



Loudoun County, Virginia

Department of General Services

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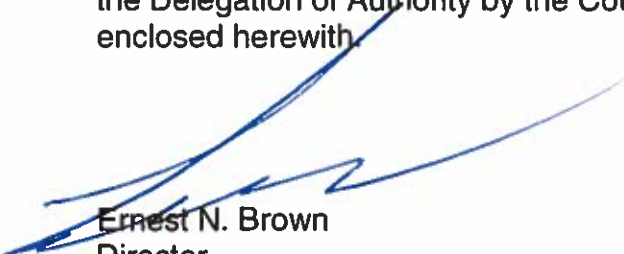
September 30, 2019

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 1 Annual Report;
Reporting Period: July 1, 2018 – June 30, 2019.

"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 1 Annual Report, July 1, 2018 – June 30, 2019, Permit Number: VAR040067
2. Copy of Delegation of Authority

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

**Permit Year 1 Annual Report
Reporting Period: July 1, 2018 – June 30, 2019**



Submitted October 1, 2018

**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
Name

Director, Department of General Services
Title


Responsible Official Signature

9/30/2019
Date

VAR040067
Permit Number

Loudoun County
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	12	
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	14	



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	15	
E.1.g.(2)	A list of strategies used to communicate each high-priority stormwater issue.		BMP 1D	16	
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	19	
E.2.f.(2)	A webpage address to the permittee's MS4 program and stormwater website		BMP 2B	20	
E.2.f.(3)	A description of the public involvement activities implemented by the permittee		BMP 2C	20	
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	20	
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	23	



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	25	
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	25	
E.3.e.(3)(b)	The date or dates that the discharge was observed, reported, or both		BMP 3F	25	
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	25	
E.3.e.(3)(d)	How the investigation was resolved		BMP 3F	25	
E.3.e.(3)(e)	A description of any follow-up activities		BMP 3F	25	
E.3.e.(3)(f)	The date the investigation was closed		BMP 3F	25	
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	26	
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	26	
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.		BP 4A	26	
E.4.d.(2)	Total number of inspection conducted; and		BMP 4A	26	
E.4.d.(3)	The total number and type of enforcement actions implemented and the type of enforcement actions.		BMP 4A	26	
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	29	
E.5.i.(1)(a)	The number of privately owned stormwater management facility inspections conducted; and		BMP 5E	29	



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	29	
E.5.i.(2)	Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;		BMP 5C	28	
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	29	
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	28	
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	29	
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	31	
E.6.q.(2)	A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period;		BMP 6B	31	
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	31	
E.6.q.(4)	A summary of any new turf and landscape nutrient management plans developed that includes:		BMP 6E	33	



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	33	
E.6.q.(4)(b)	The date of the approved nutrient management plan; and		BMP 6E	33	
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	35	
E.6.q.(5)(a)	The date of the training event;		BMP 6H	35	
E.6.q.(5)(b)	The number of employees who attended the training event; and		BMP 6H	35	
E.6.q.(5)(c)	The objective of the training event		BMP 6H	35	
Part II. TMDL Special Conditions			BMP 6H	35	
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	12	
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	12	
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	12	
A.13.d.	A list of BMPs that are planned to be implemented during the next reporting period.		BMP F	12	
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	14	
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, 2018 to June 30, 2019 (Year 1).

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 the revised program plan is provided in Appendix A.

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 May 1, 2019 and posted to the Loudoun County stormwater website prior to May 30, 2019 (Appendix A).

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 of 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.



BMP Status: Permit Year 1 requirements 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: Permit Year 1 requirements 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 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 shall be conducted during Permit Year 2 with future implementation through the end of the permit cycle.

BMP Status: Permit Year 1 requirements 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 is required to be drafted and completed by November 1, 2019. A draft of the Action Plan has been created and is currently under review. The plan is on track to be completed by the required date.

The Action Plan is also required to be submitted for public comment for no less than 15 days. The Action Plan is on track to be submitted by November 1, 2019 and will be submitted for public comment for at least 15 days. A summary of the public comments received will be provided in the Year 2 Annual Report.



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 1, Loudoun County purchased 30 phosphorus credits as a means of achieving the required pollution reduction goals of the Chesapeake Bay TMDL (Appendix B).

Table 1 below shows Loudoun County's progress toward reaching the required reductions for this permit cycle. The information in Table one is from the *Draft Loudoun County, Virginia Phase II Chesapeake Bay TMDL Action Plan*. The final numbers will be provided with the final plan on November 1, 2019.

The county continued working toward meeting the 40% pollution reduction requirements during Year 1 by working on the following BMPs:

1. Over-Treatment of stormwater management facilities (0 lbs. TP, 0 lbs. TN, 0 lbs. TSS). The county will be reviewing this BMP in Year 2 to determine if it is still a viable BMP.
2. Stormwater retrofit projects.
3. Development of Nutrient Management Plans (NMP) outside of the MS4 (6.13 pounds TN, and 0.12 pounds of TP).
4. Septic System Disconnects (29 lbs. TN).
5. Nutrient Purchases (30 lbs. TP, 182.66 lbs. TN, 3,894.79 lbs. TSS).

Table 1: Summary of Permit Year 1 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, 2018	3,074.64	596.18	405,606.33
- Over-Treatment of stormwater management facilities	0	0	0
- *Stormwater retrofit projects	0	0	0
- Development of NMP outside of the MS4	6.13	0.12	0
- Nutrient Credit Purchase	182.66	30	3,894.79
= Remainder/(Excess) Toward 40% Target	3,133.69	126.88	195,119.63

* No stormwater retrofit projects were completed during the permit cycle.

The following BMPs are planned for the next reporting period:

1. Over-Treatment of stormwater management facilities
2. Stormwater retrofit projects
 - a. Loudoun Valley Estates II constructed wetland. Construction is planned to begin in Fall 2019.
 - b. Countryside Stream Restoration. The design of this project is planned to be completed during Year 2. It is projected that construction will begin in Year 3.



- c. Trilside Park Stream Restoration. The design for this stream restoration project is planned for Year 2.
- d. Retrofit of dry pond (MD1745) to a constructed wetland. Feasibility study and design are projected for Permit Year 2.
- 3. Development of Nutrient Management Plans (NMP) outside of the MS4.
- 4. Septic System Disconnects.
- 5. Nutrient Purchases. Loudoun County is planning to purchase 30 phosphorus with associated nitrogen and TSS credits in Year 2.

BMP Status: Permit Year 1 requirements complete. This BMP is ongoing.

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

Permit Section: Part I, D 5

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 to the plan.

The status report on implementation of the local TMDLs for Goose Creek (benthic) and Bull Run (benthic and bacteria) watersheds is provided in Appendix C.

BMP Status: Permit Year 1 requirements 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 meet the current permit requirements.

During Permit Year 1, the PEOP was updated to meet the current permit requirements (Appendix D). The revised PEOP will be implemented in the following permit years.

BMP Status: Revised PEOP drafted in Permit Year 1. 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 (Appendix D).



BMP Status: The revised PEOP identifies the high-priority stormwater issues in Permit Year 1. These will be reviewed annually as part of the overall program plan review to establish that they are still effective at meeting the intended education goal. 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 revised PEOP (Appendix D) 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 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.

The Loudoun County PEOP was revised during this permit cycle to include all of the parameters outlined within this GP section. A copy of the revised PEOP (version 2, June 10, 2019) is provided in Appendix D. The PEOP will 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 1: 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 1. 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 500 brochures were distributed throughout Year 1.

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 1, 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.

Total Household Television Impressions	33,591,119
Total Digital Impressions (internet banner ads and in-stream video ads)	769,300
Number of Times the Ad Aired (July 2018 – June 2019)	9,416
Visits to the website (www.onlyrain.org)	6,674

The televised PSAs reached >75% of the target audience in Northern Virginia. Additional details are included in Appendix E.



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

BMP Status: Year 1 requirements 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 activities, stormwater pollution concerns, public input and comments. These are listed below:

- Loudoun Express Request (LEEx). 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 is provided in Appendix F.

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

BMP Status: Year 1 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 complete. The stormwater website will continue to be updated as needed.

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 list in the general permit Table 2 (see Figure 2).

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 2: MS4 General Permit Table 2.

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 2 below lists the household hazardous waste events held in Permit Year 1.



Table 2: Household Hazardous Waste Events - Permit Year 1

Date	Location	Number of Participants	Tons Collected
July 7, 2018	Lovettsville Elementary School	205	6.9
September 22, 2018	Harmony Park and Ride, Hamilton	381	12.4
October 5, 2018	Loudoun County Landfill	10	2.5
October 13, 2018	751 Miller Drive, Leesburg	380	13.9
November 17, 2018	Claude Moore Park, Sterling	410	11.3
March 23, 2019	751 Miller Drive, Leesburg	550	15.9
April 13, 2019	Harmony Park and Ride, Hamilton	270	10.2
May 4, 2019	Ashburn North Park and Ride, Ashburn	470	9.3
May 17, 2019	Loudoun County Landfill	11	1.4
June 22, 2019	Freedom High School, South Riding	430	13.3
TOTAL		3,117	97.1

Loudoun County Elementary School Water Walks

Throughout Year 1, DGS staff educated children at various County elementary schools about stormwater and the environment. In October 2018, DGS staff provided teacher specific training regarding watersheds, the water cycle and stormwater management.

In spring 2019, DGS staff, 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 25, 2019	Belmont Station Elementary School
February 26, 2019	Meadowland Elementary School
February 27, 2019	Lovettsville Elementary School
February 28, 2019	Stuart Weller Elementary School
March 1, 2019	Rolling Ridge Elementary School
March 4, 2019	Sanders Corner Elementary School
March 5, 2019	Goshen Post Elementary School
March 6, 2019	Frances Hazel Reid Elementary School
March 7, 2019	Mill Run Elementary School

Storm Drain Marking Program

Loudoun County began a storm drain marking program a number of 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 1 a total of 622 storm drain markers were distributed to one Boy Scout and two county residents that conducted storm drain marking projects throughout the County. To date, the program has installed approximately 11,220 storm drain markers.



Presentations

China Delegation - In December 2018, DGS was requested to present in conjunction with the Loudoun County Agricultural Extension Office to a delegation of Chinese Government officials. The delegation was a group of officials who were standing up the China National Flood Control and Drought Prevention and Resistance Program. DGS staff talked about how municipal stormwater is managed (quantity and quality) and the different programs, tactics, and methods that are used throughout the Chesapeake Bay Watershed to achieve clean water goals.

