regulated Acres	173.42	88.22	15.59	69.61	157.83
Unregulated Acres	347.60	67.52	104.22	175.86	243.38
	521.02	155.74	119.81	245.47	401.21
STEP 3		**Portion of Reductions (lbs/yr)**			
	Land Ratio	**TN**	**TP**	**TSS**	
Regulated Urban	0.30	30.67	27.81	18,353.62	
Unregulated Urban	0.47	47.30	42.88	28,302.00	
Unregulated Forested	0.23	23.28	21.11	13,932.38	
STEP 4	**TN**	**TP**	**TSS**		
Required Baseline Reduction on Unregulated Impervious (lbs/yr)	102.45	17.50	15,817.51		
Required Baseline Reduction on Unregulated Pervious (lbs/yr)	106.25	5.23	2,705.17		
Total Required Baseline Reduction on Unregulated (lbs/yr)	208.71	22.73	18,522.67		
MS4 Credits	30.67	27.81	18,353.62		
Unregulated Urban Credits	-	20.15	9,779.33		
Unregulated Forested Credits	23.28	21.11	13,932.38		
Total Credits	**53.95**	**69.07**	**42,065.33**		

Note: Per 3/11/2019 phone conversation with Jeff Selengut, DEQ, the "industrial area" of VPDES industrial permitted land receives credit as if it is an MS4 regulated area. Further, the MS4 area in this case is the Town of Leesburg. DEQ confirmed that credit is received for the MS4 area regardless of the owner.

Countryside Stream Restoration

Countryside Stream Restoration					
Anticipated Installation Date: December 2020					
Latitude: 39.056191		HUC:			
Longitude: -77.396533		Calculation Method: BANCS Method, Protocol 1			
Restoration Length (ft)	**1,700.00**				
	TN	**TP**	**TSS**		
Impervious 5% Rate Reduction (lbs/ac/yr)	0.08	0.01	11.71		
Pervious 5% Rate Reduction (lbs/ac/yr)	0.03	0.00	0.77		
BANCS Initial Sediment (tons/yr)			396.34		
Conversion to Pounds (2.28*TSS Tons for TN; 1.05*TSS Tons for TP; TSS*2,000)	903.66	416.16	792,680.00		
Apply Effectiveness of 50%	451.83	208.08	396,340.00		
Apply Delivery Factor of 0.181 for TSS in Piedmont			71,737.54		
Total Reduction Based on Protocol 1 (lbs)	451.83	208.08	71,737.54		
	Total	**Impervious**	**Forested**	**Pervious**	**Total Urban**
Regulated Acres	1,121.50	567.52	7.76	546.22	1,113.74
Unregulated Acres	615.83	59.50	289.59	266.74	326.24
	1,737.33	627.02	297.35	812.96	1,439.98
		Portion of Reductions (lbs/yr)			
	Land Ratio	**TN**	**TP**	**TSS**	
Regulated Urban	0.64	289.65	133.39	45,988.37	
Unregulated Urban	0.19	84.85	39.07	13,471.05	
Unregulated Forested	0.17	77.33	35.61	12,278.13	
	TN	**TP**	**TSS**		
Required Baseline Reduction on Unregulated Impervious (lbs/yr)	90.29	15.42	13,938.71		
Required Baseline Reduction on Unregulated Pervious (lbs/yr)	161.16	7.93	4,103.13		
Total Required Baseline Reduction on Unregulated (lbs/yr)	251.45	23.35	18,041.84		
MS4 Credits	289.65	133.39	45,988.37		
Unregulated Urban Credits	-	15.72	-		
Unregulated Forested Credits	77.33	35.61	12,278.13		
Total Credits	**366.98**	**184.73**	**58,266.49**		

Trail Side Park (Upper) Stream Restoration

Trail Side Park Stream Restoration - Upper					
Anticipated Installation Date: 2021					
Latitude: 39.052951		HUC:			
Longitude: -77.504168		Calculation Method: BANCS Method, Protocol 1			
Restoration Length (ft)	**900.00**				
	TN	**TP**	**TSS**		
Impervious 5% Rate Reduction (lbs/ac/yr)	0.08	0.01	11.71		
Pervious 5% Rate Reduction (lbs/ac/yr)	0.03	0.00	0.77		
BANCS Initial Sediment (tons/yr)			57.15		
Conversion to Pounds (2.28*TSS Tons for TN; 1.05*TSS Tons for TP; TSS*2,000)	130.30	60.01	114,296.50		
Apply Effectiveness of 50%	65.15	30.00	57,148.25		
Apply Delivery Factor of 0.181 for TSS in Piedmont			10,343.83		
Total Reduction Based on Protocol 1 (lbs)	65.15	30.00	10,343.83		
	Total	**Impervious**	**Forested**	**Pervious**	**Total Urban**
Regulated Acres	123.66	45.53	-	78.13	123.66
Unregulated Acres	99.00	9.75	34.71	54.54	64.29
	222.66	55.28	34.71	132.67	187.95
		Portion of Reductions (lbs/yr)			
	Land Ratio	**TN**	**TP**	**TSS**	
Regulated Urban	0.56	36.18	16.66	5,744.72	
Unregulated Urban	0.29	18.81	8.66	2,986.64	
Unregulated Forested	0.16	10.16	4.68	1,612.48	
	TN	**TP**	**TSS**		
Required Baseline Reduction on Unregulated Impervious (lbs/yr)	14.79	2.53	2,284.07		
Required Baseline Reduction on Unregulated Pervious (lbs/yr)	32.95	1.62	838.96		
Total Required Baseline Reduction on Unregulated (lbs/yr)	47.75	4.15	3,123.04		
MS4 Credits	36.18	16.66	5,744.72		
Unregulated Urban Credits	-	4.51	-		
Unregulated Forested Credits	10.16	4.68	1,612.48		
Total Credits	**46.34**	**25.85**	**7,357.19**		

Sterling Commercial Retrofit (MD1745)

Sterling Commercial Retrofit - MD1745

Description:	Existing dry pond converted to a constructed wetland (Constructed Wetland 2).	
Completion Date:	2022	
Location:	Lat: 38.987438	Long: -77.443428
Methodology:	Chesapeake Bay TMDL Special Condition Requirements Memorandum (5/18/2015)	
	Existing Pond Efficiences = Appendix V.C - Chesapeake Bay Program, Established Efficiencies	
	Retrofit Efficiencies for TN and TP = Appendix V.A - Virginia BMP Clearninghouse; TSS = Appendix V.C - Chesapeake Bay Program, Established Efficiencies	

Downward Modification Table Based on Deficiencies (Applies to Retrofit of Existing Facilities Only)

BMP Type	Modification Type	Downward Modification Applied (%)
Extended Detention Dry Pond	Lack of Forebay	10
	Insufficient WQ Volume	10
	Total %	**20**

Efficiency for New Facility

Pollutant	Existing Facility Efficiency	Downward Modification * Existing Pond Efficiency	New Facility Efficiency	Total Efficiency
TP	20	16	75	**59**
TN	20	16	55	**39**
TSS	60	48	60	**12**

Table 2b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs/acre)	Estimated Total POC Load Based on 2009 Progress Run	New BMP Efficiency	Load Reduction
Regulated Urban Impervious	Total Nitrogen	67.12	16.86	1,131.64	39.00	**441.34**
Regulated Urban Pervious		49.52	10.07	498.67	39.00	**194.48**
Regulated Urban Impervious	Total Phosphorus	67.12	1.62	108.73	59.00	**64.15**
Regulated Urban Pervious		55.85	0.41	22.90	59.00	**13.51**
Regulated Urban Impervious	Total Suspended Solids	67.12	1,171.32	78,619.00	12.00	**9,434.28**
Regulated Urban Pervious		55.85	175.80	9,818.43	12.00	**1,178.21**

TN Reduction (lbs/year)	**635.82**
TP Reduction (lbs/year)	**77.66**
TSS Reduction (lbs/year)	**10,612.49**

Nutrient Management Plans

The following shows all NMPs that will be developed in the County. Only NMPs outside of the MS4 or under an acre within the MS4 receive credit.

Site	Acres	Inside MS4? (Y or N)	Date Effective	Date Expires	TN Load	TP Load	TN Credit in MS4	TP Credit in MS4	TN Credit Out MS4	TP Credit Out MS4	Total TN Credit	Total TP Credit
Dulles South	1.55	Y	2019		15.61	0.64	0.00	0.00	0.00	0.00	0.00	0.00
Eastern Sheriff Substation	1.08	Y	2019		10.88	0.44	0.00	0.00	0.00	0.00	0.00	0.00
East Gate Park and Ride	2.29	Y	2019		23.06	0.94	0.00	0.00	0.00	0.00	0.00	0.00
Harmony Park and Ride	2.89	Y	2019		29.10	1.18	0.00	0.00	0.00	0.00	0.00	0.00
Kincora	1.37	Y	2019		13.80	0.56	0.00	0.00	0.00	0.00	0.00	0.00
Landsdowne	1.15	Y	2019		11.58	0.47	0.00	0.00	0.00	0.00	0.00	0.00
Moorefield Fire and Rescue	1.25	Y	2019		12.59	0.51	0.00	0.00	0.00	0.00	0.00	0.00
Stone Ridge	2.15	Y	2019		21.65	0.88	0.00	0.00	0.00	0.00	0.00	0.00
Ashburn Sheriff	1.83	Y	2019		18.43	0.75	0.00	0.00	0.00	0.00	0.00	0.00
Purcellville Fire Station	2.49	N	2019		25.07	1.02	0.00	0.00	1.17	0.02	1.17	0.02
Western Sheriff	7.02	N	2019		70.69	2.88	0.00	0.00	3.31	0.07	3.31	0.07
Loudoun Heights	2.33	N	2019		23.46	0.96	0.00	0.00	1.10	0.02	1.10	0.02
Middleburg Fire Station	1.17	N	2019		11.78	0.48	0.00	0.00	0.55	0.01	0.55	0.01
Franklin Park	-	N	2019		-	-	0.00	0.00	0.00	0.00	0.00	0.00
Trailside Park	2.84	Y	2015	2020	28.60	1.16	0.00	0.00	0.00	0.00	0.00	0.00
Lyndora Park	2.53	Y	2015	2020	25.48	1.04	0.00	0.00	0.00	0.00	0.00	0.00
Greg Crittenden Park	1.55	Y	2015	2020	15.61	0.64	0.00	0.00	0.00	0.00	0.00	0.00
Chick Ford and Ryan	1.47	Y	2015	2020	14.80	0.60	0.00	0.00	0.00	0.00	0.00	0.00
Cascades Library	1.12	Y	2015	2020	11.28	0.46	0.00	0.00	0.00	0.00	0.00	0.00
Auburn Library	1.05	Y	2015	2020	10.57	0.43	0.00	0.00	0.00	0.00	0.00	0.00
East Gate Park	2.08	Y	2014	2019	20.95	0.85	0.00	0.00	0.00	0.00	0.00	0.00
Conklin Park	3.38	Y	2014	2019	34.04	1.39	0.00	0.00	0.00	0.00	0.00	0.00
Byrnes Ridge Park	9.58	Y	2014	2019	96.47	3.93	0.00	0.00	0.00	0.00	0.00	0.00
Bles Park	7.46	Y	2014	2019	75.12	3.06	0.00	0.00	0.00	0.00	0.00	0.00
Potomac Lakes Sportsplex	15.2	Y	2015	2020	153.06	6.23	0.00	0.00	0.00	0.00	0.00	0.00
Scott Jenkins Park	2.18	Y	2015	2020	21.95	0.89	0.00	0.00	0.00	0.00	0.00	0.00
Claude Moore Park	9.76	Y	2015	2020	98.28	4.00	0.00	0.00	0.00	0.00	0.00	0.00
Ray Muth Park	5.37	Y	2015	2020	54.08	2.20	0.00	0.00	0.00	0.00	0.00	0.00
										Total	**6.13**	**0.12**

Septic Disconnects

The County will track new septic disconnects and report them in the MS4 annual reports.

Land Use Changes

The County will track new land use changes and report them in the MS4 annual reports.

Nutrient Credit Purchases

Affidavits of Nutrient Offset Sale to-date are included in this section. The County will provide additional certifications of nutrient credit purchases in the MS4 annual reports.

AFFIDAVIT OF NUTRIENT OFFSET SALE

Ecosystem Services, LLC, [broker] (the "Company") on behalf of Reeves Mitigation Services, LLC, hereby certifies the following:

1. Pursuant to the Agreement, between the Company (as Seller) and **Loudoun County** ("Acquirer"), the Company, for the benefit of the Acquirer, agreed to sell **10.00** pounds of phosphorus offsets and **34.14** pounds of nitrogen (representing the ratio of nitrogen offsets to the phosphorus offsets at the offset generating facility) offsets to Acquirer;

2. The Company and the Acquirer, as of the date hereof, have closed the transaction contemplated by the Agreement and the Company has sold to Acquirer phosphorus and nitrogen offsets and **3,894.79** pounds of sediment (representing the ratio of nitrogen offsets to the phosphorus offsets at the offset generating facility) offsets.

WITNESS the following signature:

By: Jonathan R. Roller
Manager

Date: 7/26/19

Sworn to and subscribed before me this 26th day of July, 2019, by Jon Roller, Manager, on behalf of Ecosystem Services, LLC

My commission expires: 8/31/2021

Notary Public

WILLIAM JACKSON SIMMONS
NOTARY PUBLIC
REGISTRATION # 7737689
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
AUGUST 31, 2021

Acquirer: **County of Loudoun**

Nutrient Offset Bank: **Mossy Creek Nutrient Bank**

Name of Project: **Municipal Separate Storm Sewer System (MS4) Permit Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan**

Phosphorus Offsets: **10.00** **pounds**

Nitrogen Offsets: **34.14** **pounds**

Sediment Offsets: **3,894.79** **pounds**

AFFIDAVIT OF NUTRIENT OFFSET SALE

Ecosystem Services, L.L.C., [broker] (the "Company") on behalf of Boone's Run Farm, L.L.C., hereby certifies the following:

1. Pursuant to that certain Acquisition and Sale Agreement dated **June 21, 2019** (the "Agreement"), between the Company (as Seller) and **Loudoun County** ("Acquirer"), the Company, for the benefit of the Acquirer, agreed to sell **20.00** pounds of phosphorus offsets and **148.52** pounds of nitrogen (representing the ratio of nitrogen offsets to the phosphorus offsets at the offset generating facility) offsets to Acquirer;

2. The Company and the Acquirer, as of the date hereof, have closed the transaction contemplated by the Agreement and the Company has sold to Acquirer phosphorus offsets and **148.52** pounds of nitrogen (representing the ratio of nitrogen offsets to the phosphorus offsets at the offset generating facility) offsets.

WITNESS the following signature:

By: Jonathan R. Roller
Manager

Date: 7/26/19

Sworn to and subscribed before me this 26th day of July, 2019, by Jon Roller, Manager, on behalf of Ecosystem Services, LLC

My commission expires: 8/31/2021

Notary Public

WILLIAM JACKSON SIMMONS
NOTARY PUBLIC
REGISTRATION # 7737689
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
AUGUST 31, 2021

Acquirer: **Loudoun County**

Nutrient Offset Bank: **Boones Run Farm Nutrient Bank**

Name of Project: **Municipal Separate Storm Sewer System (MS4) Permit Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan**

Phosphorus Offsets: **20.00** **pounds**

Nitrogen Offsets: **148.52** **pounds**

Appendix D

Public Comments

Six comments were received on the plan. However, they did not necessitate changes to the plan. The following is a snapshot of the public notices and copies of the comments are provided below.

Home › News & Announcements

County News

Posted on: October 18, 2019

Comments Sought on Stormwater Management Plan for Reducing Pollutants

Loudoun County is seeking public comments on a draft plan for reducing pollutants entering the Chesapeake Bay.

The draft "Phase II Chesapeake Bay TMDL Action Plan" outlines ways that the county intends to meet requirements for reducing the quantity of pollutants entering the Chesapeake Bay via the county's municipal separate storm sewer system (MS4). The county operates the MS4 under a permit from the state of Virginia and the permit requires the development and implementation of action plans for impaired waterways. TMDL refers to the allowed "Total Maximum Daily Load" of the pollutants allowed to enter a water body without violating water quality standards.

The Phase II plan builds on the county's "Phase 1 Chesapeake Bay TMDL Action Plan," which was approved by the Virginia Department of Environmental Quality in 2015.

The draft action plan is posted online at loudoun.gov/stormwater for review and public comment. Comments on the action plan are due by Thursday, October 31, 2019.

Comments can be sent by email or by phone at 703-777-0117.

More information about Loudoun County's Stormwater Management Program is available at loudoun.gov/stormwater.

# # #

Home › Departments & Offices › General Services › Stormwater Management Program

Stormwater Management Program

News and Announcements

The draft "Phase II Chesapeake Bay TMDL Action Plan" for Loudoun County is online for public review and comment.

- Read the draft Phase II Chesapeake Bay TMDL Action Plan

Comments may be sent by email or by calling 703-777-0117. The deadline for comments is Thursday, October 31, 2019.

Stone, Chris

From: Purdy, Jason
Sent: Wednesday, October 23, 2019 12:06 PM
To: DEPT-GENSERV-STORMWATER
Subject: Phase II-Ches. Bay TMDL action plan comments

In review of the Phase II Action Plan, the dramatic reduction in Total Nitrogen loading from the disconnection of residential septic systems is startling. Just 6 residences with an average of 2.7 occupants resulted in a net reduction 58.32 lbs/year of TN. This immediately brings to mind a number of areas of possibility for additional septic disconnects that would allow the County to continue meeting the aforementioned TN reduction goals in the coming years. One of the first places that should be a point of emphasis for septic disconnects should be Hamilton Station Road between E. Colonial Highway and Route 7. Beginning at 17350 Hamilton Station and moving Northward to 17244 Hamilton Station, there are 9 addresses on the East side of the road. These 9 structures represent very challenging scenarios for onsite sewage disposal (small lots, very poor soils, and old septic systems). Of the 9 addresses, 6 properties have at least one failure (surfacing of wastewater) noted in the property history (per Loudoun County Health Dept. records). The 3 remaining properties (17338, 17314, and 17320 Hamilton Station) have septic systems from 1959, no records, and 1982 respectively. 17292 Hamilton Station is under current compliance enforcement for a failing septic field. 17290 and 17350 are under continued surveillance to track the impending failure before beginning compliance enforcement. This stretch of 1,100 feet is near an existing public sewer line and represents a huge opportunity for a small extension of public sewer that will yield a net reduction of TN exceeding 60 lbs/year and an abatement of continuing threats to public health. While onsite waste disposal is vital to many rural citizens of the County, there are a number of pockets that development has bypassed. Additional focus can, and should, be paid to areas such as the aforementioned where threats to the public health and environment can be remedied in a way that also greatly benefits the County's continued efforts at meeting TMDL goals.

Jason Purdy
Environmental Health Specialist, Rural
Jason.Purdy@loudoun.gov
703.771.5248
Get onsite in your inbox!

Stone, Chris

From: lswcdchairman@lswcd.org
Sent: Tuesday, October 29, 2019 3:22 PM
To: DEPT-GENSERV-STORMWATER
Subject: [EXTERNAL] MS-4 Phase II Plan Comment
Attachments: MS4 Loudoun TMDL Phase II Comments.docx

Please accept the attached comments on the proposed phase II MS-4 plan.

James Christian
Chairman Loudoun Soil and Water Conservation District

Sent from my iPad

Thank you for the opportunity to provide comments on Loudoun's Phase II Chesapeake Bay TMDL Action Plan. Traditionally much of the Loudoun Soil and Water Conservation District's (LSWCD) work is in the rural, non MS-4 permitted areas of Loudoun, however, we also work with our suburban and urban Loudoun residents and landowners.

The Virginia Conservation Assistance Program (VCAP) practices that we support provide cost share assistance for and have helped landowners install projects in Loudoun that may help Loudoun County meet its MS-4 requirements. This includes impervious surface removal, permeable paver installation, vegetated stormwater conveyances, rainwater harvesting, and conservation landscaping (which includes tree plantings and rain gardens). LSWCD would be happy to partner with the County by providing information on the practices completed in MS-4 areas so that they may help the county meet its MS-4 (or nutrient reduction) requirements.

On a related note, some of these VCAP practices are very costly, and the state cost share is capped at levels where it is not financially feasible for many landowners to participate. If Loudoun would be interested in providing additional incentives for "high value" BMPs that are part of the VCAP program to help meet MS4 requirements we would be happy to discuss that opportunity. This would help mitigate some of the need for purchasing credits, which in many cases are from outside Loudoun county, to make up for stormwater impacts. As we help our landowners be better stewards of their environment here in Loudoun, we would encourage the county to do the same and take advantage of practices being implemented in the county rather than purchase credits for work done outside the county.

Thank you for your time and consideration.

James B. Christian, Chairman, LSWCD

Stone, Chris

From: jaydee <jaydee600@gmail.com>
Sent: Wednesday, October 30, 2019 7:16 PM
To: DEPT-GENSERV-STORMWATER
Subject: [EXTERNAL] Draft Action Plan

Draft-Phase-II-Chesapeake-Bay-TMDL-Action-Plan

The Draft Action Plan needs to be implemented to reduce the pollutants entering our waterways.

Thanks for working on this project.

Johan G. de Groot
Lincoln VA

Stone, Chris

From:	Michael Myers <mmyers@loudounwildlife.org>
Sent:	Thursday, October 31, 2019 3:20 PM
To:	DEPT-GENSERV-STORMWATER
Subject:	[EXTERNAL] Public Comment on Phase II Ches Bay TMDL Action Plan - Loudoun Wildlife Conservancy
Attachments:	Loudoun County Phase II Ches Bay TMDL Action Plan Comments - LWC - 10.31.19.pdf

Hi,

Attached are public comments from Loudoun Wildlife Conservancy.

My best,
Michael

Michael Myers, MNM
Executive Director
Loudoun Wildlife Conservancy

Cell: 775.432.9192
mmyers@loudounwildlife.org
LoudounWildlife.org

Stone, Chris

From: Irv Snyder <snyder@rstarmail.com>
Sent: Thursday, October 31, 2019 2:51 PM
To: DEPT-GENSERV-STORMWATER
Subject: [EXTERNAL] Stormwater Management by VDOT

I was wondering if the Stormwater Management Program addresses how VDOT manages runoff from highways in the state and/or County. I live in Bluemont and my property borders a section of Route 7 east approximately between routes 734 and 760. There are 2-3 large stormwater discharge pipes that dump water, trash and toxic materials (oil, gas, etc.) from the highway directly on to my land. Aside from the pollutants, the water has caused significant erosion to the land and my driveway that cost a great deal to mitigate. I had contacted VDOT about this several years ago and was told that their responsibility "ends at the end of the pipe."

Can you offer any information or guidance regarding these kinds of cases. I am sure I am not the only landowner with this kind of problem. Thank you.

Irv Snyder
snyder@rstarmail.com

www.loudounwildlife.org

October 31, 2019

Loudoun County
Department of General Services
801 Sycolin Rd SE, Suite 300
Leesburg, Virginia 20175

To whom it may concern:

Loudoun Wildlife Conservancy applauds Loudoun County for their work on compiling the Phase II Chesapeake Bay TMDL Action Plan to reach the reduction target goals for the second permit cycle ending in 2023.

In addition to proposed actions, Loudoun Wildlife Conservancy would like to see greater incentives to further reduce the quantity of impervious surfaces in new developments and retrofit projects in Loudoun County. The MS4 permit area is nearly 33% impervious surface, which not only affects TMDL but also negatively impacts stream temperatures and the ability of the land to mitigate flood damage. Furthermore, incentives to plant native vegetation as part of a nutrient management plan will maximize the capacity of native vegetation (by having deeper and more effective root structures compared to non-native vegetation) to reduce nutrient run off. Loudoun County has the potential to be trendsetters for going above and beyond minimum requirements to improve water quality for Loudoun residents, and all residents of the Chesapeake Bay watershed.

Loudoun Wildlife Conservancy would also like to see Loudoun County utilize local and state programs such as the Virginia Conservation Assistance Program offered through the Loudoun Soil and Water Conservation District as a tool to help offset costs related to projects that will positively impact stormwater management and reduce nutrient run off. Collaboration with other local and state organizations and nonprofits will enhance the collective impact of projects.

The reliance on nutrient credit purchases to reach target goals for Total Nitrogen, Total Phosphorus, and Total Suspended Solids concerns our organization, especially the high volume of Total Suspended Solids. Dollars spent on nutrient credits would be better utilized on completing projects that actually reduce nutrient run off in Loudoun County. We suggest eliminating reductions from planned nutrient purchases and increasing reductions from land use changes and other BMPs.

Thank you for taking our comments into consideration.

Sincerely,

Michael Myers
Executive Director

PO Box 1892, Leesburg, VA 20177

Stone, Chris

From: Stone, Chris
Sent: Tuesday, November 5, 2019 8:53 AM
To: gbingol@pecva.org
Cc: Cumbie, Dennis
Subject: FW: [EXTERNAL] Phase II Chesapeake Bay TMDL Action Plan comments--due by today, October 31, 2019

Ms. Bingol,
Thank you for your comments on the Loudoun County Phase II Chesapeake Bay Action Plan. The plan was posted to the website the same day that your comments were received. Per your request to have the comments included in the plan, we will add your comments and the others received in a revised version of the plan, which will be uploaded to the website soon. These comments will also be provided in our MS4 Annual Report for this permit cycle.

Regarding the credit purchase, the county is utilizing as many options as we can to meet our nutrient removal goals. The reduction guidelines on nutrient reduction projects provided by DEQ favor actions that occur within our MS4 permit area. However, the availability of potential retrofit projects that reduce substantial amounts of nutrients within our MS4 permit area are limited. On the other hand, nutrient purchases are available from any nutrient bank located within the Potomac River basin. Our purchasing documents are written so as to acquire credits as locally as possible, and if not local, limited only to those banks "upstream" of Loudoun. If changes to the guidance occur (and we have reason to believe they will), our mix of future projects may move away from credit purchases.

If you have any other questions, please let me know.
Thank you,
Chris

Chris Stone, CFM, PG
Stormwater Chief
chris.stone@loudoun.gov
www.loudoun.gov/stormwater
571.258.3542 (direct)
571.233.6559 (cell)
MSC #48
PO Box 7100
801 Sycolin Road, SE
Suite 300
Leesburg, VA 20175

From: DEPT-GENSERV-STORMWATER
Sent: Tuesday, November 5, 2019 8:51 AM
To: Stone, Chris <Chris.Stone@loudoun.gov>
Subject: FW: [EXTERNAL] Phase II Chesapeake Bay TMDL Action Plan comments--due by today, October 31, 2019

From: Gem Bingol [mailto:gbingol@pecva.org]
Sent: Thursday, October 31, 2019 4:22 PM
To: DEPT-GENSERV-STORMWATER <STORMWATER@loudoun.gov>
Subject: [EXTERNAL] Phase II Chesapeake Bay TMDL Action Plan comments--due by today, October 31, 2019

To Whom It May Concern:
It appears that the Action Plan may have already been submitted, however the date for providing input is noted as today and the submittal date is noted as tomorrow. So I would request that my comments are included in the responses to the public notice.

As noted in the Action Plan, Loudoun County has embarked on and completed (some) a series of noteworthy retrofit and restoration projects. My concern centers on nutrient purchases versus additional projects that would actually reduce additional Nitrogen, Phosphorus and Sediment excesses in our streams. I understand that it is perfectly within the County's right to make those purchases, but Loudoun streams will not get better through such purchases. Therefore, to have over 50% of the nitrogen and TSS reductions achieved through these purchases is disappointing. This won't benefit our streams and local environment.

In addition, at the end of the report, it notes that the comments already submitted do not require a change in the plan. In the interest of transparency, I would request that my comments and the other comments that have been received by today's deadline date be included with the plan along with the public notices seeking the comments.

Thank you.

Respectfully,
Gem Bingol

Gem Bingol
Loudoun & Clarke Land Use
The Piedmont Environmental Council
540-347-2334 ext. 7041
703-431-6941 (cell)
Twitter: @gem_bingol

Appendix C

Nutrient Credit Purchase

BILL OF SALE

THIS BILL OF SALE is made as of the 13th day of February, 2020 by Boone's Run Farm, L.L.C., a Virginia Limited Liability Company ("Seller") and County of Loudoun, Virginia ("Purchaser").

Seller and Purchaser have entered into that certain Agreement for Purchase and Sale of Nutrient Offset Credits, dated January 16th, 2020 (the "Purchase Agreement"), the terms of which are incorporated herein by reference and made a part hereof, with respect to the sale by Seller and the purchase by Purchaser of nutrient offset credits generated by Seller's Boone's Run Farm Nutrient Bank located in Rockingham County, VA.

In consideration of the payment of the Purchase Price (as defined in the Purchase Agreement) and other good and valuable consideration, the receipt and sufficiency of which are mutually acknowledged, Seller hereby sells, transfers, assigns, conveys, delivers, and sets over to Purchaser, its successors or assigns the following nutrient offset credits (as defined in the Purchase Agreement):

Nitrogen: 170.10 lbs. and

Phosphorus: 23.04 lbs.

WITNESS the following authorized signature:

Ecosystem Services, LLC,
a Virginia limited liability company
Authorized Broker and Representative

By: _____.
Name: Jonathan R. Roller
Title: Manager

BILL OF SALE

THIS BILL OF SALE is made as of the 13th day of February, 2020 by Reeves Mitigation Services, L.L.C., a Virginia Limited Liability Company ("Seller") and County of Loudoun, Virginia ("Purchaser").

Seller and Purchaser have entered into that certain Agreement for Purchase and Sale of Nutrient Offset Credits, dated January 16th, 2020 (the "Purchase Agreement"), the terms of which are incorporated herein by reference and made a part hereof, with respect to the sale by Seller and the purchase by Purchaser of nutrient offset credits generated by Seller's Mossy Creek Nutrient Bank located in Augusta County, VA.

In consideration of the payment of the Purchase Price (as defined in the Purchase Agreement) and other good and valuable consideration, the receipt and sufficiency of which are mutually acknowledged, Seller hereby sells, transfers, assigns, conveys, delivers, and sets over to Purchaser, its successors or assigns the following nutrient offset credits (as defined in the Purchase Agreement):

Phosphorus: 6.96 lbs.,

Nitrogen: 23.70 lbs. and

Sediment: 2,710.77 lbs.

WITNESS the following authorized signature:

Ecosystem Services, LLC,
a Virginia limited liability company
Authorized Broker and Representative

By:

_____.

Name: Jonathan R. Roller
Title: Manager

Appendix D

Local TMDL Action Plan

Loudoun County, Virginia

Comprehensive Local TMDL Action Plan

Submittal to DEQ – May 1, 2020

Sediment TMDLs for Goose Creek and Bull Run
Bacteria TMDLs for Bull Run and Sugarland Run

Loudoun County Department of General Services
801 Sycolin Road, S.E., Suite 300, Leesburg, Virginia 20175

Prepared with assistance by:
Wood Environment & Infrastructure Solutions
Chantilly, Virginia

Prepared in Compliance with Municipal Separate Storm Sewer System (MS4)
Permit No. VAR040067

CERTIFICATION

"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."

Name	Title	Date
BROWN.ERNEST.N.1049329322 Digitally signed by BROWN.ERNEST.N.1049329322 Date: 2020.04.30 15:55:15 -04'00'	Director, Department of General Services	30 APRIL 2020

Comprehensive Local TMDL Action Plan
Loudoun County, Virginia

May 1, 2020

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Comprehensive Local TMDL Action Plan
Loudoun County, Virginia

May 1, 2020

1. Introduction

1.1. Purpose

This Comprehensive Local TMDL Action Plan documents how the County will meet the "Local TMDL Special Condition" in Part II B of the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) that became effective November 1, 2018 (2018 MS4 permit). This plan replaces the original County plan dated October 1, 2015 that was submitted to the Virginia Department of Environmental Quality (DEQ).

The County's MS4 permit requires the development and implementation of action plans for impaired waters where a Total Maximum Daily Load (TMDL) approved by the State Water Control Board (SWCB) assigns a waste load allocation (WLA) to the County. A TMDL establishes the maximum amount of a pollutant that can enter a water body without violating water quality standards. A WLA represents the total pollutant loading that is allocated to a specific source. The County has been assigned WLAs for sediment (Goose Creek and Bull Run) and bacteria (Bull Run and Sugarland Run).

Section 2 presents the Sediment TMDL Action Plan and Section 3 presents the Bacteria TMDL Action Plan. The MS4 permit is addressed by: describing the WLAs assigned to the County and the corresponding reduction requirements; identifying significant sources of the pollutants of concern discharging from the County's MS4; identifying best management practices (BMPs) to reduce the pollutants of concern in accordance with specific permit requirements; calculating existing and planned pollutant reductions; developing outreach strategies to enhance the public's ability to eliminate and reduce discharges of pollutants; and, establishing an implementation schedule for the permit term.

The County's original plan addressed WLAs assigned prior to July 1, 2013. These included the sediment and bacteria WLAs for Goose Creek and Bull Run. In accordance with the 2018 MS4 permit, the County must update previously approved plans no later than 18 months after the effective permit date. The County must also develop plans for WLAs assigned on or after July 1, 2013 no later than 30 months after the effective permit date. This includes the bacteria WLA for Sugarland Run. This Comprehensive Local TMDL Action Plan updates the previously approved plan and integrates new strategies to address the Sugarland Run bacteria WLA.

1.2. Plan Preparation

This plan has been prepared in accordance with Part II B of the MS4 permit, DEQ Guidance Memo 16-2006 "TMDL Action Planning for Local TMDL Maximum Daily Loads," applicable portions of DEQ Guidance Memo 15-2005 "Chesapeake Bay TMDL Special Conditions Guidance," and other guidance as provided by DEQ.

1.3. MS4 Service Area

The County's responsibilities under the MS4 permit are based on the extent of the MS4 service area within the 2010 Census Urbanized Area. The WLAs in the TMDLs are aggregated to include other MS4 permit holders due to limitations in available MS4 mapping data at the time of TMDL development. However, Loudoun County and other permittees have since more precisely delineated their MS4 service areas. The methodology used to delineate the County's regulated MS4 is described in the County's Final Phase II Chesapeake Bay TMDL Action Plan.

The County's full MS4 service area map is presented in Appendix A. Figures 1.A-1.C show the MS4 service area within portions of Goose Creek, Bull Run, and Sugarland Run subject to WLAs assigned to the County. Table 1.A shows the amount of MS4 impervious and pervious area within each watershed. The MS4 area for Goose Creek is shown with and without the area draining to Beaverdam Reservoir.[1]

Table 1.A – County MS4 Impervious and Pervious Area by TMDL Watershed

	Total Area (acres)			County MS4 Area (acres)		
Watershed	**Total**	**Imperv.**	**Pervious**	**Total**	**Imperv.**	**Pervious**
Goose Creek	247,135.7	8,942.0	238,193.7	1,240.2	340.0	900.2
	Excluding Beaverdam Reservoir			972.4	283.4	689.0
Bull Run	123,995.1	2,899.0	121,096.1	2,390.7	559.0	1,831.7
Sugarland Run	14,516.2	2,022.1	12,494.1	2,279.8	803.3	1,476.5

[1] The Goose Creek benthic TMDL excludes the Beaverdam Reservoir drainage area from the Loudoun County MS4 because it is assumed to contribute no loads to Goose Creek. See Section 6.2.3.3 of the Goose Creek TMDL.

Figure 1.A – County MS4 Service Area within Goose Creek Watershed

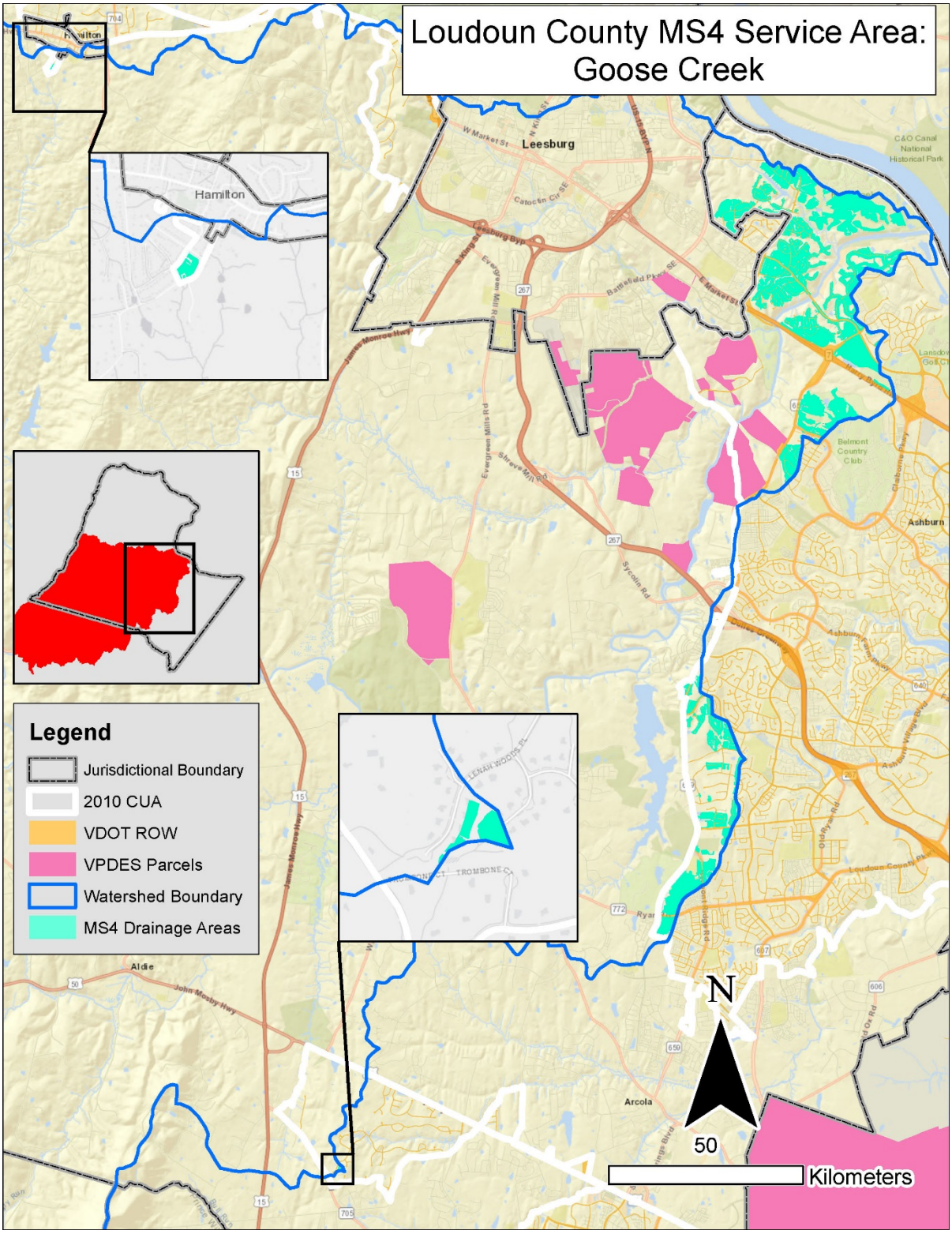


Figure 1.B – County MS4 Service Area within Bull Run Watershed

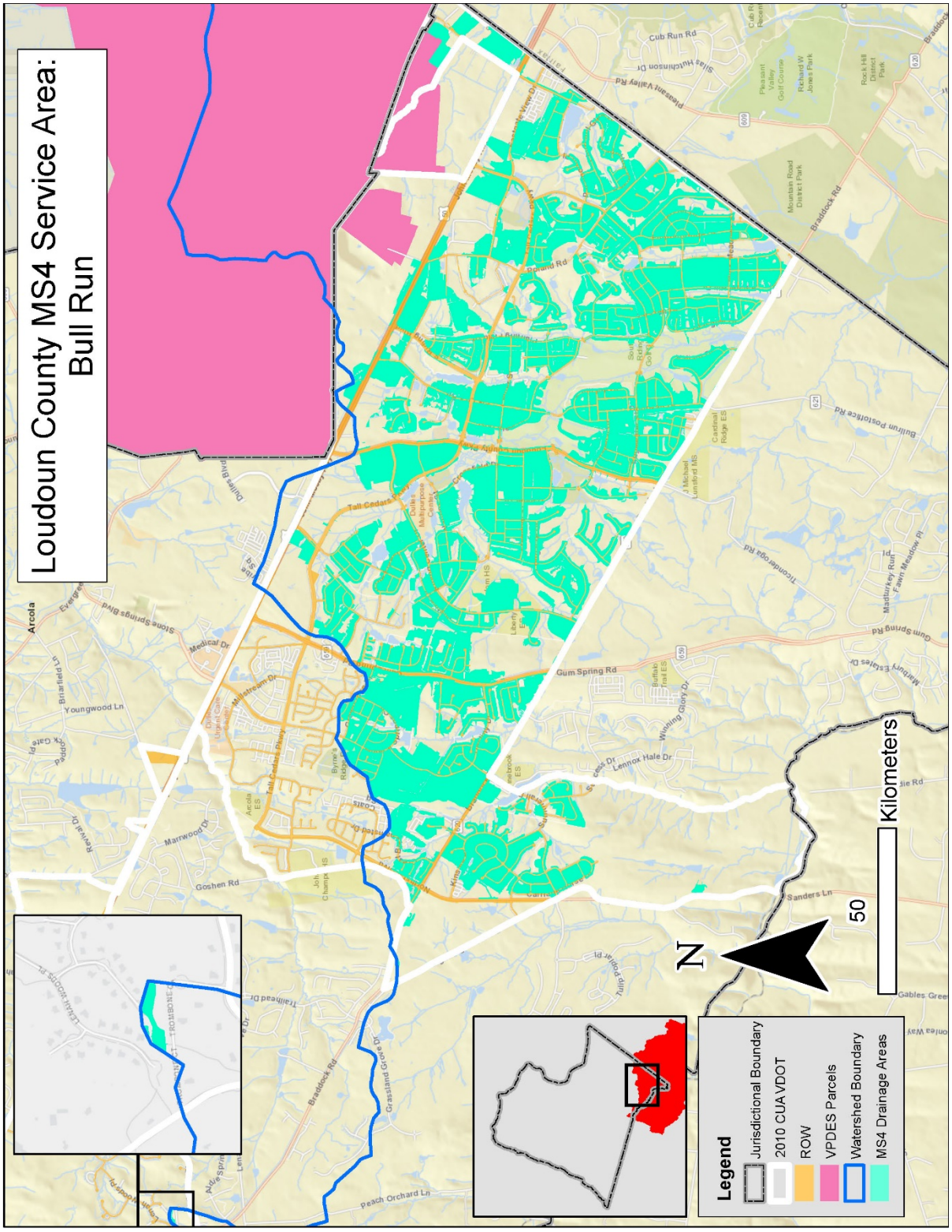
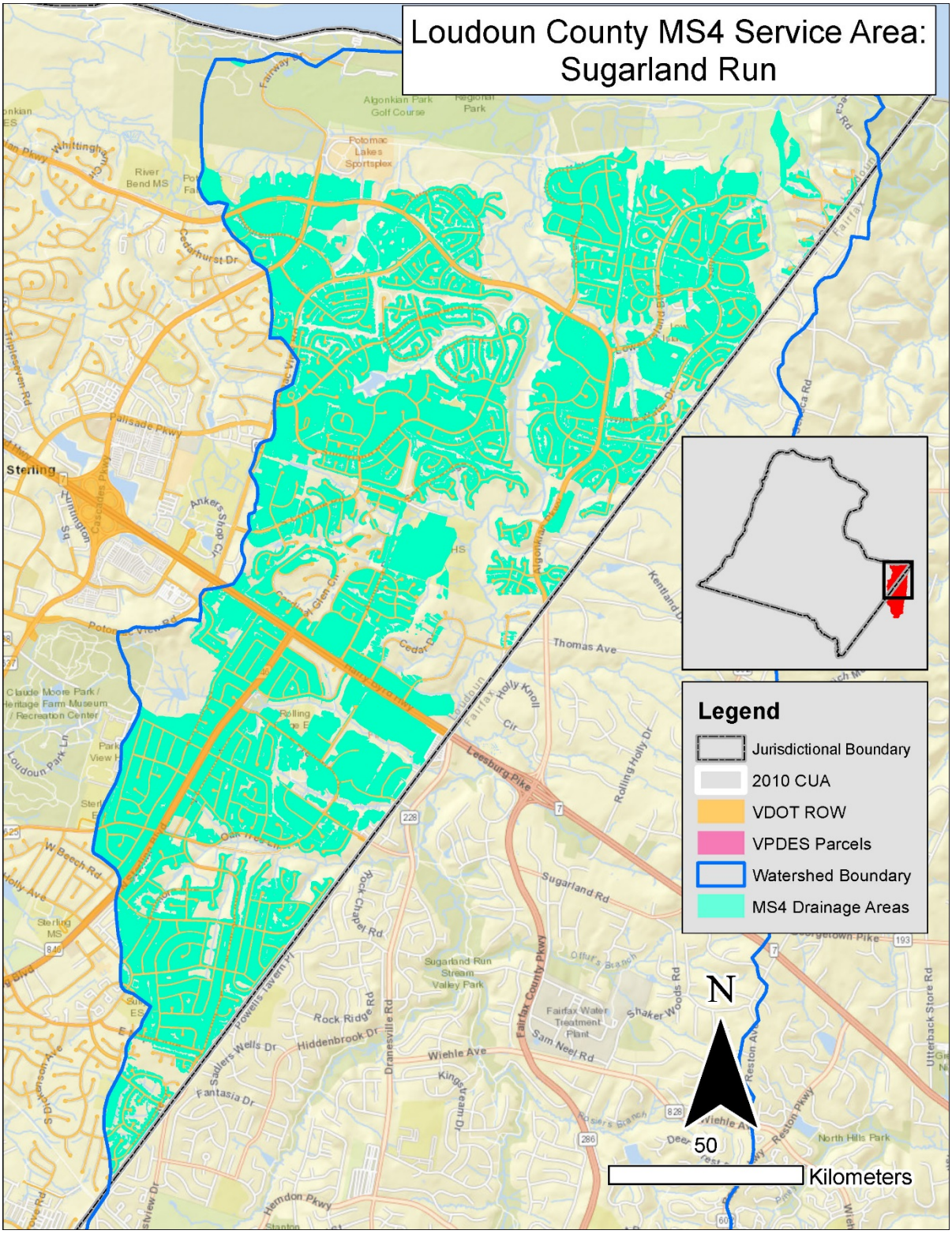


Figure 1.C – County MS4 Service Area within Sugarland Run Watershed



2. Sediment TMDL Action Plan

The County has been assigned two WLAs for sediment, including the "Benthic TMDLs for the Goose Creek Watershed" and the "Benthic TMDL Development for Bull Run, Virginia." Table 2.A provides an overview of the organization of the Sediment TMDL Action Plan and how each section addresses the 2018 MS4 permit.