Virginia Lakes and Watershed Conference – Staff from DGS presented “From CAD to Cattails” a presentation on the overall stormwater BMP process in Loudoun County. This presentation outlined the BMP process from design to long term maintenance.

BMP Status: Year 1 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 2019.

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. 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. 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 G. The most up to date stormwater information can be obtained by contacting the Loudoun County Stormwater Team.

BMP Status: Year 1 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 during this permit cycle (Appendix H). 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 permittees.

BMP Status: Year 1 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. The revised procedures can be found in Appendix I.

The Loudoun County IDDE procedures will be provided upon request [Part I E 3 d (3)].

BMP Status: Complete.



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 previously established IDDE procedures. The results of this effort are summarized below. For the rest of the permit cycle (years 2-5), the county will implement the procedures outlined in the new IDDE procedures established above.

The county conducted dry weather screening (Appendix J) on a total of 325 regulated MS4 outfalls. Of those outfalls investigate, 306 were found to be "clear" of dry weather flow, 15 were found to be "suspect", and 4 were found to be "illicit". To date, the suspect and illicit discharges have been reviewed and the appropriate actions have been taken as outlined in the County's SOP.

BMP Status: Year 1 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 1, 52 suspected illicit discharges were reported to DGS. To date, 40 of these reports have been resolved and 12 of these cases remain under investigation. This report includes a summary of each investigation (Appendix K) 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. 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 L.

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 3 provides a summary of land-disturbing activities for Permit Year 1, as required by the Section of the GP.

Table 3: Summary of Land-Disturbing Activities - Permit Year 1

Item	Quantity (Period 7/1/2018-6/30/2019)
Total Number of E&S Inspections	14,058
Total Number of Enforcement Actions	62
Number of Notices to Comply Noted	197*
Number of Notices to Comply Corrected	194
Number of Stop Work Orders Noted	31
Number of Stop Work Orders Corrected	13 (4 at the County Attorney’s Office)
Number of Grading Permit Non-Filers Identified	34

* There are three cases where the owner is working directly with the County to resolve the documented issues

BMP Status: Year 1 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: 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. 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 its Virginia Stormwater Management Program (VSMP) consistent with all applicable state regulations. See Appendix M 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 activities 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)

The County will continue to follow the current inspection and maintenance procedures. In Permit Year 1, the county will review its current procedures and revise or update as needed. These revised procedures will be implemented in the remaining permit years.

In Year 1, the existing inspection and maintenance procedures were reviewed and revised. The updated procedures are provided in Appendix N.

BMP Status: Year 1 procedures updated. 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 1 post-construction stormwater BMP inspections are summarized below and the details of each inspection are provided in Appendix O.



In Year 1, structural inspections were conducted on 235 wet and dry ponds and 22 bioretention BMPs. Also, there were 124 underground inspections conducted. The remaining BMPs, 484, received preventative maintenance inspections. Of the inspection conducted this permit cycle, 30 are private BMPs (Appendix O). The private BMP inspections resulted in 5 enforcement actions taken. A description of the significant maintenance/repair for the public BMPs is provided in Appendix O.

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 O for a summary of details.

BMP Status: Year 1 review completed. 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 O for a summary of details.

BMP Status: Year 1 review completed. 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 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, 2019.

BMP Status: Year 1 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 4. In Year 1, the SOPs were reviewed and only one needed to be updated.

Table 4: List of Standard Operating Procedures

Name	Effective Date
Land Disturbing SOP	6/11/2015
Landscaping and Grounds Maintenance SOP	6/11/2015
Loading-Unloading SOP	6/11/2015
Material Storage SOP	6/11/2015
Non-Stormwater Discharges SOP	6/11/2015
Pool Operation SOP	6/11/2015
Road, Street and Parking Lot SOP	5/1/2019
Small Equipment SOP	6/11/2015
Spill Response SOP	6/11/2015
Storm Sewer System Cleaning & Maintenance SOP	6/11/2015
Vehicle Fueling SOP	6/11/2015
Vehicle-Equipment Maintenance/Repair SOP	6/11/2015
Vehicle-Equipment Storage SOP	6/11/2015
Vehicle-Large Equipment Washing SOP	6/11/2015
Waste Management SOP	6/11/2015

BMP Status: Year 1 review completed. 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.



Table 5: Loudoun County SWPPP Information – Year 1

Location	Annual Inspection date	Issues Observed	Actions Completed	SWPPP Revisions Needed	SWPPP Revisions Made	Additional notes
Central Warehouse & Maint. Facility	11/28/2018	None	None needed	No	None needed	Erosion from 1/4/2016 structural report has been repaired.
Potomac Lakes Sportsplex	11/29/2018	Sediment	Installed temporary wash pad. Recommend permanent wash pad.	Yes. Added employees and equipment	Modified SWPPP	DGS working with PRCS staff to design and construct a permeant wash pad
		Litter	Litter was removed.			
		Bare soil	Installed silt fence.			
		Unstabilized fill	Constructed temporary pad over bare soil.			
Claude Moore Park	12/3/2018	Sediment & litter accumulation	PW staff completed needed maintenance.	No	None needed	
		Overgrown vegetation	PW staff completed needed maintenance.			
Fire, Rescue and Emergency Training Center	12/4/2018	Sediment & litter accumulation	Communicated to facility manager for needed maintenance	No	None needed	
PRCS Trailside Maintenance Facility	12/7/2018	None	None needed	No	None needed	Oil/grit separator was recently pumped

BMP Status: Year 1 review completed. 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 1.

BMP Status: Year 1 review completed. 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 review completed. 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.

In Year 1, the County added 15 NMPs, which are provided in Table 6.



Table 6: Identified Acres Requiring Turf and Landscape NMPs

Facility Name	Area (Acreage)	Plan Expiration Date	Latitude	Longitude
Ashburn Library	1.05	9/24/2020	39.2	-77.3
Cascades Library & Senior Center	1.12	9/24/2020	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	3/15/2020	39.01	-77.29
Lyndora Park	5.86	3/15/2020	38.59	-77.29
Ray Muth Sr. Park	5.37	1/9/2020	39.2	-77.27
Scott Jenkins Park	2.18	1/9/2020	39.8	-77.38
Trailside Park	6.69	3/15/2020	39.03	-77.3
Claude Moore Park	9.76	1/9/2020	39.00	-77.24
Potomac Lakes Sportsplex	15.2	1/9/2020	39.3	-77.22
East Gate Park	3.36	4/1/2022	38.54	-77.29
Dulles South PSC*	1.6		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	
Loudoun Heights Fire Station*	2.4	4/15/2022	39.14	
Franklin Park*	14.92	4/15/2022	39.7	-77.44
Ashburn Sheriff*	1.8	4/15/2022	39.3	-77.27
Total Acreage	127.17			

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

BMP Status: Year 1 completed. 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. In support of this



statement, please see SOP – Road, Street, and Parking Lot Maintenance, Version 2, dated May 1, 2019 (Appendix P).

BMP Status: Complete.

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

Permit Section: Part I E 6 I

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: 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 (Appendix Q) as outlined in Part I E 6 m. The new training plan will be implemented in Year 2 and continue throughout this permit cycle.

For Year 1, the County followed the existing training plan developed under the previous permit. The annual BMP training was conducted on November 8, 2018 (Appendix Q). There were 15 attendees at that training. In Year 1 we also hosted two online training modules; *Illicit Discharge*



Detection and Elimination and *MS4's Stormwater Pollution Prevention*. A total of 74 county staff took these trainings.

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

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

For July 2018 – June 2023



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Department of General Services
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Version 1
May 1, 2019



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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. Virginian 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 also 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 also



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 as a result 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: Department of General Services (DGS). DGS shall be responsible for drafting and updating the MS4 Program Plan.

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: Department of General Services (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: Department of General Services (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.

<u>Responsible Party:</u>	Department of General Services (Table 1). DGS shall be responsible for drafting and submitting the MS4 Annual Report to DEQ.
<u>Schedule:</u>	MS4 Annual report will be submitted to DEQ on or before October 1 of each year each permit year.
<u>Items to Report:</u>	Report items outlined in Part I D 2.
<u>Method of Evaluation:</u>	Completion of the MS4 Annual Report.

BMP E: Evaluate Effectiveness of Program BMPs

<u>Permit Section:</u>	Part I D 2 e
<u>Objective:</u>	Ensure that, to the MEP, all program BMPs are achieving the objectives intended; to correct identified deficiencies and/or inefficiencies.
<u>Measurable Goal:</u>	Each program BMP will be evaluated/critiqued annually to determine its effectiveness in achieving its stated objective, with recommendations for continuance or revision provided.
<u>Necessary Documents:</u>	MS4 Program Plan.
<u>Responsible Party:</u>	Department of General Services (Table 1).
<u>Schedule:</u>	The first evaluation shall be conducted during Permit Year 2 with future implementation through the end of the permit cycle.
<u>Items to Report:</u>	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

<u>Permit Section:</u>	Part I D 4
<u>Objective:</u>	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.
<u>Measurable Goal:</u>	Annual reporting on the status of the Chesapeake Bay TMDL Action Plan.
<u>Necessary Documents:</u>	Loudoun County Chesapeake Bay TMDL Action Plan (Appendix A).



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

Responsible Party: Department of General Services (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: Department of General Services (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 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: Department of General Services (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: Department of General Services (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: Department of General Services (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: Department of General Services (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 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.

Measurable Goal: Development of the procedures outlined above.

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

Responsible Party: Department of General Services (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: Department of General Services (Table 1). DGS 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 list 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. .

Responsible Party: Department of General Services (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.

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



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: Department of General Services (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.



<u>Measurable Goal:</u>	Annual updates to the County's outfall data table that includes the following information for each outfall or point of discharge: <ol style="list-style-type: none">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; and8. The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.
<u>Necessary Documents:</u>	Annual Outfall Data Information Table (Appendix A). 2016 303(d)/305(b) list.
<u>Responsible Party:</u>	Department of General Services (Table 1).
<u>Schedule:</u>	No later than October 1 of each year.
<u>Items to Report:</u>	Confirmation statement, including dates, of MS4 Outfall Data Information Table updates.
<u>Method of Evaluation:</u>	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.

<u>Permit Section:</u>	Part I E 3 a (5)
<u>Objective:</u>	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.
<u>Measurable Goal:</u>	Written notification of any applicable downstream MS4 operators of stormwater systems physically interconnected with the Loudoun County MS4.
<u>Necessary Documents:</u>	County Stormwater GIS Data.
<u>Responsible Party:</u>	Department of General Services (Table 1).
<u>Schedule:</u>	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 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: Department of General Services (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 procedures the 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: Department of General Services (Table 1).



<u>Schedule:</u>	Ongoing program, with implementation of revised IDDE procedures in Year 1.
<u>Items to Report:</u>	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.
<u>Method of Evaluation:</u>	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

<u>Permit Section:</u>	Part I E 3 c (3), (4), and (5)
<u>Objective:</u>	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.
<u>Measurable Goal:</u>	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.
<u>Necessary Documents:</u>	IDDE Procedure as outlined in Part I E 3 c County Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County, §1096.04: Violations)
<u>Responsible Party:</u>	Department of General Services (Table 1).
<u>Schedule:</u>	Ongoing program, with implementation of revised IDDE procedures in Year 1.
<u>Items to Report:</u>	Summary of each investigation of any suspected illicit discharge as follows: <ol style="list-style-type: none">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; and5. Date investigation completed/closed.
<u>Method of Evaluation:</u>	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, that 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: Department of Building and Development (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 (Table 1).
Department of General Services (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).

The Department of Building and Development maintains SOPs for Erosion and Sedimentation Control inspection and enforcement (Appendix A).

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

Department of Building and Development

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

Department of General Services

- 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: Department of Building and Development. B&D is responsible for conducting the inspections and maintaining the required files.

Department of General Services. DGS is responsible for reporting this information in the annual report.

Schedule: Annual.

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: NA.



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: Department of Building and Development.

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.

<u>Necessary Documents:</u>	Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County) County inspections and maintenance written procedures (Appendix A).
<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	Year 1 – review existing procedures and update as needed. Following permit years - ongoing program.
<u>Items to Report:</u>	Compliance with procedures.
<u>Method of Evaluation:</u>	Review the procedures to ensure they are still meeting the needs of the program.

BMP 5C: Inspect Permanent Post-Construction Stormwater BMPs

<u>Permit Section:</u>	Part I E 5 b (2)
<u>Objective:</u>	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.
<u>Measurable Goal:</u>	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.
<u>Necessary Documents:</u>	Stormwater Management Ordinance (Chapter 1096, Codified Ordinances of Loudoun County). County stormwater facility inspection checklists. County inspections and maintenance written procedures.
<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	Annual.
<u>Items to Report:</u>	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: N/A.

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: Department of General Services.

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: N/A

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: Department of General Services.

Schedule: Annual.

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.



<u>Necessary Documents:</u>	<p>Inventory of permanent structural stormwater management facilities discharging to the regulated small MS4.</p> <p>2016 303(d)/305(b) list.</p> <p>Most recent inspection results.</p>
<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	Within 30 days of facility completion/discovery.
<u>Items to Report:</u>	<p>For each stormwater management facilities brought online and taken offline during each reporting year the following information is to be reported:</p> <ol style="list-style-type: none">Facility unique identifierFacility typeGeographic location (latitude and longitude)Number of acres treated by the facility<ol style="list-style-type: none">With breakdown of pervious and impervious acresDate the facility was brought on lineSixth order hydrologic unit code (HUC)Operator- or privately-owned<ol style="list-style-type: none">If privately-owned, whether maintenance agreement existsWhether 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 bothDate of operator's most recent inspection <p>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.</p> <p>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.</p>
<u>Method of Evaluation:</u>	Conduct quality control (i.e., spot check) of database entries made within the permit year to ensure data accuracy.



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

<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	Year 1 – Review of existing SOPs. Years 2, 3, 4, and 5 – Implementation.
<u>Items to Report:</u>	Year 1 – Updated written procedures. The written procedures will be provided upon request (Appendix A).
<u>Method of Evaluation:</u>	Annual review of written procedures for appropriateness and need of new procedures.

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

<u>Permit Section:</u>	Part I E 6 c, d, and g
<u>Objective:</u>	The County will continue to implement the SWPPPs that were developed under the previous permit.
<u>Measurable Goal:</u>	The County shall follow all parameters within each existing SWPPP..
<u>Necessary Documents:</u>	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
<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	Annual.
<u>Items to Report:</u>	Listing of the SWPPPs, dates of annual inspection, any findings, and corrective actions.
<u>Method of Evaluation:</u>	Effectiveness of SWPPPs.

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

<u>Permit Section:</u>	Part I E 6 e
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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: Department of General Services.

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.



<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	As needed.
<u>Items to Report:</u>	Report unauthorized discharges as outline in Part III G.
<u>Method of Evaluation:</u>	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: Department of General Services with assistance from Parks, Recreation & Community Services.

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.



<u>Necessary Documents:</u>	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.
<u>Responsible Party:</u>	Department of General Services.
<u>Schedule:</u>	N/A
<u>Items to Report:</u>	Statement that the chemical outlined in Part I E 6 k or not used by the County.
<u>Method of Evaluation:</u>	N/A.

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

<u>Permit Section:</u>	Part I E 6 I
<u>Objective:</u>	Require, to the MEP, that municipal contractors use appropriate control measures and procedures for stormwater discharges to the County's MS4.
<u>Measurable Goal:</u>	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.
<u>Necessary Documents:</u>	Loudoun County Standard Contract. Loudoun County Standard Stormwater Contracting Scopes of Work.
<u>Responsible Party:</u>	Department of General Services, with assistance from the County Purchasing Department and County Attorney's Office.
<u>Schedule:</u>	In the previous contract, the county added language to its standard contract and to the detailed scope of work template documents specifically for stormwater maintenance contracts.
<u>Items to Report:</u>	Report annually that the verbiage remains in these documents.
<u>Method of Evaluation:</u>	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: Department of General Services, with assistance from Department of Parks, Recreation, and Community Services (PRCS) and Building and Development



<u>Schedule:</u>	<p>Continue with existing plan in Year 1.</p> <p>Update existing training plan to meet Part I E 6 m during Year 1 and implement in Year 2.</p>
<u>Items to Report:</u>	<p>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:</p> <ol style="list-style-type: none">1. The date of the training event;2. The number of employees attending the training event; and3. The objective of the training event. <p>The training plan can be found here (link).</p>
<u>Method of Evaluation:</u>	<p>Annual review of the Training Plan.</p>



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 TMDL Action Plan for Reducing Nitrogen, Phosphorus, and Sediment Entering the Chesapeake Bay	Final	June 2015
Loudoun County, Virginia Phase II Chesapeake Bay TMDL Action Plan	Draft	TBD
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	10/1/2015
Public Education and Outreach Plan	Final	August 2014 May 2016 (Revised)
Public Education and Outreach Plan (updated)	Draft	TBD
MS4 Permit Coverage Letter	Final	October 31, 2018
MS4 Map	Final	To be developed in June 2018
MS4 Outfall Table	Final	To be developed during the development of the Year 1 Annual Report.
Illicit Discharge Detection and Elimination (IDDE) Procedure	Fifth	December 2017
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	First	June 2014



**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	4/1/2020	44830 Riverside Parkway, Ashburn, VA 20147	39° 04' 07" -77° 26' 57"
Byrnes Ridge Park	21.0	4/1/2019	4/1/2020	24915 Mineral Springs Circle, South Riding, VA 20105	38° 55' 43" -77° 33' 08"
Conklin Park	6.1	4/1/2019	4/1/2020	25701 Donegal Drive, Chantilly, VA 20152	38° 54' 29" -77° 31' 25"
Ray Muth Sr. Park	5.4	1/9/2017	1/9/2020	20971 Marblehead Drive, Ashburn, VA 20148	39° 2' 9" -77° 27' 38"
Scott Jenkins Park	2.2	1/9/2017	1/9/2020	39464 Colonial Highway, Hamilton, VA 20158	39° 8' 12" -77° 38' 20"
Trailside Park	2.8	3/15/2015	3/15/2020	Claiborne Parkway, Ashburn, VA 20147	39° 3' 8" -77° 30' 18"
Lyndora Park	2.5	3/15/2015	3/15/2020	Lucketts Bridge Circle, Ashburn VA, 20148	38° 59' 18" -77° 29' 31"
Greg Crittenden Memorial Park	1.6	3/15/2015	3/15/2020	21401 Windmill Dr, Ashburn, VA 20147	39° 1' 56" -77° 29' 49"
Chick Ford & Ryan Bickel Fields	1.5	3/15/2015	3/15/2020	21597 Ashburn Village Blvd, Ashburn, VA 20147	39° 2' 15" -77° 28' 30"
Cascades Library and Senior Center	1.1	9/24/2015	9/24/2020	21030 Whitfield Place Potomac Falls, VA 20165	39° 1' 59" -77° 23' 41"
Ashburn Library NMP	1.1	9/24/2015	9/24/2020	43316 Hay Road, Ashburn VA 20147	39° 2' 45" -77° 30' 9"
Claude Moore Park	9.8	1/9/2017	1/9/2020	46105 Loudoun Park Lane, Sterling, VA 20164	39° 0' 53" -77° 24' 15"
Potomac Lakes Sportsplex	20.1	1/9/2017	1/9/2020	20280 Cascades Parkway, Sterling, VA 20165	39° 3' 14" -77° 22' 42"
East Gate Park	3.4	4/1/2019	4/1/2020	43664 Tall Cedars Parkway, Chantilly, VA 20152	38° 54' 44" -77° 29' 33"



Appendix A

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Public Education and Outreach Plan	Final	August 2014 May 2016 (Revised)
Public Education and Outreach Plan (updated)	Draft	TBD
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Ashburn Library NMP	1.1	9/24/2015	9/24/2020	43316 Hay Road, Ashburn VA 20147	39° 2' 45" -77° 30' 9"
Claude Moore Park	9.8	1/9/2017	1/9/2020	46105 Loudoun Park Lane, Sterling, VA 20164	39° 0' 53" -77° 24' 15"
Potomac Lakes Sportsplex	20.1	1/9/2017	1/9/2020	20280 Cascades Parkway, Sterling, VA 20165	39° 3' 14" -77° 22' 42"
East Gate Park	3.4	4/1/2019	4/1/2020	43664 Tall Cedars Parkway, Chantilly, VA 20152	38° 54' 44" -77° 29' 33"

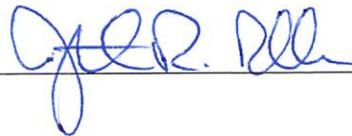
AFFIDAVIT OF NUTRIENT OFFSET SALE

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



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:

Jonathan R. Roller

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

William Jackson Simmons
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



**Loudoun County Stormwater Management
Engineering Services**

**PERMIT 4 / YEAR 1 UPDATE OF THE LOUDOUN COUNTY COMPREHENSIVE
TOTAL MAXIMUM DAILY LOAD (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 COMPREHENSIVE TOTAL
MAXIMUM DAILY LOAD (TMDL) ACTION PLAN FOR:**