Table 2.A – Sediment TMDL Action Plan Permit Compliance Crosswalk

Section	Plan Element	2018 MS4 Permit	
2.1	Overview of Sediment TMDLs	Part II B 3	a. The TMDL project name. b. The EPA approval date of the TMDL. c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable.
2.2	Identification of Significant Sources of Sediment	Part II B 3	d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 and that are not covered under a separate VPDES permit. For the purpose of this requirement, a significant source of pollutants means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL.
2.3	Best Management Practices	Part II B 3	e. The BMPs designed to reduce the pollutants of concern in accordance with Parts II B 4, B 5, and B 6.
2.4	Sediment-Specific Permit Requirements	Part II B 3	f. Any calculations required in accordance with Part II B 4, B 5, or B 6.
		Part II B 5	a. The permittee shall reduce the loads associated with sediment, phosphorus, or nitrogen through implementation of one or more of the following: (1) one or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65 or other approved BMPs found on the Virginia Stormwater BMP Clearinghouse website; (2) one or more BMPs approved by the Chesapeake Bay Program; or, (3) land disturbance thresholds lower than Virginia's regulatory requirements for erosion and

Section	Plan Element	2018 MS4 Permit	
			sediment control and post-development stormwater management. b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented to meet the requirements of the Chesapeake Bay TMDL in Part II A as long as the BMPs are implemented in the watershed for which local water quality is impaired. c. The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in Part II B 3 f.
2.5	Outreach Strategy	Part II B 3	g. For action plans developed in accordance with Part II B 4 and B 5, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants.
2.6	Schedule of Anticipated Actions	Part II B 3	h. A schedule of anticipated actions planned for implementation during this permit term.
2.7	Anticipated End Date	Part II B 5	d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department the anticipated end dates by which the permittee will meet each WLA for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with Part II B 2.
4	Opportunity for Public Comment	Part II B 7	Prior to submittal of the action plan required in Part II B 1, the permittee shall provide an opportunity for public comment proposed to meet the local TMDL action plan requirements of no less than 15 days.

2.1. Overview of Sediment TMDLs

Sediment is a major cause of stream degradation nationally and has been identified as the primary stressor associated with the decline of benthic aquatic habitats in the Goose Creek and Bull Run watersheds. While some sediment is a natural part of the water environment, too much sediment smothers bottom dwelling organisms, impairs the organs of filter-feeders, and blocks

sunlight to underwater plants. These underwater plants serve as food and habitat to many aquatic species. In addition, other pollutants such as phosphorus and PCBs may be attached to sediment particles.

2.1.1. Goose Creek Sediment TMDL

The Goose Creek sediment TMDL addresses 4.91 miles of benthic impairment located downstream of the Goose Creek Reservoir to the confluence of the Potomac River. The County MS4 is assigned a WLA of 123.6 tons/year, which is aggregated with the Virginia Department of Transportation (VDOT) MS4, Virginia Pollutant Discharge Elimination System (VPDES) industrial permit holders, and VPDES construction site permit holders. The MS4 wasteload allocation is based on the 2015 Land Use Scenario and assumes a total of 1,628.1 acres served by the County MS4 (1,613 developed and 15.1 under construction). Table 2.B provides a summary of the Goose Creek sediment TMDL.

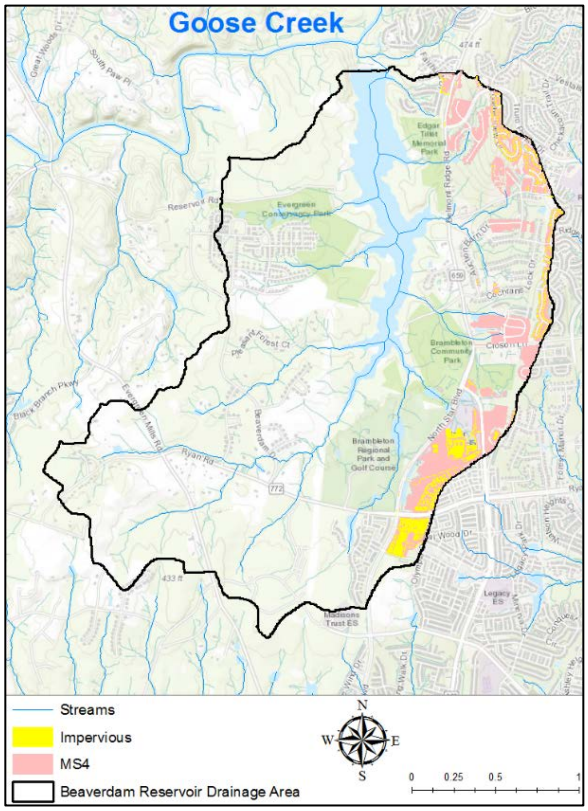
Table 2.B – Goose Creek Sediment TMDL Summary

TMDL Name	Approval Date	MS4 Existing Load	MS4 WLA	Reduction	Aggregated MS4s
		Tons per Year			
"Benthic TMDLs for the Goose Creek Watershed"	SWCB – 8/31/2004	See Text	123.6	30%	Loudoun County
	USEPA – 4/26/2004				VDOT

In addition to aggregating the County's MS4 WLA, the Goose Creek sediment TMDL does not specify an existing baseline load for the County MS4 from which to measure progress. The County has developed a methodology for estimating its portion of the required sediment reduction to meet the TMDL. As noted previously, Loudoun County and other MS4 permittees have more precisely delineated their MS4 service areas. Based on the County's MS4 service area map, the County calculates that 972.4 acres drain to the Goose Creek from the regulated MS4.[2] The County-specific MS4 service area is 59.7% of the aggregated MS4 area in the TMDL of 1,628.1 acres. As a result, it is estimated that the County is responsible for 59.7% of the aggregated WLA of 123.6 tons/year, which equals 73.8 tons/year.

[2] The total amount of the County's MS4 service area draining to Goose Creek is 1,240.2. However, as discussed in Section 6.2.3.3 of the Goose Creek TMDL, the area draining to Beaverdam Reservoir is not included in the MS4 service area since it is assumed to contribute no loads to Goose Creek.

The TMDL assumes a reduction of 30% of the sediment load from developed land in determining the MS4 WLA.[3] A 30% reduction means that the County-specific baseline load is 105.4 tons/year *(100% - 30% * (baseline load) = 73.8 tons/year)*. Therefore, the reduction that must be achieved by the County to meet the WLA is estimated to be 31.6 tons/year *(105.4 tons/year – 73.8 tons/year)*.



Beaverdam Reservoir drainage area.

2.1.2. Bull Run Sediment TMDL

The Bull Run sediment TMDL addresses 4.8 miles of benthic impairment located downstream of the County between Cub Run and Popes Head Creek. The County MS4 is assigned a WLA of 458.7 tons/year, which is aggregated with the VDOT MS4. The MS4 wasteload allocation assumes a County MS4 area of 5,156.2 acres. Unlike the Goose Creek TMDL, VPDES industrial and construction site permits are accounted for separately. The Bull Run TMDL establishes a sediment reduction target of 77.1%. The reason that this percent is much higher than Goose Creek is that a portion of sediment from streambank erosion is assigned to the MS4s. Table 2.C provides a summary of the Bull Run sediment TMDL.

Table 2.C – Bull Run Sediment TMDL Summary

TMDL Name	Approval Date	MS4 Existing Load	MS4 WLA	MS4 Reduction	Aggregated MS4s
		Tons per Year			
"Benthic TMDL Development for Bull Run, Virginia"	SWCB – 6/27/2007	2,006.8	458.7	77.1%	Loudoun County
	USEPA – 9/26/2006				VDOT

[3] Section 6.2.1.4 of the TMDL states "The wasteload allocation for the MS4s under each growth scenario was determined based on the acres of developed land and disturbed land within the MS4 boundary under each scenario. Under each scenario, these land uses were given the same reduction within the MS4 as they were given watershed-wide. The MS4 wasteload under each scenario is the load after the reductions from developed and disturbed land." Section 6.3 states "The load reduction required from developed land was therefore set at 30%."

To determine the County's share of the WLA for Bull Run, it is again appropriate to reference the most recently delineated MS4 service area. The County calculates that 2,390.7 acres drain to Bull Run from the regulated MS4. The County-specific MS4 service area is 46.4% of the aggregated MS4 area in the TMDL of 5,156.2 acres. As a result, it is estimated that the County is responsible for 46.4% of the MS4 existing load of 2,006.8, which equals 931.2 tons/year, and the aggregated WLA of 458.7 tons/year, which equals 212.8 tons/year. Therefore, the reduction that must be achieved by the County to meet the WLA is estimated to be 718.4 tons/year *(931.2 tons/year – 212.8 tons/year)*.

2.2. Identification of Significant Sources of Sediment

Sources of sediment in urban areas identified in the Goose Creek and Bull Run TMDLs include stormwater runoff from developed land, discharges from active land-disturbing activities, and streambank erosion caused by increased volume and velocity of stormwater runoff from impervious surfaces.

Two examples of potential sources of sediment from developed land uses.

Sediment from developed land may enter the storm drain system when stormwater intermingles with exposed or poorly stabilized soils or when soil particles are blown onto impervious surfaces. Exposed or poorly stabilized soils can be caused by improper stabilization after construction, vehicle/pedestrian compaction, vehicle/equipment wheel ruts, sports activities, concentrated runoff in areas without stable vegetation, etc. Soil stockpiles that are not protected from precipitation can be a source of sediment if not properly controlled. Construction and other land disturbing activities can become a source of sediment if adequate erosion and sediment controls are not in place. Loudoun County addresses the impacts of land-disturbing activities through implementation of its Virginia Erosion and Sediment Control Program. Similarly, the volume and velocity of stormwater runoff from developed areas is addressed through implementation of the County's Virginia Stormwater Management Program. Measures put in place to address sources of sediment are further discussed in Section 2.3.

As required by the MS4 permit, the County has reviewed publicly-owned properties within the MS4 to identify any significant sources of sediment in the Goose Creek and Bull Run watersheds. A sources is considered significant if the pollutant loading is expected to be greater than the average pollutant loading for the land use identified in the TMDL. For the Loudoun County MS4, this is developed urban land. Factors identified by the County for the assessment include the following features or activities: stockpiles of soil or other erodible material; sports fields; large areas of denuded or poorly stabilized soils; active construction; long-term use of vehicles/equipment with the potential to expose or disturb underlying soil; vehicle/equipment washing areas; and, playground equipment/picnic areas.

The County conducted an initial desktop assessment of each publicly-owned property within the MS4 using land use type and aerial photography during the last permit cycle. Based on the initial assessment, properties were identified for further onsite assessment using the factors identified above. A "Loudoun County Total Maximum Daily Load (TMDL) Municipal Facility Assessments" report was completed in 2015 and submitted to DEQ with the FY2015 annual report. Table 2.D presents the results of the evaluation. Follow-up actions for the current permit cycle are discussed in Section 2.3.

Table 2.D – Evaluation of Potential Significant Sediment Sources

Facility Name	Primary Use	Watershed	Assessment Factors	Source of Sediment?[4]
Elizabeth Mills Riverfront Park 43513 Squirrel Ridge Pl.	Park	Goose Creek	None (Passive Recreation)	NA
Lansdowne Sports Park 18900 Kipheart Dr.	Park	Goose Creek	Sports Fields	No
Harper Park 18910 Potomac Station Dr.	Park	Goose Creek	Playground Equipment	No
Conklin Park 25710 Donegal Dr.	Park	Bull Run	Sports Fields (Volleyball)	No
Dulles Multipurpose Center 24950 Riding Center Dr.	General Recreation	Bull Run	Playground Equipment; Equipment Storage	No

[4] Based on the "Loudoun County Total Maximum Daily Load (TMDL) Municipal Facility Assessments" conducted in 2015, if applicable.

Facility Name	Primary Use	Watershed	Assessment Factors	Source of Sediment?[4]
Dulles South Public Safety Station 19 25216 Loudoun County Pkwy.	Fire & Rescue	Bull Run	None (No Exposed Soils)	NA
South Riding Park Site 42691 Nations St.	Park	Bull Run	Sports Fields (Volleyball)	No
Byrne's Ridge Park 24915 Mineral Springs Circle	Park	Bull Run	Sports Fields	No

2.3. Sediment Best Management Practices

The County has implemented a comprehensive program to reduce existing sources of sediment and prevent new sources of sediment. The program includes the County's legal authorities to prohibit illicit discharges, require active land-disturbing activities to implement erosion and sediment controls, and require post-development stormwater quality and quantity controls. The program also includes the County's Public Education and Outreach Plan, MS4 Program Plan, Final Phase II Chesapeake Bay TMDL Action Plan, and Loudoun County 2019 Comprehensive Plan. Finally, this section describes the actions the County will take to continue to monitor County properties identified in Section 2.2 for potential sources of sediment pollution.

2.3.1. County Legal Authorities Related to Sediment

The County Board of Supervisors has adopted stormwater quality and quantity requirements that meet or exceed state requirements. Chapter 1220 "Erosion Control" of the Loudoun County Codified Ordinance implements the requirements of the Virginia Erosion and Sediment Control Act (§62.1-44.15:51 *et seq*, Code of Virginia) and its attendant regulations. In addition to meeting minimum state standards, the County has strengthened the requirements by requiring land disturbing permits land-disturbing activities exceeding 5,000 square feet. In addition, the County has established special limitations on land-disturbing activities and the clearing of vegetation in its Mountainside Development Overlay District (Section 4-1600), Limestone Overlay District (Section 4-1900) and other steep slopes areas in the County's Zoning Ordinance.

Chapter 1220 also authorizes the County to require a property owner to develop and implement an erosion and sediment control plan if the County has identified an "erosion impact area." This is an area not associated with current land-disturbing activity but subject to persistent soil erosion resulting in the delivery of sediment to waters of the Commonwealth. The definition of an erosion impact area does not include land of 10,000 square feet or less used for residential purposes or to shorelines where erosion results from wave action.

Chapter 1096 "Stormwater Management" of the Loudoun County Codified Ordinance implements the requirements of the Virginia Stormwater Management Act (§62.1-44.15:24 *et seq*, Code of Virginia) and its attendant regulations. The ordinance was first adopted in 2003 and then updated in 2014. The County was approved as a Virginia Stormwater Management Program Authority effective July 1, 2014. Technical criteria are provided in the County's Facilities Standards Manual and reflect the requirements of the Virginia Stormwater Management Program Regulations (Part II B, 9 VAC 25-870-10 *et seq*.). For any new development approved after July 1, 2014, post development stormwater management water quality controls must be designed using the Virginia Runoff Reduction Method, which is equivalent to 60% forest, 30% pasture, and 10% impervious cover. In addition, the redevelopment requirements of the ordinance are designed to reduce sediment and other pollutants from existing land uses. For redevelopment greater or equal to one acre, the phosphorus load must be reduced by at least 20% from predevelopment conditions. For redevelopment less than one acre, the phosphorus load must be reduced by at least 10% from predevelopment conditions. The reduction in phosphorus load also results in a reduction in sediment.

Finally, the County has implemented measures to prohibit illicit discharges to the storm sewer system, which includes sediment. Section 1096.03 of the Loudoun County Codified Ordinance defines and prohibits illicit discharges and establishes penalties for violations.

2.3.2. Public Education and Outreach Plan

The County's Public Education and Outreach Plan (PEOP) identifies sediment as one of the County's high-priority water quality issues in accordance with the MS4 permit. Specific actions included in PEOP Section 4.4 are as follows:

- 4.4.1 – Distribute English and Spanish versions of the "Resident's Guide to Sediment Reduction for a Cleaner Environment" brochure.
- 4.4.2 – Promote the use of rain barrels and rain gardens to capture and infiltrate stormwater and reduce instream erosion caused by uncontrolled runoff.
- 4.4.3 – Provide information to the development community to improve their knowledge about how to improve site design and minimize the discharge of sediment as a result of land-disturbing activities.
- 4.4.4 – Promote the availability of the Extension Service Master Gardeners Speakers Bureau Program to provide speakers to community groups regarding the management of stormwater runoff.

2.3.3. MS4 Program Plan

The County's MS4 Program Plan documents implementation of all MS4 permit requirements, including the programmatic and legal authorities required to meet the "Local TMDL Special Condition." The full MS4 Program Plan can be found at https://www.loudoun.gov/stormwater. Table 2.E provides a summary of elements of the plan's six minimum control measures (MCMs) implemented by the County that relate to sediment.

Table 2.E – MS4 Program Plan Components Related to the Chesapeake Bay TMDL

Minimum Control Measure	MS4 Program Plan Elements Related to Controlling Sediment
MCM #1 – Public Education and Outreach on Stormwater Impacts	The County has developed a Public Education and Outreach Plan as described in Section 2.3.2. The PEOP identifies sediment as one of the County's high-priority pollutants for the focus of its education and outreach efforts.
MCM #2 – Public Involvement and Participation	MCM #2, BMP 2A establishes procedures for the public to report illicit discharges and improper disposal. The Loudoun Express Request (LEx) system is used to report sediment-related complaints, including violations of the County's erosion and sediment control requirements.
MCM #3 – Illicit Discharge Detection and Elimination	The County has implemented an Illicit Discharge Detection and Elimination (IDDE) program designed to prevent, identify, and eliminate sources of pollutants, including sediment.
MCMC #4 – Construction Site Stormwater Runoff Control	The County's construction site stormwater runoff control program, implemented through Chapter 1220 "Erosion Control," is fully consistent with the requirements of the Virginia Erosion and Sediment Control Act and the Virginia Stormwater Management Act, and their attendant regulations.
MCM #5 – Post-Construction Stormwater Management	The County's post-construction stormwater runoff control program, implemented through Chapter 1096 "Stormwater Management," is fully consistent with the requirements of the Virginia Stormwater Management Act and its attendant regulations.
MCM #6 – Pollution Prevention and Good Housekeeping for Municipal Operations	The County has designed a program to prevent pollution from County facilities through the development of stormwater pollution prevention plans (SWPPPs), standard operating procedures (SOPs), and training. SOPs related to sediment include the Land Disturbing SOP, Landscaping and Grounds Maintenance SOP, Loading-Unloading SOP, Material Storage

Minimum Control Measure	MS4 Program Plan Elements Related to Controlling Sediment
	SOP, Street and Parking Lot SOP, Storm Sewer System Cleaning and Maintenance SOP, and Vehicle-Large Equipment Washing SOP.

2.3.4. Chesapeake Bay TMDL Action Plan

The County has adopted a Final Phase II Chesapeake Bay TMDL Action Plan, which was submitted to DEQ on November 1, 2019. The plan is located at https://www.loudoun.gov/DocumentCenter/View/157709/Loudoun-Phase-II-Bay-TMDL-Action-Plan_DEQ-Submittal_11-1-2019. The Chesapeake Bay TMDL was established by the U.S. EPA in December 2010. One of the pollutants of concern identified for the Chesapeake Bay is sediment. The County's MS4 permit requires specific reductions in sediment over three five-year permit cycles in accordance with the following: 5% by the end of the first permit cycle (June 30, 2018); 40% by the end of the second permit cycle (2023); and, 100% by the end of the third permit cycle (2028).

The MS4 permit authorizes local TMDLs to be met through BMPs implemented to meet the Chesapeake Bay TMDL. The Final Phase II Chesapeake Bay TMDL Action Plan includes sediment reduction strategies applicable to Goose Creek and Bull Run. Applicable strategies are described below. Sediment reduction calculations are contained in Section 2.4.

- County Stormwater Retrofits. This includes County-initiated stormwater quality retrofit projects as well as retrofits above regulatory minimums initiated as a result of proffers to the County by developers. Projects may include new structural facilities, design enhancements to existing facilities, or stream restoration projects.
- Street/Parking Lot Sweeping. This includes pollutant reductions associated with sweeping of County properties within the MS4 service area.
- Land Use Changes: This includes land use changes that result in a pollutant load reduction. Land use changes eligible for credit include: (1) impervious to forest, mixed open, and turf; (2) turf to forest and mixed open; and, (3) mixed open to forest.

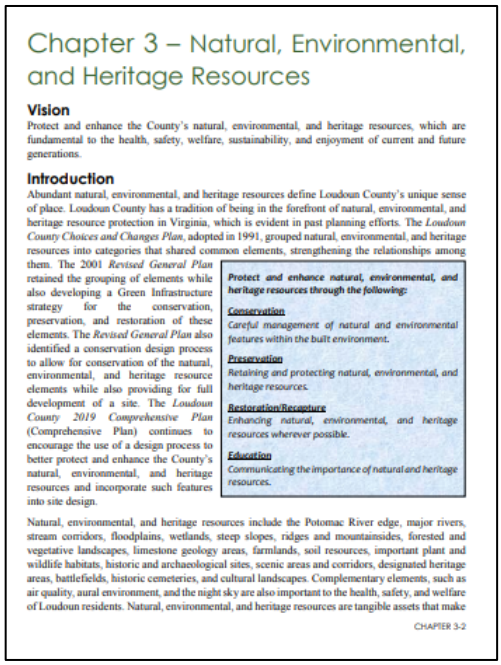
2.3.5. Loudoun County 2019 General Plan

The Loudoun County 2019 General Plan, most recently adopted by the Board of Supervisors on June 20, 2019, provides an overall vision for the County's growth and establishes policies and actions to achieve that vision. Chapter 3 – Natural, Environmental, and Heritage Resources establishes the following vision for the County: "Protect and enhance the County's natural, environmental, and heritage resources, which are fundamental to the health, safety, welfare, sustainability, and enjoyment of current and future generations." The chapter contains several

sections related to reducing sediment pollution. The Water Resources section includes a discussion about the restoration of impaired streams and the protection of steep slopes. The Forest, Trees, and Vegetation section includes a discussion about how the preservation and enhancement of vegetation reduces stormwater runoff and soil erosion.

Strategies from Chapter 3 relevant to reducing the County's sediment load are provided below. Each strategy is accompanied in the plan by specific action items.

- Strategy 2.1. Establish and maintain a healthy river and stream corridor ecosystem that meets desired water quality standards, protecting from the damages of soil erosion and flooding while promoting biological diversity.
- Strategy 2.2. Establish River and Stream Corridor Resource (RSCR) buffers to promote river and stream health (streambank/streambed stability, temperature moderation, nutrient removal, sediment removal, flood control, and aquatic food and habitat).
- Strategy 2.3 Protect and improve stream quality and watershed health by decreasing the amount of stormwater runoff and pollutants from reaching local waters.
- Strategy 2.4. Protect and enhance impaired streams and their tributaries to improve water quality and provide ecological benefits while also providing opportunities for passive recreation.
- Strategy 3.3. Protect steep slopes, ridgelines, and mountainside areas against destabilization, erosion, building and/or road failure, downstream flooding, and other hazards and to maintain the scenic and rural nature of these areas.
- Strategy 4.1. Preserve, protect, and manage forest resources for their economic and environmental benefits.
- Strategy 4.2. Promote tree planting and preservation to reduce the heat island effect, manage stormwater run-off, and improve water quality, air quality, and wildlife habitat.



Chapter 3 – Natural, Environmental, and Heritage Resources

Vision

Protect and enhance the County's natural, environmental, and heritage resources, which are fundamental to the health, safety, welfare, sustainability, and enjoyment of current and future generations.

Introduction

Abundant natural, environmental, and heritage resources define Loudoun County's unique sense of place. Loudoun County has a tradition of being in the forefront of natural, environmental, and heritage resource protection in Virginia, which is evident in past planning efforts. The *Loudoun County Choices and Changes Plan*, adopted in 1991, grouped natural, environmental, and heritage resources into categories that shared common elements, strengthening the relationships among them. The 2001 *Revised General Plan* retained the grouping of elements while also developing a Green Infrastructure strategy for the conservation, preservation, and restoration of these elements. The *Revised General Plan* also identified a conservation design process to allow for conservation of the natural, environmental, and heritage resource elements while also providing for full development of a site. The *Loudoun County 2019 Comprehensive Plan* (Comprehensive Plan) continues to encourage the use of a design process to better protect and enhance the County's natural, environmental, and heritage resources and incorporate such features into site design.

Protect and enhance natural, environmental, and heritage resources through the following:

Conservation
Careful management of natural and environmental features within the built environment.

Preservation
Retaining and protecting natural, environmental, and heritage resources.

Restoration/Recapture
Enhancing natural, environmental, and heritage resources wherever possible.

Education
Communicating the importance of natural and heritage resources.

Natural, environmental, and heritage resources include the Potomac River edge, major rivers, stream corridors, floodplains, wetlands, steep slopes, ridges and mountainsides, forested and vegetative landscapes, limestone geology areas, farmlands, soil resources, important plant and wildlife habitats, historic and archaeological sites, scenic areas and corridors, designated heritage areas, battlefields, historic cemeteries, and cultural landscapes. Complementary elements, such as air quality, aural environment, and the night sky are also important to the health, safety, and welfare of Loudoun residents. Natural, environmental, and heritage resources are tangible assets that make

CHAPTER 3-2

The County's Comprehensive Plan establishes an overall vision and specific actions for improving water quality.

2.3.6. County-Owned Properties

As noted in Section 2.2, the County performed a "Loudoun County Total Maximum Daily Load (TMDL) Municipal Facility Assessments" during the last permit cycle. The County will conduct a

follow-up assessment in FY2022 using the form in Appendix B and report the findings to DEQ in the FY2022 MS4 annual report.

2.4. Sediment-Specific Permit Requirements

Part II B 5 a-c of the MS4 permit requires permittees to reduce sediment loads through implementation of specific BMPs and to calculate anticipated load reductions. The MS4 permit allows the reductions to be met through BMPs implemented as part of the Chesapeake Bay TMDL provided that the BMPs are implemented in the watershed for which local water quality is impaired.

The Final Phase II Chesapeake Bay TMDL Action Plan includes three strategies applicable to the Goose Creek and Bull Run sediment TMDLs (see Section 2.3.4). While the County engages in street/parking lot sweeping, it does not do so at a frequency necessary to receive credit. As a result, the County is leveraging County-initiated stormwater retrofit projects (structural facilities and stream restoration projects) and land use changes to reduce the sediment load in the Bull Run and Goose Creek watersheds. It is important to note that the sediment reduction credit has been modified from the Final Phase II Chesapeake Bay TMDL Action Plan. This reflects that local TMDL sediment reduction projects are subject to TMDL-specific baseline reductions and do not have to account for the sediment delivery factor.

2.4.1. Goose Creek Sediment Reduction Calculations

The County has completed one project in the Goose Creek watershed (Murray's Bridge Removal), with an additional project expected to be completed during 2020 (Phil Bolen Memorial Park Stream Restoration). In addition, one land use change was implemented at the Loudoun County Landfill. These projects are described in Figure 2.A and calculations are summarized in Table 2.F. Detailed calculations are provided in Appendix C.

Figure 2.A – Description of Goose Creek Sediment Reduction Projects

Murray's Bridge Removal Project	Description
	The Murray's Bridge removal project occurred in 2014 on Goose Creek. The bridge was abandoned in place in 1970. The remainder of the bridge was impeding flow and causing bank erosion on both sides. A report by Wetland Studies and Solutions, Inc. estimated erosion reduction rates as a result of the removal of the bridge and the stabilization of stream banks. The picture on the left shows the abutment and resulting erosion prior to stabilization.

Phil Bolen Memorial Park Stream Restoration	Description
	This project involves the restoration of 1,350 linear feet of an un-named tributary of Sycolin Creek at the Phil Bolen Memorial Park. The current stream is in a highly degraded condition. The project will stabilize and restore the channel with a gravel/cobble riffle/pool morphology typical of Virginia Piedmont streams.

Loudoun County Landfill Land Use Change	Description
	This project involves the conversion of nine acres of turf to forest. Approximately 680 trees per acre were planted using a mix of conifer and hardwood.

Table 2.F – Summary of Goose Creek Sediment Reductions

Project	Completion Date	Sediment Reduction	
		(lbs/year)	(tons/year)
Murrays Bridge Removal	2014	50,780.85	25.4
Phil Bolen Stream Restoration	2020	196,283.41	98.1
Loudoun County Landfill Land Use Change	2015	3,509.10	1.8
Total		**250,573.36**	**125.3**

2.4.2. Bull Run Sediment Reduction Calculations

Three projects from the Final Phase II Chesapeake Bay TMDL Action Plan are planned to be implemented in the Bull Run watershed. These are anticipated to be completed in 2022 and 2023. Since these projects are still in the conceptual phase, the County reserves the right to replace them with projects of similar scale should they be deemed impractical. However, should that be necessary, the County will work to find alternative locations within the Bull Run watershed if possible. These projects are summarized in Table 2.G.

Table 2.G – Summary of Bull Run Sediment Reductions

Project	Description	Completion Date	Sediment Reduction	
			(lbs/year)	(tons/year)
Conklin Park Retrofit	Retrofit of existing stormwater pond to a constructed wetland.	2023	7,100.00	3.6
Conklin Park Stream Restoration	Restoration of approximately 1,300 LF of highly degraded stream.	2023	5,300.00	2.7
Dulles South Retrofit	Retrofit of existing stormwater pond to a constructed wetland.	2022	28,300.00	14.2
Total			**40,700.00**	**20.4**

2.5. Sediment Outreach Strategy

The County has adopted an outreach strategy to enhance the public's understanding about how to eliminate and reduce the discharge of sediment from the MS4. The foundation of the County's efforts is the Public Education and Outreach Plan, which is described in Section 2.3.2. Sediment was selected as a high-priority pollutant in response to the Goose Creek and Bull Run impairments. The PEOP has been integrated into the MS4 Program Plan. The PEOP focuses on educating the public about what they can do on their own property to capture and infiltrate stormwater and to reduce instream erosion caused by uncontrolled runoff. The PEOP also targets the development community to educate them about how environmental site design can be improved to reduce stormwater runoff. The public is informed that they may report sources of sediment pollution (such as a failing erosion and sediment controls at a construction site) through the Loudoun Express Request (LEx) system. LEx is the County's online system for the public to submit requests for service and to report concerns.

In accordance with the MS4 Program Plan, County field staff receive pollution prevention training at least once every 24 months. Training includes how to identify and report potential sources of sediment to the MS4. It also includes training on SOPs related to sediment include the Land Disturbing SOP, Landscaping and Grounds Maintenance SOP, Loading-Unloading SOP, Material Storage SOP, Street and Parking Lot SOP, Storm Sewer System Cleaning and Maintenance SOP, and Vehicle-Large Equipment Washing SOP.

2.6. Schedule of Anticipated Actions

This Sediment TMDL Action Plan will be implemented in accordance with the following schedule and milestones.

Table 2.H – Sediment TMDL Action Plan Schedule and Milestones

Action Item	Description	Schedule
Implement Legal Authorities	• Erosion and Sediment Control – Section 1220 County Code • Stormwater Management – Section 1096 County Code • Illicit Discharge Prohibition – Section 1096.03 County Code	Ongoing.

Action Item	Description	Schedule
Public Education and Outreach Plan	• 44.4.1 – Distribute English and Spanish versions of the "Resident's Guide to Sediment Reduction for a Cleaner Environment" brochure. • 4.4.2 – Promote the use of rain barrels and rain gardens to capture and infiltrate stormwater and to reduce instream erosion caused by uncontrolled runoff. • 4.4.3 – Provide information to the development community to improve their knowledge about how to improve site design and minimize the discharge of sediment as a result of land-disturbing activities. • 4.4.4 – Promote the availability of the Extension Service Master Gardeners Speakers Bureau Program to provide speakers to community groups regarding the management of stormwater runoff.	In accordance with the schedule contained in the PEOP.
MS4 Program Plan	• MCM #1 – Public Education and Outreach on Stormwater Impacts • MCM #2, BMP 2A – Public Involvement and Participation • MCM #3 – Illicit Discharge Detection and Elimination • MCMC #4 – Construction Site Stormwater Runoff Control • MCM #5 – Post-Construction Stormwater Management • MCM #6 – Pollution Prevention and Good Housekeeping for Municipal Operations	Ongoing in accordance with the schedule contained in the MS4 Program Plan.
	• MCM #6, BMP 6H – Field Staff Training	Every 24 months in accordance with the MS4 Program Plan
Chesapeake Bay TMDL Action Plan	• Implement planned County-initiated water quality retrofit and stream restoration projects.	In accordance with the schedule contained in the Chesapeake Bay

Action Item	Description	Schedule
		TMDL Action Plan.
Loudoun County Comprehensive Plan	• Implement strategies and actions contained in Chapter 3 related to reducing sediment loads and streambank erosion.	In accordance with the Loudoun County Comprehensive Plan
County Facility Assessments	• Conduct on-site assessments of County properties identified as having high risk factors for sediment in Table 2.D.	During FY2022; report findings to DEQ in the FY2022 annual report.

2.7. Anticipated End Date

The MS4 permit requires the County to submit an anticipated end date by which it will meet the WLAs for sediment. As described in Section 2.1.1, the County estimates that its share of the Goose Creek TMDL sediment load reduction is 31.6 tons/year. Section 2.4.1 describes projects that when fully implemented are expected to reduce sediment by 125.3 tons/year. As a result, the County has met the Goose Creek sediment TMDL. The County will continue to implement projects necessary to meet the Chesapeake Bay TMDL, which will further reduce sediment loads to Goose Creek.

As described in Section 2.1.2, the County estimates that its share of the Bull Run TMDL sediment load reduction is 718.4 tons/year. This reduction target, which is higher due to the assignment of a portion of stream erosion to the County, represents a significant challenge. Section 2.4.2 describes projects that when fully implemented are expected to reduce sediment by 20.4 tons/year. The sediment reduction calculation for the stream restoration project has not been adjusted to eliminate the sediment delivery factor (SDF) of 0.181 (which is required for the Chesapeake Bay TMDL but not local TMDLs). While preliminary, the County estimates that elimination of the SDF will result in an additional sediment reduction of 10 tons/year, for a total of 30.4 tons/year. Assuming a similar pace of investment and mix of projects each five year permit cycle, full compliance with the TMDL will be achieved in approximately 119 years, or 2139. As the County continues to implement projects to meet the Chesapeake Bay TMDL, it will focus on selecting potential projects in Bull Run in order to accelerate the expected end date.

3. Bacteria TMDL Action Plan

The County has been assigned two WLAs for bacteria – the "Bacteria TMDLs for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run, Bull Run, and the Occoquan River, Virginia" and the "Bacteria TMDL Development for Tributaries to the Potomac River: Sugarland Run, Mine Run, and Pimmit Run." Specific WLAs are assigned to the County for Bull Run and Sugarland Run, respectively. Table 3.A provides an overview of the organization of the Bacteria TMDL Action Plan and how each section addresses the 2018 MS4 permit.

Table 3.A – Bacteria TMDL Action Plan Permit Compliance Crosswalk

Section	Plan Element	2018 MS4 Permit	
3.1	Overview of Bacteria TMDLs	Part II B 3	a. The TMDL project name. b. The EPA approval date of the TMDL. c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable.
3.2	Identification of Significant Sources of Bacteria	Part II B 3	d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 and that are not covered under a separate VPDES permit. For the purpose of this requirement, a significant source of pollutants means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL.
3.3	Best Management Practices	Part II B 3	e. The BMPs designed to reduce the pollutants of concern in accordance with Parts II B 4, B 5, and B 6.
3.4	Bacteria-Specific Permit Requirements	Part II B 3	f. Any calculations required in accordance with Part II B 4, B 5, or B 6.
		Part II B 4	a. If the permittee is an approved VSMP authority, the permittee shall select at least three strategies listed in Table 5 below designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in Part II B 3 d.

Section	Plan Element	2018 MS4 Permit	
			b. [Not applicable].
3.5	Outreach Strategy	Part II B 3	g. For action plans developed in accordance with Part II B 4 and B 5, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants.
3.6	Schedule of Anticipated Actions	Part II B 3	h. A schedule of anticipated actions planned for implementation during this permit term.
4	Opportunity for Public Comment	Part II B 7	Prior to submittal of the action plan required in Part I B 1, the permittee shall provide an opportunity for public comment proposed to meet the local TMDL action plan requirements for no less than 15 days.

3.1. Overview of Bacteria TMDLs

Bacteria contamination is one of the most common causes of water quality impairment in Virginia streams. According to the U.S. EPA "Although they [fecal bacteria] are generally not harmful themselves, they indicate the possible presence of pathogenic (disease-causing) bacteria, viruses, and protozoans that also live in human and animal digestive systems. Therefore, their presence in streams suggests that pathogenic microorganisms might also be present and that swimming and eating shellfish might be a health risk."[5] In Virginia, water quality standards for bacteria were changed in 2003 from the more general fecal coliform bacteria to E. coli (*Escherichia coli*). E. coli is a subset of fecal coliform bacteria and is considered a better indicator of the pathogenic potential of contamination.

3.1.1. Bull Run Bacteria TMDL

The Bull Run bacteria TMDL is part of an overall TMDL developed to address bacterial impairments in the Occoquan River watershed. The impairment affecting Loudoun County is located 4.8 miles downstream of the County between Cub Run and Popes Head Creek. The WLA assigned to the County's MS4 is aggregated with the VDOT MS4. The Bull Run segment identified in the TMDL was delisted as impaired for bacteria in 2008. The segment remains delisted as of the 2018 Virginia Water Quality Assessment. As a result, the strategies presented in this plan are designed to prevent a re-listing of the impairment. Table 3.B provides a summary of the Bull Run bacteria TMDL.

[5] https://archive.epa.gov/water/archive/web/html/vms511.html

Table 3.B – Bull Run Bacteria TMDL Summary

TMDL Name	Approval Date	MS4 Existing Load	MS4 WLA	MS4 Reduction	Aggregated MS4s
		CFU/Year			
"Bacteria TMDLs for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run, Bull Run, and the Occoquan River, Virginia"	SWCB – 7/31/2008	1.18E+11	1.32E+10	89%	Loudoun County
	USEPA – 11/15/2006				VDOT

3.1.2. Sugarland Run Bacteria TMDL

The Sugarland Run bacteria TMDL addresses 5.72 miles of bacteria impairment located between Folly Lick Branch (located in Fairfax County) and the Potomac River (located in Loudoun County). The WLA assigned to the County's MS4 is aggregated with the VDOT MS4. Table 3.C provides a summary of the Sugarland Run bacteria TMDL.

Table 3.C – Sugarland Run Bacteria TMDL Summary

TMDL Name	Approval Date	MS4 Existing Load	MS4 WLA	MS4 Reduction	Aggregated MS4s
		CFU/Year			
"Bacteria TMDL Development for Tributaries to the Potomac River: Sugarland Run, Mine Run, and Pimmit Run"	SWCB – 4/4/2014	Not Specified	1.76E+12	97.3%	Loudoun County
	USEPA – 9/26/2013				VDOT

3.2. Identification of Significant Sources of Bacteria

The Bull Run bacteria TMDL identifies the primary sources of bacteria as direct deposition from cattle and direct deposition from wildlife, which together constitute ~86% of the total load.

Sources associated with MS4s play a less prominent role, including low density residential (7% of the total load) and high density residential (6% of the total load). In contrast, urban land uses play a more significant role in the Sugarland Run impairment, with the dominant land uses being developed and forest (74% and 18% at the time of TMDL development). Key sources of bacteria from the MS4 are identified as stormwater runoff from residential areas.

Domestic pets are the predominant controllable source of bacteria from residential areas. Two types of domestic pets, dogs and cats, were considered in both TMDLs. While both dogs and cats were considered, dogs are more likely to become a source because they are often walked on paved areas connected to the storm drain system. Wildlife is also considered a source of bacteria from residential areas. Bacteria from wildlife can flow from the MS4 as a result of on-land runoff and direct deposition within the storm sewer system itself.

The TMDL also examines failing septic systems as a potential source of bacteria. The number of failing systems in both watersheds is small. Failed septic systems and straight pipes, which may be located in urban areas, are considered to be <1% of the total load in the Bull Run watershed. The Sugarland Run TMDL estimated just 46 homes with failing systems at the time for the entire watershed. The number of septic systems is expected to have decreased due to the redevelopment of older residential areas. New buildings that abut a street where public sewer is available must connect to the public sewer system in accordance with Section 1064.4 of the Loudoun County Codified Ordinance.

As required by the MS4 permit, the County has reviewed publicly-owned properties to identify any significant sources of bacteria in the MS4 portion of the Bull Run and Sugarland Run watersheds. A source is considered significant if the pollutant loading is expected to be greater than the average pollutant load for the land use identified in the TMDL. In conducting the assessment, the County considered whether the property would likely have a higher concentration of pet waste than similar developed land uses. This includes uses such as dog parks and parks with trails likely to be frequented by large numbers of individuals walking their pets. The County does not have public dog parks, but does have an extensive trail system open to the public. The County also considered whether the property is on a septic system. All of the identified properties are connected to the County sanitary sewer system.

The County conducted an initial desktop assessment of each publicly-owned property within the MS4 using land use type and aerial photography during the last permit cycle. Based on the initial assessment, properties were identified for further onsite assessment using the factors identified above. A "Loudoun County Total Maximum Daily Load (TMDL) Municipal Facility Assessment" report was completed in 2015 and submitted to DEQ with the FY2015 annual report. Table 3.D presents the results of the evaluation. Follow-up actions for the current permit cycle are discussed in Section 3.3.

Table 3.D – Evaluation of Potential Significant Bacteria Sources

Facility Name	Primary Use	Watershed	Assessment Factors	Source of Bacteria?[6]
Conklin Park 25710 Donegal Dr.	Park	Bull Run	None	NA
Dulles Multipurpose Center 24950 Riding Center Dr.	General Recreation	Bull Run	Walking Trails	No
Dulles South Public Safety Station 19 25216 Loudoun County Pkwy.	Fire & Rescue	Bull Run	None	NA
South Riding Park Site 42691 Nations St.	Park	Bull Run	None	NA
Byrne's Ridge Park 24915 Mineral Springs Circle	Park	Bull Run	Walking Trails	No
Loudoun County Sheriff's Office 46620 E Frederick Dr.	Public Safety	Sugarland Run	None	NA

While not located within the MS4 portion of the Sugarland Run watershed, three additional County-owned properties have been identified as having trails that could impact water quality from pet waste. These are Gwen Thompson Briar Patch Park, Potomac Lakes Sports Complex, and Sugarland Run Stream Valley Park. These and other parks with trail systems will be subject to the general BMPs identified in Section 3.3.

3.3. Bacteria Best Management Practices

The County's program to reduce the bacteria load focuses on public education and field staff training as described in the County's Public Education and Outreach Plan and MS4 Program Plan. In addition, the County has put in place legal authorities designed to eliminate illicit discharges of bacteria, ensure that individuals pick up after their pets, and reduce discharges from septic systems. Finally, the County tracks septic system conversions to sanitary sewer as

[6] Based on the "Loudoun County Total Maximum Daily Load (TMDL) Municipal Facility Assessments" conducted in 2015, if applicable.

part of its Final Phase II Chesapeake Bay TMDL Action Plan. Table 3.E summarizes the components of the County's program and the roles and responsibilities of County agencies.

Table 3.E – Loudoun County Bacteria Reduction Program

Program Element	Description
Public Education and Outreach Plan	
Section 4.1 – Bacteria Impacts on Water Quality	The Public Education and Outreach Plan identifies bacteria as one of the County's high-priority water quality issues in accordance with the MS4 permit. Specific actions included in PEOP Section 4.1 are as follows: • 4.1.1 – Distribute English and Spanish versions of the "Scoop the Poop" brochure. • 4.1.2 – Participate in the Northern Virginia Clean Water Partners multi-media pollution prevention campaign. • 4.1.3 – Establish dog waste stations and signage at County parks. • 4.1.4 – Distribute portable waste-bag dispensers and written materials to individuals who adopt dogs from a County facility or event.
MS4 Program Plan	
MCM #1 – Public Education and Outreach on Stormwater Impacts	The County has developed the PEOP as described above. MCM #1 establishes a schedule for reviewing and updating the PEOP.
MCM #2 – Public Involvement and Participation BMPs	MCM #2, BMP 2A establishes procedures for the public to report illicit discharges and improper disposal. The Loudoun Express Request (LEx) system is used to report animal-related complaints, including violations of the County's leash law and requirement for pet owners to remove pet feces.
MCM #3 – Illicit Discharge Detection and Elimination	The County has developed an Illicit Discharge Detection and Elimination (IDDE) program designed to prevent, identify, and eliminate sources of pollutants, including bacteria.
MCM #6 – Pollution Prevention/Good Housekeeping for Municipal Operations	The County has designed a program to prevent pollution from County facilities. MCM #6, BMP 6H describes the County's employee pollution prevention training program. Under the program, field personnel receive training in the recognition and reporting of illicit discharges, including those related to bacteria.

Program Element	Description
Chesapeake Bay TMDL Action Plan	
Septic Conversions	Loudoun County tracks the conversion of properties served by septic systems to the sanitary sewer system. Conversions are tracked for the purpose of receiving nitrogen reduction credit. While specific bacteria pollution reductions are not assigned to septic conversions, they have the potential to reduce bacteria pollution. Two conversions have occurred in the affected watersheds (one each in Bull Run and Sugarland Run).
Northern Virginia Clean Water Partners Program	
Bacteria Public Education Media Campaign	Loudoun County participates in the Northern Virginia Regional Commission's Clean Water Partners. This program allows participating localities to pool resources to more effectively reach target audiences. Bacteria is one of the program's high priority water quality issues. Advertisements featuring messages on the importance of picking up pet waste are aired on cable TV networks, including four Spanish speaking channels. The campaign also includes a digital component. A survey is conducted annually to assess the impact of the program and to track long-term trends.
Legal Authorities	
Pet Waste Removal	Section 612.19 of the Loudoun County Codified Ordinance requires dog owners to immediately remove dog waste from any property, other than their own, located in or adjacent to any residential subdivision including common areas of homeowners' associations and condominium and apartment complexes. Violations can be reported by the public using the LEx system.
Leash Law	Section 612.13 of the Loudoun County Codified Ordinance requires dogs to be on a leash at all times except in designated, fenced-in areas. This ensures that the dog owners are present to remove any pet waste deposits. Violations can be reported by the public using the LEx system.
Connections to Sanitary Sewer	Section 1064.4 of the Loudoun County Codified Ordinance requires all new buildings that abut a street where public sewer is available to connect to the public sewer system. This means that over time, as a result of redevelopment, the number of septic systems in the County will decrease.

Program Element	Description
Septic Pump Out Requirements	Section 1066.07(b) of the Loudoun County Codified Ordinance requires the owner of a septic tank to perform a maintenance pump-out at least once every five years by a septic tank cleaner licensed by the Loudoun County Health Department. Pump-outs are essential to the proper operation of a septic system. The use of a licensed cleaner also helps to identify other problems that may lead to failure.
Other Programs and Activities	
Department of Animal Services	The Department of Animal Services is responsible for implementing the County's animal services programs including pet adoption, animal control, and pet licensing. Specific to bacteria, DAS investigates pet waste complaints and provides educational materials aimed at encouraging individuals who adopt dogs from the County's facility and mobile adoption events to clean up and properly dispose of dog wastes.
Parks, Recreation, and Community Services	The Department of Parks, Recreation, and Community Services coordinates with the Department of General Services in the placement of dog waste stations at their facilities and promotes proper clean-up and disposal of dog waste.
Pet Waste Stations	Dog waste stations located in parks frequented by dog walkers make it convenient for County residents to comply with pet waste removal laws. Associated signage reminds residents to use the stations and that there are legal consequences for ignoring the law. Pet waste stations are maintained at the following County facilities located in the Bull Run and Sugarland Run watersheds: Byrne's Ridge Park; Conklin Community Park; Dulles South Multi-Purpose Facility; and, South Riding Park. Additional dog waste stations can be found using the following site www.loudoun.gov/Facilities.

As noted in Section 3.2, the County performed a "Loudoun County Total Maximum Daily Load (TMDL) Municipal Facility Assessments" during the last permit cycle. In addition to the activities in Table 3.E, the County will conduct a follow-up assessment in FY2022 using the form in Appendix B and report the findings to DEQ in the FY2022 MS4 annual report.

The County will also assess the potential for adding dog waste stations and/or signage to County-owned parks with walking trails that are not in the MS4 but located within the Sugarland

Run watershed. These include Gwen Thompson Briar Patch Park, Potomac Lakes Sports Complex, and Sugarland Run Stream Valley Park.

3.4. Bacteria-Specific Permit Requirements

Part II B 4 a of the MS4 permit requires approved VSMP authorities such as Loudoun County to select and implement at least three strategies listed in Table 5 of the MS4 permit. The strategies must correspond with the sources identified in Section 3.2. Both the Bull Run and Sugarland Run TMDLs identify stormwater runoff from residential areas as the key source of bacteria pollution from MS4s. Bacteria from residential areas may include pet waste, failing septic systems, and wildlife. Both TMDLs state that implementation of MS4 WLAs should focus on reducing anthropogenic (human and pet) sources of bacteria as opposed to wildlife sources.[7] As noted in Section 3.3, the County has already implemented an aggressive program to reduce bacteria pollution. Table 3.F identifies how the County demonstrates compliance with Table 5 of the MS4 permit.

Table 3.F – Selection of Bacteria Reduction Strategies from MS4 Permit Table 5

Source	Table 5 Strategy	County Program
Domestic Pets	Provide signage to pick up dog waste, providing pet waste bags and disposal containers.	Pet waste stations are maintained at the following County facilities located in the Bull Run watershed: Byrne's Ridge Park; Conklin Community Park; Dulles South Multi-Purpose Facility; and, South Riding Park.  The County will assess whether to install additional pet waste stations at the following parks: Gwen Thompson Briar Patch Park, Potomac Lakes Sports Complex, and Sugarland Run Stream Valley Park.
Domestic Pets	Adopt and enforce pet waste ordinances or	The County has adopted ordinances requiring the removal of pet waste by owners (Section

[7] See Section 5.3.2 of the Sugarland Run Bacteria TMDL.

Source	Table 5 Strategy	County Program
	policies, or leash laws or policies.	612.19) and requiring owners to keep pets on leashes except under limited circumstances (Section 612.13). The Department of Animal Services is responsible for implementing these ordinances.
Illicit Connections or Discharges	Implement an enhanced dry weather screening and illicit discharge detection, and elimination program beyond the requirements of Part I E 3.	The County has implemented an enhanced dry weather screening program by screening more than the required minimum of 50 outfalls per year. For example, in FY2019, the County screened 375 outfalls.
Illicit Connections or Discharges	Implement septic tank inspection and maintenance programs.	The County has adopted an ordinance (Section 1066.07(b)) requiring the owner of a septic tank to perform a maintenance pump-out at least once every five years by a septic tank cleaner licensed by the Loudoun County Health Department.

3.5. Bacteria Outreach Strategy

The County has adopted an outreach strategy to enhance the public's understanding about how to eliminate and reduce the discharge of bacteria from the MS4. The strategy focuses on educating pet owners on the importance of picking up fecal matter as well as training County field staff to identify and report potential sources of bacteria pollution. The Public Education and Outreach Plan, described in Table 3.E, is the primary vehicle for implementing the County's efforts and has been integrated into the MS4 Program Plan. The public are informed that they may report pet owners who do not abide by County ordinances (pet waste and leash laws) through the LEx system. County field staff receive pollution prevention training at least once every 24

Loudoun County "Scoot the Poop" education brochure.

months. This training includes how to identify and report potential sources of bacteria to the MS4. In addition to these local efforts, the Northern Virginia Clean Water Partners is an important part of the County's overall efforts. The program allows the County to leverage funding with its regional partners to reach a much broader audience than working alone. A strength of Clean Water Partners is that it conducts an annual survey to assess the effectiveness of regional efforts and to track long-term trends. For instance, in 2019, 83% of survey respondents indicated that they always pick up after their pets. This is significantly better than the assumption in the Sugarland Run TMDL that residents pick up after their dogs only 50% of the time.[8] The goal of the County is to ensure no backsliding on current progress and to increase the number of people who always pick up after their pets.

3.6. Schedule of Anticipated Actions

This Bacteria TMDL Action Plan will be implemented with the following schedule and milestones.

Table 3.G – Bacteria TMDL Action Plan Schedule and Milestones

Action Item	Description	Schedule
Public Education and Action Plan	• 4.1.1 – Distribute English and Spanish versions of the "Scoop the Poop" brochure. • 4.1.2 – Participate in the Northern Virginia Clean Water Partners multi-media pollution prevention campaign. • 4.1.3 – Establish dog waste stations and signage at County parks. • 4.1.4 – Distribute leash dispensers and written materials to individuals who adopt dogs from a County facility or event.	In accordance with the schedule contained in the PEOP.
MS4 Program Plan	• MCM #1 – Public Education and Outreach BMPs • MCM #2, BMP 2A – Public Involvement and Participation BMPs • MCM #3 – Illicit Discharge Detection and Elimination	Ongoing in accordance with the MS4 Program Plan.
	• MCM #6, BMP 6H – Field Staff Training	Every 24 months in accordance with the MS4 Program Plan

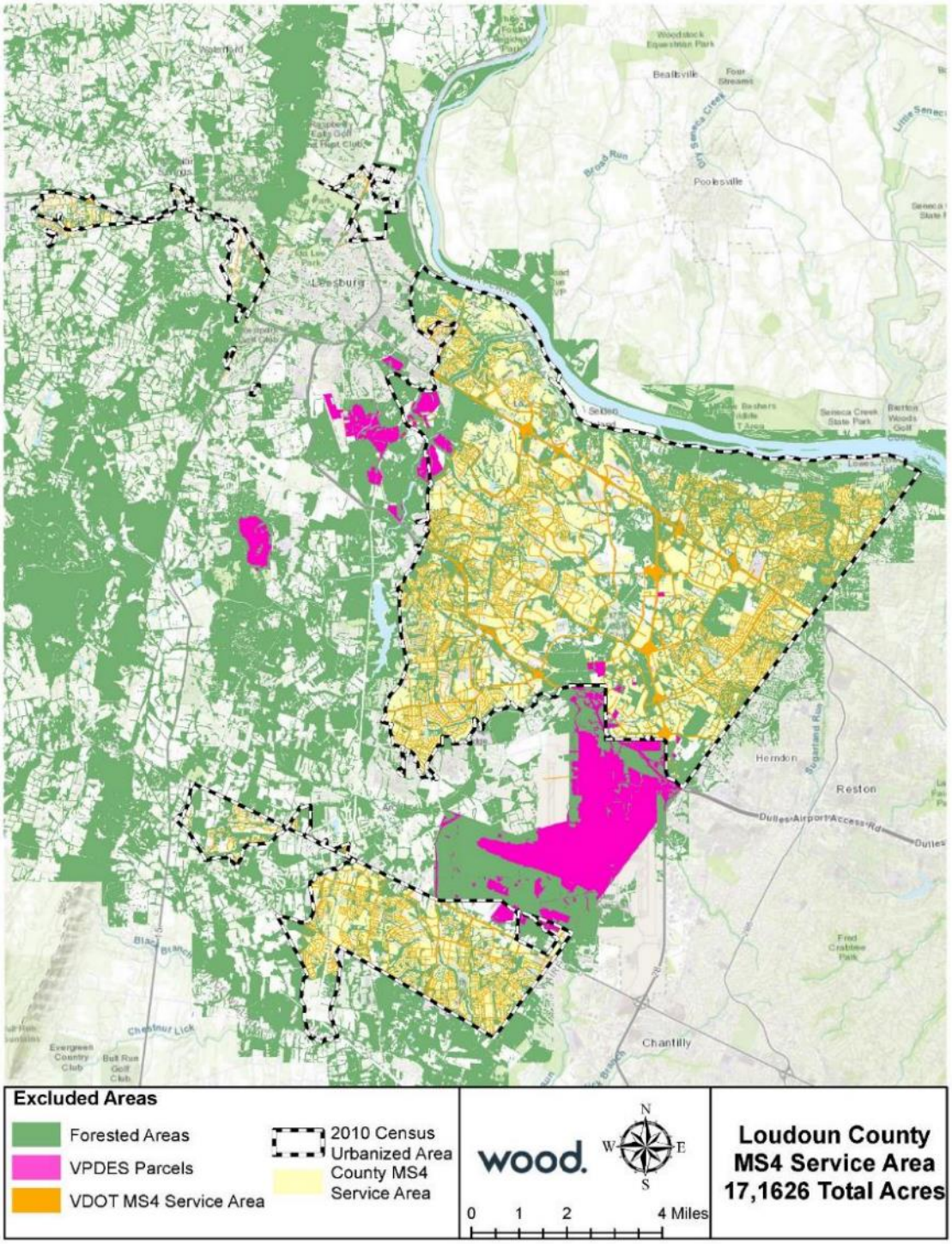
[8] Section 3.8.6 of the Sugarland Run Bacteria TMDL states "The estimated bacteria pet loading on each urban land use category was then reduced by 50%, assuming that that pet owners pick up after their dogs 50% of the time (Swann, 1999)."

Action Item	Description	Schedule
Chesapeake Bay TMDL Action Plan	• Track septic system conversions.	In accordance with the schedule contained in the Chesapeake Bay TMDL Action Plan.
Northern Virginia Clean Water Partners	• Regional public education media campaign targeting dog owners.	Ongoing in accordance with the MS4; assessment of effectiveness annually with DEQ annual report.
Implement Legal Authorities	• Pet Waste Removal – Section 612.19 County Code • Leash Law – Section 612.13 County Code • Connections to Sanitary Sewer – Section 1064.4 County Code • Septic Tank Pump Outs – Section 1066.07(b) County Code	Ongoing.
Pet Waste Stations and Signage	• Maintain pet waste stations and signage at Byrne's Ridge Park, Conklin Community Park, Dulles South Multi-Purpose Facility, and South Riding Park	Ongoing in accordance with Section 4.1.3 of the PEOP.
	• Assess whether to install additional pet waste stations and signage at Gwen Thompson Briar Patch Park, Potomac Lakes Sports Complex, and Sugarland Run Stream Valley Park. Implement where determined to be beneficial.	During FY2021; report findings to DEQ in the FY2021 annual report.
County Facility Assessments	• Conduct on-site assessments of County properties identified as having high risk factors for bacteria in Table 3.D.	During FY2022; report findings to DEQ in the FY2022 annual report.

4. Opportunity for Public Comment

This plan was made available for public comment no less than 15 days prior to submittal to DEQ in accordance with Part II B 7 of the MS4 permit. The County's news release inviting public comment and comments received are provided in Appendix D.

Appendix A
Loudoun County MS4 Service Area Delineation



Appendix B
Loudoun County Municipal Assessment Form

Loudoun County TMDL Municipal Facility Assessment Form

The County's MS4 permit requires certain municipal facilities to be periodically assessed to identify any significant sources of sediment (Goose Creek and Bull Run watersheds) or bacteria (Bull Run and Sugarland Run watersheds) pollution. Affected facilities are identified in the most recent Loudoun County Comprehensive Local TMDL Action Plan. This form is used to capture site information and identify any significant sources of the pollutants. Include site photos to illustrate issues as appropriate.

Facility Name: Click here to enter text. **Date:** Click here to enter a date.

Location: Click here to enter text.

Site Reviewer: Click here to enter text.

Watershed: Goose Creek ☐ Bull Run ☐ Sugarland Run ☐

Sediment Assessment (Bull Run and Goose Creek)

1. Check potential sources of sediment at the site:

☐ Stockpiles of Soil or Other Erodible Materials	☐ Soil Exposed by Use of Vehicles/Equipment
☐ Sports Fields – Soccer	☐ Vehicle/Equipment Washing Area
☐ Sports Fields – Baseball	☐ Playground/Picnic Areas
☐ Volleyball Pit	☐ Denuded/Poorly Stabilized Soils
☐ Sports Fields – Other	☐ Construction Activity
☐ Other: Click here to enter text.	

Note: Take pictures of any checked pollutant sources and include with this form.

2. Are any of the potential sources from above exhibiting discharges that are greater than that typically expected for a developed land use?

   ☐ Yes ☐ No

If yes, describe the type and/or location of the source(s) of sediment. Include whether the sediment discharges directly to receiving waters or stormwater infrastructure.

Click here to enter text.

3. Describe any actions (immediate or long-term) that should be taken to control any significant source(s) of sediment.

Click here to enter text.

4. Provide any additional comments about the site. This may include information about existing BMPs, other potential sources of pollution, etc.

Click here to enter text.

Loudoun County TMDL Municipal Facility Assessment Form

Bacteria Assessment (Bull Run and Sugarland Run)

1. Check potential sources of bacteria at the site:

☐ Dog Park/Off-Leash Area	☐ Trails Frequented by Dog Walkers
☐ On-Site Septic System	☐ Dumpster
☐ Portable Toilet	☐ Barns/Stables
☐ Latrine/Outhouse	☐ Congregated Wildlife (Geese, etc.)
☐ Other: Click here to enter text.	

Note: Take pictures of any checked pollutant sources and include with this form.

2. Are any of the potential sources from above exhibiting discharges that are greater than that typically expected for a developed land use?

   ☐ Yes ☐ No

If yes, describe the type and/or location of the source(s) of bacteria. Include whether the bacteria discharges directly to receiving waters or stormwater infrastructure.

Click here to enter text.

3. Describe any actions (immediate or long-term) that should be taken to control any significant source(s) of bacteria.

Click here to enter text.

4. Provide any additional comments about the site. This may include information about existing BMPs, other potential sources of pollution, etc.

Click here to enter text.

Loudoun County TMDL Municipal Facility Assessment Form

Site Photos

Photo # Click here to enter text.
Description: Click here to enter text.
Date: Click here to enter a date.

Photo # Click here to enter text.
Description: Click here to enter text.
Date: Click here to enter a date.

Photo # Click here to enter text.
Description: Click here to enter text.
Date: Click here to enter a date.

Photo # Click here to enter text.
Description: Click here to enter text.
Date: Click here to enter a date.

Appendix C
Sediment Reduction Calculations

All projects are from the County's Final Phase II Chesapeake Bay TMDL Action Plan. The calculations have been modified to reflect that local TMDL sediment reduction projects do not have to account for the sediment delivery factor. In addition, baseline reductions must reflect the local TMDL. In the case of Goose Creek stream restoration projects, a 62% percent reduction from the load allocation is assigned to stream bank erosion. This means that the County can take 38% of the sediment reduction credit for areas outside of the regulated MS4. Likewise, for Bull Run stream restoration projects, the County can take 22.6% of the sediment reduction credit.[9]

Table 6.16: TMDL Load Allocation for Goose Creek

Land Use	Projected Load (tons/yr)	Load Allocation (tons/year)	Percent Reduction
Forest	998	998	0%
Clear-Cut Timber	2	0.2	92%
Select-Cut Timber	72	6	92%
Cropland	1,666	1,166	30%
Pasture	14,185	9,930	30%
Developed Land*	634	444	30%
Streambank Erosion	83,842	31,860	62%
Sediment Trapping	-10,140	-4,440	---
Total	91,259	39,963	56%

* Excludes developed land within MS4s

Table 7-6: Load Allocations Summary for Bull Run

Source	Land Use Type	Existing Load (tons/year)	Allocated Load (tons/year)
Non-point Source	Deciduous Forest	55.7	55.7
	Evergreen Forest	12.6	12.6
	Mixed Forest	7.8	7.8
	Pasture/Hay	1,005.5	227.4
	Row Crop	2,066.8	467.3
	Quarries Strip Mine	0.0	0.0
	Low Intensity Residential	2.9	0.7
	Medium High Intensity	124.9	28.2
	Commercial/Industrial	189.9	42.9
	Institutional	19.9	4.5
	Urban Recreational Grass	0.6	0.1
	Instream Erosion	17,755.9	4,020.6
	Total	**21,242.5**	**4,867.8**

[9] Email communication from Allan Brockenbrough, DEQ, 4/8/2020.

Murray's Ford Bridge Removal and Bank Stabilization

Murray's Ford Bridge Removal and Bank Stabilization LOCAL SEDIMENT TMDL CREDIT - LOCAL TMDL BASELINE/NO DELIVERY FACTOR				
Latitude: 39.0387192		Goose Creek		
Longitude: -77.5360684		Calculation Method: Expert Panel Protocol 1 based on Bank Erosion Hazard Index and Near-Bank Stress tools (WSSI, 2011)		
Restoration Length (ft)	**450.00**			
Credit for Unregulated Land	**38%**	Goose Creek TMDL Table 6.16 for Streambank Erosion		
STEP 1	**TN**	**TP**	**TSS**	
BANCS Initial Sediment (tons/year)			133.25	
Conversion to Pounds (2.28*TSS Tons for TN; 1.05*TSS Tons for TP; TSS*2,000)	303.81	139.91	266,500.00	
Apply Effectiveness of 50%	151.91	69.96	133,250.00	
Apply Sediment Delivery Factor (None for Local TMDLs)			133,250.00	
Total Reduction Based on Protocol 1 (lbs/year)	151.91	69.96	**133,250.00**	
STEP 2	**Total**	**Impervious**	**Forested**	**Pervious**
Regulated Acres	390.44	104.41	-	286.03
Unregulated Acres	220,767.18	3,392.55	96,695.66	120,678.97
	221,157.62	3,496.96	96,695.66	120,965.00
STEP 3		**Portion of Reductions (lbs/yr)**		
	Land Ratio	**TN**	**TP**	**TSS**
Regulated	0.00	0.27	0.12	235.24
Unregulated	1.00	151.64	69.83	133,014.76
STEP 4	**TN**	**TP**	**TSS**	
Regulated Credits (100%)	0.27	0.12	235.24	
Unregulated Credits	57.62	26.54	50,545.61	
Total Credits	**57.89**	**26.66**	**50,780.85**	

Phil Bolen Stream Restoration

Note that the interim/default pollutant removal rate used for the Phil Bolen stream restoration is used for planning purposes only. The County will update the credit using one of the DEQ-accepted protocols for final Chesapeake Bay and local TMDL credit.

Phil Bolen Park Stream Restoration				
LOCAL SEDIMENT TMDL CREDIT - LOCAL TMDL BASELINE/NO DELIVERY FACTOR				
Latitude: 39.072495		Goose Creek		
Longitude: -77.530271		Calculation Method: Interim/Default Rate		
Restoration Length (ft)	**1,350.00**			
Credit for Unregulated Land	**38%**	Goose Creek TMDL Table 6.16 for Streambank Erosion		
STEP 1	**TN**	**TP**	**TSS**	
Stream Restoration Interim Rates (lbs/ft)	0.075	0.068	44.88	
Interim Rates (lbs/ft) Adjusted to Remove Sediment Delivery Factor*	0.075	0.068	247.96	
Total Reduction Based on Interim Rates (lbs)	101.25	91.80	334,746.00	
**Removes the 0.181 sediment delivery factor.*				
STEP 2	**Total**	**Impervious**	**Forested**	**Pervious**
Regulated Acres	173.42	88.22	15.59	69.61
Unregulated Acres	347.60	67.52	104.22	175.86
	521.02	155.74	119.81	245.47
STEP 3		**Portion of Reductions (lbs/yr)**		
	Land Ratio	**TN**	**TP**	**TSS**
Regulated	0.33	33.70	30.56	111,419.24
Unregulated	0.67	67.55	61.24	223,326.76
STEP 4	**TN**	**TP**	**TSS**	
Regulated Credits (100%)	33.70	30.56	111,419.24	
Unregulated Credits	25.67	23.27	84,864.17	
Total Credits	**59.37**	**53.83**	**196,283.41**	

Note: Per 3/11/2019 phone conversation with Jeff Selengut, DEQ, the "industrial area" of VPDES industrial permitted land receives credit as if it is an MS4 regulated area. Further, the MS4 area in this case is the Town of Leesburg. DEQ confirmed that credit is received for the MS4 area regardless of the owner.

Loudoun Landfill Land Use Change

The County has one land use change (turf to forest) from the Final Phase II Chesapeake Bay TMDL Action Plan in the Goose Creek watershed. The land use change is outside of the MS4. The calculation has been modified to reflect that the baseline must reflect the local TMDL. In the case of Goose Creek, the closest representative beginning land use is developed land, which has a target reduction of 30%. This means that the County can take 70% of the sediment reduction credit.[10]

Site	Acres	Type from Table	Inside MS4? (Y or N)	Date Effective	TSS Credit	Watershed	MS4 Credit for Local TMDL	Goose Creek TSS
Loudoun Landfill	9.00	TF	N	2015	5,013.00	Goose Creek	0.70	3509.10
					Total			**3509.10**

		Lbs/Acre/Year		
Conversion	**For Table**	**TN Reduction**	**TP Reduction**	**TSS Reduction**
Imp to Forest	IF	9.85	0.8	1797
Imp to Mixed Open	IM	9.55	0.48	877
Imp to Turf	IT	4.27	0	1240
Turf to Forest	TF	5.58	1.46	557
Turf to Mixed Open	TM	5.28	1.15	0
Mixed Open to Forest	MF	0.3	0.32	920

Bull Run Concept Projects

The following concept projects are from the Final Phase II Chesapeake Bay TMDL Action Plan. The sediment reduction calculation for the stream restoration has not been adjusted to eliminate the sediment delivery factor of 0.181 (which is required for the Chesapeake Bay TMDL but not local TMDLs). Calculations will be detailed and updated in MS4 annual reports to DEQ.

New County Project	TN Credit	TP Credit	TSS Credit	FY	Watershed	TSS Local Credi
Proposed - SW Pond to Constructed Wetland Retrofit	74.00	14.00	7,100.00	2023	Bull Run	7,100.00
Proposed - Stream Restoration	236.00	44.00	5,300.00	2023	Bull Run	5,300.00
Proposed - SW Pond to Constructed Wetland Retrofit	270.00	50.00	28,300.00	2022	Bull Run	28,300.00

[10] Email communication from Allan Brockenbrough, DEQ, 4/8/2020.

Appendix D
Public Notice and Comments

Loudoun County, Virginia
www.loudoun.gov
NEWS RELEASE
Office of the County Administrator, Public Affairs and Communications
1 Harrison Street SE, P.O. Box 7000, Leesburg, VA 20177-7000
703-777-0113 · Fax 703-771-5841

For Immediate Release
April 16, 2020

Media Contact: Glen Barbour, Public Affairs and Communications Officer
703-771-5086, Glen.Barbour@loudoun.gov

Comments Sought on Stormwater Management Plan for Reducing Pollutants to Local Waterways

Loudoun County is seeking public comments on a draft plan for reducing pollutants entering specific local streams: Bull Run, Goose Creek and Sugarland Run.

The draft "Comprehensive Local TMDL Action Plan; Sediments TMDLs for Goose Creek and Bull Run, Bacteria TMDLs for Bull Run and Sugarland Run" outlines ways that the county intends to meet requirements for reducing the quantity of pollutants entering these waterways via the county's municipal separate storm sewer system (MS4). The county operates the MS4 under a permit from the state of Virginia and the permit requires the development and implementation of action plans for impaired waterways. TMDL refers to the allowed "Total Maximum Daily Load" of the pollutants allowed to restore clean water in these waterways and ultimately the Chesapeake Bay.

The draft action plan is posted online at loudoun.gov/stormwater for review and public comment. Comments on the action plan are due by Friday, May 1, 2020.

Comments can be sent by email to stormwater@loudoun.gov or by phone to the Stormwater line, 703-777-0117.

More information about Loudoun County's Stormwater Management Program is available at loudoun.gov/stormwater.

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The following comments from the public were received by May 1, 2020.

Date	Source	Comments
4/16/2020	Individual	One area I feel we can improve for sediment control is by requiring the power and phone companies to fix disturbed land when they are done working on their respective lines. A recent example is located along a section of the Sycolin Creek floodplain. You can view the damaged area by turning onto Cochran Mill Rd from Sycolin Rd. Stop just after the red barn on the right. There you see severely damaged land located under powerlines on the opposite side of the creek. This damage was caused by recent work on the powerlines. There is no grass, nor any attempt to cover and reseed. It would certainly be identified as a significant source of sediment. Please let me know if you would like a picture. I travel the road frequently and can send one to your office. Also, I am interested to learn if this type of damage is already covered by ordinances or agreements with the power/phone companies. Were they supposed to repair the damaged area? If not, how can citizens help identify these problem areas (make a report)?
4/16/2020	Individual	Sediment reduction in Bull Run appears to be a significant challenge. Full compliance in 119 years does not seem to be a defensible position. Part of the issue seems to be allocation assigned to the county and part is the lack of significant measures to reduce sediment entering Bull Run. Both sides of this equation merit additional county attention. If the allocation of sediment has inherent issues, perhaps relief can be attained in the allocation. Additionally, an area as large as Bull Run should offer more opportunities to identify reduction options and these additional opportunities merit more aggressive identification and implementation to reduce the compliance timeline. Bacteria Public Education should merit more resources. Compliance by the public to cleaning up pet waste is critical. Educating pet owners and enforcing current ordinance seems critical in addressing bacteria reduction.
4/30/2020	PEC	We appreciate the opportunity to comment on the local TMDL Action Plan and understand that the plan is designed to meet VA DEQ requirements. We appreciate staff efforts to produce a plan that is understandable to the general public also, and that they take the time to respond to questions when it is not clear. Additional clarification is helpful and appreciated. We would encourage presentations to the Board about these documents in relatively easy-to-understand terms so that the public is better informed and ready to participate in reducing the pollution in our streams. Also, we would be glad to help in public education and outreach through our own work in the community. Please feel free to contact me.

Date	Source	Comments
		Reference – Page 13: 2.3.2. Public Education and Outreach Plan Comment: In addition to a speakers bureau, having an outreach program that would involve Master Gardeners and HOA volunteers to educate homeowners on the steps outlined in this section could be an additional help. **Reference – Page 14:** Table 2.E – MS4 Program Plan Components Related to the Chesapeake Bay TMDL-- MCM #2, BMP 2A establishes procedures for the public to report illicit discharges and improper disposal. The Loudoun Express Request (LEx) system is used to report sediment related complaints, including violations of the County's erosion and sediment control requirements. Comment: Several years ago the County had a soil and erosion public engagement program to train interested volunteers on what to look for, and how to report problems on construction sites with downed silt fences, etc. Reinstituting this could be a helpful addition. **Reference – Page 16:** Comprehensive Plan references Comment: Glad to see the Comp Plan strategies referenced here. In addition to updates to the ordinance to protect riparian areas with development, as part of strategy 4.2 and this TMDL Action plan, there should be focused outreach for residents who live along streams and who could partner to help restore buffers—as individuals and homeowner associations. In addition to ordinance changes, the County will have to find a way to overcome the prohibition it now faces for planting trees in floodplains without costly floodplain delineations and studies. **Reference – Page 17:** The MS4 permit allows the reductions to be met through BMPs implemented as part of the Chesapeake Bay TMDL provided that the BMPs are implemented in the watershed for which local water quality is impaired. Comment:

Appendix E

Clean Water Partners Summary

Northern Virginia Clean Water Partners Annual Summary of Results July 1, 2019 – June 30, 2020

www.onlyrain.org

Polluted stormwater runoff is the number one cause of poor water quality in streams and rivers in Northern Virginia. When it rains, the water runs off streets, driveways, yards and parking lots and mixes with pesticides, grass clippings, fertilizer, bacteria, and oil. All this pollution enters the storm drains on the street and is discharged directly to a stream. The runoff is not filtered or sent to a wastewater treatment facility.

To reduce the impacts of stormwater pollution, the Northern Virginia Clean Water Partners came together to change peoples' behavior through a public education campaign.

About the Partnership

The Northern Virginia Clean Water Partners is composed of a group of local governments, drinking water and sanitation authorities, and businesses that share the common goals to keep Northern Virginia residents healthy and safe by reducing the amount of pollution from stormwater runoff that reaches local creeks and rivers, and empower individuals to take action to reduce pollution.

To meet these goals, the Partners work together to:

- Identify high priority water quality issues for the region;
- Identify the target audience(s) for outreach;
- Educate the region's residents on simple ways to reduce pollution around their homes;
- Monitor changes in behavior through surveys and other data collection techniques; and
- Pilot new cost-effective opportunities for public outreach and education.

Membership is voluntary and each member makes an annual contribution to fund the program. By working together, the partners can leverage their funds to develop and place bilingual educational products with common messages and themes, thereby extending the campaign's reach.

Only Rain Down the Storm Drain is the motto of the partnership.

The 2020 campaign helped to satisfy MS4 (Municipal Separate Storm Sewer System) Phase I and Phase II permit requirements for stormwater education and documenting changes in behavior.

For more information visit www.onlyrain.org

2020 Campaign Overview and Accomplishments

In 2020, the Northern Virginia Clean Water Partners selected the following three high priority water quality issues to focus on for the Campaign:

- bacteria,
- nutrients, and
- chemical contaminants.

The Partners identified the target audiences for these issues as pet owners, homeowners with a lawn or garden, and home mechanics and do-it-yourselfers.

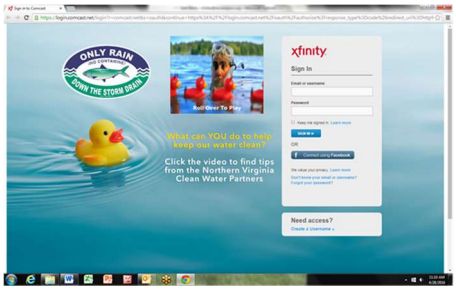
The campaign used television, print, internet advertising, Facebook, Twitter, and the Only Rain Down the Storm Drain website to distribute messages linked to specific stormwater issues, such as proper pet waste disposal, responsible fertilizer use on lawns and gardens, and proper disposal of detergents, paints, stains, and auto fluids.

In addition to the multi-media campaign, partners participated in local events to raise awareness and encourage positive behavior change in residents. The social media posts, television and internet ads featured the well-known national symbol of non-point source pollution; the rubber ducky.

2,242,313	Total household television impressions*
544,812	Total digital impressions (internet banner ads and in-stream video ads)
118,055	Total social media impressions (Facebook and Twitter)
18,262	Engagements with social media posts (Facebook and Twitter May-July 2020)
7,220	Visits to the **www.onlyrain.org** website
500	Survey Responses

Throughout the campaign year, the Partners made the following efforts to educate the public and promote awareness of impacts of stormwater pollution:

- From July 2019 through June 2020, aired four Public Service Announcements on 20 English language cable TV networks, and five Spanish language networks a total of 7,175 times. The ads featured messages on the importance of picking up pet waste and general household stormwater pollution reduction measures.
- Placed digital ads on Premium Digital Video websites that promote the same messages as the cable TV ads.
- Featured two full day, full page ads for Only Rain on the sign-in pages for Xfinity.com.

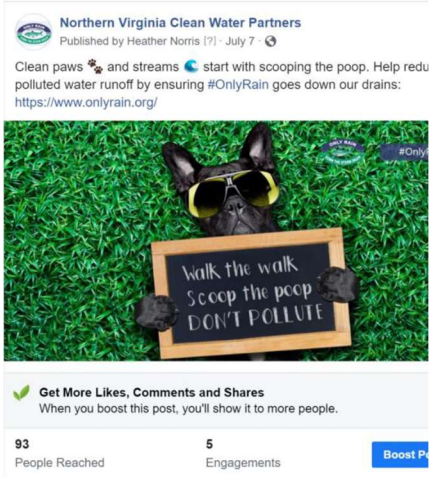


As a new strategy in 2020, the Partners contracted with a digital communications firm to develop and implement a social media campaign on Facebook and Twitter. The results so far have shown that these platforms are an effective way to engage with the target audiences.

- Since May 1, 2020 the Facebook page has gathered

46 page likes, 52 follows, and reached 99,095 people.

- During this time there were 49 posts, 17,943 post engagements, and 14 posts clicks



- Since the creation of the Twitter page on May 13, the page has gained: 18,960 impressions, 319 total engagements, 28 post link clicks, and 27 followers.
- We have tweeted 88 times leading to: 56 retweets and 64 likes.
- Two paid Facebook advertising campaigns were conducted from 07/06– 07/30 resulting in 15,879 clicks through to the website.
- Conducted an online survey of 500 Northern Virginia residents to determine the effectiveness of the ads, aid in directing the future efforts of the campaign, and to reveal any changes in behavior.
- Continued to update and maintain the Northern Virginia Clean Water Partners website.

Findings in the 2020 survey include:

General Awareness

- Nearly half (46%) of respondents either don't know where storm water ends up or believes that it goes to a wastewater treatment plant. This is a significant increase from 2019.
- 22% of respondents recalled seeing the ad on TV, Facebook, or Twitter after watching the video clip in the survey which is an increase from 2019. This indicates that adding social media to the campaign had a positive impact on the recall rate.
- Of those who recalled seeing the ads, 36 percent state they already take action to protect clean water, 48 percent state they now pick up their pet waste more often, 15 percent state that they now properly dispose of motor oil, and 35 percent state they plan to fertilize fewer times per year.
- When shown the Only Rain Down the Storm Drain logo, 61 percent of the respondents recognized it compared to 54 percent in 2013. This increase indicates that **awareness of the logo has increased over time.**
- Even though more than half of respondents feel at least somewhat confident that they would know where to report potential water pollution, only 48 percent would report water pollution if they saw it. This suggests **there is a need for education on what pollution may look like and to encourage residents to report it if they see something.**
- One in five respondents stated they don't know they need to take action around their home to protect clean water.
- **The majority (67%) of respondents indicated that they were aware their locality has a specific place to drop off household hazardous waste.**
- About four in ten respondents felt they were **most prevented to take action to protect clean water because they don't know what to do.**
- The majority of respondents (71%) indicated that they had not seen or received information about reducing water pollution in the past 12 months from any source which indicates a need to continue with public outreach.

Understanding Behaviors

In addition to questions regarding the effectiveness of the campaign, the survey asked questions about current behaviors and attitudes of Northern Virginia residents as they relate to pet waste management, lawn care, and motor oil disposal. Responses to these questions support the development of future messages and targeted promotion.

The most important reason dog owners are motivated to pick up their pet's waste is because "It's what good neighbors do". The number of respondents choosing "It causes water pollution" as the main reason has fluctuated and was the fourth most common reason in 2020.

78% of lawn and garden owners fertilize their lawns at least once per year. **Among those who fertilize once a year, 19 percent fertilize in the spring and only six percent fertilize in the fall.** This suggests that there is room to educate residents of Northern Virginia that fertilizing in the fall is better for local waterways.

Among those who fertilize their lawn, only four percent of respondents indicated that they fertilize based on results of a soil test. Slightly more than one-third (35%) in 2020 leave their grass clippings on their lawn, while 40% bag their grass clippings for disposal.

Homeowners were asked if they had implemented or had heard of or installed a rain barrel, rain garden, or conservation landscaping. Five percent reported having a rain barrel, while two percent reported having a rain garden, and eleven percent reported having conservation landscapes in their yard. This indicates there is a significant opportunity to continue to promote these practices to homeowners.

Consistent with past years, the majority of respondents take their vehicle to a service station for oil changes (73%) or take used oil to a gas station or hazmat facility for recycling (11%). Approximately ten percent of Northern Virginians reported storing used motor oil in their garage, placing it in the trash or dumping it down the storm drain, sink or on the ground.

Only Rain Down the Drain

www.onlyrain.org

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2020 Northern Virginia Clean Water Partners

Fairfax County | Arlington County | Loudoun County | Fairfax Water | City of Alexandria | City of Fairfax | City of Falls Church | City of Manassas | Town of Leesburg | Town of Dumfries | Doody Calls | Northern Virginia Regional Commission | George Mason University | Virginia Coastal Zone Management Program | Fairfax County Public Schools | Prince William County Public Schools | Northern Virginia Soil and Water Conservation District

Summary prepared by NVRC on behalf of the Partners

August, 2020

Appendix F

Outfall Data Table

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AB104	7.233642	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	57.99	PL21	-77.361313	39.028070
AB109	2.747865	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.00	PL21	-77.362323	39.025951
AB1200	89.114605	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	39.96	PL21	-77.380829	39.046338
AB1211	7.473138	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	51.80	PL21	-77.379827	39.047228
AB1227	1.209761	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.79	PL21	-77.379327	39.048490
AB1231	2.158107	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	76.49	PL21	-77.380320	39.046369
AB1236	2.757412	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	62.27	PL21	-77.379231	39.047333
AB124	1.616600	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.71	PL21	-77.362063	39.032062
AB1260	19.173763	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	34.85	PL21	-77.378143	39.048754
AB1307	26.768929	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	61.86	PL21	-77.383233	39.032668
AB1373	3.624742	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	52.75	PL21	-77.380019	39.031206
AB1375	4.180294	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.81	PL21	-77.381332	39.031899
AB1377	0.785271	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.25	PL21	-77.380837	39.031555
AB1411	0.634581	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	99.57	PL21	-77.384525	39.027582
AB1414	0.661578	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	59.67	PL21	-77.385450	39.027712
AB1419	1.947180	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.89	PL21	-77.385631	39.027399
AB142	2.662957	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.17	PL21	-77.362289	39.032280
AB1422	3.537836	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.05	PL21	-77.386205	39.027243
AB1444	37.869278	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	37.21	PL21	-77.382509	39.028013
AB1458	1.649641	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.63	PL21	-77.381529	39.027900
AB1475	3.108022	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.66	PL21	-77.380487	39.027810
AB1482	2.343479	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	54.27	PL21	-77.379406	39.028153
AB1489	5.143787	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	80.00	PL21	-77.380080	39.029208
AB149	9.313605	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.30	PL21	-77.363832	39.033537
AB1491	1.517072	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.51	PL21	-77.380505	39.028229
AB1493	2.178457	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	86.82	PL21	-77.381133	39.028099
AB1495	1.701857	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.35	PL21	-77.379237	39.028854
AB1500	3.062969	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.90	PL21	-77.379221	39.031089
AB1509	39.853026	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	52.09	PL21	-77.378023	39.030191
AB1512	0.460481	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.93	PL21	-77.377887	39.030152
AB153	2.942631	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	87.87	PL21	-77.364085	39.034660
AB1532	0.445320	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.69	PL21	-77.377884	39.029278
AB1535	0.413494	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	61.97	PL21	-77.377788	39.029365
AB154	21.807541	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.90	PL21	-77.364097	39.035480
AB1549	2.209738	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	19.01	PL21	-77.355239	39.041009
AB1551	0.853226	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.11	PL21	-77.351583	39.037570
AB1569	21.290848	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	97.65	PL21	-77.377167	39.050146
AB1761	3.109619	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.63	PL21	-77.383502	39.027541
AB1766	6.526958	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	87.21	PL21	-77.382261	39.027421
AB191	2.994613	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.94	PL21	-77.364070	39.036496
AB1913	17.259695	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	68.10	PL21	-77.377986	39.014481
AB1935	17.220228	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	42.72	PL21	-77.377058	39.018679
AB1947	0.165531	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OFFICE_GENERAL	43.33	PL21	-77.375263	39.018683
AB1955	2.143500	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	53.67	PL21	-77.374233	39.017636
AB1956	1.429875	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	58.68	PL21	-77.374219	39.017596
AB1982	6.496608	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	91.31	PL21	-77.372166	39.017130
AB1986	2.277885	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MISC	63.92	PL21	-77.371106	39.015577
AB2015	6.645809	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	94.41	PL21	-77.380202	39.015640
AB2022	5.024016	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	33.11	PL21	-77.379969	39.015409
AB2032	0.243801	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.377828	39.014426
AB2033	14.239984	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	99.07	PL21	-77.377741	39.014399
AB2049	1.173753	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.376683	39.013936
AB23	17.773685	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	54.37	PL21	-77.367736	39.023944
AB257	8.425504	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	46.16	PL21	-77.361897	39.039358
AB267	4.134121	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	43.41	PL21	-77.362210	39.039312
AB273	7.894237	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	35.64	PL21	-77.362076	39.039881
AB3018	1.208543	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484613	39.025830
AB3021	5.884108	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484206	39.025835
AB3056	11.144166	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484806	39.022184
AB3099	9.444686	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482163	39.020839

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AB3101	0.590035	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483004	39.020949
AB3109	2.361069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484006	39.020742
AB3127	8.199570	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485882	39.020915
AB3134	2.565196	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484671	39.021226
AB3141	3.576840	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485080	39.019715
AB3144	3.501528	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486922	39.019004
AB3147	2.980198	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486825	39.022452
AB3193	5.511019	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487809	39.019072
AB3195	0.187824	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487815	39.018951
AB3197	2.987143	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488146	39.018928
AB3209	1.895448	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486492	39.018661
AB3214	2.199689	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489076	39.019054
AB3218	1.674677	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489971	39.018902
AB3224	1.608825	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486672	39.017515
AB3237	6.953903	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487253	39.015993
AB3238	2.229782	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487280	39.015843
AB3249	2.318441	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486946	39.016968
AB3291	12.950265	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487323	39.014886
AB3325	22.895238	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491388	39.018550
AB3330	0.148884	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491778	39.018608
AB3333	7.895737	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492488	39.018731
AB3341	2.177254	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492828	39.018800
AB3348	1.370276	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491162	39.018737
AB3350	3.102961	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492779	39.018839
AB3358	2.960639	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490575	39.018933
AB3370	4.175494	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490014	39.019001
AB3390	0.876603	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477104	39.002076
AB3391	0.698567	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479049	39.002928
AB3392	0.129257	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480562	39.003447
AB3393	0.140599	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481188	39.003652
AB3394	2.148517	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481450	39.003720
AB3395	4.057978	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482661	39.003693
AB3400	17.069537	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.479655	38.993663
AB3402	3.180013	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486762	39.002432
AB3403	4.952749	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486468	39.002356
AB3404	0.748602	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486085	39.002182
AB3406	10.662758	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.485811	39.002087
AB3474	3.044846	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496427	39.025534
AB3484	11.944405	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495504	39.028391
AB3507	3.064338	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495494	39.029962
AB3510	1.169732	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495405	39.029279
AB3522	7.279815	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491070	39.029690
AB3533	5.101504	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491433	39.030093
AB3546	1.844901	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495647	39.030836
AB3552	3.261268	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495511	39.031949
AB3556	1.272720	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495093	39.033042
AB356	0.368217	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	57.59	PL21	-77.362277	39.043502
AB3571	3.829233	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494809	39.034119
AB3577	10.069114	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500104	39.032307
AB358	0.611796	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.41	PL21	-77.361937	39.042351
AB360	1.181752	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.77	PL21	-77.362310	39.040900
AB3625	6.367238	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496658	39.029441
AB3627	1.995505	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499327	39.029301
AB3637	4.647361	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496934	39.027541
AB3688	2.792474	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499525	39.028954
AB3689	31.658707	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499549	39.028955
AB3691	16.729703	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502591	39.029018
AB3738	4.382827	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504537	39.032501
AB3741	14.287974	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504685	39.032663
AB3753	10.116777	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506661	39.031654

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AB3775	4.079354	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502627	39.032827
AB39	1.906613	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.14	PL21	-77.364400	39.026546
AB399	2.923511	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	73.39	PL21	-77.357449	39.042119
AB412	3.155701	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.21	PL21	-77.355047	39.054411
AB413	73.819430	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	52.67	PL21	-77.355071	39.054399
AB429	27.709533	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.33	PL21	-77.356005	39.054326
AB47	2.387231	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.80	PL21	-77.365607	39.026686
AB498	3.092719	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	86.20	PL21	-77.359477	39.053381
AB51	2.523609	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.48	PL21	-77.366733	39.026972
AB517	10.130998	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.78	PL21	-77.361850	39.053030
AB524	4.677497	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.56	PL21	-77.361977	39.050730
AB56	4.156622	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	1.81	PL21	-77.363260	39.027060
AB579	10.938476	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.68	PL21	-77.361623	39.050426
AB59	0.771865	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.363508	39.026956
AB632	20.740718	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.53	PL21	-77.362427	39.049631
AB690	4.483661	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.75	PL21	-77.357842	39.043328
AB700	2.228821	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.50	PL21	-77.356941	39.042298
AB719	1.489305	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.17	PL21	-77.359510	39.043758
AB72	3.158238	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.35	PL21	-77.364581	39.029333
AB723	33.793157	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.99	PL21	-77.359268	39.044454
AB727	8.247915	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	39.01	PL21	-77.359855	39.043288
AB738	2.762042	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	29.84	PL21	-77.360198	39.043969
AB752	1.502068	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.25	PL21	-77.363088	39.044043
AB756	1.010955	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	100.00	PL21	-77.355179	39.041131
AB759	1.500808	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	99.80	PL21	-77.354415	39.041910
AB761	1.189190	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.83	PL21	-77.353054	39.042188
AB763	20.006103	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	70.76	PL21	-77.354500	39.042132
AB784	3.333119	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.75	PL21	-77.355629	39.042315
AB79	3.307617	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.67	PL21	-77.366643	39.027584
AB8	7.730373	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.25	PL21	-77.368087	39.024421
AB86	3.503291	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.37	PL21	-77.366135	39.029539
AB88	1.811984	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.06	PL21	-77.362713	39.029516
AB921	1.504448	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	63.17	PL21	-77.348846	39.052942
AB924	1.739781	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	100.00	PL21	-77.348582	39.053170
AB938	2.507220	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.77	PL21	-77.365013	39.044176
AJ107	0.638548	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	59.63	PL21	-77.382414	39.010302
AJ1079	49.880928	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424569	39.021206
AJ1082	0.465902	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424938	39.020648
AJ1089	0.252087	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424644	39.020714
AJ109	0.520004	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.71	PL21	-77.383174	39.010565
AJ1090	2.185521	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424397	39.020680
AJ111	4.515517	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	53.22	PL21	-77.383627	39.010835
AJ1115	0.776557	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424421	39.020089
AJ1132	7.323069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428262	39.018230
AJ1145	0.319046	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426272	39.020610
AJ1167	10.747452	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429449	39.018267
AJ1170	2.068869	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429748	39.016820
AJ1181	10.596478	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431241	39.020577
AJ1187	15.187093	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430906	39.022080
AJ1227	20.291389	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430326	39.024611
AJ1234	48.911064	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430329	39.025696
AJ131	4.453728	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	44.93	PL21	-77.381880	39.010460
AJ1322	6.262160	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430865	39.027608
AJ1335	1.504506	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427228	39.017295
AJ1366	25.581069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418313	39.026245
AJ157	16.542518	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	87.40	PL21	-77.381290	39.015952
AJ1676	17.704879	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404771	39.029027
AJ1685	0.751151	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405016	39.029889
AJ1688	4.757923	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404093	39.030077
AJ1696	22.803748	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404134	39.030927