September 18, 2019, Version 1

Prepared for:



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

Updated by:



4229 Lafayette Center Drive, Suite 1850
Chantilly, Virginia 20151
703-870-7000



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Attachments

- Attachment 1: 2000 U.S. Census Bureau UA Relationship to TMDL Watersheds with County MS4 WLAs
- Attachment 2: Stormwater BMPs Installed in the Goose Creek Watershed Since Implementation of the County Comprehensive TMDL Action Plan (2013)
- Attachment 3: Stormwater BMPs Installed in the Bull Run Watershed Since Implementation of the County Comprehensive TMDL Action Plan (2013)
- Attachment 4: Location of County-Maintained Dog Waste Facilities in the Bull Run Watershed



Acronyms

BMP	Best Management Practice
CFU	Colony Forming Unit
DEQ	Virginia Department of Environmental Quality
EPA	Environmental Protection Agency
LA	Load Allocation
MCM	Minimum Control Measure
MOS	Margin of Safety
MS4	Municipal Separate Storm Sewer System
MS4 General Permit	2018 MS4 General Permit
PEOP	Public Education and Outreach Plan
POC	Pollutant(s) of Concern
ROW	Right of Way
Special Condition	Special Conditions for Approved TMDLs Other than the Chesapeake Bay TMDL
SWCB	Virginia State Water Control Board
TMDL	Total Maximum Daily Load
UA	Urbanized Area
U.S.	United States
VDOT	Virginia Department of Transportation
VESCP	Virginia Erosion and Sediment Control Program
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program
WLA	Wasteload Allocation



1.0 Introduction

Discharges from the Loudoun County (County) MS4 are regulated under the federal Clean Water Act and the Virginia State Water Control Law. As such, the County obtained and maintained, authorization to discharge from their MS4 outfalls under the VPDES General Permit for Stormwater Discharges from Small MS4s (MS4 General Permit). To comply with the previous MS4 General Permit, effective July 1, 2013 through October 31, 2018, the County developed and implemented a comprehensive TMDL Action Plan to address local TMDLs approved by EPA prior to July 1, 2013 and included WLAs for the County's MS4 (Table 1). These TMDL WLAs were based upon the estimated acreage served by the County's MS4 located within the U.S. Census Bureau's 2000 UA (Attachment 1) and have not been updated to account for the more accurate MS4 mapping nor the expanded regulated area as a result of the 2010 U.S. Census.

Table 1. TMDLs with Loudoun County MS4 WLAs Approved by EPA Prior to July 1, 2013

TMDL Type	TMDL Title	EPA Approval Date
Sediment	Benthic TMDLs for the Goose Creek Watershed	April 26, 2004
Sediment	Benthic TMDL Development for Bull Run, Virginia	September 26, 2006
Bacterial	Bacteria TMDLs for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run, Bull Run and the Occoquan River, VA	November 15, 2006

The current MS4 General Permit, effective November 1, 2018, requires that the County

1. Update its TMDL Action Plans to meet the modified conditions in the current MS4 General Permit within 18-months of its effective date (May 1, 2020), and
2. Provide a "summary of actions conducted to implement each local TMDL Action Plan" for the period of July 1, 2018 through June 30, 2019 as part of its Annual Report.

This report summarizes the County's efforts in implementing the TMDL Action Plan that was developed to comply with the previous MS4 General Permit. The County will update its comprehensive TMDL Action Plan to meet the modified conditions in the current MS4 General Permit by compliance date provided in the permit.



2.0 Local TMDLs Approved By EPA Prior to July 1, 2013

2.1 Benthic TMDLs for the Goose Creek Watershed, which includes a sediment WLA for the Goose Creek Watershed

The Benthic TMDLs for the Goose Creek Watershed was approved by EPA on April 26, 2004, and by the SWCB on August 31, 2004. The TMDLs identified sediment as the POC responsible for the benthic impairments in both the lower Goose Creek watershed and its tributary, Little River. The Goose Creek portion of the TMDL study addressed a 4.91-mile length of impairment located between the Goose Creek Reservoir and the Potomac River confluence. The Goose Creek TMDL equation, based on the 2015 development scenario, is as follows:

$$\text{TMDL (Sediment, tons/year)} = 40,808 \text{ (LA)} + 1,587 \text{ (WLA)} + 4,711 \text{ (MOS)}$$

The TMDL identified that almost 70% of the excessive sediment load originates from streambank erosion and calls for a reduction of sediment contribution from streambank erosion by 62%. Streambank erosion was included in the load allocation of the TMDL and is not part of the County's WLA. The TMDL, which estimated that developed lands in a built-out scenario would contribute less than 2% of the total sediment load, assumed a reduction of 30% of the sediment load from developed lands and a 35% reduction from regulated land disturbance in establishing the WLAs. These assumptions resulted in an aggregated stormwater WLA of 123.6 tons/year applicable to discharges from the County's and VDOT's MS4s and included facilities regulated under VPDES industrial and construction stormwater permits.

Benthic TMDL for the Goose Creek Watershed Summary	
Pollutant	Sediment
Sources	In-Stream Erosion (70%)
	Land Erosion (Pastures 25%)
	Permitted Sources
WLA	123.6 Tons/Year
Percent Reduction	62% In-Stream Erosion
	35% Construction Stormwater
	30% Land-Based Runoff
Type of WLA	Aggregate
VPDES Permittees Included in Aggregated WLA	VDOT MS4
	VPDES VAR10 - Construction (372.4 acres)
	VAR051013 - Superior Paving

2.1.1 Summary of Actions Completed Between July 1, 2018 and June 30, 2019

The County has continued to implement the Goose Creek TMDL commitments identified in its Comprehensive TMDL Action Plan. The County is currently evaluating the impact that the current MS4 General Permit local TMDL special condition modifications will have on its action plan, including the County's method of pollutant reduction assessment, and will address its findings in the updated Comprehensive TMDL Action Plan. The actions completed by the County between July 1, 2018 and June 30, 2019 are summarized below.

Continued Operation of a Consistent and Compliant Local VESCP

The County continues to operate its VESCP in a manner that is consistent and compliant with the State statute and regulations. The County's VESCP is implemented watershed-wide in the Goose Creek watershed without delineation of the County's MS4 service area. This includes requiring submission of erosion and sediment control plans for approval by DEQ-certified plan reviewers and routine inspections by DEQ-certified inspectors. Cumulative results of the VESCP for the reporting period are available in the MCM 4: Construction Site Stormwater Runoff Control, BMP 4A, section of the County's Permit 4/Year 1 Annual Report.



Continued Enforcement of More Stringent Erosion and Sediment Control Requirements

Under Chapter 1220 of the Loudoun County Code of Ordinances, the County continues to require approval and implementation of Erosion and Sediment Control Plans on land disturbing activities that are 5,000 square feet or larger while also requiring additional protections on sensitive lands.

Continue Operation of a Consistent and Compliant Local VSMP

The County continues to operate its VSMP in a manner that is consistent and compliant with the State regulations. The County's VSMP is implemented watershed-wide in the Goose Creek watershed without delineation of the County's MS4 service area. This includes requiring submission of post-development stormwater management plans for approval by DEQ-certified plan reviewers and routine inspections by DEQ-certified inspectors. Cumulative results of the VSMP for the reporting period are available in MCM 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands section of the County's Permit 4/Year 1 Annual Report.

Maintain an Updated Stormwater BMP Database

The County maintains an updated database of stormwater BMPs. The locations of Goose Creek stormwater BMPs installed since 2013 as a result of County stormwater management regulations are shown in Attachment 2.

Continue to Provide Public Education and Outreach to Minimize Sediment Contributions

The County has identified sediment as a fourth high-priority stormwater issue and included public education and outreach initiatives throughout the reporting period. Sediment concerns are both County-wide as a result of the Chesapeake Bay TMDL and Goose Creek watershed-wide. During the reporting period, the County updated its PEOP to comply with the current MS4 General Permit. Individual PEOP activities are summarized in the MCM 1: Public Education and Outreach section of the County's Permit 4/Year 1 Annual Report.

2.2 Benthic TMDL Development for Bull Run, Virginia

The Benthic TMDL for the Bull Run Watershed was approved by EPA on September 26, 2006, and by the SWCB on June 27, 2007 identified sediment as the "most probable stressor" responsible for the benthic impairments in Bull Run. The benthic impairment addressed by the TMDL is a 4.8-mile section that runs between Cub Run and Popes Head Creek and is located outside of the County jurisdiction. The Bull Run TMDL equation is as follows:

$$\text{TMDL (Sediment, tons/year)} = 4,807.9 \text{ (LA)} + 5,986.8 \text{ (WLA)} + 1,199.4 \text{ (MOS)}$$

The TMDL identified that approximately 81% of the excess sediment load originates from streambank erosion while direct contributions from aggregated MS4s (Loudoun County and VDOT) account for 8.9%. The aggregated MS4 WLA of 458.7 tons/year requires a 77.1% reduction in sediment contribution from both the MS4 direct sources and from streambank erosion within the U.S. Census Bureau's 2000 UA.

Benthic TMDL for the Bull Run Watershed Summary	
Pollutant	Sediment
Sources	In-Stream Erosion (81%)
	VPDES and MS4 Loadings
	Non-Point Sources
WLA	458.7 Tons/Year
Percent Reduction	77.1%
Type of WLA	Aggregate
VPDES Permittees Included in Aggregated WLA	VDOT MS4



2.2.1 Summary of Actions Completed Between July 1, 2018 and June 30, 2019

The County has continued to implement the Bull Run Benthic TMDL commitments identified in its comprehensive TMDL Action Plan. The County is currently evaluating the impact that the current MS4 General Permit local TMDL special condition modifications will have on its action plan, including the County's method of pollutant reduction assessment, and will address its findings in the updated TMDL Action Plan. The actions completed by the County between July 1, 2018 and June 30, 2019 are summarized below.

Continued Operation of a Consistent and Compliant Local VESCP

The County continues to operate its VESCP in a manner that is consistent and compliant with the State statute and regulations. The County's VESCP is implemented watershed-wide in the Bull Run watershed without delineation of the County's MS4 service area. This includes requiring submission of erosion and sediment control plans for approval by DEQ-certified plan reviewers and routine inspections by DEQ-certified inspectors. Cumulative results of the VESCP for the reporting period are available in the MCM 4: Construction Site Stormwater Runoff Control, BMP 4A, section of the County's Permit 4/Year 1 Annual Report.