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AJ1708	0.354849	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405283	39.028534
AJ1712	0.528037	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405036	39.029073
AJ1719	3.057069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431796	39.021057
AJ1727	1.032450	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432570	39.017424
AJ1761	32.290601	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.415003	39.045023
AJ1810	3.725950	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414415	39.046088
AJ1903	13.888591	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418525	39.049797
AJ193	12.217409	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	48.50	PL21	-77.378396	39.014320
AJ1989	11.741543	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414961	39.048536
AJ1993	5.657904	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414271	39.047575
AJ1996	10.827754	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413858	39.047769
AJ2011	4.474994	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414121	39.049372
AJ2026	7.196863	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413766	39.046484
AJ205	1.314841	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.98	PL21	-77.376524	39.013274
AJ2088	1.421829	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414650	39.049343
AJ2101	7.484414	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.415992	39.052147
AJ2112	0.565248	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.415712	39.052458
AJ241	5.687152	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	86.96	PL21	-77.374456	39.012370
AJ26	12.853100	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	46.30	PL21	-77.384192	39.010241
AJ2658	7.103586	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.06	PL45	-77.507173	38.895044
AJ2662	10.326663	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.17	PL45	-77.507094	38.893823
AJ268	4.635721	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	50.20	PL21	-77.379039	39.009647
AJ2698	4.602091	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.72	PL45	-77.509706	38.898873
AJ27	0.075544	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.43	PL21	-77.384149	39.010244
AJ2708	0.855690	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551682	38.934190
AJ2710	0.674089	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551739	38.933961
AJ2734	30.034708	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	48.05	PL42	-77.551865	38.914424
AJ2735	5.590896	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	49.89	PL42	-77.550639	38.916574
AJ2786	1.180129	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	66.69	PL42	-77.552379	38.923684
AJ2787	58.480131	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	37.69	PL42	-77.552551	38.923791
AJ2788	33.673792	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	COM_OTHER_PUBLIC	81.50	PL42	-77.550770	38.923496
AJ2789	9.917781	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	76.07	PL42	-77.550994	38.923384
AJ2857	1.743244	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501592	39.004446
AJ2859	5.483403	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501775	39.003290
AJ2861	6.582543	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501217	39.008923
AJ2906	15.792550	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552826	38.932108
AJ2907	1.937915	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552040	38.931999
AJ291	26.709892	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	26.05	PL21	-77.376463	39.009717
AJ293	1.016387	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	48.93	PL21	-77.378585	39.009597
AJ2939	2.209141	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544957	38.939239
AJ2948	6.378479	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	61.65	PL42	-77.550706	38.916752
AJ2949	1.044496	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	58.75	PL42	-77.552031	38.917832
AJ2951	4.363286	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.504814	38.923792
AJ2952	0.423677	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	99.85	PL45	-77.505981	38.923018
AJ2956	16.500405	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	50.40	PL45	-77.506386	38.922065
AJ2958	13.964208	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_HEAVY_IND	39.63	PL45	-77.504935	38.924102
AJ2959	9.433280	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_HEAVY_IND	36.08	PL45	-77.504477	38.924019
AJ30	0.368470	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	100.00	PL21	-77.384687	39.011152
AJ3030	8.166284	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	52.26	PL42	-77.551005	38.923059
AJ306	1.671701	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	54.29	PL21	-77.380516	39.010018
AJ3066	0.736321	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508991	39.008043
AJ3067	0.288426	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510351	39.008023
AJ3068	0.409311	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510669	39.008406
AJ3069	0.304063	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511247	39.008399
AJ3070	1.847260	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511706	39.008456
AJ3071	4.350785	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512868	39.006341
AJ3072	3.548789	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512330	39.006858
AJ3073	1.759447	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513457	39.005894
AJ3074	0.349544	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515214	39.004988
AJ3075	0.785010	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514442	39.005004

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AJ3078	6.275898	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511140	39.000464
AJ3082	10.032562	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505170	39.003109
AJ3083	4.374808	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502649	39.004558
AJ3084	0.238235	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502567	39.005066
AJ3132	0.344461	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.542748	38.928231
AJ3140	3.074107	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.504841	38.923822
AJ3143	3.574482	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	51.95	PL45	-77.505289	38.923566
AJ3144	11.965860	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	41.66	PL45	-77.505438	38.923006
AJ315	1.819594	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	76.42	PL21	-77.376022	39.009851
AJ3248	8.686376	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	56.49	PL45	-77.532300	38.920560
AJ325	3.283227	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	26.40	PL21	-77.381053	39.010073
AJ3274	8.441680	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501698	39.009089
AJ3275	1.646972	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519627	39.032366
AJ3282	1.863110	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498738	39.006082
AJ3283	1.961591	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509132	39.003445
AJ3284	5.746034	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508811	39.004921
AJ3286	2.803946	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511180	39.006613
AJ329	1.614447	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.61	PL21	-77.381361	39.010258
AJ3319	0.122781	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551961	38.933535
AJ3320	3.392135	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552053	38.933547
AJ3321	34.800073	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551446	38.934277
AJ3348	4.344938	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	76.79	PL42	-77.549574	38.918434
AJ3364	1.105201	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	99.18	PL45	-77.506587	38.922428
AJ3367	2.511424	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	56.42	PL45	-77.506544	38.922322
AJ3375	7.529459	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_LIGHT_IND_FLEX	61.13	PL45	-77.483087	38.914826
AJ3379	58.480525	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	48.59	PL45	-77.471762	38.920962
AJ3393	2.707653	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545161	38.928370
AJ3394	0.812018	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545177	38.928453
AJ3438	1.366904	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	77.72	PL45	-77.522525	38.917304
AJ3439	0.660099	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	99.92	PL45	-77.522961	38.916861
AJ3440	10.572597	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.22	PL45	-77.523488	38.916702
AJ3443	1.026110	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.74	PL45	-77.524104	38.916747
AJ3444	8.204812	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	82.80	PL45	-77.520562	38.916199
AJ3482	1.088508	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508984	39.003956
AJ353	6.586381	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	36.89	PL21	-77.380194	39.009806
AJ3530	34.154552	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530301	38.981738
AJ3570	1.336129	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544374	38.933114
AJ360	2.406642	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	50.18	PL21	-77.379518	39.009402
AJ3604	10.910932	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	44.47	PL45	-77.520094	38.918028
AJ3605	7.129885	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	36.64	PL45	-77.519182	38.917579
AJ3608	7.975074	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.19	PL45	-77.529073	38.918029
AJ3610	1.847711	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	45.97	PL45	-77.524450	38.917664
AJ3611	0.302033	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	71.74	PL45	-77.524526	38.917675
AJ3612	1.636646	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	63.46	PL45	-77.523523	38.917794
AJ3613	2.829039	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	31.08	PL45	-77.522657	38.918512
AJ3614	0.344737	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.12	PL45	-77.521959	38.917992
AJ3615	2.628315	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	51.69	PL45	-77.525156	38.917833
AJ3633	4.365157	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	30.79	PL45	-77.537311	38.912807
AJ365	2.431958	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	53.24	PL21	-77.378341	39.009336
AJ367	2.328226	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	100.00	PL21	-77.377497	39.009200
AJ3702	6.736508	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551185	38.934228
AJ3716	13.505408	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545032	38.932673
AJ3779	2.715052	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544189	38.933057
AJ3780	4.497211	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544205	38.933213
AJ3781	4.433100	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.543931	38.933745
AJ3782	0.823841	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544091	38.934120
AJ3783	0.238536	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544220	38.934143
AJ3795	14.324205	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	65.32	PL42	-77.549075	38.919793
AJ381	43.391938	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.24	PL21	-77.396043	39.008144
AJ3819	0.511223	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	47.13	PL45	-77.528741	38.917806

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AJ3821	0.360105	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.14	PL45	-77.528675	38.917745
AJ3823	1.305396	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	69.01	PL45	-77.525645	38.917903
AJ3824	1.394236	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	71.28	PL45	-77.526151	38.917848
AJ3825	1.572870	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	50.71	PL45	-77.526669	38.917765
AJ3826	1.312850	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	55.89	PL45	-77.526964	38.917617
AJ3827	1.338436	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	31.44	PL45	-77.527438	38.919852
AJ3828	1.413586	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	41.65	PL45	-77.526118	38.920039
AJ3829	0.817878	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	21.11	PL45	-77.524856	38.919855
AJ3830	7.276262	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.82	PL45	-77.527904	38.920109
AJ3831	3.696348	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.17	PL45	-77.531045	38.920369
AJ3833	0.171758	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	7.88	PL45	-77.530964	38.920607
AJ3885	2.772247	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505451	39.006314
AJ39	0.714469	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	39.11	PL21	-77.383603	39.010527
AJ3906	3.330646	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544825	38.933231
AJ3907	5.902772	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545422	38.936014
AJ3940	1.891070	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545487	38.927481
AJ4064	5.597269	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.45	PL45	-77.532665	38.916360
AJ4065	6.955665	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.68	PL45	-77.531086	38.916095
AJ4068	0.498754	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	0.31	PL45	-77.522535	38.920326
AJ4069	7.747202	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	54.52	PL45	-77.521881	38.920646
AJ4070	1.023885	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	44.15	PL45	-77.521871	38.920151
AJ4081	2.879036	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505557	39.006333
AJ4100	4.671240	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502583	39.005518
AJ4133	0.368241	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544985	38.935600
AJ4134	4.980819	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545672	38.936405
AJ4136	3.790567	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544557	38.934616
AJ4137	3.076658	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544606	38.933860
AJ4152	20.195698	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545133	38.931763
AJ4230	4.125326	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	65.01	PL45	-77.522505	38.921745
AJ4231	9.679704	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	64.53	PL45	-77.522907	38.922109
AJ4233	1.275955	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	23.64	PL45	-77.523838	38.922687
AJ4235	1.230648	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.07	PL45	-77.524503	38.922901
AJ4237	25.331431	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	70.09	PL45	-77.523893	38.923980
AJ4252	23.638136	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	38.06	PL45	-77.517484	38.918756
AJ4255	4.019973	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.86	PL45	-77.531092	38.914982
AJ4256	7.432470	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	52.77	PL45	-77.529413	38.921105
AJ4344	1.271878	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	70.00	PL42	-77.549171	38.919722
AJ4412	1.170373	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.48	PL45	-77.536545	38.912582
AJ4413	1.539230	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.535007	38.916801
AJ4414	3.882092	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.10	PL45	-77.536146	38.913017
AJ4417	5.705926	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	37.34	PL45	-77.525616	38.922523
AJ442	13.918355	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.409136	38.988952
AJ4449	12.029159	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	40.10	PL45	-77.535646	38.919277
AJ4451	4.281081	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.24	PL45	-77.536789	38.918266
AJ4453	41.397275	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	34.46	PL45	-77.537076	38.916985
AJ4507	4.929747	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545272	38.938565
AJ4509	41.743857	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	45.04	PL42	-77.550257	38.914888
AJ4511	2.812528	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	72.89	PL42	-77.551582	38.919055
AJ452	7.170292	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408372	38.993131
AJ453	5.898374	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.410248	38.993780
AJ4534	3.336155	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544903	38.939515
AJ454	4.975945	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412189	38.993984
AJ4544	1.570361	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.12	PL42	-77.551804	38.919454
AJ4547	5.729438	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	74.57	PL42	-77.552366	38.918401
AJ4548	2.880836	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	64.34	PL42	-77.551831	38.916839
AJ4589	0.051221	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.536062	38.912617
AJ4590	5.567034	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.533703	38.914214
AJ4591	12.805337	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.43	PL45	-77.533909	38.914730
AJ4594	16.946192	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	PUBLIC	33.45	PL17	-77.518747	38.928598
AJ467	10.863058	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413071	38.994595

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Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
AJ4710	1.733237	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	18.41	PL42	-77.550975	38.915880
AJ4736	12.727876	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544927	38.939271
AJ4742	0.570731	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544844	38.939414
AJ4754	0.965283	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552857	38.932874
AJ4887	0.957193	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	20.20	PL42	-77.551254	38.915962
AJ496	17.609629	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413972	38.995811
AJ50	1.250335	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	52.21	PL21	-77.382822	39.010270
AJ516	2.117697	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.402594	38.997835
AJ521	3.745320	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403538	38.997270
AJ530	3.999481	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.94	PL21	-77.366475	39.042418
AJ531	10.839746	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.74	PL21	-77.366453	39.042371
AJ534	28.838332	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.83	PL21	-77.367976	39.045662
AJ552	1.879118	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.404347	38.996686
AJ564	0.623585	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409656	38.998394
AJ569	22.836828	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409393	38.998032
AJ573	3.225940	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409454	38.997311
AJ575	2.131087	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408754	38.996317
AJ577	0.290040	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408434	38.996085
AJ581	2.389309	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408274	38.995954
AJ599	3.228681	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405802	38.995904
AJ600	1.019606	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406275	38.995601
AJ601	1.880381	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406659	38.995389
AJ604	0.076533	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.407251	38.995529
AJ736	1.578010	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419938	39.008590
AJ737	1.000770	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419788	39.009171
AJ79	2.040867	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	52.61	PL21	-77.385913	39.011892
AJ811	30.542626	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418491	39.016719
AJ84	6.052237	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	59.42	PL21	-77.384440	39.012067
AJ846	2.885035	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416020	39.016235
AJ848	5.142913	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415537	39.015973
AJ856	40.682401	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413543	39.015526
AJ867	9.365923	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413387	39.015525
AJ869	5.092150	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413769	39.015139
AJ882	6.138270	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421451	39.020507
AJ887	16.562407	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421663	39.020589
AJ888	0.324532	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421692	39.020599
AJ905	3.358621	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418995	39.021430
AJ911	6.093774	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419235	39.021474
AJ940	14.261924	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421878	39.016042
AJ942	12.444706	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423203	39.016687
AJ972	27.646600	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415174	39.023096
AJ98	8.000090	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	49.94	PL21	-77.387976	39.016119
BC107	0.430087	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437015	38.978883
BC33	3.149950	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MISC	100.00	PL21	-77.371075	39.017134
BC6	4.716324	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.17	PL45	-77.489171	38.895196
CH10003	2.544111	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514018	39.029186
CH10007	6.751357	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515162	39.030757
CH10013	2.027766	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515663	39.030063
CH10014	2.729570	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517283	39.028123
CH10020	1.665702	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516058	39.028923
CH10022	0.763964	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523997	39.026652
CH10025	2.718293	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524620	39.026553
CH10028	2.698995	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524770	39.026072
CH1003	2.143879	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.57	PL21	-77.367588	39.049248
CH10030	0.659555	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524947	39.025777
CH10033	2.812170	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523578	39.026397
CH10034	1.560680	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523475	39.026351
CH10041	6.946141	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.525291	39.025508
CH10049	2.039533	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.522051	39.025976
CH10071	2.377281	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518847	39.024502

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH10072	6.656008	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518794	39.024476
CH1008	3.631304	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.56	PL21	-77.367339	39.049724
CH10087	1.141222	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516288	39.023552
CH10088	1.355553	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516356	39.023569
CH10119	6.345526	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517249	39.020766
CH10133	3.290583	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517212	39.020777
CH1014	1.984420	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.15	PL21	-77.365869	39.049502
CH10144	8.940804	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.526028	39.025758
CH10168	17.536517	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523743	39.027984
CH102	1.384133	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	70.57	PL21	-77.351293	39.036037
CH10202	17.106730	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520892	39.029016
CH10206	7.382880	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518960	39.029187
CH1022	14.315363	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.31	PL21	-77.367873	39.051022
CH10236	1.893502	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.522698	39.027530
CH10253	1.749843	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.521596	39.021351
CH10271	6.283317	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520160	39.020058
CH10273	16.095536	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520169	39.019944
CH10308	5.223011	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514734	39.028716
CH10318	2.552217	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513928	39.026198
CH10322	2.213350	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520755	39.027085
CH10333	1.427352	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519440	39.028526
CH10336	0.973456	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517871	39.027273
CH10338	2.936764	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516260	39.025979
CH10345	4.543024	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518077	39.026668
CH10349	1.386547	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515668	39.027752
CH10352	0.966280	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514801	39.026697
CH10361	5.387718	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514629	39.026104
CH10387	10.810860	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514302	39.025995
CH10389	1.389768	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514640	39.022224
CH10394	2.511277	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516505	39.023042
CH10400	1.661823	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516664	39.021639
CH10406	3.030911	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517796	39.019667
CH10413	1.256135	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496245	39.024440
CH10421	1.382497	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496416	39.022932
CH10437	8.211330	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494887	39.022508
CH10438	0.723013	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495081	39.022479
CH10439	0.412469	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495607	39.022602
CH10442	0.958680	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496515	39.022455
CH10445	0.593461	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496375	39.021930
CH10460	9.252245	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496575	39.021304
CH10474	1.995877	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496657	39.019499
CH10487	6.137810	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.93	PL16	-77.503164	39.087601
CH10504	4.472479	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	63.73	PL16	-77.502635	39.087397
CH10507	0.019010	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	89.09	PL16	-77.502540	39.087745
CH10510	0.393159	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	86.51	PL16	-77.502718	39.088033
CH10518	17.897861	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_OTHER_PUBLIC	51.53	PL16	-77.501900	39.085873
CH10547	6.801573	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	43.81	PL16	-77.498110	39.084302
CH1056	3.450999	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.77	PL21	-77.368977	39.051929
CH10565	19.020608	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_OTHER_PUBLIC	55.81	PL16	-77.499750	39.084841
CH10599	82.035415	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.488954	39.091047
CH1061	24.785834	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.03	PL21	-77.372600	39.051572
CH10672	5.126196	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	VACANT	80.17	PL16	-77.498498	39.085083
CH10695	4.000263	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510365	39.014336
CH10714	9.677208	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507856	39.013671
CH10743	8.850698	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510173	39.013823
CH10769	2.970503	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508622	39.013228
CH10790	7.552043	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506920	39.011932
CH10793	2.405758	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504252	39.010872
CH10803	2.883459	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505204	39.011190
CH10808	0.771700	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506033	39.011774

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH10819	2.518779	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505970	39.009367
CH10838	9.604233	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508118	39.009771
CH10851	0.554462	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511004	39.010341
CH10864	3.065341	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511365	39.009114
CH10896	5.477371	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511694	39.014415
CH10904	0.968679	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500093	39.014020
CH10906	1.372835	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499990	39.013619
CH10913	3.261327	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499761	39.015420
CH1092	11.655329	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	27.59	PL21	-77.375015	39.051722
CH10925	2.456822	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499539	39.013636
CH10933	2.133859	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499035	39.013986
CH10936	0.663476	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498444	39.014488
CH1095	2.066414	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	27.64	PL21	-77.376320	39.050931
CH10951	1.534927	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512428	39.009143
CH10953	2.613830	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513270	39.009115
CH10964	11.552557	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499607	39.012834
CH11021	4.309517	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	41.57	PL14	-77.527904	39.023239
CH11025	2.496892	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	63.95	PL14	-77.528522	39.022457
CH11026	6.242356	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	38.80	PL14	-77.529162	39.021616
CH11032	1.352714	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	10.25	PL14	-77.531268	39.020352
CH11033	9.054331	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	32.25	PL14	-77.531701	39.020332
CH11039	6.996031	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503892	39.066003
CH1111	2.306115	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.60	PL21	-77.377136	39.052240
CH1114	10.352147	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	32.01	PL21	-77.378791	39.052373
CH11150	5.903078	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	40.59	PL16	-77.503268	39.089505
CH11190	2.346383	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	32.28	PL16	-77.500134	39.086271
CH11192	1.625953	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	0.47	PL16	-77.500001	39.086597
CH11203	8.138732	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	47.38	PL16	-77.498155	39.086846
CH11293	8.473625	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.486206	39.078444
CH11319	0.117640	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.497953	39.082153
CH11324	3.572215	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	12.37	PL16	-77.497104	39.082720
CH11325	80.877887	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	26.51	PL16	-77.497575	39.082490
CH11348	6.658900	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	83.02	PL16	-77.510287	39.088851
CH11358	0.618375	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	50.76	PL16	-77.512288	39.089781
CH1136	16.429987	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	49.47	PL21	-77.380809	39.052823
CH11360	16.441737	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	38.99	PL16	-77.512995	39.089950
CH11395	1.187055	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	43.93	PL16	-77.508229	39.089711
CH11396	15.054298	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.49	PL16	-77.508565	39.089561
CH11401	3.421676	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	67.41	PL16	-77.509728	39.088773
CH1141	0.902029	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	66.35	PL21	-77.381833	39.052831
CH11425	1.832499	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	69.42	PL16	-77.512974	39.089303
CH11430	6.186090	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	72.81	PL16	-77.514364	39.088290
CH11440	1.989331	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.12	PL16	-77.516356	39.089831
CH11467	1.555680	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	72.31	PL16	-77.507601	39.100315
CH11469	1.460021	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.25	PL16	-77.506000	39.100027
CH11479	7.533843	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.83	PL16	-77.505778	39.099948
CH11490	14.388730	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	59.16	PL16	-77.508641	39.099608
CH11508	7.709858	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	61.71	PL16	-77.512854	39.097468
CH1229	0.950732	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.365385	39.045176
CH1232	0.645214	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.364791	39.044806
CH1237	3.109254	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	21.24	PL21	-77.367951	39.045645
CH1243	16.084085	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	71.16	PL21	-77.369693	39.046440
CH125	14.520504	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.89	PL21	-77.354428	39.036421
CH1275	1.011410	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	96.20	PL21	-77.375806	39.050204
CH130	0.800026	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	60.37	PL21	-77.354384	39.037025
CH132	1.981132	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	48.14	PL21	-77.354344	39.036495
CH1342	0.596664	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	99.79	PL21	-77.378553	39.050136
CH140	4.520168	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	45.02	PL21	-77.353208	39.037723
CH144	0.251031	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	51.04	PL21	-77.354605	39.037685
CH1510	2.079325	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.03	PL21	-77.365149	39.043229

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH1513	4.283256	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.89	PL21	-77.363520	39.042706
CH1517	5.727589	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	56.66	PL21	-77.363844	39.041434
CH1524	3.617133	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.61	PL21	-77.365046	39.038711
CH1532	20.997056	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	47.83	PL21	-77.365724	39.037318
CH1543	4.190247	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.95	PL21	-77.365537	39.036487
CH1545	53.132696	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	44.72	PL21	-77.365421	39.034898
CH1593	1.218752	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.16	PL21	-77.365288	39.033080
CH162	0.551021	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.64	PL21	-77.354711	39.035916
CH1693	2.487666	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.25	PL21	-77.368745	39.029662
CH1697	1.394482	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.50	PL21	-77.370050	39.031633
CH17	1.296728	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.34	PL21	-77.356997	39.030700
CH1701	4.512620	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.91	PL21	-77.368373	39.030828
CH1703	8.013285	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.94	PL21	-77.370309	39.032518
CH1714	4.692815	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	58.49	PL21	-77.364208	39.030120
CH1719	0.927746	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.92	PL21	-77.365782	39.030770
CH1726	18.163882	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.00	PL21	-77.371653	39.030728
CH1732	1.085042	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.33	PL21	-77.370091	39.030323
CH1742	21.157144	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.00	PL21	-77.372786	39.030693
CH1753	6.038193	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.57	PL21	-77.367420	39.031443
CH1755	1.462075	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.13	PL21	-77.372999	39.030218
CH177	1.125576	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	35.89	PL21	-77.351226	39.038175
CH1820	6.943917	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	77.55	PL21	-77.384799	39.033129
CH1822	2.176840	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	100.00	PL21	-77.383560	39.032830
CH1833	13.856403	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.50	PL21	-77.367567	39.041752
CH1854	7.189146	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.21	PL21	-77.371343	39.041034
CH1858	5.381194	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	56.76	PL21	-77.372246	39.040256
CH1864	3.711672	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.82	PL21	-77.367669	39.042054
CH1867	11.954228	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.28	PL21	-77.370593	39.042120
CH188	39.726292	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	34.29	PL21	-77.349451	39.040801
CH1895	36.731920	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	58.57	PL21	-77.370743	39.041997
CH1896	1.865973	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.85	PL21	-77.371369	39.041528
CH1901	3.387294	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.24	PL21	-77.372167	39.040663
CH1905	6.198428	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.51	PL21	-77.373598	39.039825
CH1917	0.943555	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	94.04	PL21	-77.377756	39.039112
CH1919	39.528161	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	37.13	PL21	-77.376257	39.039181
CH1950	49.644712	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	33.66	PL21	-77.379276	39.038101
CH1951	0.900853	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	80.84	PL21	-77.379281	39.038090
CH1952	50.224515	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	29.20	PL21	-77.379061	39.037919
CH1994	48.651291	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	43.29	PL21	-77.373338	39.039478
CH20	4.649210	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.01	PL21	-77.359195	39.028931
CH2085	3.477405	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	65.09	PL21	-77.374505	39.039160
CH2091	5.377873	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	68.35	PL21	-77.375240	39.038919
CH2095	0.629299	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	51.38	PL21	-77.377191	39.037967
CH2096	8.264366	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	53.85	PL21	-77.377453	39.037562
CH2125	16.265018	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	47.54	PL21	-77.377866	39.037546
CH216	0.574789	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	62.90	PL21	-77.351785	39.037816
CH2167	11.712692	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.81	PL21	-77.383897	39.006406
CH218	1.047298	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	54.55	PL21	-77.352035	39.037892
CH219	0.230723	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.85	PL21	-77.352084	39.037902
CH2201	3.498597	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.72	PL21	-77.382245	39.006061
CH2204	6.768651	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.63	PL21	-77.380815	39.006114
CH2224	19.381312	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.44	PL21	-77.386300	39.006716
CH2238	8.150555	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.75	PL21	-77.387879	39.007169
CH2243	2.075344	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.88	PL21	-77.390650	39.007525
CH2247	50.573868	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.99	PL21	-77.389796	39.007700
CH2254	4.663068	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	55.96	PL21	-77.391408	39.007087
CH2260	2.583562	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	61.78	PL21	-77.394449	39.007631
CH2261	3.203047	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	61.73	PL21	-77.394455	39.007629
CH2270	2.218544	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	81.12	PL21	-77.395533	39.007813
CH2287	1.235835	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.19	PL21	-77.394764	39.005602

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH2295	2.570577	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	42.17	PL21	-77.396183	39.003917
CH2296	54.730534	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	44.58	PL21	-77.396317	39.003968
CH2334	10.541952	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	45.71	PL21	-77.394106	39.005371
CH234	2.761576	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	52.27	PL21	-77.353984	39.038460
CH2351	1.120286	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	73.70	PL21	-77.391585	39.002679
CH2359	3.613183	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	48.05	PL21	-77.391193	39.003888
CH2378	12.268243	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	43.27	PL21	-77.393715	39.005884
CH2385	2.264278	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	42.81	PL21	-77.390473	39.005219
CH2386	6.614003	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	49.14	PL21	-77.390413	39.005218
CH239	0.895597	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	54.63	PL21	-77.352881	39.038037
CH2399	1.248658	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	71.58	PL21	-77.389871	39.006043
CH24	36.667381	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.21	PL21	-77.359228	39.031087
CH2414	1.654323	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	62.98	PL21	-77.390281	39.006356
CH2418	9.897893	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.81	PL21	-77.391665	39.001911
CH2419	4.605908	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.54	PL21	-77.391715	39.001919
CH2477	46.277232	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.24	PL21	-77.386808	39.004710
CH248	2.334622	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	52.52	PL21	-77.354338	39.040436
CH2485	27.701529	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.36	PL21	-77.384862	39.003149
CH249	10.648899	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	49.17	PL21	-77.354300	39.040449
CH2511	1.419916	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.48	PL21	-77.385164	39.003369
CH2515	2.805645	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	85.85	PL21	-77.386242	39.005442
CH2517	1.490095	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.03	PL21	-77.384257	39.004999
CH2531	5.759179	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.77	PL21	-77.383450	39.004494
CH2569	2.655862	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.76	PL21	-77.386969	39.006034
CH2645	5.527661	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.43	PL21	-77.392494	38.998841
CH2646	14.557083	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	56.63	PL21	-77.392545	38.998859
CH2650	5.421763	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.36	PL21	-77.392189	38.999878
CH2657	11.394005	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.60	PL21	-77.392053	39.000699
CH266	4.535720	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	52.73	PL21	-77.351616	39.041096
CH269	1.652815	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	55.02	PL21	-77.352435	39.041310
CH2696	12.280589	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.31	PL21	-77.392333	38.999933
CH277	2.166926	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.21	PL21	-77.350979	39.037773
CH2786	36.144318	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	51.23	PL21	-77.396123	39.007968
CH284	6.476966	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.16	PL21	-77.350460	39.037590
CH2874	72.907128	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.87	PL21	-77.392762	38.997944
CH2875	19.334870	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.16	PL21	-77.392799	38.997955
CH2959	2.986806	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418333	39.007116
CH2965	8.853655	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416609	39.007068
CH2970	3.209131	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414914	39.004737
CH2975	13.471062	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414256	39.003982
CH2980	2.307383	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412933	39.003425
CH2985	3.996330	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412072	39.001845
CH2995	2.730149	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411596	39.000376
CH2999	3.671381	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411324	39.000013
CH3003	3.343019	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409989	38.998974
CH301	1.184894	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.44	PL21	-77.348942	39.037493
CH3016	3.935697	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419517	39.003350
CH3023	6.737882	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419730	39.004444
CH3025	2.950398	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419920	39.005582
CH3035	6.334133	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419311	39.002173
CH3038	72.502436	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419334	39.002065
CH3052	12.223412	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418157	39.001068
CH3055	4.079909	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416937	39.001370
CH3064	6.423384	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416926	39.000028
CH3071	4.053356	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415727	38.999045
CH3076	7.725149	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414903	38.998564
CH3081	2.651960	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414642	38.997846
CH3088	5.077523	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414438	38.997319
CH3112	2.595956	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420230	39.005200
CH3122	12.993615	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419678	39.003354

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH3197	11.381789	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418656	39.000140
CH3199	2.595380	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.417831	39.000361
CH3214	8.169283	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416744	38.999380
CH3215	0.826818	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415328	38.998065
CH3232	1.533934	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415130	38.997536
CH3240	20.225480	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414313	38.996222
CH336	4.224808	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	78.33	PL21	-77.349941	39.043038
CH3360	59.277381	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405343	39.002086
CH3361	2.292564	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405347	39.002118
CH3376	3.954903	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406617	39.002158
CH3412	5.863954	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426401	38.994814
CH3414	0.342591	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426634	38.994746
CH3439	7.429319	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424950	38.993692
CH3440	1.692238	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424985	38.993839
CH3442	5.025478	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425100	38.994068
CH3449	0.201250	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425094	38.993642
CH3452	5.276198	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427047	38.994645
CH3463	3.595901	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430249	38.994783
CH3485	2.753051	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425363	38.993518
CH3488	0.626144	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425694	38.992895
CH3500	6.983148	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425201	38.991596
CH3521	13.382928	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431361	38.991360
CH357	5.036099	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.351577	39.041328
CH3631	13.847561	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.434599	39.001348
CH3632	4.984336	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.434633	39.001299
CH3711	3.621627	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426940	39.002082
CH3717	29.083944	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427816	39.002106
CH3718	8.369406	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427860	39.002245
CH3728	3.542564	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427420	39.002756
CH3760	2.097729	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425368	39.002298
CH3786	13.662628	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422504	39.006111
CH3882	72.018723	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423718	39.002263
CH3897	1.146936	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423062	39.003803
CH3900	7.583041	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422291	39.005057
CH3916	2.031196	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421297	39.006171
CH3928	3.396313	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420985	39.007098
CH3929	17.394121	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421077	39.007319
CH4029	5.247696	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429290	39.011451
CH4030	2.551547	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429282	39.011469
CH4050	3.737241	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428030	39.016779
CH4062	3.648326	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428758	39.012507
CH4084	0.094385	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420613	39.007373
CH4085	8.725895	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420586	39.007360
CH4089	0.588996	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420311	39.007215
CH4104	4.616609	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414981	39.006338
CH4113	105.898198	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412242	39.005487
CH4151	4.896281	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421438	39.007582
CH4177	3.288009	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421228	39.010306
CH4182	3.101317	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422493	39.010392
CH4193	4.008858	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424264	39.010431
CH4205	3.888955	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425264	39.009739
CH4211	4.830176	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426117	39.009113
CH4214	2.029702	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426419	39.008953
CH4252	0.187830	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429147	39.011579
CH4275	4.001373	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414254	38.996414
CH4286	6.786593	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427663	38.989679
CH4293	3.722535	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427617	39.007391
CH4308	2.889542	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427374	39.014412
CH4315	0.457218	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428320	39.013070
CH4317	3.299744	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427843	39.013401

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH4335	1.112829	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426021	39.012137
CH4336	0.607965	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426057	39.012440
CH4348	1.936675	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427342	39.013677
CH4351	1.010031	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428690	39.012304
CH4353	0.558977	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428426	39.012913
CH4361	5.224652	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425912	39.011540
CH438	6.267884	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	47.85	PL21	-77.349614	39.043192
CH4383	0.605294	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425687	39.010234
CH4393	6.414238	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426819	39.008690
CH4394	1.103334	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426761	39.008573
CH444	52.963414	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	50.65	PL21	-77.349142	39.043594
CH4489	1.270171	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431529	38.988357
CH4517	2.150487	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429869	38.983648
CH4574	5.626584	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.422690	38.963967
CH4589	7.658425	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414931	39.015270
CH4609	11.524047	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418895	39.014850
CH462	1.352942	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	51.34	PL21	-77.349992	39.043085
CH4620	0.632913	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416213	39.015517
CH4624	2.566057	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420016	39.014885
CH4647	9.112902	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421590	39.011125
CH466	1.516851	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	50.36	PL21	-77.351168	39.043109
CH4667	1.663723	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422190	39.011121
CH4683	9.258391	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422348	39.015862
CH469	0.745989	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	53.00	PL21	-77.351551	39.043549
CH4704	14.875845	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424113	39.011419
CH4738	4.979565	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425373	39.013966
CH478	18.060197	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	49.74	PL21	-77.351666	39.043726
CH4807	11.703085	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419881	39.009655
CH4818	3.263480	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420612	39.010654
CH4837	8.346624	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	36.73	PL21	-77.382447	39.052627
CH4840	0.545376	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	59.11	PL21	-77.383251	39.052893
CH4842	2.649029	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	53.32	PL21	-77.383898	39.052783
CH4855	3.641700	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	62.28	PL21	-77.384528	39.052937
CH4856	1.867175	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.21	PL21	-77.385199	39.053044
CH4864	47.365805	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	33.05	PL21	-77.386015	39.052118
CH4868	1.601075	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	61.42	PL21	-77.386535	39.053031
CH4874	28.919707	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	24.99	PL21	-77.387717	39.052739
CH492	0.910118	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	29.62	PL21	-77.352025	39.043276
CH5013	11.283782	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394955	39.050426
CH5044	3.473279	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395926	39.050259
CH5052	3.474798	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397178	39.050940
CH5143	7.054317	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394924	39.045529
CH5161	8.027772	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392952	39.044012
CH5181	0.296488	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398292	39.048907
CH5184	6.713198	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397901	39.048457
CH5203	3.593272	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398391	39.048879
CH5215	6.180666	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397823	39.049905
CH5257	4.348339	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.391227	39.053099
CH5258	33.617811	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	46.37	PL21	-77.390877	39.053011
CH5272	19.357158	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394206	39.051099
CH5282	51.607409	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.390725	39.043625
CH5289	1.022074	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.390972	39.043537
CH5323	4.394871	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392586	39.043339
CH5329	18.572962	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391430	39.040896
CH5442	7.186082	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393843	39.042952
CH5448	2.005016	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393103	39.043851
CH5453	3.029804	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393570	39.043758
CH5476	13.956102	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398550	39.038397
CH5491	1.057639	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399181	39.038787
CH5507	13.093919	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393473	39.042050

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH5523	16.525047	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391518	39.039401
CH5590	3.637479	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395504	39.036153
CH5595	1.641058	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395978	39.036841
CH5597	1.085208	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396228	39.037397
CH5605	14.430496	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396948	39.038196
CH5612	0.461431	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397942	39.039148
CH5624	1.320369	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397406	39.039915
CH565	1.436245	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	1.36	PL21	-77.352617	39.042235
CH5688	78.819402	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391694	39.035533
CH5689	14.486988	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391906	39.035631
CH5704	0.707215	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394676	39.035529
CH5708	37.478560	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395694	39.035693
CH5744	1.772374	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391511	39.036060
CH5757	2.990550	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391724	39.037888
CH5829	0.827084	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394602	39.044316
CH5836	1.996092	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395831	39.044467
CH5843	9.628322	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396567	39.043243
CH5861	8.170024	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395963	39.044593
CH5894	13.943344	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401188	39.045780
CH5916	1.335106	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401932	39.043719
CH5926	5.215357	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400929	39.042852
CH5950	12.243039	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401268	39.041839
CH5959	4.336092	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399694	39.039527
CH5961	3.260108	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401978	39.041581
CH5975	9.507087	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403365	39.040475
CH6012	10.285811	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400262	39.039099
CH6014	0.891806	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400438	39.039529
CH6023	0.902079	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399687	39.038835
CH6047	3.956225	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405591	39.038113
CH6052	10.420832	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404341	39.039267
CH6126	5.682081	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406166	39.036041
CH6128	1.393915	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403557	39.034426
CH6138	6.084708	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404784	39.035255
CH6139	0.112814	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404911	39.035230
CH6142	6.772042	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.402702	39.033964
CH617	4.330787	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	61.24	PL21	-77.342157	39.047176
CH6170	4.058468	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404144	39.033458
CH6179	3.679345	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405544	39.034728
CH62	2.199448	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.96	PL21	-77.358078	39.030724
CH6203	1.122124	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401552	39.033658
CH6223	5.504897	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405578	39.035087
CH6225	1.271887	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405680	39.035178
CH6256	5.496803	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408708	39.035432
CH6260	0.664400	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407485	39.035915
CH6272	2.680797	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408084	39.035786
CH634	16.053247	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.98	PL21	-77.346262	39.049378
CH6360	0.289017	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398693	39.031934
CH6361	15.775822	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399089	39.032033
CH6399	5.822451	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396837	39.029686
CH6400	0.298901	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396894	39.029722
CH6411	0.999244	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400595	39.033742
CH6414	0.873631	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400638	39.033138
CH6419	1.442971	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400123	39.032248
CH6431	1.339139	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398223	39.031609
CH6432	6.104099	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398278	39.031431
CH6547	1.673259	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396305	39.029671
CH6550	0.927045	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395396	39.029575
CH6570	79.736485	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397783	39.029573
CH6571	0.813226	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397474	39.029499
CH6576	0.476789	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398137	39.030017

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH6578	2.102920	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398044	39.029900
CH6581	4.489751	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394749	39.029343
CH6582	0.718342	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394991	39.029547
CH659	9.350142	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.25	PL21	-77.344458	39.049502
CH6606	0.932912	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394502	39.029241
CH6607	6.743927	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394256	39.029121
CH6610	1.356462	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393615	39.028690
CH6613	0.888744	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392923	39.028602
CH6625	0.952968	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392246	39.027265
CH6626	1.201206	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391719	39.027796
CH6637	8.779892	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391657	39.027983
CH6652	2.958557	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439046	39.048482
CH6653	0.981843	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.438999	39.048072
CH6677	2.176122	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441793	39.047092
CH6679	2.483930	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441363	39.047065
CH668	4.819798	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.43	PL21	-77.343949	39.050292
CH6682	14.582170	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440083	39.046968
CH6690	6.892522	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440761	39.050862
CH6693	1.269931	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460041	39.059069
CH6710	5.892997	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460693	39.057637
CH6716	4.746637	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461766	39.061035
CH6724	2.120783	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450707	39.049692
CH6738	1.403014	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447884	39.027757
CH6756	0.748730	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464871	39.057004
CH6761	1.146675	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464433	39.057186
CH6801	5.094549	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465672	39.060574
CH6808	2.883342	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464905	39.059470
CH6809	1.885734	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464686	39.058051
CH6819	2.442454	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464237	39.058605
CH682	4.292030	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.30	PL21	-77.345662	39.049792
CH6830	3.267441	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464705	39.057492
CH6833	6.097636	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465856	39.059467
CH6835	6.410309	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466256	39.060077
CH6837	6.768370	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466804	39.060612
CH6854	5.724741	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470193	39.063353
CH6867	3.939292	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476023	39.061052
CH687	2.013218	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.22	PL21	-77.344464	39.050233
CH6880	2.209349	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477139	39.058997
CH6890	0.462306	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477256	39.058945
CH6891	15.532916	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477250	39.058976
CH6930	4.656723	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475609	39.052875
CH6944	7.964397	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476025	39.051410
CH6952	5.884068	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475396	39.051513
CH6968	0.576512	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471806	39.049027
CH6972	1.528058	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471071	39.048672
CH6973	11.729666	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470982	39.048653
CH7073	46.468913	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481784	39.049329
CH7093	9.791190	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480495	39.046119
CH7094	9.527916	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480496	39.046102
CH7208	20.162711	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467452	39.033810
CH7235	1.713381	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463714	39.034894
CH7236	1.571656	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463494	39.034853
CH7237	0.430656	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463245	39.034826
CH7241	1.607399	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462403	39.034143
CH7257	9.185763	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459634	39.034175
CH7319	7.168280	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477939	39.061289
CH7321	6.910037	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478485	39.061832
CH7336	1.856776	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479946	39.057980
CH7343	3.882334	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478663	39.056788
CH7344	1.177302	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478536	39.056393

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH7345	0.343012	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478302	39.056144
CH7359	3.248814	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478045	39.055844
CH7366	21.618365	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479502	39.056888
CH7386	7.340425	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477529	39.054768
CH7387	4.137365	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477025	39.054733
CH7412	0.799193	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477426	39.051135
CH7422	3.101417	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478232	39.051004
CH7423	1.102399	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478763	39.051236
CH7438	0.563934	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480140	39.051312
CH7440	3.941037	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481043	39.051470
CH7453	1.682471	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481502	39.049920
CH7455	1.603102	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480888	39.049416
CH7459	1.792939	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478383	39.049061
CH7464	1.494280	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479843	39.049190
CH7466	1.575444	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479984	39.049206
CH7480	3.870745	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477489	39.048263
CH7483	4.288624	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477161	39.047866
CH7496	4.816542	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477681	39.046602
CH7501	1.620458	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477677	39.048820
CH7507	2.718264	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476859	39.048579
CH7509	1.503395	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475601	39.047991
CH7511	2.713613	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474990	39.048486
CH7517	2.255417	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474484	39.048130
CH7519	0.897984	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473396	39.048886
CH7535	11.448771	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481106	39.051667
CH7569	29.572205	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479846	39.051762
CH7578	21.603939	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478344	39.054129
CH7638	6.343214	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477321	39.067614
CH7658	6.046851	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480489	39.065848
CH7661	1.788547	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480804	39.065334
CH7711	1.089623	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472647	39.045757
CH7715	2.381431	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473566	39.046994
CH7721	8.815197	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476038	39.046905
CH7723	3.146793	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477242	39.046652
CH7724	5.274108	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477666	39.046513
CH7737	1.216765	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472650	39.045042
CH78	6.881197	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	42.87	PL21	-77.350870	39.035620
CH786	0.630265	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	43.59	PL21	-77.343967	39.050452
CH791	0.642483	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.21	PL21	-77.342667	39.050325
CH7942	0.878219	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481951	39.041066
CH8037	6.066011	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474602	39.057251
CH8042	2.775532	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475550	39.058367
CH8045	1.735035	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476208	39.058557
CH8070	3.864892	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473019	39.056546
CH8075	0.975558	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471585	39.055333
CH8078	2.365814	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470987	39.054226
CH8082	1.682103	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470057	39.053157
CH8089	2.659365	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471499	39.050964
CH8095	15.126211	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472764	39.052655
CH8099	1.087746	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473508	39.051931
CH8105	2.047424	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474602	39.052468
CH8111	2.748119	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475385	39.052885
CH8127	0.731712	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476471	39.059669
CH8129	0.639814	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476673	39.058806
CH8143	0.320406	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477652	39.051226
CH8144	8.810895	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476220	39.053381
CH8179	2.347222	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472657	39.051512
CH8183	1.929734	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472281	39.051223
CH8184	2.430251	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471728	39.050963
CH8193	0.957071	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471035	39.050270

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH8197	1.925408	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470324	39.049633
CH8208	5.406135	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470018	39.048932
CH8232	10.698655	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468619	39.044679
CH8233	40.882484	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468634	39.044669
CH8273	1.888149	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467273	39.044159
CH828	23.484158	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	51.70	PL21	-77.341614	39.056770
CH8325	17.474386	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465923	39.040328
CH8355	15.422508	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465442	39.037607
CH8360	92.665153	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467791	39.037928
CH8368	3.437170	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466272	39.037595
CH8458	4.673265	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466786	39.037388
CH8459	0.201128	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467311	39.037600
CH8476	10.926754	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463585	39.035837
CH8484	2.847313	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463899	39.036892
CH8490	0.943111	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466333	39.037354
CH8520	2.105568	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461223	39.039135
CH8530	3.069691	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462840	39.035648
CH8531	1.057674	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462380	39.035506
CH8539	0.530170	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463194	39.036248
CH8547	9.818921	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463539	39.036846
CH8574	3.241447	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462493	39.033774
CH8600	2.531557	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464728	39.032896
CH8602	2.603955	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463874	39.032503
CH8608	2.399790	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466065	39.033301
CH8615	1.353093	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466543	39.033151
CH8617	4.575729	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467526	39.033589
CH8644	8.075668	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467771	39.032556
CH8645	12.276045	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467794	39.032536
CH8720	1.727180	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445186	39.026605
CH8722	1.214501	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445836	39.026920
CH8726	1.732246	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444933	39.026023
CH8728	0.184073	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444325	39.025756
CH8732	8.239996	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441901	39.025849
CH8735	1.666180	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443465	39.027402
CH8749	2.072749	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447476	39.023778
CH8750	6.018884	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447477	39.023901
CH8755	4.470777	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447081	39.022840
CH8757	2.529664	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446910	39.021860
CH8763	1.512152	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447485	39.021352
CH8764	0.299504	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447231	39.021321
CH8766	0.969984	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447247	39.020579
CH8795	4.839449	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433548	39.018871
CH8810	0.544280	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436134	39.020609
CH8820	15.661900	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437852	39.020889
CH8835	2.193855	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435576	39.023103
CH8837	2.865748	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435165	39.023069
CH8838	10.194054	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435118	39.023114
CH8841	0.638007	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436302	39.023135
CH8844	3.505314	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457846	39.026703
CH8856	5.498888	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432690	39.016037
CH8868	2.525953	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432444	39.014715
CH8873	23.105656	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.79	PL45	-77.496092	38.901147
CH8883	35.963466	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	67.77	PL45	-77.495523	38.901430
CH8925	1.771925	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.94	PL45	-77.496843	38.901288
CH8954	4.455575	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.28	PL45	-77.497916	38.902742
CH8957	1.679921	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.41	PL45	-77.498488	38.902959
CH8964	1.598582	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.29	PL45	-77.498345	38.902357
CH8972	1.593303	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.10	PL45	-77.498260	38.902025
CH898	2.693484	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.89	PL21	-77.339153	39.052149
CH9016	8.050201	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.04	PL45	-77.506873	38.900653

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH9020	0.686751	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	17.93	PL45	-77.507388	38.900288
CH9023	0.502137	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	0.19	PL45	-77.507139	38.900250
CH9081	45.539000	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	57.98	PL45	-77.505628	38.899456
CH9082	0.904816	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.40	PL45	-77.505921	38.899568
CH91	0.995582	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.65	PL21	-77.350329	39.037215
CH9108	1.855534	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	26.38	PL45	-77.497335	38.901139
CH9117	0.805057	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	53.14	PL45	-77.497494	38.900143
CH912	5.553111	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	50.11	PL21	-77.337944	39.049647
CH9120	2.793801	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	77.02	PL45	-77.497529	38.900030
CH9122	2.017899	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	57.99	PL45	-77.497559	38.899153
CH9135	0.680374	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	52.81	PL45	-77.497512	38.898103
CH9139	3.106812	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	54.27	PL45	-77.497211	38.897706
CH9149	3.494693	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	65.62	PL45	-77.496893	38.896650
CH9152	1.969010	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	82.88	PL45	-77.496822	38.896308
CH9154	3.496547	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	50.85	PL45	-77.496804	38.895315
CH9188	4.298194	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	48.34	PL45	-77.496771	38.894291
CH9197	2.390415	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	38.12	PL45	-77.496952	38.893384
CH9220	9.647476	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.71	PL45	-77.496456	38.890928
CH9241	4.820236	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	75.62	PL45	-77.496324	38.889477
CH9242	6.131177	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.54	PL45	-77.496174	38.889194
CH9286	7.128160	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.23	PL45	-77.501262	38.889915
CH9288	7.454713	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.59	PL45	-77.501241	38.890635
CH9315	9.060524	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.73	PL45	-77.501252	38.891595
CH9341	10.689602	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	30.76	PL45	-77.501085	38.893253
CH9377	15.459160	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	29.21	PL45	-77.500822	38.895339
CH9424	16.892696	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	51.93	PL45	-77.501102	38.897250
CH943	1.680599	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.91	PL21	-77.338772	39.048194
CH9466	4.387122	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.64	PL45	-77.501322	38.893230
CH9494	1.731943	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	62.23	PL45	-77.502168	38.890286
CH9508	8.462217	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.30	PL45	-77.505388	38.893168
CH9518	8.292362	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.07	PL45	-77.505025	38.894503
CH9541	10.422881	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.45	PL45	-77.506959	38.897118
CH9563	1.638714	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.47	PL45	-77.489609	38.909247
CH9568	36.262737	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.29	PL45	-77.490185	38.908237
CH9573	0.636922	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.09	PL45	-77.489496	38.908800
CH9576	0.645906	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_NON_PUBLIC	0.30	PL45	-77.489511	38.907717
CH9608	22.910038	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.04	PL45	-77.490253	38.906167
CH9613	2.386161	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.05	PL45	-77.487582	38.906585
CH9622	3.016224	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.93	PL45	-77.484949	38.907865
CH9676	78.936195	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	42.31	PL45	-77.510870	38.898439
CH9704	4.649132	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.47	PL45	-77.510213	38.900064
CH9709	11.137680	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.41	PL45	-77.510567	38.901237
CH9710	0.321750	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	32.82	PL45	-77.510602	38.901435
CH972	2.298654	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	33.86	PL21	-77.369849	39.046522
CH9781	15.935475	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	67.34	PL14	-77.523643	39.016300
CH9814	8.148640	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	68.96	PL14	-77.527484	39.022243
CH982	13.803534	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.43	PL21	-77.367406	39.048480
CH9852	27.882521	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517873	39.017672
CH9853	5.258543	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518181	39.017636
CH986	1.068049	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.42	PL21	-77.367607	39.047141
CH9861	17.146422	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	70.90	PL14	-77.523173	39.016270
CH9893	3.852676	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519112	39.019228
CH9894	0.730748	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519194	39.019104
CH991	2.399687	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	84.07	PL21	-77.368313	39.046069
CH9919	5.612480	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520042	39.023742
CH9920	14.611406	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520623	39.023997
CH9944	12.505338	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518768	39.026355
CH9964	5.655023	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517556	39.029167
CH9966	0.284015	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517521	39.029254
CH9971	2.669879	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517831	39.029508

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH9996	1.340504	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515019	39.030252
CP10001	4.900002	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455388	39.057736
CP10022	0.600814	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460084	39.057640
CP1010	0.327814	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.562090	38.936466
CP10114	4.491848	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455841	39.049775
CP10155	5.639402	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491221	39.049045
CP10179	0.339123	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492115	39.050368
CP10180	1.642484	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491925	39.050329
CP10188	0.861841	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493528	39.048840
CP10192	0.317192	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493130	39.048346
CP10193	1.119085	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493327	39.048490
CP10196	0.607411	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493576	39.048852
CP10203	6.321176	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418087	39.028267
CP10229	5.410395	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.417749	39.028958
CP10278	6.858422	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500043	39.029613
CP10288	3.594256	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500287	39.054385
CP10291	8.271206	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500634	39.054533
CP10334	7.741223	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501694	39.056399
CP10338	4.350078	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501463	39.055964
CP10400	1.163817	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413479	38.974311
CP1042	14.695890	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558164	38.935435
CP1044	2.768815	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558401	38.935491
CP1058	3.587718	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	37.86	PL45	-77.528984	38.931643
CP1061	1.684765	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_MEDICAL	95.72	PL45	-77.529097	38.931328
CP1065	5.046515	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_CHURCH	78.49	PL45	-77.528975	38.931048
CP1068	0.318138	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	16.94	PL45	-77.528822	38.931133
CP10731	13.320789	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412904	38.974721
CP1084	0.296483	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_MEDICAL	94.26	PL45	-77.529887	38.932302
CP1154	7.647629	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_LIGHT_IND_FLEX	55.00	PL45	-77.469941	38.916611
CP1174	2.951689	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	96.05	PL45	-77.469234	38.917114
CP1193	0.421061	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_LIGHT_IND_FLEX	58.57	PL45	-77.471691	38.916606
CP1278	3.455643	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511622	38.983695
CP1280	1.527272	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508198	38.983927
CP1284	1.144271	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508360	38.984169
CP1299	3.207452	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506533	38.986504
CP1325	0.765089	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483436	38.995596
CP1326	3.868717	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483354	38.996135
CP1359	1.337993	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483631	38.997475
CP1370	3.706073	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483000	38.996739
CP1372	0.381318	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482588	38.996029
CP1374	0.216878	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482756	38.996312
CP1380	0.938679	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.481692	38.996065
CP1391	2.289892	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474884	39.002248
CP1408	4.299772	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472631	39.006525
CP1410	1.675489	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472551	39.006629
CP1416	5.087801	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470972	39.007745
CP1435	2.495658	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464734	39.008690
CP1440	3.299148	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462020	39.008527
CP1466	0.269847	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457093	39.010445
CP1468	3.733232	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457138	39.010379
CP1478	2.556844	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482290	39.003541
CP1481	5.510119	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481778	39.003381
CP1509	55.293707	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482966	39.004021
CP1511	3.756151	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482964	39.003949
CP1512	1.016032	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482856	39.004004
CP1556	12.963160	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456283	39.002668
CP164	3.367930	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	35.74	PL42	-77.565740	38.921121
CP165	0.878747	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	63.32	PL42	-77.565731	38.920684
CP1653	7.557987	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	36.17	PL14	-77.528747	38.996312
CP1667	10.844201	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	33.60	PL14	-77.528120	38.995935

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CP1668	2.141737	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	51.94	PL14	-77.526765	38.996281
CP1728	3.402022	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	72.73	PL14	-77.530261	38.997533
CP1798	4.634708	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	92.53	PL14	-77.529293	38.996227
CP1807	3.145197	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	100.00	PL14	-77.530645	38.994330
CP1808	5.565428	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	100.00	PL14	-77.531669	38.994244
CP1824	16.970624	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	90.41	PL14	-77.531723	38.994295
CP1857	1.303014	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	89.43	PL14	-77.529527	38.993743
CP1861	0.303911	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	100.00	PL14	-77.529847	38.993506
CP1863	0.838391	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	89.28	PL14	-77.529081	38.993244
CP1875	2.907616	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	62.10	PL14	-77.531406	38.995244
CP1894	9.782729	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	88.93	PL14	-77.535430	38.991518
CP1895	23.539957	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_MFA	35.10	PL14	-77.535371	38.991123
CP1910	2.551154	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507283	39.008776
CP1956	2.216171	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502332	39.009153
CP1960	1.906406	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503913	39.008898
CP1961	0.914306	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505170	39.008882
CP1962	3.233545	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505777	39.008862
CP1963	1.495308	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506523	39.008773
CP1967	0.291023	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502006	39.009723
CP1970	0.353648	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502560	39.010056
CP1972	9.869644	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502864	39.010483
CP1985	0.802255	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506482	39.012740
CP1990	0.241546	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502512	39.009921
CP2054	4.048839	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464335	39.015649
CP2083	9.347454	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491158	39.007051
CP2101	30.250266	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481565	39.017065
CP2150	1.972106	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437581	39.022215
CP2204	1.168693	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428680	38.990852
CP2209	3.273557	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429550	38.990667
CP2221	4.602539	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430470	38.991000
CP2224	0.792358	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428217	38.990838
CP2225	0.306043	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427931	38.991245
CP2227	1.224086	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427298	38.991455
CP2229	0.951020	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426735	38.991635
CP2232	0.378069	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426282	38.991938
CP2247	7.847757	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428497	38.991065
CP2250	0.443634	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427977	38.990142
CP230	10.159900	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	58.84	PL42	-77.561198	38.922276
CP2356	59.878164	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411012	38.976987
CP2358	0.148407	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430393	39.015427
CP2366	9.207935	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432069	39.014571
CP2381	4.771586	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431101	39.016178
CP2386	12.216180	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430422	39.015262
CP2420	1.412228	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487847	39.039605
CP2431	1.041600	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515892	39.031971
CP2438	2.471432	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517181	39.032303
CP2445	5.871871	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516826	39.032721
CP2449	4.547708	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515761	39.033503
CP2472	1.571567	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487655	39.038868
CP2477	0.416797	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520248	39.031617
CP2481	14.774228	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519132	39.031761
CP250	3.383114	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	54.31	PL42	-77.564313	38.921137
CP251	3.898324	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	61.53	PL42	-77.564834	38.921596
CP2538	3.011622	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465774	39.050846
CP2562	3.534685	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467213	39.052151
CP2567	4.781689	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463770	39.049914
CP2582	1.566890	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462445	39.050157
CP2592	2.286643	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462962	39.051144
CP2593	2.777311	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463328	39.052611
CP2617	11.542874	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_OTHER_NON_PUBLIC	28.25	PL19	-77.451279	39.045649

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CP2659	0.987166	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457819	39.042673
CP2668	4.974225	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459480	39.041642
CP2785	33.508718	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454341	39.059362
CP2832	4.395592	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454113	39.059271
CP2883	7.937284	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451919	39.058164
CP2886	0.504877	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451458	39.057805
CP2895	6.979541	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451417	39.057870
CP2915	1.315451	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452330	39.057760
CP2945	0.639491	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451742	39.057851
CP3038	3.501284	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426964	39.019043
CP331	14.578287	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.04	PL42	-77.562993	38.918436
CP358	1.404283	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	60.27	PL42	-77.559724	38.911390
CP362	0.660883	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	52.75	PL42	-77.560543	38.911481
CP373	3.116221	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	45.56	PL45	-77.541148	38.923970
CP374	5.704983	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.62	PL45	-77.540974	38.924408
CP394	2.918176	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.89	PL45	-77.541182	38.923546
CP398	0.290102	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	35.86	PL45	-77.542608	38.925699
CP402	0.953940	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.60	PL45	-77.542548	38.925775
CP408	0.781963	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	32.97	PL45	-77.543065	38.926588
CP419	1.372118	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.46	PL45	-77.541720	38.925737
CP429	0.715180	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	56.26	PL45	-77.540616	38.925503
CP438	0.992222	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	44.54	PL45	-77.539618	38.926214
CP4507	2.138468	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484496	39.040602
CP4508	73.996571	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484730	39.040645
CP4515	1.317264	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484888	39.040632
CP4516	6.996806	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485123	39.040493
CP4563	43.745109	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	53.64	PL42	-77.561695	38.916271
CP4649	17.720331	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.89	PL45	-77.532166	38.918511
CP4685	1.177994	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	58.67	PL45	-77.535810	38.910759
CP4694	0.922653	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	62.55	PL45	-77.536338	38.910339
CP4695	0.852572	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	60.12	PL45	-77.536985	38.909773
CP470	3.538244	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	21.15	PL45	-77.543471	38.925865
CP4701	0.359112	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	52.57	PL45	-77.537142	38.909643
CP4708	8.937442	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	46.87	PL45	-77.537361	38.910013
CP4709	8.725999	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	55.29	PL45	-77.537288	38.910300
CP4723	14.268814	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	35.65	PL45	-77.537868	38.908782
CP4738	0.325484	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	2.99	PL45	-77.538752	38.907244
CP476	6.613148	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	91.46	PL45	-77.543688	38.925460
CP4876	2.022718	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	5.35	PL42	-77.553307	38.913894
CP616	1.874807	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	58.82	PL45	-77.540692	38.910791
CP6320	4.910197	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552100	38.934419
CP6368	10.942788	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551967	38.936924
CP6369	0.798847	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551898	38.937133
CP6375	2.847840	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551895	38.938288
CP638	10.968001	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	58.92	PL45	-77.536473	38.922185
CP6410	4.515752	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560472	38.932940
CP6411	1.111098	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560748	38.932633
CP6430	9.020817	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559771	38.934759
CP6544	16.571410	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560119	38.930065
CP6584	3.430902	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559962	38.930086
CP6588	11.695739	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560872	38.930119
CP6589	4.386022	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.561069	38.930282
CP706	8.669461	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.539233	38.936759
CP7300	3.680421	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506174	38.990066
CP7306	1.284216	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505906	38.991710
CP7319	4.436346	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505775	38.992998
CP7329	2.038012	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506148	38.993212
CP7355	12.001851	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508876	38.990548
CP7359	18.189704	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508872	38.990994
CP738	2.788591	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.546196	38.939375

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CP7438	17.672867	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509694	38.990971
CP7439	0.482266	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509384	38.991123
CP7442	0.776145	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509039	38.991308
CP7447	0.389988	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.510422	38.989719
CP7458	0.658756	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505502	38.991448
CP747	1.613395	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.547907	38.940113
CP7526	11.615928	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505835	38.990725
CP7533	1.029959	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505858	38.990203
CP755	2.991926	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.548702	38.940418
CP762	1.550771	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.548147	38.940196
CP7667	5.373005	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	91.47	PL14	-77.524701	39.014261
CP7669	10.530698	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	66.11	PL14	-77.524398	39.014378
CP768	0.785823	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.550282	38.940732
CP7681	0.802643	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	57.44	PL14	-77.523514	39.015690
CP7695	1.940587	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	34.58	PL14	-77.524642	39.015100
CP7697	5.785755	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	60.12	PL14	-77.524074	39.015369
CP7701	1.119417	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	37.89	PL14	-77.524638	39.014872
CP7710	2.833910	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	36.44	PL14	-77.523863	39.015043
CP7734	8.214178	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522965	38.989024
CP7745	1.085146	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482692	39.019798
CP7746	0.316352	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482458	39.019608
CP7759	6.154924	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484017	39.019728
CP7776	1.728315	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485553	39.018635
CP783	9.355698	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551336	38.939284
CP7838	15.264776	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492147	39.012608
CP7839	2.861885	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492130	39.012568
CP784	0.509697	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551793	38.939017
CP7841	1.213533	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491956	39.012148
CP7843	4.838506	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491124	39.012927
CP786	4.729510	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551777	38.939143
CP7875	4.236049	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492133	39.012634
CP7899	5.301839	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502023	39.013768
CP7902	6.486117	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502188	39.013768
CP7943	11.438033	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491967	39.044729
CP7985	12.089571	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457857	39.046855
CP8050	7.967943	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454842	39.046630
CP8069	2.399686	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433741	39.030642
CP8076	3.141354	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433860	39.030682
CP8092	13.243888	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436418	39.029219
CP8121	0.753507	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439959	39.013118
CP8162	25.339778	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442989	39.014122
CP8178	0.427763	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440472	39.010673
CP8223	6.660546	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	37.78	PL45	-77.483331	38.911370
CP8229	4.977604	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	34.11	PL45	-77.482721	38.911147
CP831	12.873782	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	54.04	PL45	-77.489165	38.913047
CP8385	1.819345	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.93	PL16	-77.505952	39.104394
CP8421	6.780272	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477553	39.020127
CP8425	1.291658	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478216	39.020207
CP8428	0.492447	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480354	39.018760
CP8434	1.856712	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	42.37	PL14	-77.528363	38.996946
CP8438	0.837780	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	64.04	PL14	-77.526589	38.997414
CP8443	0.318581	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	64.61	PL14	-77.526012	38.997161
CP8451	1.492552	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486179	38.999128
CP8454	0.592744	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486051	38.999098
CP8470	3.959005	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483882	38.998189
CP8472	1.121840	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483937	38.997985
CP8475	1.654736	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486208	38.998290
CP8476	0.433454	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486293	38.998118
CP8481	8.122776	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412299	38.982608
CP8495	13.472575	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412201	38.982046

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CP8510	7.020599	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411958	38.983548
CP864	9.149806	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	57.86	PL45	-77.487418	38.912493
CP8688	12.805853	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443129	39.048755
CP8691	1.719042	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445127	39.047574
CP8693	2.249421	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445567	39.047615
CP8698	7.387781	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447242	39.048657
CP8734	37.781591	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.652814	39.140432
CP874	1.232782	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	27.23	PL45	-77.486279	38.915320
CP8742	13.393527	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.646876	39.136980
CP8746	10.899511	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.646069	39.138002
CP8748	2.682824	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.645946	39.138931
CP8756	3.154415	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.574804	38.952626
CP8762	2.364588	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.575058	38.952456
CP8764	0.184067	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.575322	38.952847
CP8771	1.699365	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.574438	38.953738
CP8779	1.603714	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.572267	38.955034
CP8820	3.999260	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.504283	39.113879
CP8839	0.456983	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	50.13	PL42	-77.562782	38.910916
CP8843	0.203352	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.563612	38.910589
CP8871	6.172247	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	72.72	PL42	-77.566988	38.911846
CP89	2.562351	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.71	PL45	-77.515610	38.896451
CP893	3.311794	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MISC	55.67	PL45	-77.488718	38.911398
CP895	4.052581	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	0.86	PL45	-77.488760	38.911367
CP8956	13.023035	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	51.85	PL42	-77.566707	38.908568
CP8957	12.259065	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	34.01	PL42	-77.566684	38.908544
CP9016	1.029611	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.570902	38.912770
CP9021	3.759435	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MULTI_USE	49.75	PL42	-77.570935	38.914817
CP9044	12.876028	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.08	PL42	-77.569489	38.911663
CP9047	0.587327	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.570837	38.911709
CP9053	2.541487	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	63.10	PL45	-77.497989	38.919242
CP9060	5.578437	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_MFST	45.05	PL45	-77.498075	38.919255
CP9117	4.295379	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	71.48	PL45	-77.504703	38.915860
CP9126	0.681936	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	57.27	PL45	-77.504777	38.917306
CP9128	12.200760	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	46.13	PL45	-77.504795	38.917478
CP9169	9.747020	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	44.50	PL45	-77.501761	38.919311
CP9189	0.113993	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522967	38.971636
CP9193	0.332244	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523826	38.972112
CP9230	7.724262	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470151	38.998875
CP9234	4.575444	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470347	38.999148
CP9321	3.155231	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432976	38.981521
CP938	0.903720	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	33.84	PL45	-77.498270	38.912200
CP9380	9.173334	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444180	38.986281
CP9433	4.480963	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503321	39.025501
CP9479	0.983141	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458255	39.034200
CP9483	2.058030	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458085	39.034629
CP949	14.433951	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	99.02	PL45	-77.488767	38.912927
CP9495	7.420081	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458060	39.035311
CP9500	1.460163	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456188	39.036053
CP9502	4.654594	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456733	39.036356
CP9530	10.222154	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457019	39.036378
CP9555	5.501479	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457043	39.037982
CP9561	3.370020	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455911	39.037273
CP9614	8.978314	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458340	39.030481
CP9624	19.296007	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461784	39.029485
CP9684	14.590844	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450606	39.040686
CP9685	19.831898	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450940	39.040573
CP9756	1.081049	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455623	39.048906
CP9760	0.725331	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457038	39.048180
CP9784	9.000714	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.458623	39.063204
CP9789	9.899356	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.458966	39.063784

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CP9963	3.472801	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452123	39.054645
CP9965	4.397140	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451997	39.054982
CP9966	4.947035	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451886	39.055147
CP9990	0.889675	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454493	39.057246
CP9994	1.032407	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454697	39.057401
CS1	13.330424	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411060	39.004843
CS16	0.492103	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	64.13	PL14	-77.528602	39.003721
DB1027	8.603174	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.06	PL45	-77.496035	38.900418
DB1099	19.712810	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.14	PL45	-77.495773	38.895343
DB1131	1.687120	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.41	PL45	-77.495596	38.893769
DB1138	1.680858	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	54.57	PL45	-77.495594	38.894867
DB1164	12.649611	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.89	PL45	-77.496281	38.897365
DB1169	0.187721	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.30	PL45	-77.496746	38.897409
DB1191	0.792181	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	46.26	PL45	-77.479621	38.907569
DB1212	8.611847	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.39	PL45	-77.481106	38.908019
DB1219	2.947736	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.55	PL45	-77.483125	38.908378
DB1224	24.012500	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	57.97	PL45	-77.483562	38.908417
DB1266	2.994637	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.39	PL45	-77.510751	38.896853
DB1271	6.539175	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	40.67	PL45	-77.511287	38.897016
DB1295	6.183341	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	62.99	PL45	-77.511447	38.897608
DB1318	2.331574	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	33.21	PL45	-77.522819	38.902338
DB1321	0.296837	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.98	PL45	-77.522879	38.902918
DB1326	8.084555	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	47.98	PL45	-77.522668	38.903773
DB1327	1.986259	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	32.90	PL45	-77.522319	38.904583
DB1335	1.452749	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	23.69	PL45	-77.521988	38.905160
DB1336	0.966481	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	29.26	PL45	-77.521805	38.905538
DB1341	0.502336	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	8.68	PL45	-77.521918	38.906112
DB1344	12.691299	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.75	PL45	-77.521551	38.906038
DB1359	5.208134	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	59.34	PL45	-77.519978	38.908327
DB1366	0.997878	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	16.16	PL45	-77.518509	38.909105
DB1373	3.853708	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	22.56	PL45	-77.518533	38.909608
DB1382	2.204253	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500378	39.022446
DB1395	5.332587	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498408	39.020208
DB1406	2.858222	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500283	39.020204
DB1412	0.522312	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501256	39.021543
DB1413	13.293909	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501571	39.021362
DB1426	0.845511	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501364	39.020256
DB1472	1.101985	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502324	39.022122
DB1486	9.494252	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503682	39.022188
DB15	33.790312	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427203	39.029720
DB1515	22.431292	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502827	39.022657
DB1574	5.967257	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501068	39.022723
DB1588	27.070407	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498042	39.017832
DB1592	0.482388	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497782	39.018848
DB162	9.157015	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426503	39.037550
DB1620	0.520822	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498932	39.016045
DB1622	2.191831	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499151	39.016068
DB1625	1.841861	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498963	39.015358
DB1628	0.631771	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499133	39.015638
DB1638	5.281144	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499365	39.016508
DB1658	10.391295	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498863	39.018059
DB1688	6.146558	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498871	39.018759
DB1696	36.340491	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497862	39.023519
DB1702	2.239664	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497450	39.025019
DB1757	7.035701	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510664	39.025655
DB1797	3.638229	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509244	39.022638
DB1807	3.384854	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507471	39.022998
DB1811	2.131486	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506800	39.022363
DB1812	5.081637	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509380	39.022592
DB1822	0.293504	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508913	39.022324

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
DB1827	1.325342	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508856	39.021579
DB1835	0.787960	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508237	39.021794
DB1838	0.884479	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507384	39.021782
DB1845	2.930328	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507085	39.019983
DB186	16.891971	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425293	39.035877
DB1860	4.350029	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508106	39.019313
DB1862	0.678579	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507830	39.019341
DB1864	2.758109	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508011	39.018919
DB1888	10.516107	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506923	39.018593
DB1916	12.582573	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507172	39.013751
DB1947	33.216968	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511625	39.014773
DB195	8.612301	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425524	39.036854
DB196	35.455394	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425470	39.036931
DB1974	3.313714	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510964	39.019729
DB1975	0.269193	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510777	39.019779
DB1980	1.551762	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510618	39.020258
DB1993	7.866547	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512210	39.021711
DB2016	0.412633	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511229	39.024601
DB2019	5.559448	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510690	39.023494
DB2020	4.686078	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511040	39.023043
DB2029	0.564951	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509489	39.024068
DB2031	0.582140	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510087	39.024439
DB2033	1.706217	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511089	39.025416
DB2046	6.484818	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511464	39.024941
DB2130	0.152660	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513910	39.016519
DB2133	0.889322	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514505	39.016549
DB2168	13.792002	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.479718	39.079372
DB2209	12.576558	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481904	39.081217
DB2236	16.997125	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.480263	39.085558
DB2252	7.967327	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.478066	39.086651
DB2270	4.184039	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.478963	39.087359
DB2296	8.138692	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481271	39.087874
DB2307	3.580720	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.480919	39.089512
DB2318	4.705683	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477042	39.089376
DB2324	3.201744	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.476067	39.087617
DB2329	3.388318	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.480245	39.089834
DB2334	3.116611	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481483	39.088392
DB2338	3.635041	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481640	39.089125
DB2348	1.651188	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.483950	39.087328
DB2359	29.157794	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484088	39.086541
DB2400	8.703538	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482696	39.073350
DB2423	0.233087	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515101	39.016928
DB2431	5.213245	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517098	39.017816
DB2438	0.806806	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516947	39.017293
DB2439	2.448271	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517380	39.017200
DB2442	6.826396	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518557	39.016840
DB2460	4.214926	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516157	39.016497
DB2480	20.807851	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514559	39.015395
DB2493	4.694610	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513007	39.014511
DB2509	2.167285	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515020	39.010947
DB2517	9.632091	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513709	39.011437
DB2523	17.356828	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514205	39.009624
DB2610	17.093961	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517130	39.009496
DB2611	10.769721	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518049	39.009555
DB2693	17.661144	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503763	39.061604
DB2738	1.786388	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502705	39.062355
DB2739	1.852435	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501693	39.063345
DB2745	6.656376	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500975	39.064575
DB2749	4.278414	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500701	39.065144
DB2784	0.414709	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.482190	39.081344

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
DB2793	15.477636	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484241	39.080873
DB2796	0.762179	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484792	39.080797
DB2797	33.111158	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.485224	39.080656
DB2908	5.179692	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484161	39.087946
DB30	1.157905	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427737	39.030448
DB3051	3.961022	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	77.62	PL16	-77.501936	39.094715
DB3068	1.457349	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	83.97	PL16	-77.503910	39.094245
DB316	11.652041	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421517	39.034379
DB395	0.622319	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441433	39.051380
DB44	13.592765	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429079	39.032796
DB448	0.231025	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432934	39.048008
DB449	3.455554	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433452	39.048240
DB453	1.283826	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432493	39.047178
DB456	2.022596	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431694	39.046656
DB462	0.409219	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432323	39.046338
DB464	0.385564	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431137	39.046257
DB468	0.238844	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431682	39.046747
DB470	0.526027	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432341	39.047688
DB48	2.125801	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428883	39.032069
DB497	0.856678	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480816	39.065329
DB500	0.892069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480978	39.064425
DB502	0.976666	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481006	39.064355
DB513	7.203564	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481392	39.064366
DB514	0.181994	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481354	39.064378
DB524	3.060648	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480546	39.058095
DB56	15.711423	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424987	39.039929
DB57	7.440978	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425342	39.039387
DB60	2.684820	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426113	39.038836
DB700	2.912936	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	21.37	PL45	-77.502372	38.890072
DB703	0.229674	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	1.08	PL45	-77.503172	38.890464
DB706	0.132590	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.69	PL45	-77.504314	38.890989
DB709	6.682031	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	21.96	PL45	-77.509587	38.893329
DB73	4.691885	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427178	39.038382
DB765	5.154405	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.46	PL45	-77.495238	38.890959
DB780	15.867903	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	29.36	PL45	-77.495223	38.891221
DB870	10.499327	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.25	PL45	-77.491908	38.892781
DB894	3.166596	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.85	PL45	-77.491673	38.893421
DB911	6.094841	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.36	PL45	-77.491560	38.894790
DB916	61.749177	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	62.81	PL45	-77.490231	38.896753
DB983	2.735147	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.55	PL45	-77.491731	38.895518
DB993	7.963294	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	54.51	PL45	-77.491196	38.896742
DD133	7.968828	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.446117	38.985010
DD241	5.573509	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.537798	38.912930
DD26	1.293569	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439870	38.997049
DD3	5.490009	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497093	39.027018
DD34	0.108260	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407664	39.036124
DD55	1.402752	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437275	38.978217
DD58	0.565476	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437891	38.978880
DD66	10.297222	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_CHURCH	55.76	PL45	-77.494054	38.914837
DD78	1.197308	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.417185	39.017046
DD8	0.958082	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436372	39.011538
DD86	4.167148	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	100.00	PL21	-77.389247	39.060360
DD9	0.080950	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447780	38.999067
DF123	8.180078	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463301	39.025872
DF148	6.983239	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426794	39.040608
DF153	0.581910	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428984	39.043413
DF158	5.455012	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474098	39.068211
DF16	1.078791	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.500514	38.985413
DF169	9.967862	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.504147	38.982191
DF185	9.446812	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475331	39.065803

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
DF188	1.679471	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448191	39.057834
DF190	10.023502	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405788	39.012375
DF196	4.638700	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474975	39.066253
DF21	10.306755	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	54.27	PL45	-77.500203	38.916522
DF278	0.660681	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500268	39.022500
DF28	16.705658	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468810	39.052989
DF66	14.435656	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.543094	38.931050
DF73	14.066609	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505260	38.979690
DF93	2.914337	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	58.82	PL14	-77.531298	39.020356
DK11558	2.006598	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515791	39.004217
DK11568	0.526598	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516217	39.004070
DK20037	3.566249	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516812	39.003613
DK30021	1.769864	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513043	39.005861
DK30234	3.303854	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396299	39.029583
DK30235	5.453264	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423777	39.019839
DK30238	2.146248	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426562	39.016600
DK30239	3.003345	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424969	39.016043
DK30240	3.826431	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411431	39.008941
DK30241	0.475179	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411376	39.009033
DK30242	3.420739	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411738	39.009004
DK30245	3.547472	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424559	38.990059
DK30246	6.738108	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408180	38.995977
DK30247	1.685062	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.407787	38.995715
DK30255	5.164703	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513328	39.005788
DK30257	9.108329	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514839	39.004375
DK30259	0.764877	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518724	38.983117
DK30260	4.044774	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518934	38.981138
DK30261	3.799165	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518730	38.981143
DK80001	0.071786	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396549	39.029618
DW120	3.460361	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425897	38.983586
DW152	14.223935	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447372	38.982672
DW154	0.424193	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.363415	39.026991
DW155	1.115523	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	49.23	PL21	-77.377467	39.029777
DW156	1.310490	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	49.28	PL21	-77.377428	39.029765
DW212	2.052657	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463569	39.022850
DW26	19.038588	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	24.37	PL21	-77.356476	39.041778
DW29	1.134137	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	92.91	PL21	-77.363609	39.037768
DW309	3.120660	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run	RES_MFST	36.63	PL19	-77.499857	39.053241
DW311	1.626949	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run	RES_MFST	95.87	PL19	-77.499932	39.053223
DW325	1.251686	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run	COM_OTHER_PUBLIC	82.59	PL19	-77.490111	39.020053
DW43	14.636556	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	38.67	PL21	-77.358565	39.042558
DW46	1.816985	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.65	PL45	-77.523709	38.902793
DW48	43.529691	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469098	39.019580
DW52	11.930298	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	72.73	PL21	-77.346003	39.053744
GC1002	1.658159	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	68.08	PL14	-77.526486	39.005766
GC1216	3.610756	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	76.78	PL45	-77.515473	38.919493
GC1275	5.507200	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	81.14	PL42	-77.557164	38.909026
GC1276	2.873416	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	66.67	PL42	-77.557283	38.910257
GC1483	2.855381	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.83	PL45	-77.539238	38.914718
GC1515	0.518659	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.74	PL45	-77.524038	38.900392
GC1516	2.439770	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	23.93	PL45	-77.523873	38.900315
GC1517	12.740403	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	48.38	PL45	-77.522899	38.901969
GC1518	1.487028	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.36	PL45	-77.523934	38.901043
GC1519	1.484855	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	48.06	PL45	-77.524041	38.903009
GC1520	2.772790	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.16	PL45	-77.523358	38.905199
GC1521	3.272319	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.71	PL45	-77.523217	38.906970
GC1522	0.405622	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	46.57	PL45	-77.523282	38.907331
GC1523	0.753758	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	74.23	PL45	-77.522871	38.907845
GC1535	5.788006	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	53.62	PL45	-77.529851	38.928715
GC1536	1.779320	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	44.54	PL45	-77.529489	38.928583

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
GC1537	1.729982	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.16	PL45	-77.528526	38.927569
GC1538	1.737599	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.47	PL45	-77.532729	38.928668
GC1540	14.080360	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	49.09	PL45	-77.530551	38.925983
GC1541	4.443425	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	30.71	PL45	-77.531835	38.925799
GC1542	13.447747	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.75	PL45	-77.532260	38.925281
GC1543	20.813716	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551147	38.936367
GC1544	0.610393	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551217	38.935731
GC1545	2.170653	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	34.74	PL42	-77.550284	38.926314
GC1546	12.488969	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	62.19	PL42	-77.550091	38.926269
GC1548	6.744006	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	75.90	PL42	-77.550697	38.924802
GC1552	20.170184	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	29.75	PL42	-77.551875	38.922053
GC2101	6.683125	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.494881	39.110486
GC2102	3.603232	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.495723	39.112531
GC2103	5.746417	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.490835	39.110085
GC2104	1.795569	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477030	39.087329
GC2105	19.512398	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.474762	39.087646
GC2109	57.797626	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.42	PL16	-77.506255	39.090656
GC2140	3.560390	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460986	39.041713
GC2141	2.063791	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462084	39.042247
GC2142	9.540642	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463742	39.042678
GC2246	20.054077	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460248	39.045092
GC2247	3.058793	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460194	39.045096
GC2248	2.361433	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460312	39.045187
GC2250	7.659233	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458969	39.045745
GC2257	0.652560	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459672	39.033598
GC2258	0.848317	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460501	39.033136
GC2259	1.454048	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461474	39.033220
GC235	4.323576	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	46.54	PL14	-77.531870	39.024158
GC2379	3.883234	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	96.70	PL16	-77.509589	39.060389
GC2380	23.227580	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505318	39.055932
GC2386	49.494875	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.69	PL16	-77.510749	39.063782
GC2390	5.386613	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460885	39.040832
GC2394	0.230858	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464234	39.042656
GC2395	14.326377	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462169	39.041496
GC2465	4.527499	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.29	PL16	-77.508827	39.086922
GC2469	6.060172	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498513	39.060670
GC2470	0.506217	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499132	39.059537
GC2553	12.028609	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461505	39.047969
GC2554	6.291295	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459522	39.046499
GC2555	4.870713	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460271	39.045687
GC2556	9.658739	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461914	39.048199
GC2557	9.845813	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462714	39.048962
GC2654	1.793459	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493286	39.042780
GC2658	2.837380	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495093	39.060638
GC2659	2.503376	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496991	39.059293
GC2660	1.217400	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494842	39.059204
GC2661	1.901447	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496426	39.058202
GC2662	1.431058	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494756	39.057403
GC2737	20.005632	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	61.01	PL16	-77.490002	39.097863
GC2738	31.769611	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	46.65	PL16	-77.490575	39.098386
GC2812	8.508727	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	54.69	PL16	-77.495472	39.094446
GC2813	15.061832	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.71	PL16	-77.496789	39.094998
GC2814	1.481729	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.56	PL16	-77.498571	39.091578
GC2815	1.783280	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	73.87	PL16	-77.498875	39.092965
GC2817	31.543733	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	45.39	PL16	-77.506147	39.087276
GC547	44.527974	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	34.62	PL21	-77.352939	39.053355
GC548	1.915721	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	83.23	PL21	-77.352639	39.053473
GC908	19.087532	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.516512	38.987474
GC909	0.668726	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514469	38.985724
GC914	5.277139	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514360	38.985236

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
GC915	5.715832	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.513574	38.984548
GC919	9.397312	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514951	38.981517
GC922	21.866101	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.515851	38.981965
GC927	0.759035	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520841	38.988345
GC948	4.202617	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.512210	38.983579
GC979	39.783781	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.515775	38.993926
GC981	8.427568	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.513721	38.990507
GC982	1.192941	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.512444	38.991553
GC983	1.738538	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511495	38.991088
GC996	19.227111	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	58.11	PL14	-77.530333	39.024415
GC998	0.446388	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	83.02	PL14	-77.529537	39.006790
JC1	6.143555	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.73	PL45	-77.524812	38.916966
JC1026	4.958516	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504229	39.038945
JC1028	29.189394	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504611	39.038853
JC1050	2.256835	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505501	39.039738
JC1053	1.243767	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506888	39.039784
JC1056	1.259746	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507713	39.039570
JC1058	1.245318	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508677	39.038733
JC1063	1.036126	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509068	39.036670
JC1065	11.226328	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509054	39.037415
JC1067	5.216397	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508964	39.038562
JC1097	4.460681	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510186	39.038836
JC1098	2.160770	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511183	39.038729
JC1106	1.163833	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513178	39.037904
JC1125	5.531066	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509511	39.035194
JC1127	8.294368	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509505	39.035299
JC1144	2.885069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508997	39.035780
JC1146	4.017225	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514131	39.036696
JC11470	1.310638	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	70.38	PL42	-77.559654	38.913012
JC11476	0.931987	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	92.30	PL42	-77.559749	38.912961
JC11477	0.643145	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	56.10	PL42	-77.560053	38.913155
JC1148	0.991422	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514280	39.036750
JC11480	0.448327	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	58.71	PL42	-77.560231	38.913038
JC11490	1.156462	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.88	PL42	-77.559069	38.911724
JC11491	8.075892	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.80	PL42	-77.559231	38.911393
JC11494	0.230782	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.558696	38.912221
JC1175	1.340702	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515448	39.037758
JC1177	9.014762	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515520	39.037834
JC119	2.782182	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.52	PL45	-77.525824	38.908282
JC1206	3.519742	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498742	39.031617
JC1218	1.059284	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498593	39.031899
JC1220	2.345647	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499523	39.032632
JC1227	1.234333	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500450	39.033083
JC1231	23.531806	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500527	39.032947
JC1241	4.200866	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502471	39.033066
JC125	3.650641	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.13	PL45	-77.527722	38.908837
JC126	3.632073	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.53	PL45	-77.530257	38.910267
JC1277	3.863950	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488905	39.047043
JC135	22.839873	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	67.95	PL45	-77.531348	38.908032
JC1381	5.099088	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488359	39.056336
JC1390	3.586332	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488035	39.057047
JC1398	2.214418	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487450	39.058138
JC14	10.009016	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.17	PL45	-77.526272	38.916894
JC1403	7.359027	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486798	39.058995
JC1421	9.788660	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486916	39.059089
JC1439	5.394851	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487998	39.058735
JC1456	2.678306	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488263	39.057720
JC1459	0.777019	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488774	39.056080
JC148	7.039656	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	67.72	PL45	-77.529553	38.908184
JC1485	7.492587	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491552	39.057276

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC1488	6.108171	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491480	39.057760
JC1495	1.727550	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489154	39.054485
JC1498	2.839513	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491206	39.058678
JC1502	1.946675	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494548	39.060344
JC1518	5.896692	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490530	39.060841
JC1519	1.262047	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490847	39.060084
JC1529	17.703886	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491447	39.060665
JC1542	0.749098	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494018	39.062369
JC1549	3.399242	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494603	39.061035
JC1567	4.525048	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	56.65	PL16	-77.504210	39.068645
JC1584	0.451886	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	100.00	PL16	-77.502583	39.068939
JC1586	7.718811	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	57.18	PL16	-77.502592	39.069013
JC1588	0.182517	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	100.00	PL16	-77.501740	39.069240
JC1593	4.693479	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	62.55	PL16	-77.501292	39.069129
JC1604	1.282206	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	100.00	PL16	-77.501420	39.068865
JC1630	1.866015	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	67.05	PL16	-77.506284	39.071670
JC1631	3.513853	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	51.26	PL16	-77.506197	39.072060
JC1656	12.650041	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	47.64	PL16	-77.501078	39.072828
JC1662	1.351604	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	53.02	PL16	-77.503469	39.068678
JC168	5.377558	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	75.61	PL45	-77.526766	38.904152
JC1685	1.606200	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498517	39.066567
JC169	0.840525	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.66	PL45	-77.526356	38.904477
JC1693	3.664535	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499082	39.065899
JC1696	8.752060	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	49.29	PL16	-77.501656	39.068408
JC1716	1.263142	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.490302	39.075488
JC1717	6.840164	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	42.58	PL16	-77.490331	39.075529
JC173	3.184955	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.89	PL45	-77.528945	38.903851
JC1739	2.016283	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.496650	39.078587
JC1741	0.668456	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.496764	39.078625
JC1746	2.760451	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.496337	39.078994
JC1773	1.370765	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.502413	39.081325
JC1774	15.316475	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	10.35	PL16	-77.502451	39.081341
JC1790	0.392269	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.505580	39.082788
JC1791	0.996175	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.505457	39.082718
JC1800	8.314742	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	36.41	PL16	-77.510724	39.085522
JC1803	0.201949	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	PUBLIC	0.00	PL16	-77.512460	39.086335
JC1817	0.830691	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.516757	39.088781
JC1829	0.828351	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.512557	39.086895
JC1831	0.103052	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.512446	39.086872
JC1837	7.807332	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	57.25	PL16	-77.498521	39.087438
JC1849	29.190108	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	39.70	PL16	-77.498570	39.088034
JC186	3.847632	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.15	PL45	-77.532029	38.905513
JC1886	1.626558	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	70.98	PL16	-77.499333	39.089667
JC1963	38.663677	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	44.75	PL16	-77.511407	39.098299
JC202	9.164655	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.05	PL45	-77.525325	38.906492
JC2025	32.361429	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	52.62	PL16	-77.503665	39.098859
JC203	0.247665	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.65	PL45	-77.526104	38.906125
JC210	3.335412	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.98	PL45	-77.527680	38.904875
JC211	12.126380	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	45.11	PL45	-77.516910	38.904817
JC2124	3.835675	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.500593	38.984439
JC214	3.060378	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	64.25	PL45	-77.516895	38.905197
JC2152	1.304060	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521016	38.997757
JC2153	1.695269	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520822	38.995141
JC2154	12.162867	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.519567	38.991820
JC2226	3.529641	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495695	39.053580
JC2227	8.384919	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496371	39.054485
JC2228	4.887562	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496355	39.056681
JC2229	4.744647	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495989	39.055885
JC2230	3.394908	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500729	39.055498
JC2231	17.983026	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run		0.00	PL19	-77.499732	39.053255

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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC227	7.869750	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	56.14	PL45	-77.518895	38.907064
JC2294	0.742686	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504945	39.017746
JC2297	6.489880	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503171	39.017276
JC2299	2.978469	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503897	39.018802
JC2306	2.810958	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	COM_OFFICE_MEDICAL	45.58	PL17	-77.479770	38.993290
JC2326	7.231368	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501817	38.987939
JC2327	4.432534	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502246	38.986403
JC2415	3.605004	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499093	39.052831
JC2417	3.252823	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496247	39.051334
JC2418	6.415344	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495639	39.051534
JC2419	6.689654	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495413	39.051517
JC2422	5.551043	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500334	39.059420
JC243	2.923416	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	50.76	PL45	-77.515464	38.908772
JC2492	0.691598	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517844	39.003002
JC2493	15.211603	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517818	39.002223
JC2494	0.507937	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517635	39.003623
JC2496	3.881794	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516340	39.006860
JC2498	0.089702	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516570	39.005514
JC2499	0.752474	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516100	39.006033
JC2515	9.423665	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.480620	38.991980
JC2516	20.950579	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482757	38.990316
JC2524	14.874180	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506006	38.986954
JC2527	1.594856	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502469	38.986434
JC2563	5.810536	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518899	38.990340
JC2565	5.710652	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518502	38.989118
JC266	8.523929	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	40.95	PL45	-77.520504	38.909538
JC2696	3.854925	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515945	39.009085
JC2702	0.548616	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469717	39.054345
JC2704	14.330495	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470564	39.055019
JC2727	29.010101	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483276	38.990316
JC2744	9.232897	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502846	38.985532
JC2755	6.963961	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495260	39.045440
JC2813	3.880411	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501444	39.061305
JC2816	0.776180	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502020	39.061430
JC2817	7.485383	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499042	39.059419
JC2818	0.551159	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498197	39.060727
JC2819	2.925652	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497895	39.060992
JC2881	1.105382	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515425	39.006930
JC2882	3.373760	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512306	39.008628
JC2898	2.183457	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514856	39.008500
JC2899	3.533145	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517100	39.009124
JC2930	1.251487	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483263	38.989803
JC2931	3.610719	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483248	38.989461
JC2932	1.547562	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483203	38.989083
JC2953	4.499572	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499038	38.993397
JC2954	2.394493	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.495366	38.993881
JC2988	8.890581	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495865	39.046493
JC2991	0.812082	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497797	39.048660
JC30000	7.312353	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476343	39.021434
JC30001	2.090486	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476191	39.021503
JC30003	8.859281	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478094	39.021063
JC30004	1.202979	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487289	39.014411
JC30005	0.182207	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488185	39.013432
JC30006	0.326250	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488474	39.013089
JC30007	1.203379	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487625	39.014321
JC30008	2.342772	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	HOA	66.72	PL19	-77.487593	39.013976
JC30009	9.880144	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.503979	39.000865
JC30010	1.456343	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.504227	39.001636
JC30011	1.578388	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.504451	39.002321
JC30012	18.030902	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507317	38.999038