Continued Enforcement of More Stringent Erosion and Sediment Control Requirements

Under Chapter 1220 of the Loudoun County Code of Ordinances, the County continues to require approval and implementation of Erosion and Sediment Control Plans on land disturbing activities that are 5,000 square feet or larger while also requiring additional protections on sensitive lands.

Continue Operation of a Consistent and Compliant Local VSMP

The County continues to operate its VSMP in a manner that is consistent and compliant with the State regulations. The County's VSMP is implemented watershed-wide in the Goose Creek watershed without delineation of the County's MS4 service area. This includes requiring submission of post-development stormwater management control plans for approval by DEQ-certified plan reviewers and routine inspections by DEQ-certified inspectors. Cumulative results of the VSMP for the reporting period are available in the MCM 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands section of the County's Permit 4/Year 1 Annual Report.

Maintain an Updated Stormwater BMP Database

The County maintains an updated database of stormwater BMPs. The locations of Bull Run stormwater BMPs installed since 2013 as a result of County stormwater management regulations are shown in Attachment 3.

Continue to Provide Public Education and Outreach to Minimize Sediment Contributions

The County has identified sediment as a fourth high-priority stormwater issue and included public education and outreach initiatives throughout the reporting period. Sediment concerns are both County-wide as a result of the Chesapeake Bay TMDL and Bull Run watershed-wide. During the reporting period, the County updated its PEOP to comply with the current MS4 General Permit. Individual PEOP activities are summarized in the MCM 1: Public Education and Outreach section of the County's Permit 4/Year 1 Annual Report.



2.3 Bacteria TMDLs for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run, Bull Run and the Occoquan River, Virginia

The Bacteria TMDLs for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run, Bull Run and the Occoquan River, Virginia were approved by EPA on November 15, 2006 and the SWCB on July 31, 2008 to address bacterial impairments in the Occoquan River watershed. The bacterial impairment addressed by the individual Bull Run TMDL¹ is a 4.8-mile section located between its confluences with Cub Run and Popes Head Creek. The TMDL equation for this TMDL is as follows:

$$\text{TMDL (E. coli CFU/year)} = 1.11\text{E}+14 \text{ (WLA)} + 9.54\text{E}+11 \text{ (LA)} + \text{Implicit (MOS)}$$

The TMDL concluded that during low flow events (dry weather) exceedances were most likely caused by direct discharges of bacteria as a result of livestock and wildlife. During wet weather events, exceedances were caused by contributions from indirect (overland flow) contributions from wildlife and pets living in residential areas within the watershed. The aggregate MS4 WLA requires an 88.8% reduction of the modeled existing MS4-contributed bacteria load and is reflective of the weighted average reductions required for existing forest lands (0%) and urban lands (90%).

Bacteria TMDL for Popes Head Creek, Broad Run, Kettle Run, South Run, Little Bull Run and the Occoquan River Watersheds Summary	
Pollutant	E. coli
Sources	Cattle Direct Deposit
	Wildlife Direct Deposit
	High-Density Residential
WLA	1.32E+10 CFU/Year
Percent Reduction	88.8%
Type of WLA	Aggregate
VPDES Permittees Included in Aggregated WLA	VDOT MS4

2.3.1 Summary of Actions Completed Between July 1, 2018 and June 30, 2019

The County has continued to implement the Bull Run Bacteria TMDL commitments identified in its comprehensive TMDL Action Plan. The County is currently evaluating the impact that the current MS4 General Permit local TMDL special condition modifications will have on its action plan, including the County's method of pollutant reduction assessment, and will address its findings in the updated TMDL Action Plan. The actions completed by the County between July 1, 2018 and June 30, 2019 are summarized below.

Continue to Provide Upkeep and Maintenance of Pet Waste Stations at County Facilities

The Department of General Services maintained its contract with a private local business to ensure maintenance at pet waste stations at four (4) County facilities located in the Bull Run watershed:

1. Byrne's Ridge Park
2. Conklin Community Park
3. Dulles South Multi-Purpose Facility
4. South Riding Park

¹ The Bull Run segment identified in the Bull Run TMDL was delisted as impaired in Virginia's 2008 305(b)/303(d) Water Quality Assessment Integrated Report.



The locations of these facilities are provided in Attachment 4. The equivalent strategies for bacteria reduction contained in Table 5 of the current MS4 General Permit for this activity are:

- Provide signage to pick up dog waste, providing pet waste bags and disposal containers, and
- Maintain dog parks by removing disposed of pet waste bags and cleaning up other sources of bacteria.

Continue to Provide Public Education and Outreach to Minimize Bacteria Contributions

The County previously chose bacteria contributions as a high-priority stormwater issue in its PEOP. During the reporting period, the County updated its PEOP to comply with the current MS4 General Permit and maintained bacteria as a high-priority stormwater issue. Efforts specific to reducing bacteria contributions include those that are implemented through the County's membership in the Northern Virginia Clean Water Partners and the County's "Scoop the Poop" outreach materials (Figure 1). Individual public education and outreach activities are summarized in the MCM 1: Public Education and Outreach section of the County's Permit 4/Year 1 Annual Report.

about us

Chesapeake Bay Watershed

Loudoun County lies within the Chesapeake Bay watershed, the largest estuary in the United States. Land use, agricultural activities and stormwater pollution in Loudoun County affect the health of the bay.

FOR MORE INFORMATION, CONTACT:
Department of General Services
Steve Plante, Chief,
Stormwater Management
801 Sycolin Road, Suite 300
Leesburg, VA 20175
(571) 258-3227
www.loudoun.gov/stormwater

the law

Codified ordinances of Loudoun County, Chapter 612.19, Section a (9).

The following shall be deemed unlawful and enforced by proceedings before a Judge of the General District Court in like manner and with like right of appeal as if such violations were Class Four misdemeanors.

Dog waste. For the owner of any dog to fail to remove immediately the dog's feces from any property...

PET WASTE TRANSMITS DISEASE
LEASH-CURB AND CLEAN UP AFTER YOUR DOG
PLEASE KEEP THIS AREA CLEAN

Loudoun County has prepared this educational brochure to meet requirements of their stormwater permit administered by the Virginia Department of Conservation and Recreation.

Help Protect Loudoun County's Streams and Lakes

Scoop the Poop

Be the Solution to Stormwater Pollution

Figure 1: County "Scoop the Poop" outreach brochures are available in both English and Spanish.



Continue Implementation of an Enhanced IDDE Program

The County continues to implement an enhanced IDDE program that exceeds the minimum requirements of the MS4 General Permit. MS4 outfalls are targeted based on priorities identified in the IDDE procedures, which include potential sources of high-bacteria. Potential illicit discharges identified as part of the dry weather screening program are immediately investigated to identify the source and reduce the contributions of illicit discharges. During the reporting period, dry weather screening was conducted on 325 MS4 outfalls throughout the County. Specific information regarding the implementation of the County's IDDE program is available in the MCM 3: Illicit Discharge and Detection Elimination section of the County's Permit 4/Year 1 Annual Report.

The equivalent strategy for bacteria reduction contained in Table 5 of the current MS4 General Permit for this activity is:

- Implement an enhanced dry weather screening and illicit discharge, detection, and elimination program beyond the requirements of Part I E 3 to identify and remove illicit connections and identify leaking sanitary sewer lines infiltrating to the MS4 and implement repairs.

Continue to Promote and Enforce the County's Pet Waste Ordinance

Chapter §616.19 of the Loudoun County Code of Ordinances requires dog owners to immediately remove dog wastes from any property, other than theirs, located in or adjacent to any residential subdivision including common areas of homeowners' associations and condominium and apartment complexes. The County provides a web-based mechanism to report dog waste complaints in LEx.

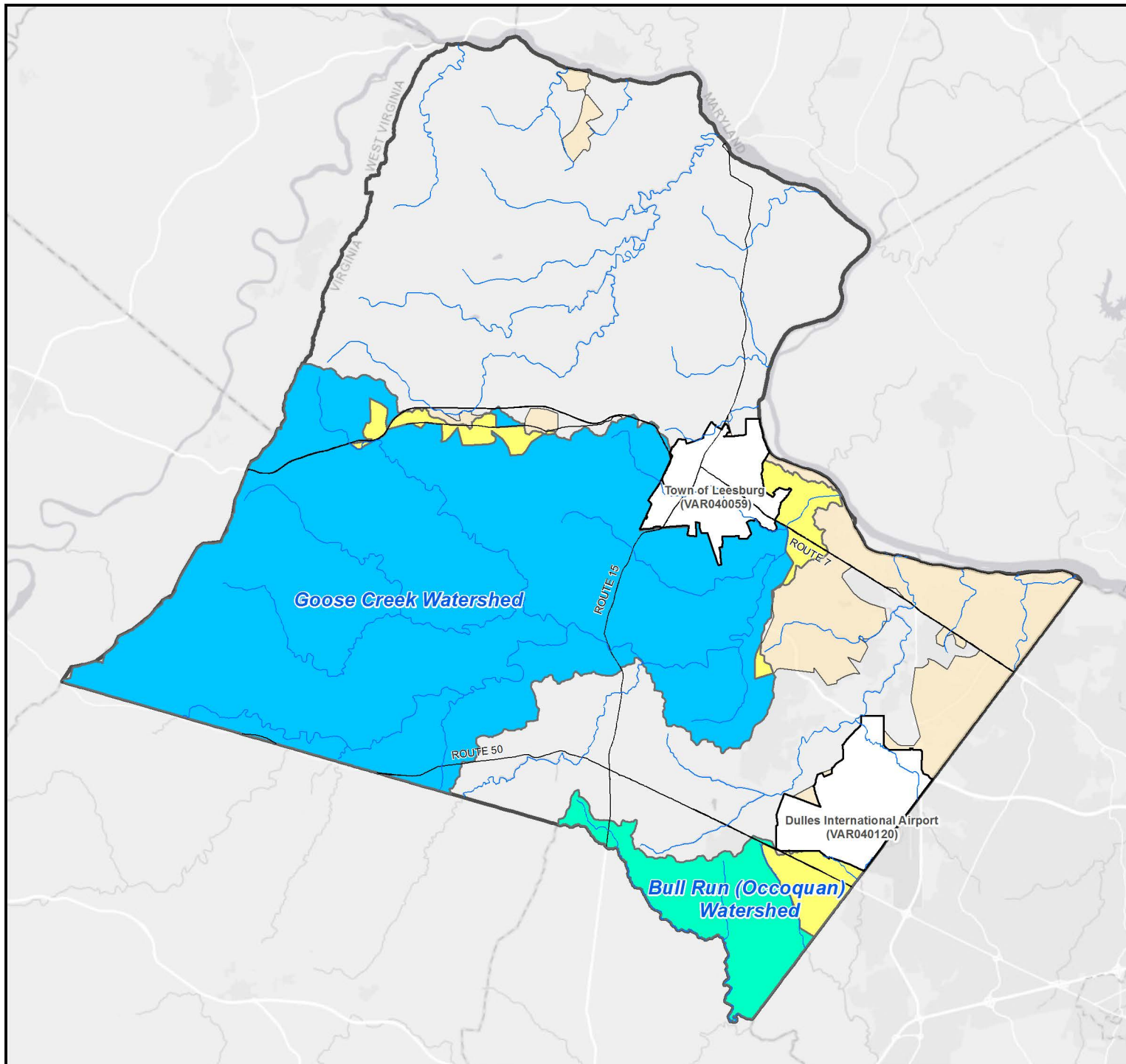
The equivalent strategy for bacteria reduction contained in Table 5 of the current MS4 General Permit for this activity is:

- Adopt and enforce pet waste ordinances or policies, or leash laws or policies.