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC30021	15.639745	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524105	38.990560
JC30024	2.980272	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522730	38.978694
JC30030	42.744262	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521584	38.971156
JC30034	22.224976	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.519927	38.973219
JC30037	8.161131	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522289	38.969694
JC30050	51.123464	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_RETAIL	29.78	PL14	-77.537215	38.987150
JC30072	1.311042	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466644	39.049719
JC30073	11.557162	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run		0.00	PL19	-77.466433	39.049409
JC30074	3.905119	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466382	39.050855
JC30075	3.223840	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	46.49	PL21	-77.354952	39.038633
JC30076	1.054993	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	60.59	PL21	-77.355059	39.039228
JC30077	1.006687	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	59.20	PL21	-77.355252	39.039826
JC30078	1.679662	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	45.05	PL21	-77.356141	39.037053
JC30079	9.337485	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	35.24	PL21	-77.356174	39.036883
JC30080	0.270074	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	78.90	PL21	-77.354780	39.036416
JC30081	1.813132	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	57.87	PL21	-77.355478	39.037574
JC30082	3.462296	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463732	39.048822
JC30083	6.019046	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run		0.00	PL19	-77.465496	39.043486
JC30196	16.734932	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.657644	39.136458
JC30198	0.875785	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.658986	39.137001
JC30199	7.144229	20700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.660350	39.136584
JC30217	6.616518	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	55.10	PL45	-77.527046	38.923126
JC30219	0.631830	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	31.74	PL45	-77.533076	38.921340
JC30220	7.594620	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	56.69	PL45	-77.533508	38.921262
JC30221	1.558564	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	62.67	PL45	-77.533684	38.921660
JC30222	2.406770	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	95.01	PL45	-77.533004	38.920916
JC30224	0.776693	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	85.05	PL45	-77.527438	38.923566
JC30226	2.443920	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.583728	38.950068
JC30227	5.844127	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.586304	38.950831
JC30228	3.594312	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.590283	38.951002
JC30229	16.688118	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.591985	38.950856
JC30230	1.581065	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.601246	38.952240
JC30231	4.156102	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.605764	38.949568
JC30233	17.437470	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.597529	38.947881
JC30234	5.224191	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.597664	38.945743
JC30236	1.209800	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.591461	38.947971
JC30243	83.552069	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	48.64	PL42	-77.559256	38.914487
JC30244	8.361722	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	52.77	PL42	-77.559820	38.914598
JC30247	1.111267	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	52.32	PL42	-77.560498	38.911585
JC30258	9.704087	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430383	38.995067
JC30260	23.900870	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	41.12	PL42	-77.550465	38.913322
JC30262	13.478631	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.82	PL45	-77.479102	38.905292
JC30263	3.265506	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	61.06	PL45	-77.510860	38.912009
JC3093	0.397717	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487379	39.027170
JC3094	49.174284	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488355	39.026385
JC3096	10.208202	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488355	39.026347
JC3098	6.433624	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491686	39.020469
JC3106	6.801797	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471346	39.056094
JC3107	27.603158	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472094	39.056898
JC3125	0.636911	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483226	38.988565
JC3126	1.012777	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483880	38.987949
JC3127	2.498038	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.484404	38.987840
JC3155	11.369092	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496530	38.988468
JC3157	1.571002	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496362	38.986893
JC3199	13.013317	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496414	39.044589
JC3213	7.029827	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	64.85	PL16	-77.507896	39.104999
JC3214	1.552880	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	52.57	PL16	-77.509067	39.107063
JC3243	5.552625	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503502	39.059475
JC3246	2.300497	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503654	39.058175
JC3249	4.931582	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502160	39.057606

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC3250	1.710665	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491904	39.052987
JC3306	0.821414	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472285	39.057050
JC3321	5.310475	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.487164	38.988108
JC3323	2.415188	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.487711	38.988770
JC3364	14.818286	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509262	38.989043
JC3373	11.443359	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.525163	38.981043
JC3394	3.849981	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	68.46	PL16	-77.511959	39.106295
JC3395	6.217337	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	60.24	PL16	-77.512096	39.106489
JC3396	2.004240	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.10	PL16	-77.511971	39.107866
JC3397	1.536776	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.89	PL16	-77.510499	39.107603
JC3398	2.784310	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	87.16	PL16	-77.512740	39.109434
JC3454	0.946859	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492565	39.052440
JC3455	0.230234	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490550	39.053700
JC3457	1.049639	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491910	39.050977
JC3458	8.163494	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491646	39.050974
JC3459	1.838879	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491597	39.050796
JC3460	2.209989	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495129	39.050602
JC3461	0.522356	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494822	39.051377
JC3531	2.853876	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.494499	38.993399
JC3568	1.835542	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	58.56	PL16	-77.514468	39.109649
JC3569	1.481150	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.10	PL16	-77.514459	39.111057
JC3570	10.869541	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.68	PL16	-77.513802	39.106284
JC3639	16.697060	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482293	39.058433
JC3641	8.920487	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482686	39.059067
JC3643	12.011211	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481724	39.059106
JC3644	0.503446	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480902	39.058893
JC3706	5.443568	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473086	39.057223
JC3726	8.733158	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488582	38.994277
JC3758	13.798920	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508349	38.988376
JC3759	6.567967	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506905	38.986683
JC378	1.157312	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487246	39.030678
JC3909	1.450875	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465066	39.057721
JC3926	2.573588	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488764	38.994309
JC3929	0.939650	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489119	38.993511
JC3930	1.599957	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489035	38.994119
JC3931	1.207475	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488857	38.993377
JC3951	1.027013	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506773	38.988710
JC3961	4.520400	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.512062	38.984156
JC3982	35.146156	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	39.72	PL16	-77.518946	39.106863
JC3992	17.718966	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522698	38.979018
JC4046	0.575351	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481298	39.059763
JC4108	2.491162	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465242	39.058471
JC4122	1.313017	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488759	38.993718
JC4123	2.083077	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489116	38.992800
JC4127	0.714801	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521823	38.984401
JC4157	2.868496	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489385	38.993119
JC4158	1.526175	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489624	38.992446
JC4159	0.583031	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489390	38.992393
JC4183	18.289994	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514308	38.986280
JC4184	2.814328	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509708	38.985378
JC4185	20.989063	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523268	38.983612
JC419	7.240849	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486551	39.034098
JC4200	3.875956	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.05	PL16	-77.511389	39.105122
JC4201	1.038278	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	63.16	PL16	-77.514071	39.105871
JC4202	0.329393	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	0.53	PL16	-77.514684	39.106355
JC4203	36.877501	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.83	PL16	-77.515655	39.106448
JC4208	37.884169	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522981	38.977493
JC4210	5.788570	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522422	38.977453
JC4211	9.706881	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521262	38.979356
JC4212	2.593555	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521779	38.978929

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC424	1.310612	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485705	39.035262
JC427	0.975605	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488122	39.034789
JC430	0.809108	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486596	39.035126
JC4323	15.176684	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522644	38.984154
JC4324	90.169703	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523189	38.983497
JC433	1.863135	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489024	39.035044
JC4344	1.304266	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489522	38.992087
JC4345	4.262041	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489890	38.990795
JC4346	1.468971	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489443	38.989998
JC4347	1.391922	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488635	38.989364
JC4348	1.243982	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489686	38.991816
JC4349	0.546079	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.490198	38.992098
JC436	2.273192	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490307	39.035560
JC4384	3.931920	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.527458	38.981219
JC4420	1.684578	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	62.13	PL16	-77.518722	39.101868
JC4422	16.778754	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	52.96	PL16	-77.508373	39.108428
JC4423	0.972747	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	71.91	PL16	-77.506238	39.108236
JC4425	1.203847	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.529242	38.981109
JC4431	33.250896	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.516648	38.979710
JC447	0.565276	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485603	39.037661
JC4512	14.161597	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	45.73	PL16	-77.508148	39.100567
JC4522	4.145243	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523317	38.981377
JC4523	0.219817	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523782	38.981531
JC4525	1.024415	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523156	38.981516
JC4526	0.809906	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523651	38.981708
JC4546	0.733944	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491093	38.992146
JC4547	4.875942	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491752	38.992531
JC4548	15.840970	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.492644	38.993436
JC458	2.961613	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487254	39.037391
JC4620	0.690425	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	56.87	PL16	-77.511794	39.110316
JC4621	1.580378	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	50.44	PL16	-77.511331	39.109830
JC4622	1.399074	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	52.02	PL16	-77.510950	39.109521
JC4623	1.419157	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	46.75	PL16	-77.510599	39.109227
JC4624	33.987644	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	40.14	PL16	-77.506401	39.108238
JC4639	2.924589	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469201	39.020374
JC4640	1.424693	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469919	39.020660
JC468	3.790721	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485785	39.036221
JC4723	2.532645	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522235	38.981785
JC4725	0.364994	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521586	38.982151
JC474	1.495385	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487424	39.036099
JC4741	8.227230	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.500100	38.986375
JC4742	1.213582	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.493027	38.993003
JC4743	1.437636	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.494065	38.993287
JC4744	6.519230	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.494347	38.993919
JC478	1.507599	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488624	39.036173
JC4815	1.266071	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	59.84	PL16	-77.509737	39.108580
JC4816	2.265880	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	44.30	PL16	-77.513153	39.111134
JC4817	13.535087	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	56.12	PL16	-77.512290	39.110520
JC4818	3.015591	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	59.86	PL16	-77.513864	39.111727
JC4819	0.278612	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	53.82	PL16	-77.514234	39.112307
JC484	0.969436	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489426	39.037062
JC4879	3.419353	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479837	39.020660
JC4880	3.096882	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480675	39.020658
JC4881	1.238927	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481154	39.020539
JC491	1.530140	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491345	39.037833
JC4914	1.165882	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491284	38.990896
JC4923	1.250644	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499327	38.985301
JC4925	1.617904	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497481	38.987083
JC4949	33.778733	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.527938	38.981388
JC4997	4.312025	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.495232	39.109790

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC4998	1.775517	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.496896	39.110240
JC501	2.624824	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491401	39.037879
JC5054	1.604894	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481539	39.020158
JC5055	3.537472	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482786	39.017843
JC5107	11.614203	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.91	PL16	-77.506317	39.100511
JC5115	1.333412	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491861	38.991922
JC5118	39.514429	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491857	38.989758
JC5119	1.133174	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491802	38.989985
JC5126	5.255233	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509204	38.984648
JC516	13.556002	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489342	39.037729
JC517	6.534160	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506411	39.043249
JC5202	1.602193	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	69.21	PL16	-77.502521	39.100978
JC5203	2.159907	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.19	PL16	-77.502035	39.100622
JC5204	1.066424	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.68	PL16	-77.499068	39.098915
JC5345	1.910791	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522074	38.980175
JC5346	61.511343	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523735	38.981615
JC5371	4.556555	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.528062	38.981495
JC5404	4.339915	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.496220	39.112697
JC5457	0.208404	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502786	39.061598
JC5463	0.299308	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501934	39.062291
JC5514	7.778636	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.14	PL16	-77.505087	39.100156
JC5517	8.732955	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.03	PL16	-77.503022	39.101699
JC552	2.437943	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505357	39.043474
JC5531	2.575348	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497318	38.992451
JC5532	2.520422	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497328	38.992421
JC5533	1.476624	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496021	38.992954
JC5534	1.740566	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.495931	38.992986
JC556	2.457789	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503264	39.044136
JC5566	4.293488	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.532289	38.983267
JC5567	0.224046	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521309	38.988878
JC5570	1.451630	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	60.90	PL16	-77.512807	39.109720
JC5578	5.639042	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	70.74	PL16	-77.501632	39.097829
JC5579	0.238787	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	46.34	PL16	-77.501658	39.097301
JC5580	4.308992	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.50	PL16	-77.501891	39.096636
JC5637	2.589603	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462401	39.056522
JC5638	3.290892	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463833	39.055420
JC5639	0.522472	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464329	39.055782
JC5644	7.520429	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499944	39.064391
JC566	4.546579	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503772	39.045155
JC5672	64.151330	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.489059	39.093368
JC5677	10.652081	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481671	39.096107
JC5713	2.064571	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	80.72	PL16	-77.505556	39.103684
JC5729	1.274443	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.495019	38.993118
JC5733	2.914476	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498412	38.993223
JC5735	12.689037	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499850	38.991934
JC5736	1.166716	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499945	38.992145
JC5759	5.987940	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521369	38.989115
JC5763	15.558558	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520908	38.992608
JC5773	1.043135	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	61.26	PL16	-77.499235	39.097406
JC5774	7.909715	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.94	PL16	-77.503543	39.096098
JC5775	4.104015	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	78.55	PL16	-77.501639	39.096463
JC583	28.297086	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505209	39.045918
JC5832	0.487928	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464606	39.055895
JC5833	22.456372	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464749	39.055903
JC5845	3.572784	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503196	39.059052
JC5846	0.060746	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503236	39.058918
JC5870	11.351248	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.479988	39.093509
JC5871	10.036740	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.482289	39.097158
JC5872	45.071030	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	32.71	PL16	-77.486980	39.097565
JC589	8.571524	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504657	39.043271

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC5893	14.899412	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488826	39.054068
JC5894	2.952632	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489239	39.054141
JC5896	5.195860	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494629	39.053314
JC5913	10.538807	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.479934	38.992987
JC5937	2.091910	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501947	38.989611
JC5985	20.392810	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521366	38.994432
JC5988	1.391612	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520777	38.993953
JC5999	2.512841	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483066	38.996828
JC600	1.333924	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505665	39.042860
JC6002	1.084073	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482677	38.996034
JC6017	8.404714	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467909	39.062330
JC6020	22.291739	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475730	39.017512
JC6021	30.192565	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475702	39.017489
JC6023	2.816577	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490941	39.053588
JC603	0.977825	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505915	39.042942
JC6248	6.276704	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	COM_OTHER_NON_PUBLIC	44.96	PL42	-77.550805	38.925350
JC625	2.926897	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502133	39.039633
JC6299	8.163637	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.03	PL45	-77.533475	38.911544
JC6302	1.259087	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.55	PL45	-77.537875	38.907803
JC6303	3.259091	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.16	PL45	-77.534471	38.906093
JC6304	2.866181	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.03	PL45	-77.532233	38.906657
JC644	23.214575	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499329	39.042767
JC6484	30.552283	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	41.63	PL45	-77.514308	38.908468
JC6485	3.743743	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.64	PL45	-77.513213	38.907754
JC6488	32.056622	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	27.82	PL45	-77.511386	38.903260
JC651	1.158753	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503562	39.043750
JC6522	5.450309	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.35	PL45	-77.504091	38.911212
JC6545	3.258784	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.88	PL45	-77.500697	38.912054
JC6548	5.229934	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	58.59	PL45	-77.504676	38.912950
JC6549	1.881497	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	48.76	PL45	-77.502090	38.911344
JC6550	14.489251	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.12	PL45	-77.503286	38.908032
JC657	3.216257	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501483	39.043618
JC661	9.946107	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499551	39.039249
JC6646	1.530628	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.96	PL45	-77.496605	38.906002
JC6669	1.025121	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.20	PL45	-77.505727	38.905664
JC6671	41.656501	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.18	PL45	-77.505446	38.906469
JC6673	4.919562	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.52	PL45	-77.498047	38.905377
JC6674	0.131242	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.19	PL45	-77.498221	38.905292
JC6675	1.104772	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	94.65	PL45	-77.498314	38.905244
JC6677	2.688393	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.38	PL45	-77.497667	38.905119
JC6720	2.547893	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.37	PL45	-77.481694	38.905568
JC6823	4.214366	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.38	PL45	-77.490913	38.904966
JC6825	16.273192	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.49	PL45	-77.484253	38.905557
JC6829	1.478918	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.42	PL45	-77.481413	38.905260
JC6830	21.538689	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.71	PL45	-77.480401	38.905170
JC6831	11.288179	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.75	PL45	-77.483611	38.905121
JC6832	9.702223	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.21	PL45	-77.486474	38.904149
JC696	3.132580	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511976	39.043990
JC699	4.555420	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509262	39.043524
JC70047	0.267527	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.558449	38.912727
JC701	1.398501	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513241	39.044762
JC702	8.040351	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512204	39.043207
JC722	26.515488	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515500	39.043911
JC724	0.460110	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514844	39.043949
JC728	3.979066	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512303	39.042888
JC735	17.659889	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511206	39.043300
JC75	12.515231	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	43.58	PL45	-77.523208	38.909376
JC758	3.609397	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508035	39.047439
JC76	23.072846	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	42.49	PL45	-77.523236	38.909274
JC763	6.052669	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507671	39.047272

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC765	18.141270	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507658	39.047494
JC804	14.491216	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509436	39.047652
JC807	3.678395	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509815	39.047713
JC836	5.439110	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512767	39.046404
JC896	5.724509	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508571	39.042877
JC897	4.998658	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507723	39.042837
JC921	11.876015	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507559	39.040148
JC923	2.978847	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508719	39.039409
JC937	1.431865	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509930	39.039333
JC939	1.488172	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506897	39.040516
JC943	3.777048	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505734	39.040327
JC950	0.901312	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504016	39.040587
JC958	3.469775	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503277	39.039773
JC963	10.419615	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502530	39.039285
JH1	1.183950	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513336	39.050189
KD30009	2.670082	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.582514	38.951914
KD30012	2.793529	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.604763	38.951025
KD30013	4.331235	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.603092	38.944340
KD30015	4.570514	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	60.52	PL42	-77.607572	38.944016
KD30018	8.619738	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.587098	38.949283
KD30019	6.383393	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.585443	38.949158
KS0122	6.353070	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.66	PL16	-77.496350	39.073154
KS0134	2.669111	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.550875	38.938856
KS0137	1.805035	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448571	39.018620
KS0139	0.962869	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448206	39.018690
KS0141	3.377106	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447839	39.018846
KS0146	0.524641	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421152	39.052543
KS0203	5.030057	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466370	39.028503
KS0226	1.798543	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.30	PL45	-77.486525	38.908378
KS0261	1.585461	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441938	39.049198
KS0364	0.923368	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MISC	98.63	PL42	-77.569148	38.896155
KS0365	1.058345	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MISC	98.91	PL42	-77.568925	38.896360
KS0366	0.486525	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MISC	83.60	PL42	-77.568693	38.896689
KT10099	13.125912	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	50.51	PL16	-77.493585	39.078572
KT10191	6.821384	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.503674	38.994718
KT10197	2.075408	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505717	38.993339
KW102	4.099251	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.17	PL45	-77.536670	38.908700
KW109	1.091081	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.482700	39.081120
KW114	29.901182	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	32.20	PL16	-77.494670	39.104110
KW12	2.089492	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401350	39.045283
KW120	2.575591	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.30	PL16	-77.502081	39.105177
KW131	1.409570	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423250	39.010520
KW201	5.291086	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	73.11	PL16	-77.499547	39.101459
KW264	15.448032	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517925	39.007862
KW298	0.731615	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.436243	38.978825
KW301	5.204800	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.04	PL16	-77.487919	39.102494
KW351	4.877132	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424829	39.015289
KW353	15.520285	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429164	39.011439
KW363	0.237128	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490322	39.034309
KW40	10.939734	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391530	39.025910
KW406	11.141990	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558565	38.936067
KW434	1.709578	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.57	PL45	-77.532852	38.911434
KW438	1.873022	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	57.20	PL45	-77.523412	38.903400
KW464	16.719137	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483353	39.066123
KW487	0.220428	20700080703	Yes	Goose Creek (Benthic), Chesapeake Bay	Sycolin Creek		0.00	PL15	-77.588279	39.085832
KW570	18.175021	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	43.04	PL45	-77.493605	38.909700
KW88	2.854034	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.371110	39.029246
MD104	7.632634	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411751	39.034299
MD109	2.254863	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411909	39.033739
MD114	4.368042	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412490	39.032927

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD1246	0.454876	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	RES_SFD	63.69	PL19	-77.426554	39.045639
MD126	1.697577	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413446	39.031884
MD1265	3.039116	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	RES_SFD	72.63	PL19	-77.426990	39.045839
MD1269	1.161734	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_CHURCH	100.00	PL19	-77.428484	39.045582
MD1281	7.773717	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430319	39.046442
MD130	68.938016	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411686	39.032794
MD1334	1.593516	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425262	39.045318
MD1344	5.696453	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425700	39.045554
MD1353	0.784016	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425248	39.045635
MD1355	1.831668	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424200	39.045292
MD1360	2.874886	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424130	39.044897
MD1366	13.450062	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423833	39.045477
MD1435	0.556290	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423553	39.044956
MD1441	9.338992	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423120	39.044679
MD1444	2.762268	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423136	39.044635
MD1452	0.081514	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425553	39.043460
MD1550	106.033762	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422714	39.044522
MD164	6.611766	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409736	39.033967
MD1641	20.671643	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418671	39.050540
MD1667	21.168923	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439734	38.983547
MD1678	1.958931	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445268	38.982814
MD1684	0.229927	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444328	38.983260
MD1687	1.943789	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445225	38.984370
MD1689	1.097415	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445080	38.985141
MD1692	1.112213	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444978	38.985427
MD1697	4.528241	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444262	38.986192
MD1701	12.581505	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445036	38.985480
MD1748	104.848607	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443597	38.987011
MD1751	1.341613	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443891	38.986765
MD178	6.287013	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410738	39.033269
MD1782	2.120724	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444846	38.985717
MD1784	0.771348	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445336	38.985190
MD1910	1.428731	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.451045	38.985885
MD1911	78.085456	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.450986	38.985797
MD1929	14.978096	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447333	38.982697
MD1937	4.122614	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447897	38.982823
MD1960	1.285623	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443296	38.983223
MD1965	0.571430	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447861	38.981664
MD1971	7.419602	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447048	38.981991
MD1987	4.618544	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.450669	38.980715
MD1993	5.251525	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.450708	38.979763
MD200	1.621053	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414386	39.029611
MD2001	14.205961	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.448358	38.977835
MD2036	3.959840	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444551	38.978476
MD204	0.432473	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412731	39.029582
MD206	2.737056	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412805	39.029396
MD2064	0.317952	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.446047	38.982233
MD2079	4.503469	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443086	38.981664
MD2095	11.222144	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.440112	38.980984
MD2103	0.540638	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.438985	38.980147
MD218	1.795463	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414560	39.028998
MD222	1.948401	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414770	39.028438
MD2242	3.329528	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437956	38.979030
MD225	0.974567	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414773	39.028245
MD2255	3.448489	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.438747	38.980229
MD2264	3.014648	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439185	38.980699
MD2276	2.723669	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439777	38.981368
MD2278	0.421046	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.440333	38.982243
MD2280	0.451436	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.440320	38.981895
MD2282	1.073037	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439583	38.982740

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD2301	2.263719	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437411	38.983628
MD2306	4.397513	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.436716	38.983114
MD231	1.873026	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414934	39.027689
MD232	54.950717	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414974	39.027657
MD2323	3.678803	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.438991	38.983071
MD2344	15.125270	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439054	38.980495
MD2365	11.048130	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435425	38.982958
MD25	2.920342	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418388	39.030553
MD2511	0.308840	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435847	38.983144
MD2524	4.463671	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.434158	38.982547
MD2533	0.673904	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433265	38.981928
MD2536	2.643379	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433198	38.981887
MD2537	2.126645	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433134	38.981818
MD2540	0.210365	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433065	38.981765
MD2572	4.712174	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430170	38.983156
MD2585	5.758903	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431562	38.984006
MD2588	1.206631	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431637	38.984200
MD2589	1.077424	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431604	38.984278
MD2593	1.284001	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432026	38.984662
MD2595	1.560276	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432011	38.984768
MD2612	4.002715	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432417	38.985491
MD2622	28.122800	20700080902	No	Chesapeake Bay	Horsepen Run	COM_LIGHT_IND_FLEX	87.53	PL18	-77.441570	38.978432
MD2626	8.949353	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433428	38.986426
MD2631	2.407405	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432627	38.987419
MD2647	1.129829	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435494	38.978820
MD2649	1.329225	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435235	38.978834
MD2650	40.444155	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.434704	38.978897
MD2652	4.246011	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.434702	38.978822
MD2663	2.761104	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431925	38.978692
MD2671	0.661454	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431024	38.977816
MD2689	5.378748	20700080902	No	Chesapeake Bay	Horsepen Run	COM_OFFICE_GENERAL	58.93	PL18	-77.433581	38.977481
MD2708	1.357119	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451908	38.992372
MD2788	3.113265	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449656	38.994773
MD2789	3.076018	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449307	38.994180
MD2813	13.850469	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454063	38.995374
MD2831	7.493911	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454558	38.997188
MD2833	1.591637	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454630	38.997527
MD2838	4.338156	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455581	38.998396
MD2839	6.405309	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455720	38.998655
MD2883	2.079485	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451688	39.001373
MD2884	30.592097	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451591	39.001419
MD2905	0.645659	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454860	39.001313
MD2910	0.635972	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455983	39.001281
MD2916	1.209889	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456261	39.001053
MD2918	6.977914	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456046	39.000977
MD2925	0.573470	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456630	38.999684
MD2928	1.512167	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456595	39.000246
MD2930	2.085889	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456562	38.999310
MD2945	0.973514	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456519	39.000881
MD2959	6.366256	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456554	39.001305
MD2961	0.492332	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457781	38.997469
MD2966	2.861305	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448462	39.001046
MD2972	0.524768	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449800	39.001689
MD2981	1.322040	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449394	39.002114
MD2982	14.417770	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449294	39.002048
MD2984	4.070612	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447571	39.001194
MD3003	1.794609	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445982	39.000157
MD3098	1.186676	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444636	39.005132
MD3099	11.658487	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444623	39.005133
MD3102	1.057895	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444136	39.005277

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD3103	11.348248	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445878	39.006445
MD3104	2.278719	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446302	39.006676
MD3109	1.452164	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445849	39.007156
MD3128	2.465393	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447556	39.007577
MD3164	1.260012	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443914	39.004963
MD3166	6.206542	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443624	39.004999
MD3190	2.901420	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442400	39.003940
MD3223	2.970101	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442959	39.003616
MD3228	8.486660	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442674	39.003147
MD3230	4.792554	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442454	39.002538
MD3261	3.206234	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443954	39.004528
MD3262	1.236798	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444860	39.000353
MD3268	23.102467	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444008	38.998924
MD3273	2.767958	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443908	38.999076
MD3332	6.337439	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447728	38.998483
MD3337	1.183338	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447568	38.999222
MD3339	1.325842	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447528	38.999375
MD3344	1.878444	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447869	38.999482
MD3353	0.246424	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_OFFICE_GENERAL	100.00	PL19	-77.446800	38.997247
MD3374	2.885947	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444356	38.995502
MD3375	3.715128	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444480	38.995434
MD3405	0.376297	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440084	38.998115
MD3407	2.568072	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439708	38.997711
MD3409	0.234438	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439295	38.998234
MD3416	9.920331	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437097	38.999448
MD3420	3.464872	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448729	38.996145
MD3424	0.129152	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449676	38.996441
MD3425	9.020742	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449652	38.996350
MD3428	0.605099	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449563	38.996613
MD3430	16.682287	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448519	38.994046
MD3438	2.481203	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449242	38.992755
MD3517	1.577626	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437857	39.012196
MD3527	20.939328	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440683	39.010812
MD3550	3.356354	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436550	39.011513
MD3562	6.881226	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435722	39.012347
MD3567	1.275018	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_RETAIL	100.00	PL19	-77.437298	39.012861
MD3675	157.378590	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441517	39.008450
MD3771	26.643994	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.05	PL45	-77.506860	38.901935
MD3791	1.261496	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.09	PL45	-77.506188	38.905811
MD3797	0.407582	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	18.13	PL45	-77.506478	38.906311
MD3804	2.258440	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	58.19	PL45	-77.506232	38.907013
MD3811	1.853018	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.96	PL45	-77.505981	38.907885
MD3814	1.724217	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	90.17	PL45	-77.505990	38.908357
MD3816	0.213557	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	27.59	PL45	-77.506053	38.908634
MD3817	3.746287	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.10	PL45	-77.506171	38.909152
MD3827	0.251421	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	30.40	PL45	-77.505904	38.909642
MD3828	5.018025	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.19	PL45	-77.505416	38.909534
MD3834	3.061205	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.39	PL45	-77.505295	38.908346
MD3843	1.389894	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.45	PL45	-77.505200	38.911409
MD3866	2.704981	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	76.18	PL45	-77.506288	38.909962
MD3872	1.162884	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.13	PL45	-77.506375	38.910692
MD3873	3.589936	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.57	PL45	-77.506064	38.911204
MD3880	1.712483	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.62	PL45	-77.505999	38.911760
MD3890	3.580719	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.70	PL45	-77.505804	38.912386
MD3892	0.180426	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	23.77	PL45	-77.505803	38.912648
MD3893	7.257461	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.43	PL45	-77.505748	38.913073
MD3907	2.519649	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	29.23	PL45	-77.505778	38.914471
MD3931	12.847573	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.44	PL45	-77.505829	38.915446
MD3960	0.153517	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_GENERAL	26.08	PL45	-77.506187	38.920484
MD3961	2.553556	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.40	PL45	-77.506083	38.920417

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD4000	7.581098	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	33.32	PL45	-77.506802	38.920796
MD4005	4.700963	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	44.11	PL45	-77.505531	38.920207
MD4015	8.010745	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	48.36	PL45	-77.505780	38.915459
MD4035	3.812314	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	34.12	PL45	-77.510511	38.916049
MD4036	3.825285	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.67	PL45	-77.510397	38.916156
MD4061	3.226498	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	19.13	PL45	-77.509776	38.917299
MD4062	8.170800	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.47	PL45	-77.509689	38.917185
MD4074	0.894253	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	5.73	PL45	-77.510856	38.916662
MD4087	3.832310	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.96	PL45	-77.508583	38.907312
MD4116	3.596161	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.27	PL45	-77.510209	38.912451
MD4119	2.212382	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.40	PL45	-77.510084	38.911623
MD4128	3.938376	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.31	PL45	-77.510106	38.910595
MD4140	7.190671	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	37.17	PL45	-77.494344	38.918555
MD4152	11.199359	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.01	PL45	-77.510616	38.909439
MD4161	2.817593	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	43.36	PL45	-77.510920	38.909623
MD4166	0.914035	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	59.11	PL45	-77.510961	38.910714
MD4173	1.253038	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	53.73	PL45	-77.512967	38.910291
MD4179	1.001155	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	60.25	PL45	-77.513816	38.910600
MD4228	35.407439	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	31.09	PL45	-77.514513	38.909974
MD4229	0.212733	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	18.66	PL45	-77.514641	38.909639
MD4303	1.880765	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	24.68	PL45	-77.510805	38.912996
MD4307	0.171933	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.73	PL45	-77.510496	38.913066
MD4310	10.069587	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.52	PL45	-77.510349	38.913311
MD433	1.352649	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407701	39.033511
MD435	9.651784	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409233	39.033988
MD4363	6.189110	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.28	PL45	-77.501723	38.891200
MD4383	5.524741	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	76.87	PL45	-77.501244	38.894260
MD4404	9.274233	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.04	PL45	-77.501159	38.895228
MD4427	9.371426	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.39	PL45	-77.501446	38.896927
MD444	0.802991	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409426	39.034948
MD445	1.293926	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410346	39.035336
MD4484	17.825140	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	25.03	PL45	-77.522967	38.909441
MD450	0.415188	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410970	39.034870
MD451	2.514953	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412484	39.035692
MD479	0.110608	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424949	39.042058
MD486	0.422933	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427273	39.043242
MD491	0.069430	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429723	39.044442
MD497	0.134563	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430582	39.043971
MD500	0.107148	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430542	39.044387
MD501	1.040042	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429429	39.044351
MD508	26.085435	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431834	39.035505
MD524	3.746953	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.402690	39.045887
MD529	2.638143	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403252	39.047223
MD537	9.468264	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406859	39.047376
MD543	14.823757	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408379	39.047765
MD572	24.155700	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403468	39.044085
MD611	3.968745	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406022	39.039477
MD62	3.522276	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413744	39.031916
MD624	15.720709	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404199	39.041512
MD631	2.004518	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403144	39.043372
MD642	1.777967	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.417482	39.054498
MD654	3.265052	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.419208	39.052765
MD660	5.146688	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.419340	39.053335
MD671	11.041791	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421051	39.052491
MD685	7.730644	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421127	39.052609
MD765	1.640131	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421003	39.053117
MD769	1.560774	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.420382	39.054302
MD770	9.926009	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.420874	39.054593
MD789	0.445674	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.422236	39.054040
MD790	65.582869	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.422255	39.053992

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD795	4.625601	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418578	39.055498
MD840	34.706462	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.426605	39.057474
MD855	2.424151	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.419464	39.055882
MD866	2.301241	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.422758	39.057797
MD877	8.244681	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418347	39.056032
MD883	2.038636	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418463	39.056719
MD886	4.649552	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418544	39.057631
MD890	5.731196	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.417825	39.057423
MD900	3.922496	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.417874	39.055461
MD909	7.066143	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416693	39.054845
ME1008	0.392900	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403806	38.991804
ME1022	1.003554	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405031	38.991940
ME1025	1.450468	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406449	38.991823
ME1032	10.077087	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.405757	38.986812
ME1039	1.323363	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.406778	38.987229
ME1053	7.386860	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.407369	38.988433
ME1056	33.315280	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.407221	38.989605
ME1064	0.246304	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406729	38.992627
ME1065	7.682811	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406835	38.992738
ME1072	1.737331	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406107	38.993091
ME1074	2.367894	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406001	38.993140
ME1089	6.605837	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408753	38.993860
ME1095	2.790443	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409376	38.993886
ME1100	5.875013	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412038	38.994228
ME1108	10.804570	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413813	38.995845
ME1129	1.221593	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412840	38.994887
ME1131	1.745377	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409749	38.997903
ME126	23.259909	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.30	PL21	-77.362743	39.039228
ME134	4.199059	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.63	PL21	-77.375524	39.029474
ME142	2.537131	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	31.06	PL21	-77.374677	39.030065
ME1464	3.300032	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411022	38.976120
ME1486	28.143981	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413498	38.980616
ME15	0.442814	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	94.90	PL21	-77.340905	39.046090
ME155	1.340400	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	67.41	PL21	-77.375139	39.029150
ME1555	2.513234	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.415387	38.977674
ME159	0.429577	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	92.11	PL21	-77.375585	39.028954
ME161	0.835151	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	83.60	PL21	-77.375417	39.028917
ME1626	23.864970	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.417471	38.986043
ME1639	8.470900	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.423454	38.988212
ME1648	8.548693	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426329	38.989311
ME1650	4.697558	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424860	38.989313
ME1666	7.473975	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.417452	38.978320
ME1667	4.229862	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419110	38.978286
ME1670	1.084879	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412841	38.977356
ME1681	0.201185	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.410947	38.976982
ME1715	4.724986	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428808	38.983641
ME177	130.558473	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	53.63	PL21	-77.376307	39.028235
ME1774	129.291893	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429031	38.983520
ME1801	7.321694	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425113	38.978736
ME1804	2.125055	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426495	38.978718
ME1819	7.346578	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427912	38.977257
ME1929	2.785400	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405950	39.003053
ME2118	23.632978	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.51	PL21	-77.392074	39.017166
ME2122	2.343313	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	90.49	PL21	-77.391383	39.016874
ME2126	1.703795	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.47	PL21	-77.391153	39.016790
ME2129	2.884831	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	90.50	PL21	-77.390607	39.016549
ME2130	6.457179	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	44.09	PL21	-77.390152	39.016498
ME2131	0.385886	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.390016	39.016476
ME2152	7.500356	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	85.06	PL21	-77.389840	39.018840
ME2153	25.688799	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.93	PL21	-77.389979	39.018679

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
ME2154	4.032463	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	80.00	PL21	-77.389324	39.018384
ME2159	11.417099	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.34	PL21	-77.388603	39.018032
ME2174	1.079886	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.23	PL21	-77.389659	39.020498
ME2176	0.492883	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.23	PL21	-77.389523	39.020642
ME2178	2.631632	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.08	PL21	-77.389389	39.020836
ME2184	21.765460	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	GQ	36.09	PL21	-77.389721	39.021604
ME2185	0.669924	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	56.17	PL21	-77.390404	39.021378
ME2290	5.840117	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403185	39.010197
ME2318	52.277829	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403276	39.015353
ME2322	1.493153	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412027	39.009680
ME2325	2.003716	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413022	39.008564
ME2332	7.756632	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415628	39.010031
ME2336	1.887681	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415824	39.009694
ME2345	25.247517	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415719	39.010472
ME2370	3.114736	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403305	39.015426
ME2374	1.050333	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.404714	39.015050
ME2393	1.637488	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406660	39.014804
ME2394	8.359419	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406309	39.015098
ME2410	2.010351	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406696	39.012583
ME2413	1.866045	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406264	39.012250
ME2479	2.145740	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414467	39.008258
ME2482	1.146026	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415066	39.008483
ME2484	0.496392	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415363	39.008421
ME2495	2.368269	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416256	39.009098
ME2500	0.147182	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416673	39.008240
ME2507	0.285103	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416570	39.007708
ME2526	2.430931	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416050	39.009669
ME2578	0.135774	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412789	39.015308
ME2621	7.499473	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.407219	39.021407
ME2726	33.383669	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398880	39.027971
ME2731	2.083856	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399828	39.028235
ME2741	11.113978	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398081	39.027520
ME2767	0.530377	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397778	39.027665
ME2870	0.448351	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399316	39.028444
ME2871	0.217168	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399849	39.028444
ME2940	0.971913	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404115	39.031046
ME2999	2.007185	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391663	39.025932
ME3012	0.826865	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399027	39.029395
ME3028	4.443953	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403249	39.031824
ME3033	15.580790	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403330	39.031604
ME3035	1.260156	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403504	39.031673
ME3038	2.147154	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403293	39.032254
ME3057	5.764275	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399623	39.031018
ME3064	5.948538	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401417	39.033604
ME3078	0.951750	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407789	39.033898
ME3235	4.540186	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441923	39.067525
ME3534	1.174803	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484777	39.036583
ME3546	3.532457	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483733	39.037674
ME3554	9.254962	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483366	39.037071
ME3559	2.645860	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483282	39.036462
ME3567	3.382095	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483390	39.035322
ME3575	1.723109	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482002	39.039669
ME3579	1.396075	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481676	39.039768
ME3658	19.329123	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481699	39.032664
ME3687	2.361004	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482841	39.034481
ME3693	1.299080	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482542	39.034036
ME3697	1.193459	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479961	39.032688
ME3699	2.950049	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479145	39.032775
ME37	6.435189	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.74	PL21	-77.366558	39.021319
ME3743	19.393321	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478323	39.032787

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
ME3760	5.645099	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475413	39.032468
ME3762	1.444006	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477754	39.032681
ME3784	1.251933	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483553	39.033468
ME3787	0.901096	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483374	39.032872
ME3794	1.010692	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483636	39.031965
ME3795	28.533621	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483655	39.031914
ME3833	4.399942	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483167	39.031736
ME3837	5.158431	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481200	39.031676
ME3852	8.326586	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478885	39.031124
ME3854	1.383991	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478932	39.028412
ME3859	2.627996	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476678	39.031108
ME3865	3.636944	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477563	39.028816
ME387	0.266895	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	57.53	PL21	-77.382985	39.021047
ME3873	2.449493	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476358	39.029263
ME388	6.994200	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	37.73	PL21	-77.382724	39.020915
ME3882	2.595760	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474533	39.030103
ME3908	2.904036	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483373	39.027450
ME3921	9.273066	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479871	39.028031
ME3927	2.005114	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483810	39.026737
ME3937	3.957266	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480385	39.026552
ME3941	13.631427	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480506	39.026178
ME3988	29.013203	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477258	39.026799
ME3989	0.801985	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477200	39.026831
ME4006	3.156590	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477446	39.027171
ME4007	1.205086	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477995	39.027864
ME4010	0.680229	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478814	39.027808
ME4013	0.717928	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477010	39.028324
ME4020	5.876218	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476336	39.028606
ME4047	4.590115	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474176	39.028945
ME4063	8.573504	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484432	39.027098
ME4066	1.485641	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485870	39.026882
ME4068	11.968678	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485973	39.027014
ME4095	5.177307	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474386	39.031733
ME4106	2.417412	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472474	39.029142
ME4111	5.848585	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471380	39.029329
ME4141	16.688826	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470450	39.025260
ME4199	29.470824	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471252	39.023777
ME4268	4.307518	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473142	39.029165
ME4295	0.170754	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469064	39.032745
ME4296	0.577803	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469250	39.032875
ME4299	0.185494	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469419	39.032205
ME4301	0.566215	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469988	39.032398
ME4305	2.786026	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470747	39.032466
ME4312	1.204535	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471519	39.032273
ME4313	0.703019	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471676	39.031996
ME4325	4.724782	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472666	39.032476
ME4330	0.811558	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473297	39.031304
ME4332	0.529032	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473252	39.032540
ME4334	1.759121	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473278	39.032950
ME4336	0.901760	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474349	39.033791
ME4338	1.090447	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475039	39.034405
ME4343	1.829216	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473366	39.033701
ME4346	2.058312	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473421	39.033717
ME4352	3.810592	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473663	39.034650
ME436	17.023787	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	29.60	PL21	-77.376561	39.021908
ME4364	0.676907	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474767	39.035287
ME4369	1.262320	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475254	39.035503
ME4370	98.711540	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475996	39.035532
ME4422	0.292621	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469598	39.021615
ME4424	1.315106	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469203	39.021376

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
ME4427	1.939892	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468028	39.021348
ME4430	1.106365	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468218	39.021223
ME4444	3.552425	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468024	39.022346
ME4445	0.089113	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467844	39.022667
ME449	23.085748	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	71.38	PL21	-77.373775	39.023164
ME4541	12.918456	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469640	39.024913
ME4564	3.309285	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467158	39.025006
ME4609	3.634906	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468990	39.019690
ME4699	13.130537	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463611	39.022800
ME4703	8.779461	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463837	39.022893
ME4798	94.451734	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450640	39.016123
ME4799	3.440430	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450607	39.016028
ME490	12.867423	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.11	PL21	-77.373031	39.024575
ME4962	93.097202	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450331	39.018372
ME4967	1.725041	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450584	39.017868
ME5064	4.721041	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457310	39.012002
ME5074	2.099069	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458673	39.012647
ME5075	0.641019	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458759	39.012669
ME5079	2.383734	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459511	39.012713
ME5080	46.244040	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459557	39.012695
ME5081	0.557441	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459598	39.012647
ME5116	4.231852	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453124	39.013212
ME5120	0.957714	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452741	39.013090
ME5148	11.194400	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452497	39.009832
ME5157	0.159789	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454701	39.014189
ME5158	1.634371	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454689	39.014226
ME5171	9.042140	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454830	39.013798
ME5187	5.715733	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454880	39.010127
ME5217	3.352493	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465692	39.020487
ME5218	0.227072	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464842	39.021521
ME5269	1.362018	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458978	39.011897
ME5272	1.902760	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458661	39.011872
ME5294	1.104822	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472520	39.022077
ME5327	0.623451	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484333	39.026133
ME5328	0.156861	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484358	39.026053
ME5388	1.124976	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485247	39.037563
ME5627	0.344620	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487341	39.026460
ME5630	11.825366	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487204	39.026448
ME5649	0.895694	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484683	39.025841
ME5650	11.348166	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484685	39.025831
ME5672	5.381746	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479454	39.009443
ME5676	7.595926	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479534	39.009225
ME5678	55.350184	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480742	39.009761
ME5730	9.334466	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484234	39.007239
ME5733	13.857534	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479560	39.012433
ME5754	10.147495	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489021	39.012885
ME5801	2.751337	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490156	39.012349
ME581	7.778609	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.26	PL21	-77.371497	39.021610
ME5834	12.620625	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488359	39.012840
ME5845	0.581325	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488855	39.012673
ME589	0.661464	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	87.05	PL21	-77.371425	39.022264
ME5953	13.678060	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476983	39.012559
ME5954	2.222605	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476782	39.012609
ME745	13.736193	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	93.82	PL21	-77.374628	39.028809
ME746	4.331430	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.373517	39.029171
ME756	6.163003	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.32	PL21	-77.394612	38.990792
ME760	2.438137	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.42	PL21	-77.395502	38.990026
ME829	22.576886	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403117	38.994552
ME838	28.903003	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403536	38.994647
ME848	8.829861	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.404647	38.993429

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Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
ME863	0.761699	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.402638	38.991628
ME889	4.164263	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.402034	38.991165
ME90	15.257410	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	56.94	PL21	-77.343186	39.052588
ME922	42.940387	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	50.32	PL21	-77.397137	38.988405
ME930	16.638959	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.12	PL21	-77.398587	38.986931
PO0004	5.756963	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_OTHER_NON_PUBLIC	38.29	PL19	-77.482272	39.064660
PO0005	0.715578	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_CHURCH	76.65	PL19	-77.426954	39.045816
RA0013	4.026277	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563790	38.935570
RA0049	0.520253	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.557870	38.935449
RA0051	0.634701	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.556605	38.935841
RA0087	1.841554	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.556005	38.935623
RA0187	6.493531	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.564236	38.929546
RA0189	0.181580	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563939	38.930076
RA1086	6.155462	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466064	39.019781
RA1101	22.262489	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465994	39.019733
RA1160	0.328139	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	0.05	PL42	-77.562595	38.918292
RA1170	0.149025	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	0.19	PL42	-77.561033	38.917490
RA1183	11.519901	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442253	38.996015
RA1219	28.328229	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563568	38.935265
RA1229	0.225171	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563977	38.933454
RA1324	0.262237	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510262	39.007239
RA1328	1.116623	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509789	39.007683
RA1336	4.997048	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507123	39.006646
RA1367	2.830012	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499199	39.004740
RA1379	2.655875	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501566	39.005980
RA1381	2.747410	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	99.36	PL21	-77.387191	39.016349
RA1481	0.154026	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559968	38.933180
RA1482	0.035153	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559573	38.933216
RA1499	8.743771	20700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	36.33	PL47	-77.538506	38.930224
RA1540	0.572061	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.540704	38.931428
RA1541	0.855086	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497823	39.007691
RA1548	2.108849	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498443	39.006665
RA1568	49.287297	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498087	38.995371
RA1631	0.316373	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497613	38.996869
RA1633	0.828588	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497321	38.996843
RA1635	1.753758	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496700	38.995442
RA1706	3.623350	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497250	38.998044
RA1717	7.238367	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496996	38.999060
RA1724	1.665181	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497091	39.003026
RA1730	0.479094	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498688	39.002987
RA2871	3.330582	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run	HOA	53.49	PL19	-77.469225	39.049070
RA2898	1.738620	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run	RES_SFD	59.55	PL19	-77.468411	39.049074
RA2914	1.815243	20700080903	No	Chesapeake Bay	Beaverdam Run-Broad Run	RES_MFST	100.00	PL19	-77.500053	39.052280
RA3668	4.851088	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.594517	38.958092
RA3676	2.181737	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.595040	38.956998
RA3683	3.647298	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.593287	38.954809
RA3689	4.418630	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.593715	38.954610
RA4800	5.479064	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.593719	38.954479
RA4812	1.614662	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.592978	38.954671
RA4823	4.204800	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.590672	38.954133
RA4852	13.666260	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.595455	38.944093
RA4863	19.748455	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	60.66	PL17	-77.597804	38.941585
RA4879	3.896826	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.591007	38.957029
RA5248	1.057833	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	66.71	PL42	-77.557505	38.907171
RA5254	4.191969	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	37.95	PL42	-77.558114	38.906539
RA5263	0.318427	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	1.33	PL42	-77.557360	38.905932
RA5503	9.744873	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	70.92	PL17	-77.562304	38.926635
RA5507	14.857186	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	HOA	50.89	PL17	-77.561521	38.926429
RA5598	7.733889	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	42.09	PL42	-77.566160	38.924345
RA5647	1.263286	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.03	PL47	-77.528583	38.929775

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
RA5653	0.821535	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	22.32	PL47	-77.528098	38.929439
RA5659	0.586453	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.27	PL47	-77.526964	38.928840
RA5664	0.317087	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.05	PL47	-77.526555	38.928821
RA5669	0.409682	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.10	PL47	-77.526401	38.928648
RA5676	2.010727	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.76	PL47	-77.526101	38.928301
RA5681	0.150973	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.45	PL47	-77.525570	38.926210
RA5686	0.971747	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.10	PL47	-77.525469	38.925776
RA5690	0.186276	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.58	PL47	-77.525308	38.924769
RA5699	3.414016	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	54.66	PL45	-77.492131	38.912599
RA5704	9.398765	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	82.54	PL45	-77.489767	38.911579
RA5764	18.445184	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	COM_OTHER_PUBLIC	100.00	PL17	-77.504910	38.997765
RA5784	2.143855	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	COM_OTHER_PUBLIC	39.83	PL17	-77.504531	38.998984
RA5792	6.080821	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	COM_OTHER_PUBLIC	85.05	PL17	-77.504678	38.999057
RA5806	3.475846	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	COM_OTHER_PUBLIC	99.52	PL17	-77.504958	38.996547
RA5882	6.879248	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	VACANT	40.93	PL19	-77.447055	38.997138
RA5906	6.961556	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.389902	39.052939
RA5970	1.333263	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	98.85	PL45	-77.516898	38.918896
RA5976	1.946161	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	90.51	PL45	-77.517393	38.918875
RA6004	1.060272	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560865	38.931789
RA6007	3.965000	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560904	38.931652
RA6023	2.222016	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560819	38.932486
RA6033	5.423243	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558427	38.934356
RA6061	12.876247	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559420	38.933213
RA6106	1.162868	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.557889	38.930228
RA6110	1.526424	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	54.90	PL47	-77.532304	38.930039
RA6116	28.676654	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	43.50	PL47	-77.533991	38.929940
RA6185	11.961756	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	44.30	PL47	-77.536515	38.927031
RA6198	0.118250	20700080904	No	Chesapeake Bay	Selden Island - Potomac River	HOA	98.04	PL20	-77.470834	39.076284
RA6201	1.140842	20700080904	No	Chesapeake Bay	Selden Island - Potomac River	RES_SFA	80.40	PL20	-77.467836	39.075549
RA6207	15.525025	20700080904	No	Chesapeake Bay	Selden Island - Potomac River	RES_SFA	50.78	PL20	-77.468788	39.076036
RA6242	48.866530	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	VACANT	39.56	PL19	-77.485273	39.065379
RA6309	0.528519	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485736	39.065134
RA6388	4.228520	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	99.98	PL21	-77.349251	39.053950
RA6430	7.564362	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	MULTI_USE	57.41	PL19	-77.474378	39.058831
RA6456	3.675464	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	MULTI_USE	98.05	PL19	-77.474563	39.058896
RA6475	14.838230	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_RETAIL	79.95	PL19	-77.447669	39.051749
RA6497	0.393342	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	VACANT	0.69	PL19	-77.448035	39.051477
RA6499	0.514627	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	VACANT	1.06	PL19	-77.448406	39.051387
RA6565	4.837122	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	71.05	PL17	-77.585637	38.953886
RA7508	2.977596	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_DATA_CENTER	98.92	PL45	-77.493194	38.915300
RA7530	9.310486	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_DATA_CENTER	100.00	PL45	-77.493138	38.915431
RA7556	2.877545	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_DATA_CENTER	100.00	PL45	-77.493658	38.915625
RA7638	0.117934	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	6.27	PL47	-77.528298	38.927304
RA7641	1.073415	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	44.98	PL47	-77.527688	38.927186
RA7648	8.454357	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	48.19	PL47	-77.526682	38.925161
RA7785	2.757501	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.02	PL45	-77.527521	38.920557
RA7801	2.728607	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.525613	38.922395
RA7802	0.480572	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.97	PL45	-77.526179	38.920324
RA7806	1.059579	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.525110	38.920353
RA7807	1.059582	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.525122	38.920348
RA7809	1.725279	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.91	PL45	-77.526891	38.920442
RA8149	6.910633	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	53.38	PL17	-77.585834	38.954237
RA8578	0.755267	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507061	38.995078
RA8632	11.625218	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	47.53	PL17	-77.596799	38.956424
RA8646	7.512530	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	66.74	PL17	-77.596326	38.957111
RA8654	0.930298	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.28	PL45	-77.497277	38.887522
RA8663	0.879999	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.94	PL45	-77.496318	38.887989
RA9100	2.142220	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506300	38.993519
RA9810	0.354840	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_RETAIL	0.04	PL19	-77.485495	39.065255
RA9845	4.633217	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	HOA	55.59	PL19	-77.497894	39.022200

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
RC10	4.003237	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	53.60	PL16	-77.503088	39.107311
RC12	1.667153	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.496798	39.109150
RC16	4.591559	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.46	PL16	-77.489298	39.102668
RC17	5.277515	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	53.92	PL16	-77.500973	39.101648
RC18	1.898803	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.498807	39.110656
RC180	4.156337	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	59.75	PL16	-77.483156	39.102124
RC20	3.459654	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	68.50	PL16	-77.500382	39.106347
RC21	12.770049	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.488287	39.108907
RC24	4.619194	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	70.80	PL16	-77.500908	39.104807
RC26	6.002657	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	62.51	PL16	-77.492267	39.103844
RC28	2.617198	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.497163	39.109101
RC29	2.306374	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	71.80	PL16	-77.500253	39.106964
RC40	3.284272	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	53.89	PL16	-77.486130	39.102840
RC41	3.440300	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	50.40	PL16	-77.486461	39.103759
RC42	3.075217	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	54.79	PL16	-77.491346	39.103356
RC43	2.277387	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	63.26	PL16	-77.486780	39.104077
RC44	4.787621	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	52.22	PL16	-77.504571	39.106106
RC45	2.014594	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.44	PL16	-77.504259	39.106486
RC46	12.120467	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	58.23	PL16	-77.487289	39.105328
RC498	4.604909	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	74.48	PL16	-77.492880	39.103035
RC500	10.710076	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.41	PL16	-77.493564	39.104176
RC502	31.005075	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_GOLF_COURSE	41.24	PL16	-77.494038	39.104361
RC51	10.502478	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.498683	39.112225
RC510	2.114676	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	47.83	PL16	-77.502879	39.104780
RC513	1.768421	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.484977	39.105661
RC514	2.060125	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	50.03	PL16	-77.484180	39.102163
RC52	1.723893	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.499417	39.109622
RC54	1.799855	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	90.98	PL16	-77.488354	39.103235
RC55	1.763054	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	68.71	PL16	-77.486489	39.102580
RC56	4.050289	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.489820	39.108844
RC58	6.454310	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.91	PL16	-77.504715	39.105728
RC59	8.049244	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	92.29	PL16	-77.493250	39.101494
RC63	2.904931	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_GOLF_COURSE	69.89	PL16	-77.499799	39.102396
RC64	4.428268	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.64	PL16	-77.503694	39.103147
RC65	14.362831	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.490326	39.108058
RC66	1.106664	20700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.488869	39.109798
RJ0052	6.567453	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475630	39.017490
RJ0055	9.914482	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.557372	38.937968
RJ0083	5.710596	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	59.13	PL42	-77.563486	38.910043
RJ0086	3.164378	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	25.76	PL45	-77.505235	38.914492
RJ0090	1.331269	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	47.61	PL45	-77.505457	38.914514
RJ0092	0.230061	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	46.17	PL45	-77.505622	38.914555
RJ0099	11.991313	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.422169	38.987400
RJ0100	0.559784	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.421326	38.987166
RJ0112	3.181912	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.565003	38.930584
RJ0119	0.750649	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	73.07	PL42	-77.549830	38.918231
RJ0134	1.263993	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	2.11	PL16	-77.503882	39.090518
RJ0215	0.039577	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488789	39.046628
RR27	1.670492	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467644	39.064402
RR29	0.200177	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467547	39.064378
RR35	0.259569	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467580	39.064989
RR51	2.261931	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468435	39.065427
RR61	0.263124	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463622	39.062438
RR9	1.051027	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475238	39.068171
SR11	6.250033	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	99.30	PL21	-77.374651	39.012869
SR122	6.875013	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.44	PL21	-77.387110	39.016682
SR125	5.426561	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.59	PL21	-77.385546	39.016613
SR126	6.604364	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.79	PL21	-77.384435	39.016811
SR127	4.001559	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.68	PL21	-77.383433	39.016848
SR128	3.403105	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.09	PL21	-77.382381	39.016521

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
SR13	0.255654	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.374350	39.012472
SR133	44.160783	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	47.87	PL21	-77.381249	39.016709
SR15	0.357828	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	98.69	PL21	-77.374041	39.012272
SR155	4.349410	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	17.58	PL21	-77.388084	39.017405
SR159	0.318192	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.388445	39.017844
SR161	4.367254	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	84.15	PL21	-77.388489	39.017980
SR163	0.201485	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	24.19	PL21	-77.388093	39.017400
SR166	5.187670	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	21.14	PL21	-77.389543	39.016393
SR170	10.566061	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.90	PL21	-77.388478	39.016301
SR217	6.781376	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.93	PL21	-77.386656	39.012085
SR252	12.816576	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	32.58	PL21	-77.384954	39.016354
SR268	84.399235	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.32	PL21	-77.392831	39.009466
SR274	5.952092	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.43	PL21	-77.392023	39.008669
SR276	1.448820	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.10	PL21	-77.391405	39.008313
SR3	2.677350	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.377192	39.014053
SR446	2.807426	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419995	38.988445
SR505	1.434783	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.423690	38.989501
SR506	52.886992	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.423819	38.989554
SR523	45.851504	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420528	38.988504
SR524	19.846717	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420577	38.988519
SR525	0.362403	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420841	38.988577
SR526	0.521783	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.421207	38.988102
SR538	2.042424	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.421947	38.987968
SR540	2.267262	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.422793	38.989069
SR546	2.302124	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412372	38.987665
SR560	1.379242	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413506	38.987280
SR563	0.450984	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413095	38.987357
SR568	4.762385	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412949	38.987450
SR570	0.937995	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413235	38.986942
SR572	5.224245	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413041	38.986568
SR582	102.532728	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.410920	38.988102
SR603	8.841058	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411067	38.988133
SR607	7.302779	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.414610	38.986858
SR608	0.469882	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.414349	38.986990
SR609	0.529826	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.414094	38.987068
SR641	7.347715	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419624	38.987241
SR660	25.914186	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430270	38.986827
SR739	5.637117	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428100	38.983595
SR740	5.518765	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427181	38.983769
WB1013	25.799207	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408916	39.056050
WB1034	3.195517	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406719	39.048313
WB1044	6.297893	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405839	39.049583
WB1049	2.346417	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403445	39.049599
WB1056	2.356731	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401141	39.048168
WB1063	4.782411	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400599	39.049849
WB1064	5.074792	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400604	39.050041
WB1066	5.360809	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400467	39.049936
WB1111	12.910242	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406261	39.053033
WB1125	2.430787	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407036	39.055766
WB1145	7.819467	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405590	39.054172
WB1147	1.694124	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403593	39.055578
WB1157	16.658558	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401446	39.055210
WB1182	10.906817	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399691	39.053470
WB1184	0.749233	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399521	39.054934
WB12091	20.704444	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	46.14	PL42	-77.551425	38.913105
WB1239	2.646388	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410525	39.057824
WB1243	3.270229	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412493	39.058160
WB12680	16.469183	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507957	38.977414
WB1270	7.047153	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414116	39.058593
WB1273	1.755729	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412958	39.058228

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WB1302	4.798662	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395628	39.053081
WB1316	3.549978	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397034	39.051665
WB1338	9.315918	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398794	39.054802
WB1358	82.806988	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440980	39.052075
WB1532	9.424480	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433340	39.049421
WB1543	6.061108	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433932	39.050619
WB1544	0.251641	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433908	39.050648
WB1567	5.295338	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	COM_OTHER_NON_PUBLIC	60.58	PL19	-77.445953	39.055106
WB1595	2.731103	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436398	39.055779
WB1604	6.506782	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436666	39.056446
WB1618	7.046559	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440208	39.058155
WB1646	13.325976	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441037	39.062166
WB1655	4.430075	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440560	39.060199
WB1788	47.838686	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446268	39.057142
WB1798	2.919966	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440139	39.057879
WB1799	1.260535	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440115	39.057881
WB18	2.924673	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420360	39.033763
WB1855	21.029249	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442207	39.063733
WB1860	21.530737	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446029	39.067969
WB1879	17.043181	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.449973	39.070185
WB1886	14.587595	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.451713	39.069333
WB1899	20.128813	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444808	39.066222
WB1954	6.524967	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445014	39.066338
WB2	36.200632	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420065	39.033593
WB20075	4.172925	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	57.01	PL21	-77.371363	39.025923
WB2122	1.152947	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468422	39.065698
WB2126	0.730295	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468615	39.065844
WB2279	45.647919	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.467129	39.073136
WB2281	0.883740	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470197	39.068797
WB2317	3.428054	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456279	39.059814
WB2353	3.560594	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.453021	39.071145
WB241	3.235269	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423853	39.035192
WB2434	5.662862	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475474	39.068884
WB252	17.986233	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421489	39.034235
WB2545	22.062895	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.474909	39.074964
WB2573	3.448215	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.474560	39.075374
WB2576	2.660122	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.473881	39.075822
WB2584	0.628639	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.473661	39.076095
WB2588	6.278456	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.472903	39.077338
WB2633	7.542999	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.473857	39.073329
WB2635	1.399011	20700080904	No	Chesapeake Bay	Selden Island - Potomac River	MULTI_USE	0.32	PL20	-77.471810	39.074409
WB2650	19.833886	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.468685	39.073865
WB2659	2.298417	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run	VACANT	6.81	PL19	-77.448806	39.056796
WB277	5.780318	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420684	39.033589
WB296	0.321648	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419876	39.033191
WB299	22.856185	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420161	39.033030
WB30027	3.187633	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.15	PL16	-77.498005	39.083533
WB30028	2.933673	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	80.30	PL16	-77.499863	39.088495
WB30030	1.805922	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487591	39.014446
WB30032	3.136967	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474242	39.021989
WB30043	17.436835	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	71.37	PL42	-77.556542	38.908968
WB30271	10.222786	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418165	39.032054
WB30272	11.611389	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418187	39.032161
WB30273	2.257364	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418223	39.030176
WB30274	2.137099	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404962	39.027769
WB30275	44.735064	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405133	39.027992
WB30276	1.363458	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405299	39.028391
WB30280	23.844849	20700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	97.52	PL21	-77.370304	39.027829
WB30281	1.439415	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	98.41	PL16	-77.496378	39.079904
WB30282	25.569078	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	24.08	PL16	-77.496178	39.079815

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WB30287	0.368975	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465454	39.067111
WB30289	7.960239	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.461609	39.068725
WB30293	23.807305	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.462037	39.070133
WB30295	7.069286	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471000	39.068838
WB30296	3.563680	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.463109	39.072049
WB30297	2.024705	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.461861	39.072008
WB30298	0.402193	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467635	39.062582
WB30299	3.029293	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466462	39.061112
WB30300	20.301477	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466213	39.061111
WB30302	0.306677	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467731	39.061597
WB30303	4.369784	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467805	39.061185
WB30304	2.767270	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.460524	39.071033
WB30305	5.522391	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.461536	39.070303
WB30306	7.141406	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461318	39.059920
WB30311	4.261138	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.476571	39.078715
WB30312	3.218492	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477427	39.078576
WB30313	3.430281	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.476410	39.078177
WB30314	92.396045	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477118	39.078443
WB30316	2.126337	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.487634	39.093281
WB30321	5.311037	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484127	39.090250
WB30322	2.426006	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.485906	39.091745
WB30323	2.376599	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484115	39.090638
WB30324	2.167442	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.486569	39.090313
WB30325	6.792612	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469200	39.049965
WB30326	1.580755	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468232	39.049767
WB30332	23.351487	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461686	39.026393
WB30333	13.893096	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461738	39.026343
WB30338	2.199921	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459777	39.022976
WB30339	2.797361	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459233	39.022432
WB30346	5.732458	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445357	39.007808
WB30347	0.869773	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448149	38.996846
WB30348	1.900888	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448273	38.996568
WB30360	11.656123	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442746	39.007077
WB30374	5.932328	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437504	38.992008
WB30382	11.511458	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435881	39.002536
WB30391	0.867455	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.436060	38.984504
WB30392	64.741944	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437373	38.984282
WB30397	0.103301	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428547	38.989891
WB30398	1.010053	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429165	38.989737
WB30401	0.391187	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430860	38.989851
WB30402	0.193817	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430435	38.990028
WB30403	0.143093	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430576	38.990502
WB30406	6.470932	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	77.61	PL17	-77.533425	38.977154
WB30407	5.093160	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	75.13	PL17	-77.534938	38.979430
WB30417	1.615509	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509352	38.981831
WB30418	13.021104	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511756	38.981727
WB30422	1.360469	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514203	38.981298
WB30423	9.641568	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.510048	38.980310
WB30428	1.103777	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	HOA	15.14	PL17	-77.505457	38.976780
WB30439	0.959606	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514327	38.979937
WB30446	34.007290	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431788	38.988937
WB30447	0.525740	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431575	38.987731
WB30449	0.391234	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430794	38.988214
WB30450	0.414369	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430838	38.988400
WB30454	10.396850	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419965	38.986566
WB30456	1.970481	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420434	38.986927
WB30486	11.817171	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	77.47	PL14	-77.526966	39.012501
WB30488	4.481534	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	86.92	PL14	-77.528465	39.021027
WB30489	6.584158	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	76.14	PL14	-77.530286	39.017573
WB30490	2.014863	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	77.78	PL14	-77.529267	39.019875

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WB30491	0.640422	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	52.90	PL14	-77.529293	39.020087
WB30493	1.614060	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	75.10	PL14	-77.531497	39.018189
WB30494	3.235121	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	80.17	PL14	-77.530733	39.018224
WB30496	22.120741	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521074	38.999329
WB30498	4.368289	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521402	38.998631
WB30499	5.822647	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520504	38.998787
WB30504	3.454030	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490807	39.012091
WB30505	1.189442	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490823	39.012101
WB30507	1.831432	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491829	39.012121
WB30508	27.696446	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491765	39.012106
WB30511	14.068788	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490705	39.020201
WB30512	2.134242	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488545	39.023055
WB30513	0.329204	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488554	39.023031
WB30514	5.366118	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.00	PL45	-77.540679	38.922767
WB30516	1.646851	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.43	PL45	-77.541527	38.921430
WB30517	22.297390	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	41.15	PL45	-77.541471	38.921421
WB30518	5.348005	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.80	PL45	-77.541095	38.922271
WB30519	5.772237	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.36	PL45	-77.541082	38.923285
WB30524	9.275819	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	54.31	PL42	-77.552396	38.921754
WB30527	1.540336	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	62.34	PL42	-77.552892	38.923115
WB30529	14.361785	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	72.46	PL42	-77.562274	38.910901
WB30530	0.200062	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	0.34	PL42	-77.562142	38.910830
WB30532	19.213603	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	73.88	PL42	-77.562458	38.913403
WB30534	2.682049	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	71.49	PL42	-77.561701	38.915802
WB30535	4.139010	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	67.16	PL42	-77.561587	38.917146
WB30536	1.230214	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_NON_PUBLIC	92.87	PL45	-77.534709	38.919015
WB30549	10.702041	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_GENERAL	91.86	PL45	-77.471973	38.916416
WB30550	7.766636	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	97.77	PL45	-77.474521	38.912772
WB30551	5.754277	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	100.00	PL45	-77.474612	38.912528
WB30552	6.324774	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	12.86	PL45	-77.473705	38.911806
WB30555	4.027460	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445968	39.028704
WB30556	3.140474	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445870	39.028729
WB30557	0.782688	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445501	39.028550
WB30558	2.328154	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444044	39.029451
WB30559	1.062501	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442813	39.028413
WB30561	2.455589	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445295	39.033865
WB30563	25.972737	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440643	39.032768
WB30565	3.091153	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.472682	39.083678
WB31005	3.065955	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493228	39.055997
WB31006	1.604144	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491983	39.056768
WB31007	0.733385	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492128	39.057025
WB31008	7.749993	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494224	39.058411
WB31009	4.694284	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493611	39.056221
WB31010	1.546871	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	56.67	PL42	-77.551069	38.913048
WB35	2.285562	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421920	39.034630
WB369	1.800991	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418844	39.032081
WB373	1.007328	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418301	39.031695
WB386	12.501683	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418373	39.029203
WB389	3.083296	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418147	39.029631
WB40456	0.525346	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431119	38.989267
WB40458	8.084070	20700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430973	38.990470
WB40480	0.953691	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	75.69	PL45	-77.537836	38.923342
WB422	3.791125	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409280	39.044426
WB428	6.459506	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406941	39.043873
WB436	3.034267	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405021	39.043441
WB444	3.159187	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408880	39.040711
WB448	30.602497	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408585	39.039968
WB532	0.268767	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413536	39.044451
WB533	22.896931	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414232	39.044775
WB562	4.891744	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410403	39.044223

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WB571	6.514309	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413382	39.044601
WB641	6.629018	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407925	39.037082
WB642	4.626525	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407896	39.036970
WB644	1.538781	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407641	39.036306
WB650	0.373681	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410114	39.036945
WB654	0.343195	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409795	39.036734
WB655	2.073243	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409652	39.036523
WB661	0.945851	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408361	39.035655
WB669	3.919566	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411352	39.037036
WB679	0.318555	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411711	39.037887
WB682	3.526940	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411885	39.037917
WB691	8.457056	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412248	39.037545
WB7	0.983559	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419916	39.033443
WB70105	1.910755	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447808	39.008631
WB70106	1.075032	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447678	39.008731
WB721	3.186039	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412359	39.037432
WB732	1.457926	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412462	39.037001
WB737	0.570674	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412010	39.036781
WB821	20.103825	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407805	39.051438
WB826	1.112903	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405072	39.050758
WB828	1.189051	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404969	39.050132
WB853	20.469078	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409755	39.052125
WB860	1.831800	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408486	39.052682
WB862	2.715938	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408532	39.052746
WB864	1.524138	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407413	39.053448
WB870	1.620508	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410877	39.052509
WB887	3.999605	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407932	39.054054
WB888	0.774143	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407784	39.054251
WB891	0.683807	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407260	39.054395
WB896	0.665784	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407190	39.054102
WB901	0.513315	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408090	39.054540
WB902	0.443618	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408081	39.054676
WB906	9.618823	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416872	39.054197
WB958	8.709759	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416187	39.053575
WB968	1.640979	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411449	39.053275
WB994	1.783517	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418441	39.051587
WB995	2.441907	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418546	39.051709
WB998	2.358128	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416722	39.053040
WC30573	2.245937	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494596	39.061005
WC30582	0.503250	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468485	39.067056
WC30583	4.054057	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469090	39.066971
WJ1017	23.366591	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513803	39.054943
WJ1018	2.302169	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513691	39.054815
WJ1029	5.013558	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513123	39.054086
WJ1030	2.003808	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512189	39.054115
WJ104	11.432292	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.64	PL45	-77.512266	38.923579
WJ1084	8.512336	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513194	39.052098
WJ1162	15.846195	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513653	39.050504
WJ1189	17.583261	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510877	39.050790
WJ120	18.344619	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.83	PL45	-77.516803	38.921957
WJ1203	2.057686	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512235	39.049450
WJ124	20.943546	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	23.11	PL45	-77.511033	38.921749
WJ1263	29.066572	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514133	39.048125
WJ1275	19.406707	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513153	39.047814
WJ131	2.325880	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	49.41	PL45	-77.510785	38.921480
WJ132	0.215197	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.16	PL45	-77.510782	38.921462
WJ135	0.051060	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.14	PL45	-77.510915	38.921331
WJ1403	44.941654	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513004	39.048518
WJ1405	24.230919	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512812	39.039226
WJ1412	1.281706	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512786	39.039221

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WJ144	14.011084	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	42.64	PL45	-77.510718	38.919214
WJ1449	4.887086	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513596	39.038108
WJ1454	7.939999	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517111	39.037934
WJ1467	19.451574	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517326	39.037805
WJ1496	3.471176	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514912	39.035746
WJ1497	7.853332	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516098	39.035714
WJ1518	11.389134	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517757	39.035628
WJ1530	35.343773	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489652	39.050056
WJ1641	0.674440	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488034	39.066152
WJ1643	0.545740	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487626	39.065673
WJ1651	12.651847	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488527	39.067400
WJ1678	3.402685	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492701	39.067508
WJ1681	0.975528	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488569	39.066159
WJ1683	4.873136	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487904	39.065217
WJ1707	12.488582	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486488	39.065017
WJ1730	25.672575	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486912	39.059071
WJ1735	4.274763	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493518	39.064424
WJ1737	0.167137	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493469	39.064558
WJ176	16.654477	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_MFA	31.54	PL45	-77.511368	38.916996
WJ1760	6.845359	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493161	39.065084
WJ1771	8.991387	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488886	39.066930
WJ1781	4.347413	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492715	39.067502
WJ1785	2.583013	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493153	39.066893
WJ1789	2.040739	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493373	39.066187
WJ1795	2.242974	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493320	39.065671
WJ1803	2.955744	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493673	39.064351
WJ1806	17.167920	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494506	39.062456
WJ1825	4.736480	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498331	39.065003
WJ1830	4.466769	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497975	39.066157
WJ1840	18.366798	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497174	39.067146
WJ1855	2.333046	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497034	39.067800
WJ1868	10.072949	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496829	39.068665
WJ1894	12.525005	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.52	PL16	-77.496812	39.073353
WJ1903	2.776899	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	74.34	PL16	-77.498083	39.075054
WJ1907	2.924532	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.15	PL16	-77.500245	39.071815
WJ1913	3.033699	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	99.88	PL16	-77.500200	39.071717
WJ1915	9.548426	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	74.29	PL16	-77.500158	39.071508
WJ192	12.266291	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	43.56	PL45	-77.511346	38.915331
WJ1957	5.607155	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.00	PL16	-77.500034	39.070841
WJ1961	0.158983	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	100.00	PL16	-77.500558	39.071082
WJ1970	18.936424	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.68	PL16	-77.500695	39.072455
WJ2	13.124258	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	38.39	PL45	-77.524682	38.916943
WJ2034	13.663381	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.475498	39.078701
WJ204	0.358274	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.511083	38.916268
WJ2042	0.895916	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.475663	39.078628
WJ2043	1.433924	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.475703	39.078622
WJ2068	0.354359	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470295	39.079732
WJ2073	2.904491	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470607	39.079210
WJ2091	22.829067	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471284	39.083538
WJ2117	9.512553	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471214	39.075873
WJ2118	2.130074	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471190	39.075869
WJ2120	0.214522	20700080904	No	Chesapeake Bay	Selden Island - Potomac River	COM_OFFICE_GENERAL	0.29	PL20	-77.471530	39.074921
WJ2126	0.340794	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470347	39.079950
WJ2128	11.594531	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471017	39.080337
WJ2157	15.119300	20700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470804	39.081008
WJ2178	1.288097	20700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	23.44	PL16	-77.504229	39.090786
WJ226	4.986119	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	37.05	PL45	-77.511438	38.914361
WJ250	2.944849	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	47.62	PL45	-77.516609	38.913324
WJ255	2.462631	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	31.13	PL45	-77.517687	38.914017
WJ267	5.392460	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	47.49	PL45	-77.517399	38.916225

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WJ271	0.753371	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	60.10	PL45	-77.517539	38.916013
WJ272	0.724561	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	49.74	PL45	-77.517093	38.915437
WJ277	4.716973	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	54.97	PL45	-77.517204	38.914921
WJ301	4.125982	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	95.53	PL45	-77.516984	38.917717
WJ308	0.963556	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.517556	38.917290
WJ310	1.472592	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.19	PL45	-77.517222	38.917198
WJ316	1.404433	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	28.60	PL45	-77.518079	38.916426
WJ322	1.217869	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	8.87	PL45	-77.518383	38.915052
WJ337	24.438564	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	53.13	PL45	-77.520255	38.915334
WJ364	3.855806	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	24.43	PL45	-77.518385	38.914063
WJ367	5.578701	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	45.02	PL45	-77.520075	38.909654
WJ383	9.861803	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501948	39.038526
WJ390	2.319368	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500540	39.038585
WJ398	1.455142	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499871	39.038460
WJ401	1.751314	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498497	39.038494
WJ406	1.459635	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497445	39.038255
WJ412	31.251345	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494997	39.036396
WJ413	1.623194	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494918	39.036480
WJ419	1.600918	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494697	39.038091
WJ426	0.488335	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496326	39.038175
WJ427	3.973290	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494972	39.036150
WJ435	7.994357	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495574	39.034628
WJ444	6.606605	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496083	39.034012
WJ466	4.532634	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494012	39.035268
WJ473	3.180232	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492979	39.037141
WJ476	2.851147	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491672	39.035095
WJ482	8.750050	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492085	39.033345
WJ493	2.249035	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490584	39.030857
WJ503	4.797155	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489556	39.032102
WJ507	2.556093	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489102	39.032285
WJ510	0.131661	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488856	39.032251
WJ515	1.132055	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487775	39.032858
WJ519	5.350444	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489259	39.031579
WJ526	3.802274	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487535	39.031504
WJ530	2.719550	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490544	39.029925
WJ536	2.485723	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490043	39.031463
WJ541	0.767150	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487423	39.031947
WJ542	1.344702	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487258	39.031725
WJ547	0.630626	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487196	39.030856
WJ572	1.693534	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487462	39.033189
WJ576	2.894451	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492990	39.040131
WJ582	7.203577	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492207	39.041470
WJ593	6.003892	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491755	39.042692
WJ608	5.060332	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498373	39.043243
WJ610	7.132496	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499407	39.044069
WJ621	1.176112	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499777	39.045280
WJ626	1.326218	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499806	39.046070
WJ63	16.024478	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.38	PL45	-77.528574	38.915680
WJ632	2.194767	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500307	39.046280
WJ637	3.103645	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498762	39.048871
WJ64	3.488114	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	84.61	PL45	-77.528047	38.916047
WJ640	5.974858	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498712	39.049002
WJ657	0.325496	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503455	39.045689
WJ660	2.550566	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503488	39.045610
WJ663	1.171625	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503754	39.045179
WJ675	3.955305	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503251	39.046549
WJ685	7.221635	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500571	39.046458
WJ69	10.826306	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.56	PL45	-77.528798	38.915509
WJ692	7.069803	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500613	39.048526
WJ707	3.506762	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500505	39.050931

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WJ708	2.966990	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499538	39.050427
WJ719	5.314744	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503610	39.046772
WJ737	4.822315	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505886	39.046779
WJ762	9.402842	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501396	39.051531
WJ764	0.798532	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502662	39.052201
WJ768	10.360061	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503759	39.052516
WJ82	3.157428	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.29	PL45	-77.529518	38.915404
WJ826	15.832922	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507022	39.047312
WJ828	1.520592	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507040	39.047250
WJ837	1.180313	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506092	39.046752
WJ843	2.107195	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504602	39.046355
WJ859	1.883123	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497335	39.039394
WJ875	9.694676	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496731	39.039351
WJ886	11.628497	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505230	39.053303
WJ887	5.241045	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505707	39.053508
WJ91	1.638340	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.85	PL45	-77.511916	38.922096
WJ911	4.743790	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509461	39.054545
WJ917	1.605545	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509164	39.054758
WJ924	1.821797	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509269	39.055553
WJ929	11.710556	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510516	39.057358
WJ950	3.085113	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511757	39.055244
WJ967	7.780628	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509954	39.055812
WJ972	0.320370	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511030	39.054587
WJ973	8.116172	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510675	39.054507
WJ998	5.418419	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	VACANT	18.31	PL14	-77.515378	39.057640
WP2621	0.727891	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFA	43.89	PL17	-77.524778	38.969885
WP3201	0.913373	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	10.33	PL45	-77.499792	38.912926
WP3483	7.200089	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459517	39.049027
WP3520	2.755815	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502064	39.001426
WP3521	0.554550	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502168	39.001266
WP3522	0.291642	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502320	39.001131
WP3523	1.860901	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	49.51	PL14	-77.523743	39.001159
WP3524	16.373869	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	37.49	PL14	-77.527523	39.002681
WP3526	2.093742	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	48.83	PL14	-77.528477	39.002906
WP3527	0.848546	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	57.83	PL14	-77.528911	39.002953
WP3528	10.455414	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	41.21	PL14	-77.528394	39.004020
WP3537	6.166573	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508714	39.009536
WP3538	1.309111	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459759	39.003930
WP3539	2.419860	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459534	39.004370
WP3546	10.230162	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506573	38.982857
WP3547	5.958441	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509201	38.980233
WP3548	2.715344	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	25.39	PL14	-77.529302	39.002500
WP3554	0.923177	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	9.57	PL14	-77.530723	38.997268
WP3555	0.361075	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	8.60	PL14	-77.530986	38.996652
WP3557	1.439508	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	13.84	PL14	-77.531351	38.995929
WP3560	1.629569	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508464	38.978365
WP3563	10.087834	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_MFST	39.09	PL14	-77.536967	38.987588
WP3564	1.455190	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	0.27	PL14	-77.536849	38.989573
WP3565	0.064083	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	94.70	PL14	-77.536748	38.989760
WP3566	1.734906	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	62.61	PL14	-77.536542	38.989708
WP3567	2.262964	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	0.07	PL14	-77.535763	38.991209
WP3568	5.595214	20700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	16.16	PL14	-77.537411	38.986951
WP3569	1.995682	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463580	39.021854
WP3570	3.120255	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463335	39.022145
WP3571	1.701197	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464969	39.021316
WP3572	1.180442	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465056	39.021355
WP3573	6.115963	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465444	39.020068
WP3574	8.623174	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465170	39.019496
WP3578	0.085531	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462840	39.026482
WP3579	0.359176	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462908	39.025390

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
WP3580	0.443918	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462941	39.025344
WP3581	0.248929	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464028	39.029017
WP3582	7.056944	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464424	39.028865
WP3583	2.227814	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467866	39.028674
WP3584	0.158195	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467599	39.028913
WP3585	14.641097	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468309	39.028187
WP3586	0.428952	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469176	39.027987
WP3587	0.915542	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450135	39.027816
WP3588	0.526044	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455214	39.029254
WP3589	0.800462	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455240	39.029355
WP3590	6.128322	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456985	39.031488
WP3591	0.426019	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456603	39.032047
WP3592	7.958163	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456836	39.031503
WP3593	6.580521	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456041	39.032526
WP3594	0.641544	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457965	39.031972
WP3607	1.782323	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	69.77	PL42	-77.563312	38.920513
WP3608	1.594257	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	57.26	PL42	-77.563334	38.921312
WP3609	1.501569	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	52.29	PL42	-77.561217	38.920723
WP3610	4.570198	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	38.23	PL42	-77.561144	38.919503
WP3611	1.258157	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	57.11	PL42	-77.560951	38.920771
WP3612	0.331620	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	21.36	PL42	-77.562553	38.918843
WP3613	0.476040	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	11.62	PL42	-77.562612	38.918778
WP3614	5.177416	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	46.64	PL42	-77.556545	38.921122
WP3615	6.397626	20700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	49.92	PL42	-77.556919	38.922155
WP3618	3.509923	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544474	38.936762
WP3620	0.197753	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544765	38.936678
WP3621	4.264899	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544847	38.936360
WP3622	7.197313	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544030	38.935423
WP3627	12.749518	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	51.95	PL45	-77.530805	38.924238
WP3628	3.254324	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.16	PL45	-77.530278	38.924406
WP3629	1.051899	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	71.66	PL45	-77.531598	38.924678
WP3630	3.903023	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	59.95	PL45	-77.527777	38.923676
WP3631	5.007000	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	68.63	PL45	-77.523279	38.925706
WP3632	0.481983	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	88.85	PL45	-77.500461	38.913314
WP3635	10.894498	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	55.20	PL45	-77.497120	38.912677
WP3637	12.034686	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.98	PL45	-77.495094	38.910320
WP3638	1.646207	20700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.91	PL45	-77.494815	38.910372
WP3647	10.747276	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419571	39.012124
WP3648	1.145805	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420216	39.011281
WP3651	0.095246	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428232	39.041679
WP3652	1.335641	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427958	39.041528
WP3653	1.099262	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427894	39.041038
WP3654	0.831453	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428259	39.040509
WP3655	0.806504	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428732	39.038503
WP3675	0.498246	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524982	38.968743
WP3676	3.216048	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524522	38.968345
WP3677	2.076553	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524126	38.967475
WP3678	7.743464	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522564	38.968715
WP3690	5.116544	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458317	39.048411
WP3691	2.412529	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455236	39.048966
WP3692	2.361288	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453026	39.046899
WP3693	1.508654	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453457	39.047196
WP3694	6.814862	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453247	39.046273
WP3695	0.324832	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453234	39.046250
WP3697	1.005822	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453723	39.046338
WP3698	0.644226	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453669	39.046412
WP3699	0.305679	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530918	38.974519
WP3700	22.350270	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530609	38.975063
WP3701	0.461243	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530682	38.975083
WP3705	5.896033	20700080901	No	Chesapeake Bay	Lenah Run - Broad Run	RES_SFD	66.98	PL17	-77.534666	38.977765

Loudoun County Virginia
Regulated MS4 Outfall Table

FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
Z17_2S	44.706115	20700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472889	39.008878

Appendix G

Dry Weather Screening – Year 2

July 6, 2020

Ms. Kate Helms
Senior Stormwater Engineer
Loudoun County
Department of General Services
MSC #48
P.O. Box 7100
801 Sycolin Road SE, Suite 300
Leesburg, VA 20175

RE: Permit 4/Year 2 (FY2020) – Illicit Discharge Detection & Elimination Program (IDDE) Dry Weather Screening Report of Findings

Dear Ms. Helms:

To support Loudoun County's compliance with its submitted Phase II Municipal Separate Storm Sewer System (MS4) Program Plan and the County's Illicit Discharge Detection and Elimination (IDDE) Procedure (Version 2, June 10, 2019), GKY & Associates, Inc. (GKY) conducted visual dry weather screening inspections on 337 outfalls. These outfalls were selected because their associated drainage areas were identified as having a high potential for illicit discharges.

The inspections included a visual evaluation of the conditions observed at each outfall. GKY documented each inspection using an electronic field inspection form and obtained photo documentation (i.e., digital photographs). If the field team observed dry weather flow, the source was investigated and samples were collected if a potential or actual illicit discharge was discovered.

Dry Weather Screening Results

GKY categorized the outfalls into one (1) of three (3) categories (*Clear, Suspect,* and *Illicit*). Tables 1-3, included below, summarize the results for each category. Table 4 presents a cumulative outfall statistics summary. **Attachments 1-3** include reports associated with each of the categories and **Attachment 4** provides a tabular summary of the data associated with each outfall screened. Please note that the tabular summary in **Attachment 4** contains 361 total records, as flow at several outfalls was traced to two (2) or more separate sources within the drainage area; therefore, multiple inspection reports were generated for each of those outfalls. In instances where multiple sources were investigated the outfall was categorized by the most severe category for potential illicit discharge (in order of *Illicit, Suspect,* then *Clear*). For example, if the outcome of two (2) investigations for an outfall yielded one (1) *Clear* source and one (1) *Illicit* source the outfall is categorized as Illicit.

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WATER RESOURCES & ENVIRONMENTAL SOLUTIONS

Clear

Clear outfalls presented the following conditions:

- No dry weather flow at the time of the inspection;
- The outfall or upstream node was wet but not flowing; or
- Dry weather flow was observed at the outfall, but after investigation, the flow was determined not to be a potential or actual illicit discharge (e.g., the source was determined to originate from groundwater).

The number of outfalls subcategorized within the *Clear* category is shown in **Table 1**.

Table 1. Outfalls Categorized as *Clear*

Category	Sub Category	No. of Outfalls	% of Total Outfalls (337)
Clear	Dry/Wet but Not Flowing	166	49.26%
	Outfall Inaccessible/Submerged (Upstream Node Screened)	73	21.66%
	Not Able to Be Screened (e.g., Not Found)	1	00.30%
	Non-Suspect Flow*	71	21.07%
	Subtotal**	**311**	**92.29%**

*Where GKY observed dry weather flow, the inspection team investigated the source of the flow for each outfall by tracing the flow up the storm sewer system until the source could be identified. The source of flow for each of the outfalls contained in this category was classified as *Clear*. Based upon the County IDDE Procedure, GKY determined *Clear* outfalls to be free of concern, and noted observed flows as originating from one of the following sources:

- Groundwater
- Ponded water upstream
- SWM pond discharge
- Natural stream/channel
- Landscape irrigation water

****Attachment 4** shows 331 *Clear* outfalls because flow at several outfalls was traced to two (2) or more separate sources within the drainage area; therefore, multiple inspection reports were generated for each outfall.

Attachment 1 includes digital copies of the inspection form, photolog, and photo location map for each *Clear* outfall. Based on the observed conditions at *Clear* outfalls, no additional follow-up is required at this time. **Attachment 4** contains a table that displays the results of the inspections.

Suspect

Suspect outfalls presented visible and measurable dry weather flows at the time of the inspection. GKY investigated the source of the dry weather flow for each outfall in this category by tracing the flow up the MS4 but was unable to identify the source of the observed flow.

The number of outfalls subcategorized within the *Suspect* category is shown in **Table 2**.

Table 2. Outfalls Categorized as *Suspect*

Category	Sub Category	Initial Finding	% of Total Outfalls (337)
Suspect	Suspect	11	3.26%
	Outfall Submerged/Inaccessible (Upstream Node Screened)	9	2.67%
	Subtotal*	**20**	**5.93%**

***Attachment 4** shows 24 *Suspect* outfalls because flow at several outfalls was traced to two (2) or more separate sources within the drainage area; therefore, multiple inspection reports were generated for each outfall.

Attachment 2 includes digital copies of the inspection form, photolog, and a photo location map for each *Suspect* outfall. **Attachment 4** contains a table that displays the results of the investigations including observations, field testing results, analytical testing results, and recommended follow-up actions for all *Suspect* outfall.

Illicit

Illicit outfalls presented visible and measurable dry weather flows at the time of the inspection, and, upon investigation, the source of the flow was identified as **not** being composed entirely of natural flow (e.g., groundwater). The number of outfalls subcategorized within the *Illicit* category is shown in **Table 3**.

Table 3. Outfalls Categorized as *Illicit*

Category	Sub Category	Initial Finding	% of Total Outfalls (337)
Illicit	Confirmed Illicit Discharge	6	1.78%
	Outfall Partially Submerged/ Inaccessible (Upstream Node Screened)	0	0%
	Subtotal	**6**	**1.78%**

Attachment 3 includes digital copies of the inspection form, photolog, and a photo location map for each *Illicit* outfall. **Attachment 4** contains a table that displays the results of the investigation including observations, field testing results, analytical testing results, and recommended follow-up actions for the outfall categorized as *Illicit*.

Cumulative Results

The results of the inspections are summarized in **Table 4**.

Table 4. Cumulative Outfall Statistics Summary

Category	Total No. Outfalls	% of Total Outfalls (337)
Clear	311	92.29%
Suspect	20	5.93%
Illicit	6	1.78%
Total	**337**	**100.00%**

Follow-Up Sampling

Per the County's IDDE Procedure, field samples were analyzed for temperature, conductivity, pH, turbidity, chlorine, and ammonia. If these field analyses indicated an exceedance of the field sampling benchmark criteria, additional samples were collected for further analysis. Laboratory analysis was conducted in a certified laboratory for ammonia, fluoride, surfactants, potassium, oil and grease, and total petroleum hydrocarbon (TPH) as outlined in Addendum 2, Dry Weather Screening Protocol (December 2017). Bacteria analysis was conducted by GKY field staff using Coliscan Easygel's growth media. The results of the field and analytic sampling are provided in **Attachment 4**. Laboratory analysis reports may be provided upon request.

Should you have any questions regarding the outfall inspection results presented in this report, please feel free to contact me at (703) 870-7000 or by email at mkuker@gky.com.

Sincerely,

GKY & Associates, Inc.