Attachment 1

2000 U.S. Census Bureau UA Relationship to TMDL Watersheds with County MS4 WLAs



Legend

- 2000 UA Within the TMDL Watersheds
- 2000 UA Outside of the TMDL Watersheds
- Bull Run Watershed Outside of the 2000 UA
- Goose Creek Watershed Outside of the 2000 UA



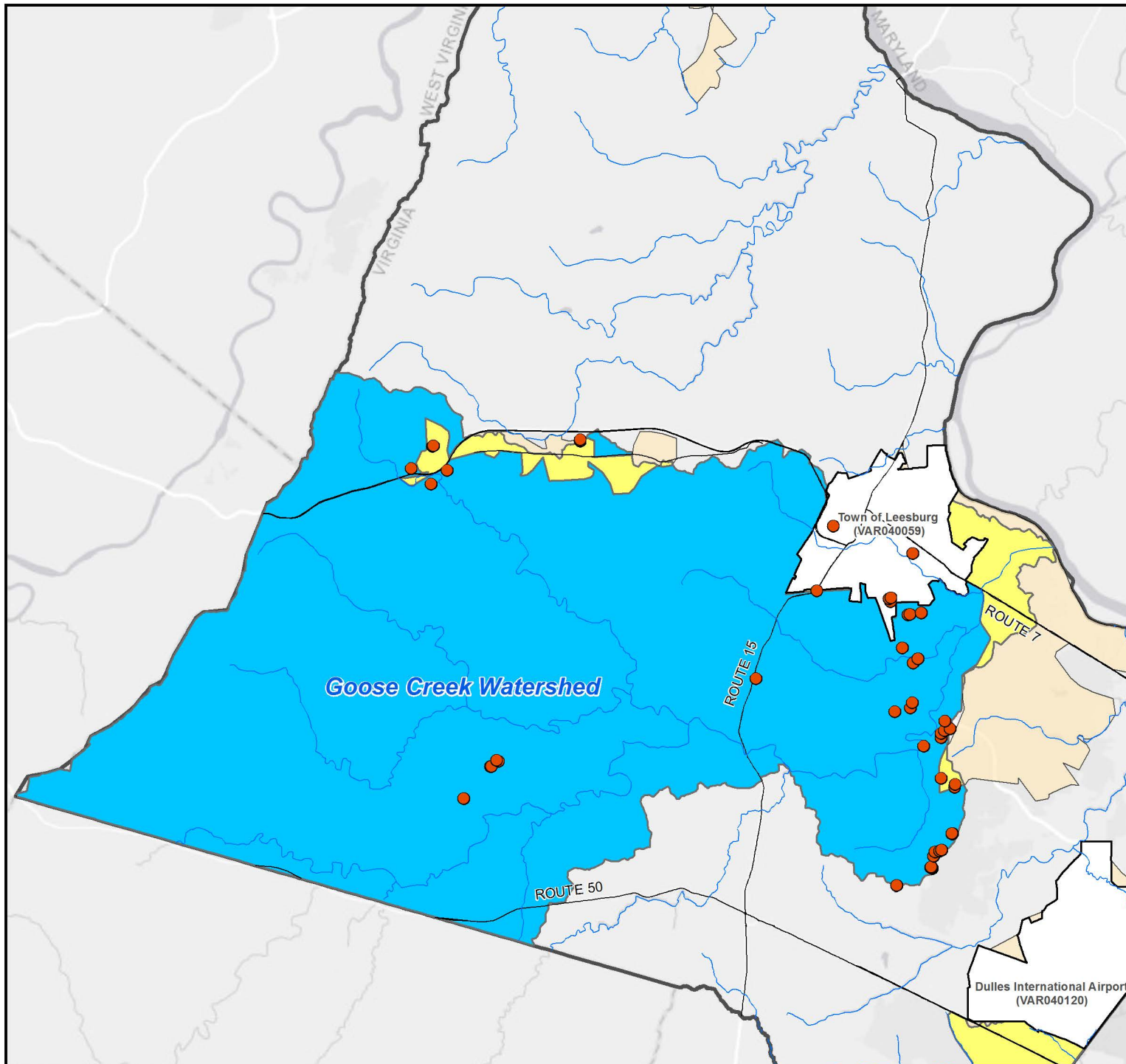
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Attachment 1: 2000
U.S. Census Bureau
UA Relationship to
TMDL Watersheds with
County MS4 WLAs



Attachment 2

Stormwater BMPs Installed in the Goose Creek Watershed Since Implementation of the County Comprehensive TMDL Action Plan (2013)



Legend

- Stormwater BMPs Installed 2013 to Present
- 2000 UA Within the TMDL Watersheds
- 2000 UA Outside of the TMDL Watersheds
- Goose Creek Watershed Outside of the 2000 UA



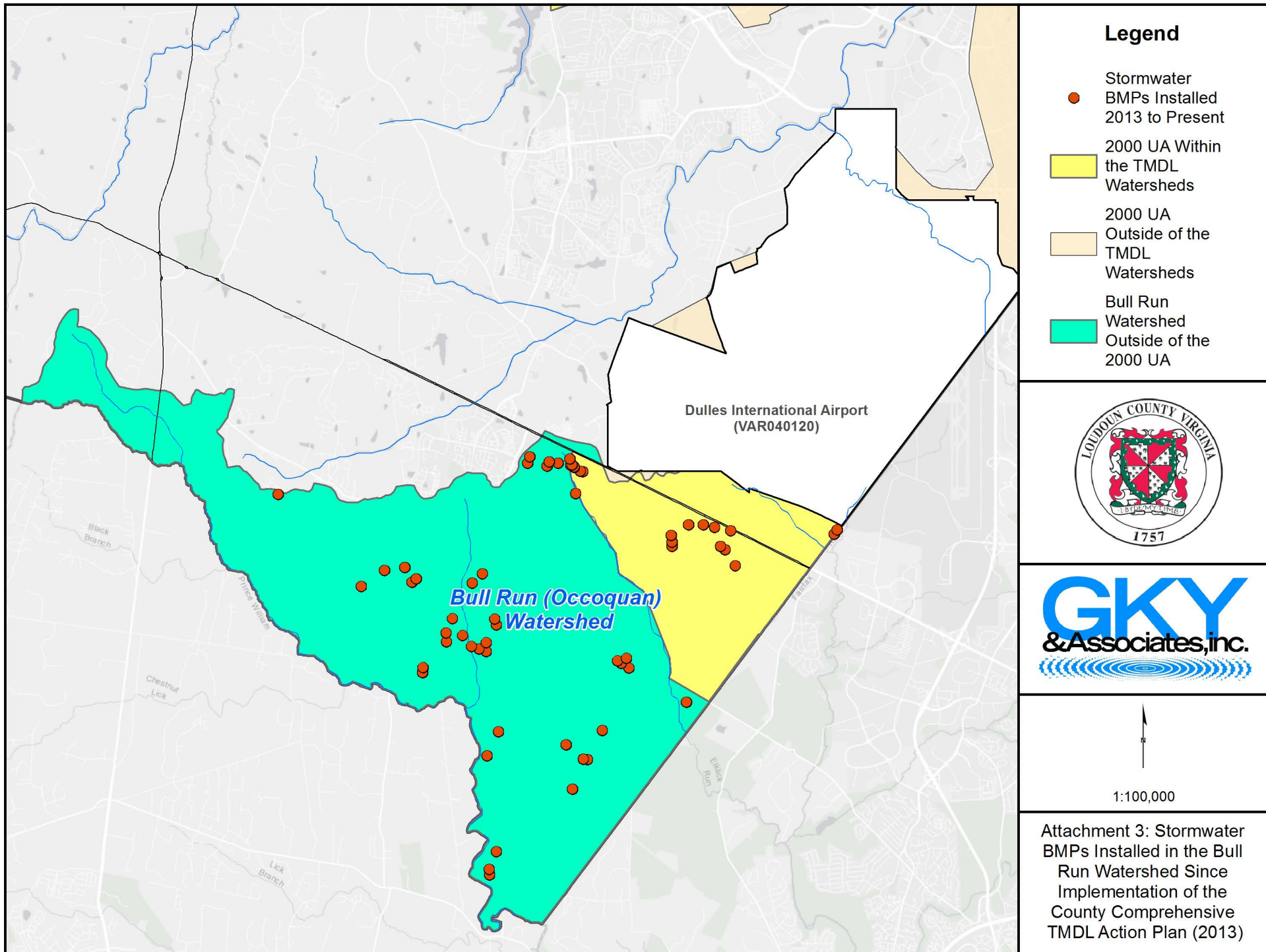
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Attachment 2: Stormwater BMPs Installed in the Goose Creek Watershed Since Implementation of the County Comprehensive TMDL Action Plan (2013)