Maxwell E. Kuker
Water Resources Project Manager

Enclosures:
Attachment 1. Permit 4/Year 2 Inspection Reports for Outfalls Categorized as *Clear*
Attachment 2. Permit 4/Year 2 Inspection Reports for Outfalls Categorized as *Suspect*
Attachment 3. Permit 4/Year 2 Inspection Reports for Outfalls Categorized as *Illicit*
Attachment 4. Permit 4/Year 2 Dry Weather Field Screening Results Table

Attachment 1

Permit 4/Year 2 Inspection Reports for Outfalls Categorized as *Clear*

Attachment 2

Permit 4/Year 2 Inspection Reports for Outfalls Categorized as *Suspect*

Attachment 3

Permit 4/Year 2 Inspection Reports for Outfalls Categorized as *Illicit*

Attachment 4

Permit 4/Year 2 Dry Weather Field Screening Results

Appendix H

IDDE Investigation Summary

Outfall ID	LEx ID	Status	Source of Illicit Discharge	Date Discharge Observed	Date Discharge Reported	Method of Discovery	Investigation Resolution	Follow-up Activities	Date Investigation Closed
ME1470	7565142	Open	Washwater	1/21/2020	1/21/2020	SWM Reporting Telephone Number	Ongoing	Public Education	N/A
AB1913	7592530	Open	Grease Bin	1/29/2020	1/30/2020	Dry Weather Screening	Ongoing	Issue additional NOV(s) per SOP	N/A
MD3517	7599722	Closed	Washwater	2/3/2020	3/5/2020	Dry Weather Screening	Source Eliminated	None	7/31/2020
WJ124	7605832	Closed	Washwater	1/30/2020	3/5/2020	Dry Weather Screening	Source Eliminated	None	8/27/2020
CH1950	7592167	Open	Under investigation	2/5/2020	3/5/2020	Dry Weather Screening	Ongoing	Include in next year's Dry Weather Screening	N/A
ME1464	7600456	Open	Under investigation	2/4/2020	3/5/2020	Dry Weather Screening	Ongoing	Include in next year's Dry Weather Screening	N/A
JC6847	8097661	Open	Under investigation	5/19/2020	5/26/2020	Dry Weather Screening	Ongoing	Include in next year's Dry Weather Screening	N/A
DF176	8099674	Closed	None	5/29/2020	5/29/2020	LEx	Isolated Incident	None	9/4/2020
JC4640	8532526	Open	Grease Bin	3/18/2020	7/6/2020	Dry Weather Screening	Ongoing	Public Education	N/A
CH5980	7572254	Closed	Construction Activities	N/A	2/21/2020	SWM Reporting Telephone Number	No Action Required	None	6/8/2020
WB992	7572573	Closed	Construction Activities	2/24/2020	2/22/2020	Phone Call to County Staff	Source Eliminated	None	6/8/2020
CH5913	8097183	Closed	Dumping - Paint	N/A	5/16/2020	Phone Call to County Staff	No Action Required	None	5/27/2020
N/A	8010674	Closed	Dumping- Chemical	5/4/2020	5/4/2020	Phone Call to County Staff	Source Eliminated	None	5/21/2020

Outfall ID	LEx ID	Status	Source of Illicit Discharge	Date Discharge Observed	Date Discharge Reported	Method of Discovery	Investigation Resolution	Follow-up Activities	Date Investigation Closed
CP2209	7558822	Closed	Sewage	2/5/2020	2/4/2020	Dry Weather Screening	Source Eliminated	None	3/13/2020
CH5950	6728087	Closed	Dumping - Unknown Material	9/5/2019	N/A	Dry Weather Screening	Source Eliminated	DGS Cleanup	5/26/2020
N/A	6726878	Closed	Grease Bin	2/5/2020	1/31/2020	Dry Weather Screening	Source Eliminated	Include in next year's Dry Weather Screening	4/30/2020
CH6638	6835194	Closed	Construction Activities	11/26/2019	11/26/2019	Phone Call to County Staff	Source Eliminated	None	11/27/2019
WB11696	7003338	Closed	Pool Water	10/30/2019	N/A	Resident Email	No Action Required	Public Education	10/31/2019
CH2575	6885853	Closed	Pool Water	10/8/2019	N/A	Resident Email	No Action Required	Direct to relevant municipality	10/9/2019
AB924/ AB291	6745637	Closed	Pool Water	4/22/2020	3/5/2020	Dry Weather Screening	Isolated Incident	Public Education	9/10/2019
N/A	6546936	Closed	Not Applicable	N/A	8/6/2019	Resident Email	No Action Required	Public Education	9/20/2019
CP10731	6725839	Closed	Not Applicable	8/21/2019	8/21/2019	Referral from other municipality	Allowable Discharge	None	8/22/2019
N/A	6725631	Closed	Not Applicable	8/19/2019	8/19/2019	SWM Reporting Telephone Number	No Action Required	Public Education	8/19/2019

Appendix I

Erosion and Sedimentation

L. Preston Bryant, Jr.
Secretary of Natural
Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street, Suite 206
Richmond, Virginia 23219
Phone: (804) 786-2064 Fax: (804) 786-1798

November 20, 2007

Mr. Kirby Bowers
County Administrator
Loudoun County
P.O. Box 7000
Leesburg, VA 20177-7000

Re: Loudoun County's Erosion and Sediment Control Program

Dear Mr. Bowers:

In response to information presented to the Virginia Soil and Water Conservation Board by the Department of Conservation and Recreation staff, the Board approved the following motion:

> "The Virginia Soil and Water Conservation Board commends Loudoun County for successfully improving the City's Erosion and Sediment Control Program to become fully consistent with the requirements of the Virginia Erosion and Sediment Control Law and Regulations, thereby providing better protection for Virginia's soil and water resources."

We congratulate Loudoun County on this substantial accomplishment and recognize the County's efforts to proactively protect Virginia's soil and water resources through implementation of effective erosion and sediment control.

Sincerely,

Joseph H. Maroon
Director

cc: Kevin Haile, Loudoun County Erosion and Sediment Control Program Administrator
Kelly Vanover, DCR Warrenton Regional Manager
Eric R. Capps, DCR Erosion and Sediment Control Program Manager

Appendix J

VSMP Statement

Loudoun County, the permittee, submitted stormwater management facility information for this permit cycle through the Virginia Construction Stormwater General Permit database for all land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.

Name: James P. Edmonds

Title: Va. Stormwater Management Program Administrator, Dept. of Building & Development

Appendix K

BMP Inspection Summary – Year 2

Loudoun County Virginia
BMPs Identified Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	BMP Sub Type	Acres Treated	Pervious Acres	Imperv. Acres	Online Date	VAHUC6	Owner	Maint. Agmnt.	CB TMDL	Last Inspection	Longitude	Latitude
BT0072	Bioret		1.84	1.84	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.411694	38.990136
BT0073	Bioret		1.80	1.80	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.412784	38.989147
BT0076	Bioret		1.43	1.02	0.41	7/1/2019	PL19	Private	Yes	<null>	On Bond	-77.449907	38.995023
BT0077	Bioret		1.91	1.91	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.434404	38.985213
BT0078	Bioret		1.77	1.77	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.435078	38.984775
BT0079	Bioret		1.27	0.90	0.38	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.411841	38.977617
BT0080	Bioret		0.32	0.27	0.05	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.485891	39.047978
BT0081	Bioret		1.06	0.44	0.61	11/6/2019	PL19	County	Yes	<null>	On Bond	-77.447036	39.053560
BT0082	Bioret		2.33	2.26	0.08	11/12/2019	PL14	County	Yes	<null>	On Bond	-77.528344	39.001008
BT0083	Bioret		1.47	0.26	1.21	1/21/2020	PL18	County	Yes	<null>	On Bond	-77.410901	38.977347
BT0086	Bioret		0.31	0.31	0.00	5/13/2020	PL19	County	Yes	<null>	On Bond	-77.472500	39.061598
BT0087	Bioret		0.88	0.88	0.00	5/26/2020	PL14	County	Yes	<null>	On Bond	-77.529856	39.015547
DP0053	Pnd_Dry	Enhanced Ext Detent	20.65	16.21	4.44	7/1/2019	PL17	County	Yes	<null>	On Bond	-77.517562	38.995184
DP0054	Pnd_Dry	Enhanced Ext Detent	15.99	14.66	1.33	7/1/2019	PL17	County	Yes	<null>	On Bond	-77.517689	38.990594
DP0055	Pnd_Dry	Detention	4.81	1.30	3.51	7/1/2019	PL19	Private	Yes	<null>	2/25/2020	-77.450497	38.996272
DP0056	Pnd_Dry	Extended Detenton	6.84	4.33	2.51	7/1/2019	PL45	County	Yes	<null>	On Bond	-77.537600	38.931729
DP0060	Pnd_Dry		3.20	3.06	0.14	11/12/2019	PL14	County	Yes	<null>	On Bond	-77.528249	39.000112
DP0068	Pnd_Dry		1.20	0.92	0.28	6/26/2020	PL19	County	Yes	<null>	On Bond	-77.428471	39.005898
DS0010	Dry_Swale		0.15	0.15	0.00	11/12/2019	PL14	County	Yes	<null>	On Bond	-77.527535	39.001123
FT0016	Fltrra		0.12	0.01	0.11	7/1/2019	PL17	Private	Yes	<null>	3/6/2020	-77.479067	38.999453
FT0017	Fltrra		0.12	0.02	0.10	7/1/2019	PL45	County	Yes	<null>	On Bond	-77.502384	38.924616
FT0018	Fltrra		0.59	0.02	0.57	7/1/2019	PL45	County	Yes	<null>	On Bond	-77.502134	38.924588
FT0019	Fltrra		0.63	0.05	0.58	7/1/2019	PL45	County	Yes	<null>	On Bond	-77.501773	38.924437
FT0020	Fltrra		0.99	0.99	0.00	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.442475	39.050455
FT0021	Fltrra		0.34	0.34	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.435176	38.983624
FT0023	Fltrra		1.22	1.22	0.00	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.450305	39.049681
FT0026	Fltrra		0.18	0.04	0.14	8/7/2019	PL14	County	Yes	<null>	On Bond	-77.535963	38.985229
FT0027	Fltrra		0.28	0.08	0.20	8/7/2019	PL14	County	Yes	<null>	On Bond	-77.536110	38.985039
FT0028	Fltrra		0.30	0.03	0.27	8/7/2019	PL14	County	Yes	<null>	On Bond	-77.535856	38.985015
FT0029	Fltrra		0.23	0.19	0.04	8/7/2019	PL14	County	Yes	<null>	On Bond	-77.535639	38.984628
FT0030	Fltrra		0.70	0.47	0.23	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.485965	39.048646
FT0036	Fltrra		0.66	0.62	0.04	11/12/2019	PL14	County	Yes	<null>	On Bond	-77.528066	39.000272
FT0037	Fltrra		0.44	0.44	0.00	11/12/2019	PL14	County	Yes	<null>	On Bond	-77.528114	39.000883
PA0014	Pervious_Pavement		0.30	0.04	0.26	7/1/2019	PL45	County	Yes	<null>	On Bond	-77.502271	38.924153
RA2870	Plngpl		3.41	2.58	0.84	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.469296	39.049356
RA2897	Plngpl		1.90	0.79	1.11	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.468248	39.049268
RA2963	Strmcptr		1.73	0.68	1.05	10/17/2019	PL18	County	Yes	<null>	On Bond	-77.411259	38.977638
RA2967	Strmcptr		1.73	0.68	1.05	10/17/2019	PL18	County	Yes	<null>	On Bond	-77.411296	38.977702
SW0018	Grass_Swale		0.67	0.67	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.435125	38.984359
SW0019	Grass_Swale		0.62	0.62	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.433929	38.985219
SW0020	Grass_Swale		0.74	0.74	0.00	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.486443	39.048011
SW0021	Grass_Swale		0.64	0.64	0.00	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.486535	39.048428
SW0022	Grass_Swale		0.76	0.44	0.31	3/2/2020	PL45	County	Yes	<null>	On Bond	-77.530136	38.927205
SW0023	Grass_Swale		0.30	0.28	0.01	3/2/2020	PL45	County	Yes	<null>	On Bond	-77.529683	38.926863
SW0024	Grass_Swale		5.50	5.38	0.12	5/13/2020	PL20	County	Yes	<null>	On Bond	-77.460555	39.066077
SW0025	Grass_Swale		1.22	1.22	0.00	5/13/2020	PL20	County	Yes	<null>	On Bond	-77.460935	39.067242
UG0088	CDS		1.80	1.80	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.412942	38.989321
UG0089	Undrgrnddet		4.25	4.25	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.413003	38.989458
UG0090	CDS		0.61	0.61	0.00	7/1/2019	PL18	County	Yes	<null>	On Bond	-77.412812	38.989633
UG0091	CDS		1.07	1.07	0.00	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.510392	39.028834
UG0092	CDS		0.82	0.82	0.00	7/1/2019	PL19	County	Yes	<null>	1/6/2020	-77.511122	39.028379
UG0095	Undrgrnddet	StormTech	4.56	3.56	1.00	7/1/2019	PL19	County	Yes	<null>	1/3/2020	-77.486184	39.046969
UG0097	Undrgrnddet		1.28	1.28	0.00	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.459730	39.058354
UG0098	Undrgrnddet		3.03	1.42	1.61	7/1/2019	PL45	County	Yes	<null>	On Bond	-77.491283	38.917979

Loudoun County Virginia

BMPs Identified Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	BMP Sub Type	Acres Treated	Pervious Acres	Imperv. Acres	Online Date	VAHUC6	Owner	Maint. Agmnt.	CB TMDL	Last Inspection	Longitude	Latitude
UG0105	Undrgrnddet		12.58	10.99	1.59	7/30/2019	PL21	School	Yes	<null>	On Bond	-77.370947	39.027951
UG0108	Undrgrnddet		0.25	0.18	0.07	10/15/2019	PL19	County	Yes	<null>	On Bond	-77.485776	39.048293
UG0110	Jellyfish		1.41	1.39	0.02	11/22/2019	PL19	County	Yes	<null>	On Bond	-77.510332	39.007869
UG0111	Undrgrnddet		1.50	1.50	0.00	1/21/2020	PL19	County	Yes	<null>	On Bond	-77.448532	38.996908
UG0112	Strmcptr		4.44	4.44	0.00	1/21/2020	PL18	County	Yes	<null>	On Bond	-77.445608	38.988828
UG0115	CDS		4.16	3.98	0.18	1/30/2020	PL45	County	Yes	<null>	On Bond	-77.502609	38.921112
UG0116	Undrgrnddet		1.27	0.87	0.40	2/10/2020	PL19	County	Yes	<null>	On Bond	-77.488072	39.043467
UG0117	Undrgrnddet		2.71	1.37	1.34	2/10/2020	PL19	County	Yes	<null>	On Bond	-77.487878	39.042691
UG0122	Jellyfish		3.51	3.51	0.00	5/13/2020	PL20	County	Yes	<null>	On Bond	-77.459933	39.067329
UG0123	Jellyfish		3.92	3.92	0.00	5/13/2020	PL20	County	Yes	<null>	On Bond	-77.458985	39.068881
UG0124	Jellyfish		6.27	5.87	0.40	5/13/2020	PL20	County	Yes	<null>	On Bond	-77.459035	39.064925
UG0125	Undrgrnddet		1.94	1.94	0.00	5/13/2020	PL19	County	Yes	<null>	On Bond	-77.474953	39.061323
UG0126	Undrgrnddet		0.99	0.99	0.00	5/13/2020	PL19	County	Yes	<null>	On Bond	-77.473648	39.060836
UG0127	Undrgrnddet		3.58	3.58	0.00	5/13/2020	PL19	County	Yes	<null>	On Bond	-77.472874	39.061448
UG0128	Undrgrnddet		3.32	2.97	0.35	5/13/2020	PL19	County	Yes	<null>	On Bond	-77.472319	39.061404
UG0129	BayFilter		3.32	2.97	0.35	5/13/2020	PL19	County	Yes	<null>	On Bond	-77.472262	39.061249
UG0130	Undrgrnddet		1.30	1.30	0.00	5/13/2020	PL45	County	Yes	<null>	On Bond	-77.486414	38.914515
UG0131	Undrgrnddet		0.93	0.93	0.00	5/13/2020	PL45	County	Yes	<null>	On Bond	-77.485387	38.914651
UG0134	CDS		3.96	3.96	0.00	5/26/2020	PL14	County	Yes	<null>	On Bond	-77.530391	39.015546
WP0052	Pnd_Wet	Retention	16.87	15.53	1.34	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.469759	39.018171
WP0053	Pnd_Wet	Retention	10.30	4.23	6.07	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.470600	39.015318
WP0055	Pnd_Wet	Retention	7.81	7.59	0.22	7/1/2019	PL19	County	Yes	<null>	On Bond	-77.442115	39.050199
WP0057	Pnd_Wet		7.22	6.18	1.04	11/12/2019	PL14	County	Yes	<null>	On Bond	-77.525569	39.000173
WP0058	Pnd_Wet	Retention	13.84	3.96	9.88	1/27/2020	PL17	County	Yes	<null>	4/1/2019	-77.549860	38.940828
WP0059	Pnd_Wet	Retention	3.46	0.97	2.49	1/27/2020	PL17	County	Yes	<null>	4/1/2019	-77.549969	38.939145
WP0064	Pnd_Wet		4.11	4.11	0.00	5/13/2020	PL20	County	Yes	<null>	On Bond	-77.459717	39.067988
WP0066	Pnd_Wet		49.32	45.85	3.46	5/26/2020	PL14	County	Yes	<null>	On Bond	-77.531052	39.013555
WP0067	Pnd_Wet		33.94	31.25	2.69	5/28/2020	PL19	County	Yes	<null>	On Bond	-77.514315	39.032026

Loudoun County Virginia
BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	Inspection Date	Functioning As Designed	Description of Maintenance
AB1935	CDS	1/8/2020	Yes	NA
AB2039	Undrgrnddet	1/8/2020	Yes	NA
AB2053	Undrgrnddet	1/8/2020	Yes	NA
AJ2659	Pnd_Wet	3/17/2020	Yes	NA
AJ2730	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Only
AJ3157	Pnd_Dry	5/19/2020	Yes	Preventative Maintenance Only
AJ4238	Pnd_Wet	3/12/2020	Yes	Preventative Maintenance Only
AJ570	Strmcptr	12/6/2019	Yes	NA
AJ629	Strmcptr	12/6/2019	Yes	NA
AJ665	Strmcptr	12/12/2019	Yes	NA
BC124	Undrgrnddet	12/5/2019	No	Control Structure MH3 (MD2705), remove sediment and debris from manhole and detention pipe. Unbury/unblock flow restrictor. Control structure MH4 (MD2706), unblock/unbury flow restrictor. Outfall (MD2707), repair deterioration: spalling/erosion.
BC127	Strmtrt	1/8/2020	Yes	NA
BC131	Strmcptr	1/8/2020	Yes	NA
BC136	Baysvr	12/2/2019	Yes	NA
BC30	Baysvr	1/8/2020	Yes	NA
BC36	Hydroguard	12/27/2019	Yes	NA
BC37	Strmfltr	12/5/2019	Yes	NA
BC38	Undrgrnddet	1/3/2020	Yes	NA
BC39	Baysvr	12/23/2019	Yes	NA
BC4	Pnd_Dry	3/18/2020	Yes	Preventative Maintenance Only
BC44	Pnd_Dry	2/17/2020	Yes	NA
BC45	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only
BC46	Pnd_Dry	3/4/2020	Yes	NA
BC47	Pnd_Dry	3/4/2020	Yes	NA
BC56	Pnd_Dry	3/9/2020	Yes	Preventative Maintenance Only
BC62	Pnd_Dry	2/17/2020	Yes	Preventative Maintenance Only
BC74	Strmtrt	1/8/2020	Unknown	Ensure access to the structure, inspect, and perform maintenance as needed. Replace vandal proof bolts if needed to ensure access.
BC75	Strmtrt	1/8/2020	Unknown	Ensure access to the structure, inspect, and perform maintenance as needed. Replace vandal proof bolts if needed to ensure access. Parge exposed brick around both pipe ends inside JC30008. Locate access to stormtreat outfall. If possible.
BC76	Strmtrt	1/8/2020	Unknown	Ensure access to the structure, inspect, and perform maintenance as needed. Replace vandal proof bolts if needed to ensure access. Parge exposed brick around pipe ends inside JC20010.
BC77	Strmtrt	1/8/2020	Unknown	Ensure access to the structure, inspect, and perform maintenance as needed. Replace vandal proof bolts if needed to ensure access. Parge around the bypass pipe inside JC10048, remove blockage from in front of the PVC outfall. Remove trash/debris.
BC78	Pnd_Dry	3/17/2020	Yes	NA
BC86	Pnd_Dry	2/28/2020	Yes	Preventative Maintenance Only
BC87	Pnd_Dry	2/28/2020	Yes	Preventative Maintenance Only
BC88	Pnd_Dry	2/28/2020	Yes	NA
BT0005	Bioret	10/24/19	Yes	NA
BT0014	Bioret	10/29/19	Yes	NA
BT0022	Bioret	10/29/19	Yes	NA
BT0023	Bioret	10/29/19	Yes	NA
BT0027	Bioret	10/23/19	Yes	NA
BT0028	Bioret	10/23/19	Yes	NA
BT0029	Bioret	10/23/19	Yes	NA
BT0036	Bioret	10/24/19	Yes	Preventative Maintenance Only
BT0038	Bioret	11/1/20219	Yes	NA
BT0043	Bioret	10/24/19	Yes	NA
BT0044	Bioret	10/24/19	Yes	NA
BT0046	Bioret	10/22/19	Yes	NA

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BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	Inspection Date	Functioning As Designed	Description of Maintenance
BT0047	Bioret	10/22/19	Yes	NA
BT0048	Bioret	10/22/19	Yes	NA
BT0049	Bioret	10/22/19	Yes	Preventative Maintenance Only
BT0050	Bioret	10/23/19	Yes	Preventative Maintenance Only
BT0051	Bioret	10/23/19	Yes	NA
BT0052	Bioret	10/23/19	Yes	NA
BT0053	Bioret	10/15/19	Yes	NA
BT0064	Bioret	10/21/19	Yes	Preventative Maintenance Only
BT0065	Bioret	10/22/19	Yes	NA
CH8905	Pnd_Dry	3/18/2020	Yes	NA
CH9112	Pnd_Wet	3/18/2020	Yes	Preventative Maintenance Only
CH9243	Pnd_Wet	3/18/2020	Yes	Preventative Maintenance Only
CH9496	Pnd_Wet	3/18/2020	Yes	NA
CP10293	Strmfltr	12/23/2019	Yes	NA
CP10299	CDS	12/23/2019	Yes	NA
CP10336	Strmfltr	12/23/2019	Yes	NA
CP2411	Baysvr	12/23/2019	Unknown	Waiting on GKY to get back regarding whether the fence is in the easement.
CP2463	Strmfltr	1/3/2019	Yes	NA
CP2471	Strmcptr	1/3/2020	Yes	NA
CP406	Bioret	10/17/19	Yes	Preventative Maintenance Only
CP407	Bioret	10/17/19	Yes	NA
CP4157	Pnd_Dry	4/14/2020	Yes	Preventative Maintenance Only
CP420	Bioret	10/17/19	Yes	NA
CP421	Bioret	10/17/19	Yes	NA
CP422	Bioret	10/17/19	Yes	NA
CP439	Bioret	10/17/19	Yes	NA
CP445	Bioret	10/17/19	Yes	NA
CP446	Bioret	10/17/19	Yes	NA
CP6545	Pnd_Wet	5/13/2020	Yes	NA
CP6569	Pnd_Wet	3/12/2020	Yes	NA
CP772	Undrgrnddet	12/4/2019	Yes	NA
CP8645	Strmfltr	12/20/2019	Yes	NA
CP8648	Strmfltr	12/20/2019	Yes	NA
CP8650	Strmfltr	12/20/2019	Yes	NA
CP8846	Bioret	10/14/19	Yes	Preventative Maintenance Only
CP8872	Pnd_Wet	3/24/2020	Yes	NA
CP8958	Pnd_Wet	3/24/2020	Yes	Remove the low flow blockage. Remove the blockage at inflow # 2. Remove sediment at CP8956 and add new rip rap.
CP9111	Bioret	10/10/19	Yes	NA
CP9118	Pnd_Wet	3/26/2020	Yes	NA
CS12	Strmcptr	12/23/2019	Yes	NA
CS13	Bioret	10/29/19	Yes	NA
DB1192	Pnd_Wet	3/18/2020	Yes	Repair erosion and animal holes at the control structure.
DB1257	Pnd_Wet	3/17/2020	Yes	Preventative Maintenance Only
DB1337	Pnd_Wet	3/9/2020	Yes	Remove blockages at DB1336 & GC1520. Repair separtions at DB1335 & DB1327
DD104	Strmcptr	1/9/2020	Yes	NA
DD105	Strmcptr	1/9/2020	Yes	NA
DD111	Strmfltr	12/2/2019	Yes	NA
DD112	Strmfltr	12/2/2019	Yes	NA
DD118	Strmfltr	12/6/2019	Yes	NA
DD120	Strmfltr	12/5/2019	Yes	NA
DD122	Strmfltr	12/5/2019	Yes	NA
DD23	Strmfltr	12/2/2019	Yes	NA
DD231	Pnd_Dry	3/12/2020	Yes	NA

Loudoun County Virginia

BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	Inspection Date	Functioning As Designed	Description of Maintenance
DD32	Bioret	10/30/19	Yes	Preventative Maintenance Only
DD33	Strmcptr	1/8/2020	Yes	NA
DD39	Strmfltr	12/2/2019	Yes	NA
DD43	Strmfltr	12/2/2019	Yes	NA
DD5	Strmfltr	12/5/2019	Yes	NA
DD51	Strmfltr	12/5/2019	Yes	NA
DD54	Bioret	10/22/19	Yes	NA
DD61	Undrgrnddet	1/6/2020	Unknown	Remove blockages preventing access to the control structure.
DD65	Pnd_Dry	3/26/2020	Yes	Preventative Maintenance Only
DD68	Bioret	10/18/19	Yes	NA
DD69	Bioret	10/18/19	Yes	NA
DD70	Bioret	10/18/19	Yes	NA
DD89	Baysvr	12/20/2019	Yes	NA
DF129	Bioret	10/23/19	Yes	NA
DF130	Bioret	10/23/19	Yes	Preventative Maintenance Only
DF131	Bioret	10/23/19	Yes	NA
DF141	Bioret	10/28/19	Yes	NA
DF142	Bioret	10/28/19	Yes	NA
DF146	Strmfltr	12/18/2019	Yes	NA
DF166	Bioret	10/24/19	Yes	NA
DF167	Bioret	10/24/19	Yes	Preventative Maintenance Only
DF170	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only
DF201	Bioret	10/24/19	Yes	Preventative Maintenance Only
DF202	Bioret	10/18/19	Yes	NA
DF203	Pnd_Dry	5/13/2020	Yes	NA
DF204	Pnd_Dry	5/13/2020	Yes	NA
DF209	Bioret	11/1/19	Yes	NA
DF210	Bioret	11/1/19	Yes	NA
DF214	Bioret	11/1/19	Yes	NA
DF216	Undrgrnddet	1/3/2020	Yes	NA
DF219	Pnd_Wet	3/26/2020	Yes	NA
DF220	Bioret	10/25/19	Yes	Preventative Maintenance Only
DF224	Pnd_Dry	3/9/2020	Yes	Preventative Maintenance Only
DF233	Bioret	10/18/19	Yes	NA
DF267	Pnd_Dry	3/4/2020	Yes	NA
DF276	Pnd_Wet	3/12/2020	Yes	NA
DF336	Pnd_Wet	3/12/2020	Yes	NA
DF41	Bioret	10/24/19	Yes	Preventative Maintenance Only
DF42	Bioret	10/24/19	Yes	Preventative Maintenance Only
DF43	Strmfltr	1/3/2020	Yes	NA
DF45	Pnd_Wet	3/26/2020	Yes	NA
DF56	Pnd_Wet	3/9/2020	Yes	NA
DF63	Pnd_Dry	4/27/2020	Yes	Preventative Maintenance Only
DF70	Pnd_Wet	2/17/2020	Yes	NA
DF71	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only
DF88	Bioret	10/21/19	Yes	NA
DF89	Bioret	10/21/19	Yes	NA
DF90	Bioret	10/21/19	Yes	NA
DF95	Bioret	10/21/19	Yes	NA
DK20002	Baysvr	12/18/2019	Yes	NA
DK20004	Strmfltr	12/18/2019	Unknown	Remove sod covering the buried manhole structure.
DK20006	Strmfltr	12/18/2019	Yes	NA
DK20026	Strmfltr	12/6/2019	Yes	NA
DK20030	Strmfltr	12/6/2019	Yes	NA

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BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	Inspection Date	Functioning As Designed	Description of Maintenance
DP0023	Pnd_Dry	2/28/2020	Yes	Preventative Maintenance Only
DW14	Pnd_Dry	3/26/2020	Yes	NA
DW148	Baysvr	12/20/2019	Yes	NA
DW151	Baysvr	12/20/2019	Yes	NA
GC1221	Pnd_Dry	3/17/2020	Yes	NA
GC1224	Pnd_Dry	5/20/2020	Yes	Preventative Maintenance Only
GC187	Bioret	10/21/19	Yes	NA
GC188	Bioret	10/21/19	Yes	NA
GC189	Bioret	10/21/19	Yes	NA
GC937	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only
GC939	Pnd_Wet	2/17/2020	Yes	Remove vegetation at the outfall. Parge pipe separation at GC918. Repair the dam erosion.
GC940	Pnd_Dry	3/4/2020	Yes	NA
GC941	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only
JC2411	Pnd_Dry	2/17/2020	Yes	Preventative Maintenance Only
JC4182	Pnd_Dry	4/27/2020	Yes	NA
JC4380	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only
JC4381	Pnd_Dry	4/27/2020	Yes	NA
JC4527	Pnd_Wet	2/17/2020	Yes	Preventative Maintenance Only
JC4577	Pnd_Dry	3/4/2020	Yes	NA
JC4579	Pnd_Wet	2/20/2020	Yes	Preventative Maintenance Only
JC50004	Pnd_Dry	3/4/2020	Yes	NA
JC50005	Pnd_Dry	3/4/2020	Yes	NA
JC50044	Pnd_Dry	2/28/2020	Yes	NA
JC50045	Pnd_Wet	3/24/2020	Yes	Preventative Maintenance Only
JC50047	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Only
JC6489	Pnd_Dry	3/17/2020	Yes	NA
JC6490	Pnd_Dry	3/17/2020	Yes	NA
JC6551	Pnd_Wet	3/18/2020	Yes	Preventative Maintenance Only
JC6552	Pnd_Wet	5/19/2020	Yes	Preventative Maintenance Only
JC6682	Pnd_Dry	3/17/2020	Yes	Preventative Maintenance Only
JC6683	Pnd_Dry	3/18/2020	Yes	Preventative Maintenance Only
JC6684	Pnd_Dry	3/18/2020	Yes	Preventative Maintenance Only
JC6844	Pnd_Dry	3/18/2020	Yes	Preventative Maintenance Only
JC6845	Pnd_Dry	5/19/2020	Yes	Preventative Maintenance Only
KD50006	Pnd_Dry	2/28/2020	Yes	Repair the low flow pipe, remove trees & veg from the pond floor & emerg spillway, repair pond floor erosion.
KD50007	Pnd_Dry	2/28/2020	Yes	Preventative Maintenance Only
KD50011	Pnd_Dry	2/28/2020	Yes	NA
KD50012	Pnd_Dry	2/28/2020	Yes	NA
KD50013	Pnd_Dry	2/28/2020	Yes	Preventative Maintenance Only
KS0215	Bioret	10/21/19	Yes	NA
KS0231	Bioret	10/28/19	Yes	Preventative Maintenance Only
KS0235	Bioret	10/29/19	Yes	Preventative Maintenance Only
KS0236	Bioret	10/29/19	Yes	Preventative Maintenance Only
KS0242	Bioret	10/29/19	Yes	Preventative Maintenance Only
KS0243	Bioret	10/29/19	Yes	Preventative Maintenance Only
KS0370	Bioret	10/28/19	Yes	NA
KS0371	Bioret	10/28/19	Yes	NA
KS0372	Bioret	10/28/19	Yes	NA
KS0373	Bioret	10/28/19	Yes	Preventative Maintenance Only
KS0374	Bioret	10/28/19	Yes	NA
KS0375	Bioret	10/28/19	Yes	NA
KS0376	Bioret	10/28/19	Yes	NA
KS0377	Bioret	10/28/19	Yes	NA

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FCTID	BMP Type	Inspection Date	Functioning As Designed	Description of Maintenance
KS0385	Bioret	10/24/19	Yes	Preventative Maintenance Only
KS0399	Bioret	10/28/19	Yes	Preventative Maintenance Only
KS0400	Strmcptr	12/12/2019	Yes	NA
KS0410	Pnd_Dry	4/14/2020	Yes	NA
KS0432	Strmfltr	12/6/2019	Yes	NA
KS0433	Strmfltr	12/6/2019	No	Reinstall the outlet riser.
KS0800	Pnd_Dry	6/8/2020	Yes	NA
KS0801	Pnd_Wet	6/8/2020	Yes	NA
KW498	Pnd_Dry	4/16/2020	Yes	Preventative Maintenance Only
KW86	Baysvr	12/23/2019	Yes	NA
RA0104	Strmcptr	1/9/2020	Yes	NA
RA0135	Strmcptr	1/9/2020	Yes	NA
RA0365	Bioret	10/14/19	Yes	Preventative Maintenance Only
RA5761	BayFilter	12/4/2019	Yes	NA
RJ0001	Strmfltr	12/6/2019	Yes	NA
RJ0044	Bioret	10/25/19	Yes	NA
RJ0073	Strmfltr	1/3/2020	Yes	NA
RJ0075	Strmfltr	1/3/2020	Yes	NA
RJ0155	Pnd_Wet	3/24/2020	Yes	Preventative Maintenance Only
RJ0161	Pnd_Dry	3/12/2020	Yes	Preventative Maintenance Only
RJ0164	Strmfltr	12/6/2019	Yes	NA
RJ0168	Pnd_Dry	3/12/2020	Yes	Preventative Maintenance Only
RJ0191	Strmfltr	12/12/2019	Yes	NA
RJ0196	Strmcptr	12/12/2019	Yes	NA
RJ0199	Pnd_Dry	3/26/2020	Yes	Preventative Maintenance Only
RJ0203	Pnd_Wet	2/28/2020	Yes	Preventative Maintenance Only
SP2	Undrgrnddet	1/8/2020	Yes	NA
SR719	Undrgrnddet	12/6/2019	Yes	NA
UG0003	CDS	1/6/2020	Yes	NA
UG0014	Strmfltr	1/3/2020	Yes	NA
UG0017	Strmfltr	1/6/2020	Yes	NA
UG0022	Strmfltr	12/18/2019	Yes	NA
UG0023	Strmfltr	12/18/2019	Yes	NA
UG0032	Jellyfish	12/27/2019	Yes	NA
UG0033	Strmfltr	1/6/2020	No	The 10" PVC connector pipe needs to connect to the upstream cartridge bay in order to treat overflow here before it breaches the weir into the first outlet bay. An energy dissipator must be installed on the downstream end of this pipe and cleanout.
UG0051	Downstream_Defender	12/12/2019	Yes	NA
UG0052	Undrgrnddet	12/4/2019	Yes	NA
UG0053	CDS	12/4/2019	Yes	NA
UG0054	CDS	12/4/2019	Yes	NA
UG0055	CDS	12/20/2019	Yes	NA
UG0063	CDS	12/18/2019	Yes	NA
UG0087	Undrgrnddet	1/8/2020	Yes	NA
UG0095	Undrgrnddet	1/3/2020	Yes	NA
WB20063	Strmcptr	12/12/2019	Yes	NA
WB20064	Strmcptr	12/12/2019	Yes	NA
WB20065	Strmcptr	12/12/2019	Yes	NA
WB20077	Baysvr	12/23/2019	Yes	NA
WB20078	Baysvr	12/23/2019	Yes	NA
WB20131	CDS	1/9/2020	Yes	NA
WB20137	CDS	1/9/2020	Yes	NA
WB20140	CDS	1/9/2020	Yes	NA
WB50070	Pnd_Dry	3/4/2020	Yes	Preventative Maintenance Only

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FCTID	BMP Type	Inspection Date	Functioning As Designed	Description of Maintenance
WB51005	Pnd_Wet	3/9/2020	Yes	NA
WJ118	Pnd_Dry	3/12/2020	Yes	NA
WJ268	Pnd_Wet	3/12/2020	Yes	Separations at WJ316 & WJ310. Veg/blockage at WJ267. Veg at WJ271. Bare areas on dam. Blockage at low flow orifice.
WJ89	Pnd_Dry	3/12/2020	Yes	Open church stack, add new stone. Remove veg and repair erosion on pond floor. Remove sediment at pipe WB124.
WP0003	Pnd_Wet	2/28/2020	Yes	Preventative Maintenance Only
WP0026	Pnd_Wet	4/16/2020	Yes	NA
WP0044	Pnd_Wet	4/24/2020	Yes	NA
WP0048	Pnd_Wet	2/20/2020	Yes	NA

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BMP Inspections (Private Ownership) Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	Inspection Date	Functioning As Designed	Enforcement Action Taken
AB1658A	Undrgrnddet	1/9/2020	Yes	Preventative Maintenance Letter Sent
AJ3389	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Letter Sent
AJ3598	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Letter Sent
AJ4194	Pnd_Wet	3/12/2020	Yes	Preventative Maintenance Letter Sent
AJ4195	Pnd_Wet	3/12/2020	Yes	Preventative Maintenance Letter Sent
AJ4196	Pnd_Wet	3/12/2020	Yes	Preventative Maintenance Letter Sent
BC26	Undrgrnddet	1/8/2020	Yes	Preventative Maintenance Letter Sent
BC40	Undrgrnddet	12/6/2019	No	Maintenance Required Letter Sent
BC57	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
CP8190	Strmcptr	12/12/2019	Yes	Preventative Maintenance Letter Sent
CP8224	Pnd_Wet	3/18/2020	Yes	Preventative Maintenance Letter Sent
CP8301	Strmcptr	12/12/2019	Yes	Preventative Maintenance Letter Sent
CP878	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
CS14	Strmfltr	12/18/2019	Yes	Preventative Maintenance Letter Sent
CW7	Pnd_Wet	3/26/2020	Yes	Preventative Maintenance Letter Sent
DD103	Baysvr	1/6/2020	Yes	Preventative Maintenance Letter Sent
DD24	Undrgrnddet	12/5/2019	Yes	Preventative Maintenance Letter Sent
DD25	Strmcptr	12/5/2019	Yes	Preventative Maintenance Letter Sent
DD27	Undrgrnddet	12/5/2019	Yes	Preventative Maintenance Letter Sent
DD28	Strmfltr	12/6/2019	Yes	Preventative Maintenance Letter Sent
DD30	Strmfltr	12/6/2019	Yes	Preventative Maintenance Letter Sent
DD62	Baysvr	12/20/2019	Yes	Preventative Maintenance Letter Sent
DD63	Baysvr	12/20/2019	Yes	Preventative Maintenance Letter Sent
DD77	Strmtrt	12/12/2019	Yes	Preventative Maintenance Letter Sent
DD95	Bioret	10/21/19	Yes	Preventative Maintenance Letter Sent
DF221	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
DF222	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
DF223	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
DF231	Pnd_Wet	3/18/2020	Yes	Preventative Maintenance Letter Sent
DF234	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
DF235	Bioret	10/18/19	Yes	Preventative Maintenance Letter Sent
DF57	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Letter Sent
GC1563	Pnd_Wet	3/12/2020	Yes	Preventative Maintenance Letter Sent
JC77	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Letter Sent
KS0369	Undrgrnddet	12/4/2019	Yes	Preventative Maintenance Letter Sent
KS0378	Pnd_Dry	4/28/2020	Yes	Preventative Maintenance Letter Sent
KS0389	Bioret	10/14/19	Yes	Preventative Maintenance Letter Sent
KS0390	Bioret	10/14/19	Yes	Preventative Maintenance Letter Sent
KS0430	Bioret	10/28/19	Yes	Preventative Maintenance Letter Sent
KS0431	Bioret	10/28/19	Yes	Preventative Maintenance Letter Sent
MD4151	Pnd_Wet	3/17/2020	Yes	Preventative Maintenance Letter Sent
RA0186	Pnd_Wet	2/28/2020	Yes	Preventative Maintenance Letter Sent
RA0364	Bioret	10/14/19	Yes	Preventative Maintenance Letter Sent
RA5202	Pnd_Wet	3/24/2020	Yes	Preventative Maintenance Letter Sent
RJ0014	Bioret	10/29/19	Yes	Preventative Maintenance Letter Sent
RJ0015	Bioret	10/29/19	Yes	Preventative Maintenance Letter Sent
RJ0016	Strmfltr	12/6/2019	Yes	Preventative Maintenance Letter Sent
RJ0023	Undrgrnddet	12/12/2019	Yes	Preventative Maintenance Letter Sent
RJ0029	Pnd_Wet	3/9/2020	Yes	Preventative Maintenance Letter Sent
RJ0166	Pnd_Dry	4/27/2020	Yes	Preventative Maintenance Letter Sent
RJ0219	Strmfltr	12/12/2019	Yes	Preventative Maintenance Letter Sent
SP22	Undrgrnddet	12/12/2019	Yes	Preventative Maintenance Letter Sent
UG0092	CDS	1/6/2020	Yes	Preventative Maintenance Letter Sent
WB50072	Pnd_Wet	2/17/2020	Yes	Preventative Maintenance Letter Sent

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BMP Inspections (Private Ownership) Within the MS4 Area from July 1, 2019 - June 30, 2020

FCTID	BMP Type	Inspection Date	Functioning As Designed	Enforcement Action Taken
WB50101	Bioret	11/4/19	Yes	Preventative Maintenance Letter Sent
WJ145	Pnd_Wet	3/12/2020	Yes	Preventative Maintenance Letter Sent
WP3096	Baysvr	1/8/2020	Yes	Preventative Maintenance Letter Sent

Appendix L

Training

Table 6: Stormwater Pollution Prevention Training Attendance Sheet

Training Class:	SWPPP / PZ / GH	**Location:**	Claude Moore Rec Center
Instructor:	Max Walker (GKY)	**Date:**	12/4/19

Student Name (please print)	Student Signature	Department	Extension	E-mail
Austin Mehalic		PRCS	571-233-1137	austin.mehalic@loudoun.gov
Dodie Lewis		PRCS	571-258-3704	dodie.lewis@loudoun.gov
Josh Ashby		PRCS	571-233-1439	Joshua.Ashby@loudoun.gov
ELDEN GROVER		PRCS	571-233-0614	elden.grover@loudoun.gov
Brian Danner		PRCS	571-258-3702	brian.danner@loudoun.gov
Greg Davidson		PRCS	703-737-8554	greg.davidson@loudoun.gov

Table 5: Stormwater Pollution Prevention Training Documentation

Stormwater Pollution Prevention Training	Date	Location	Training Instructor (print)	Training Instructor (signature)
Chris Stone	12/3/2019	801 - Rm 102	Jason George	[illegible]
Ken Prisby	12/3/19			
Kate Helms	12/3/19			
David Wayland	12/03/19			

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Stormwater Pollution Prevention Training	Date	Location	Training Instructor (print)	Training Instructor (signature)
Karl Evans	12-3-19	Room 102	Jason George	[illegible]
Brent Payne	12-3-19	801 Sycolin Rd.		
Patrick Maddox	12-3-19	801 Sycolin Rd.		
Kevin Lenhart	12-3-19	801 Sycolin Rd		
Randy Pearson	12-3-19			
Everton Morgan	12-3-19	" "		
Donnie Mason	12-3-19			
[illegible]	12/3/19	801 Sylvan Rd		
[illegible]	12-3-19			
Jeff Hacoa	12-3-19	1002-B Sycolin Rd		
Edgar Pollen	12-3-19	1002-B Sycolin Rd		
Jason Wynne	12-3-19	1002-B Sycolin Rd		
Michele Seib	12/3/2019	801 Sycolin Rd Leesburg		
Kathy Willis	12/3/2019	801 Sycolin Rd		

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Seminar Sign-In Sheet

CONTECH ENGINEERED SOLUTIONS

Topic Stormwater BMP Maintenance

Company Loudoun County Dept of Public Works

Date 10/30/19

Name	E-mail address	PDH Certificate? (✓)
Ken Prisby	Ken.Prisby@Loudoun.Gov	
Josh Pratt	Joshua.Pratt@Loudoun.Ga	
Kevin Lenhart	Kevin.Lenhart@loudoun.gov	
Norm Pearson		
Jeff Haga	jeffery.haga@loudoun.gov	
Donnie Muson	Donnie.Muson@loudoun.gov	
Edgar Pollen JR	Edgar.Pollen@loudoun.gov	
David Wayland	david.wayland@loudoun.gov ✓	
Chris Stone	chris.stone@loudoun.gov	
Kathy Willis	Kathleen.willis@loudoun.gov	
Dennis Cumbin	dennis.cumbin@loudoun.gov	
Karl Evans	Karl.evans@loudoun.gov	

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Stormwater Pollution Prevention Training	Date	Location	Training Instructor (print)	Training Instructor (signature)
Corey Kirkpatrick	12/12/19	Trailview	Max Koker (GKY)	[illegible]
Steven Welch	12/12/19			
MARK FAUBLE	12-12-2019			
Jonathan Shepherd	12/12/19			
[illegible]	12			
Tim Martin	12/12/19			
Joey Garlem	12/12/19			
Dave Thomas	12/12/19			
Randy House	12/12/19			
PAUL BATTEN	12/12/19			
SEAN JONES	12/12/19			
C. Aaron Dixon	12/12/19			

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Stormwater Pollution Prevention Training	Date	Location	Training Instructor (print)	Training Instructor (signature)
JEFF JONES	12-12-2019	Trailview	Max Kiker	[illegible]
David Zidek	12/12/19			
JACK MACDONOUGH	12/12/19			
Timothy Depoy	12/12/19			
Justin Edwards	12/12/19			
Charles Chanell	12DEC19			
Ricky Hummer	12/12/19			
Chris Ohler	12/12/19			
John Gaerig	12/12/19			
Ted Tippett	12/12/19			
Michael Pittinger	12/12/19			
Tom Reed	12/12/19			
Andy Tomlinson	12/12/19			
Butch Payne	12/12/19			
Kevin Kelley	12/12/19			
Adam Bailey	12/12/19			
Danny Cury	12-12-19			
Daniel Thacker	12-12-19			

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Table 5: Stormwater Pollution Prevention Training Documentation

Stormwater Pollution Prevention Training	Date	Location	Training Instructor (print)	Training Instructor (signature)
Ben Pickering	12-12-19			
Fred Embrey	12-12-19			
Chan Herrell	12-12-19			
Joe Payne II	12-12-19			
Shane Reed	12-12-19			
David Brown	12-12-19			
Jabie M. Plank	12/12/19			
Mike Lugo	12/12/19			
Jason Grow	12/12/19			
Danny Vance	12/12/19			
James Lickey	12/12/19			
Jeff Demory	12/12/19			
Cole Pitcock	12/12/19			
Danny Edmondson	12/12/19			
Cole Pitcock	12-12-19			

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