Attachment 3

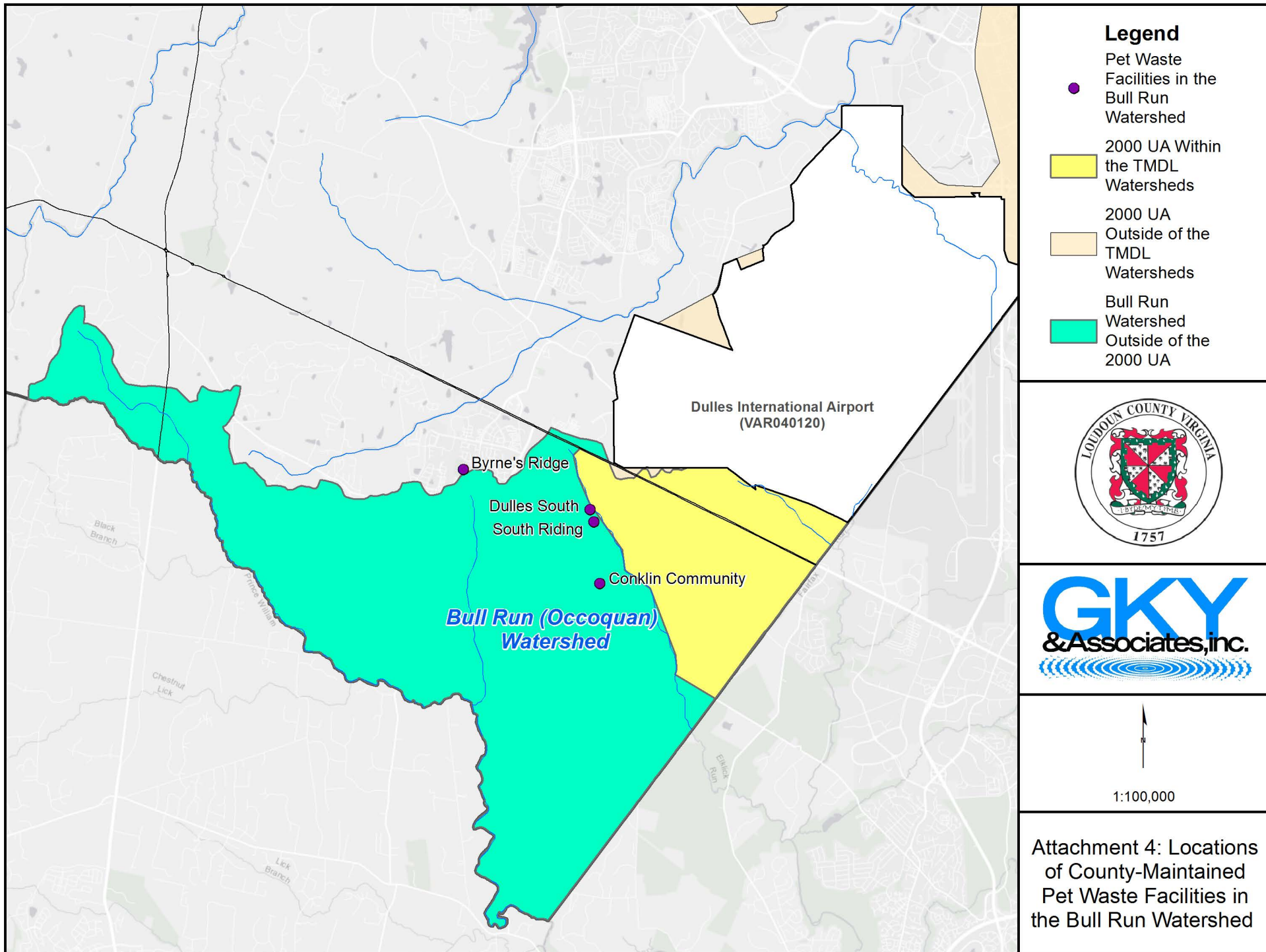
Stormwater BMPs Installed in the Bull Run Watershed Since Implementation of the County Comprehensive TMDL Action Plan (2013)

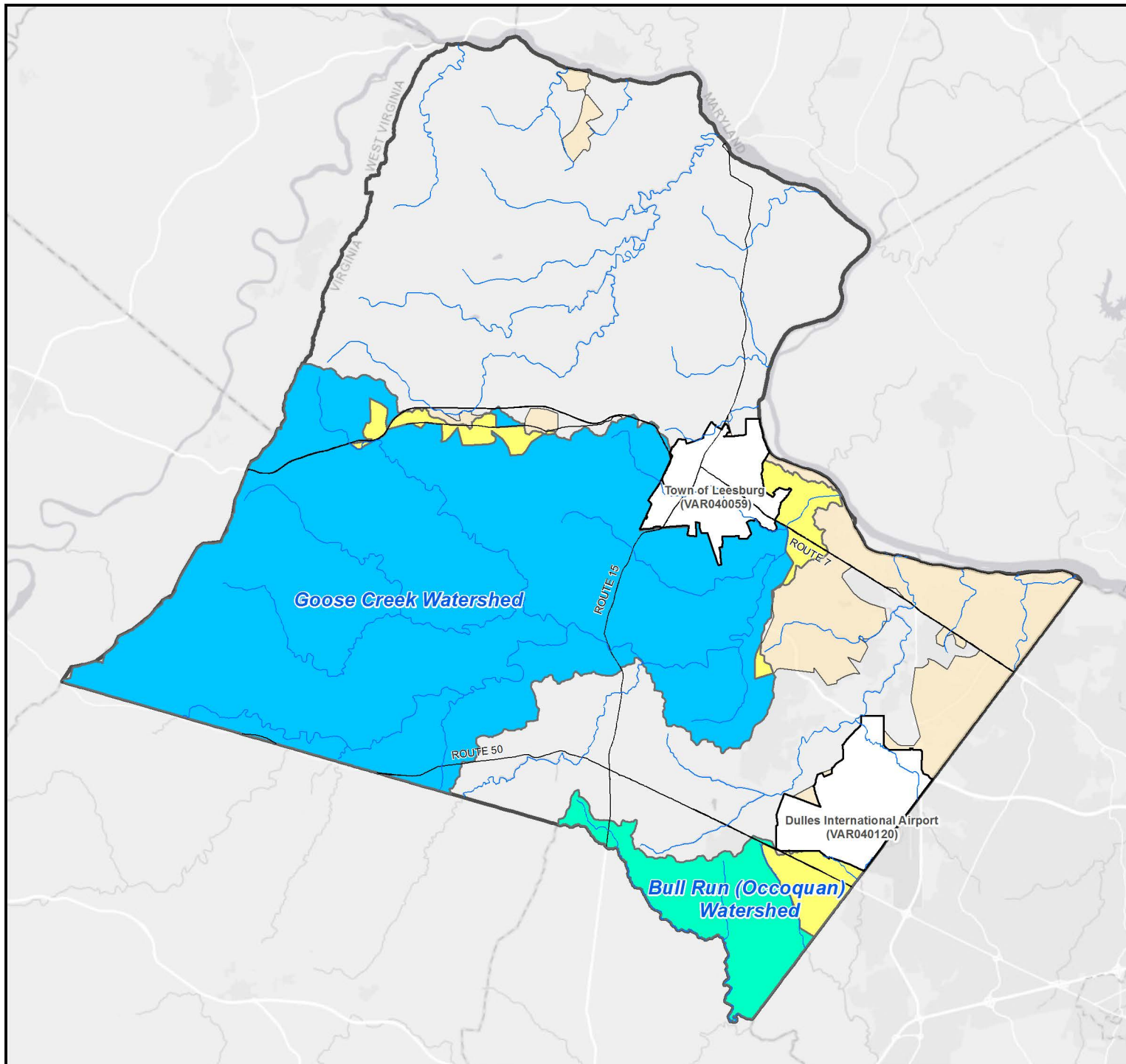








Attachment 4

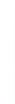
Location of County-Maintained Dog Waste Facilities in the Bull Run Watershed





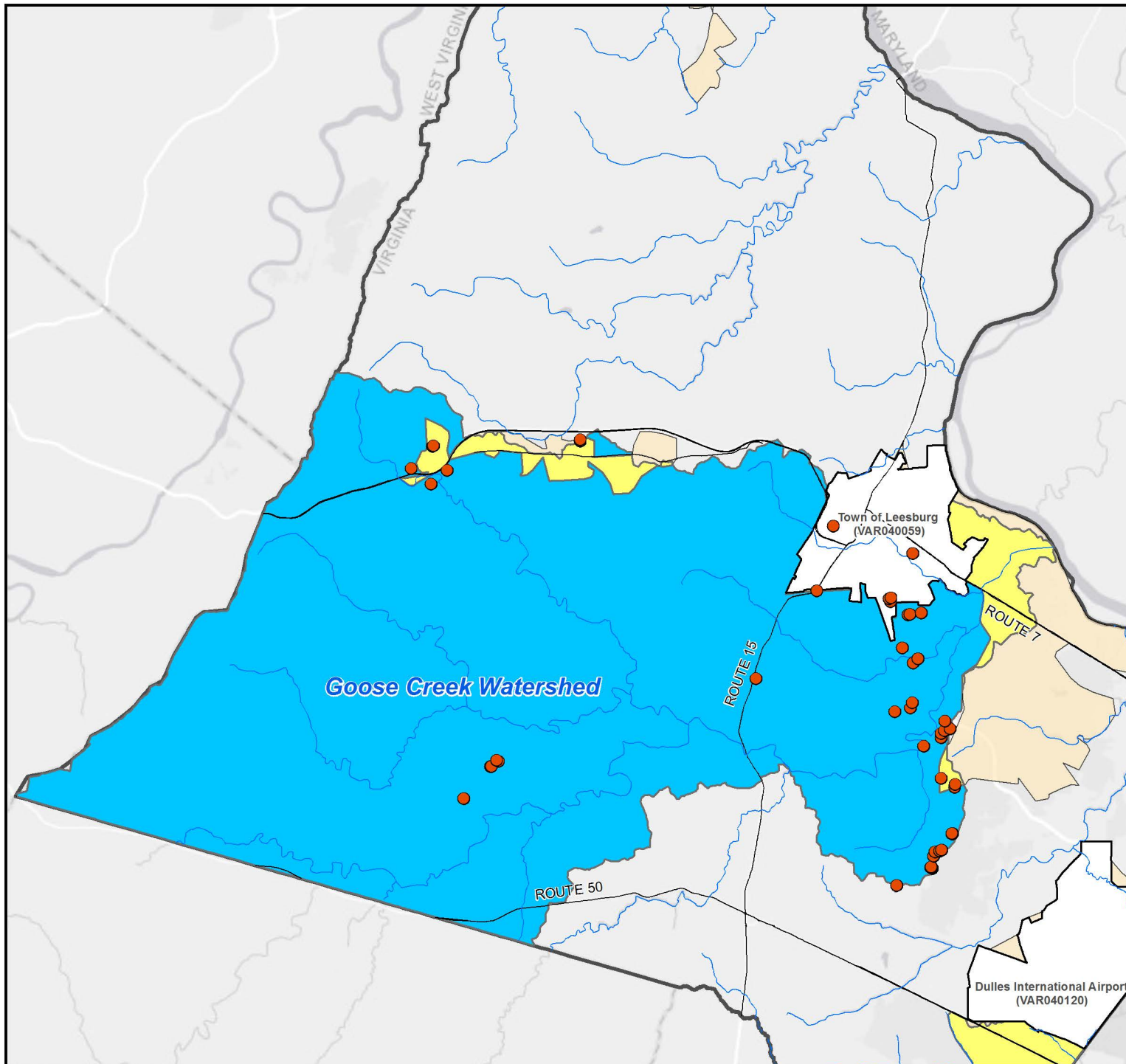
Legend

-  2000 UA Within the TMDL Watersheds
-  2000 UA Outside of the TMDL Watersheds
-  Bull Run Watershed Outside of the 2000 UA
-  Goose Creek Watershed Outside of the 2000 UA



1:300,000

Attachment 1: 2000
U.S. Census Bureau
UA Relationship to
TMDL Watersheds with
County MS4 WLAs



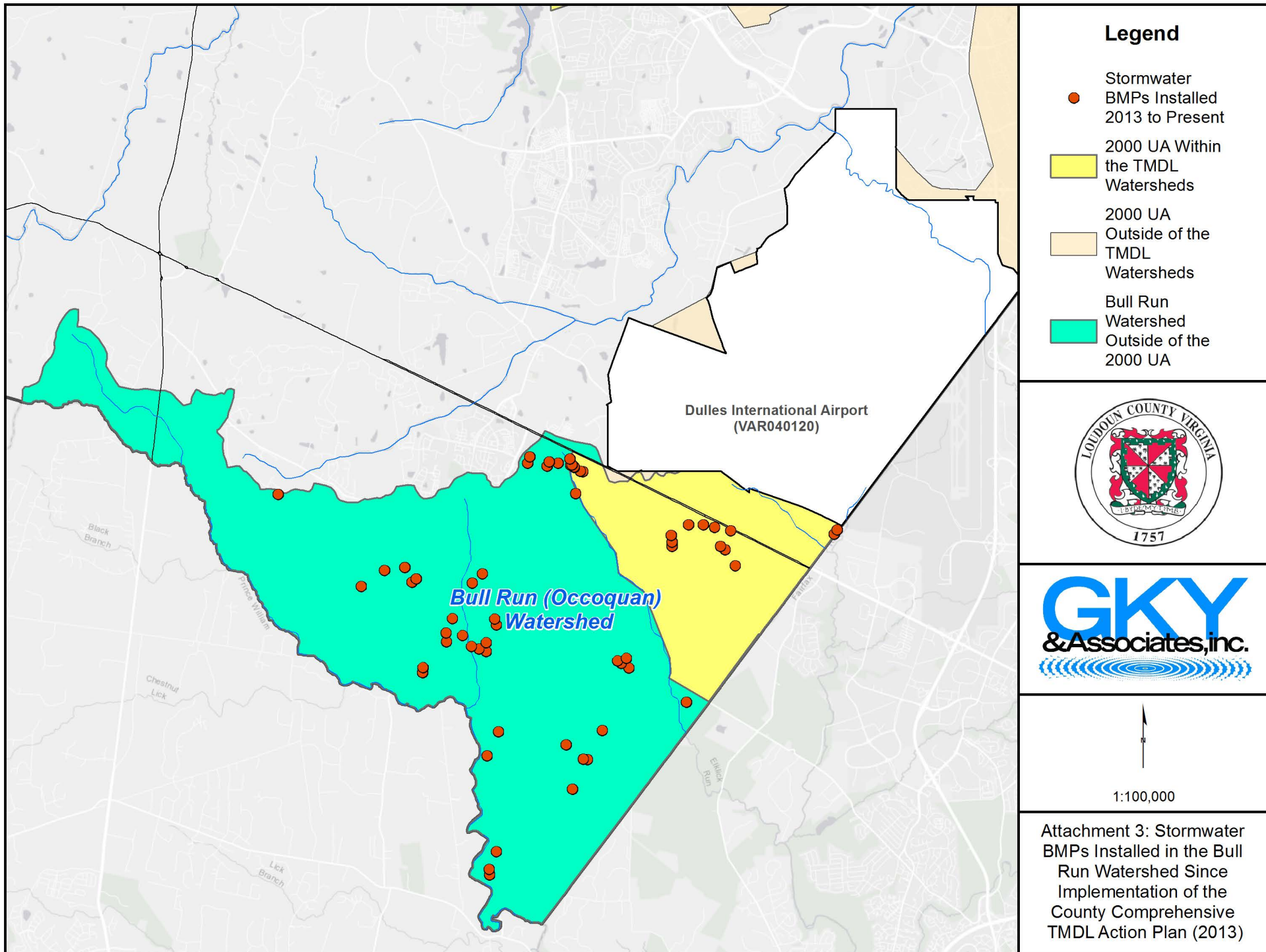
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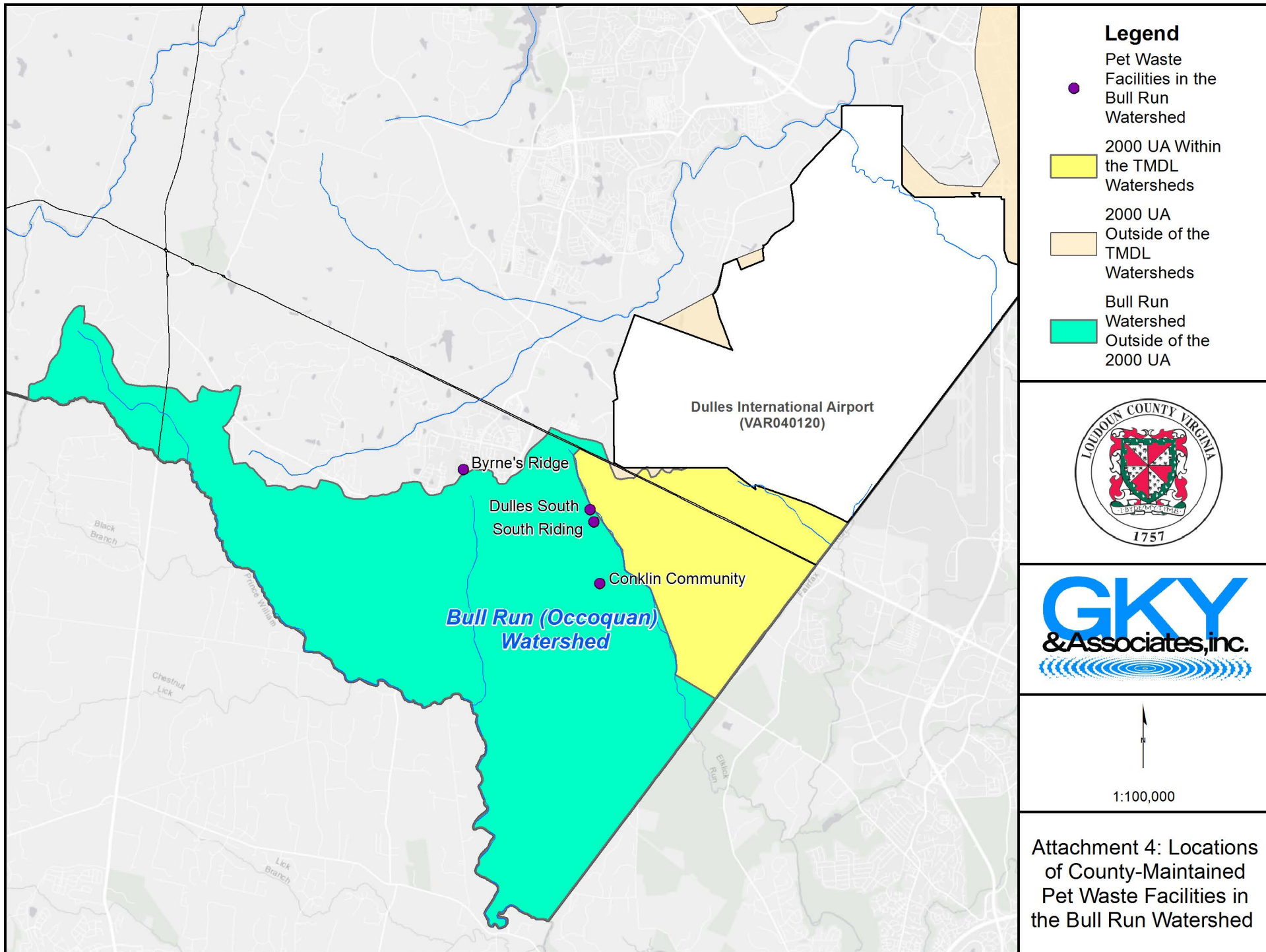
- Stormwater BMPs Installed 2013 to Present
- 2000 UA Within the TMDL Watersheds
- 2000 UA Outside of the TMDL Watersheds
- Goose Creek Watershed Outside of the 2000 UA



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Attachment 2: Stormwater BMPs Installed in the Goose Creek Watershed Since Implementation of the County Comprehensive TMDL Action Plan (2013)





**Loudoun County Stormwater Management
Engineering Services**

PUBLIC EDUCATION AND OUTREACH PLAN (PEOP)

Version 2, June 10, 2019

Prepared for:



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

Updated by:



4229 Lafayette Center Drive, Suite 1850
Chantilly, Virginia 20151
703-870-7000



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Acronyms

B&D	Department of Building and Development
BMP	Best Management Practice
CWA	Clean Water Act
DAS	Department of Animal Services
DCR	Virginia Department of Conservation and Recreation
DES	Department of Extension Services
DEQ	Virginia Department of Environmental Quality
DGS	Department of General Services
EMG	Extension Service Master Gardeners
GIS	Geographic Information System
HOA	Homeowner Association
KLB	Keep Loudoun Beautiful
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NVCWP	Northern Virginia Clean Water Partners
NVRC	Northern Virginia Regional Commission
PEOP	Public Education and Outreach Plan
PRCS	Department of Parks, Recreation and Community Services
SWCD	Loudoun County Soil & Water Conservation District
SWM	Department of General Service - Stormwater Management Division
TMDL	Total Maximum Daily Load
VCE	Virginia Cooperative Extension
VDOT	Virginia Department of Transportation
VPDES	Virginia Pollutant Discharge Elimination System
WMD	Department of General Services - Waste Management Division

1.0 Background and Purpose

Loudoun County (County) operates a Municipal Separate Storm Sewer System (MS4) that is permitted through the Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Stormwater Discharges from Small MS4s (MS4 General Permit) issued by the Virginia Department of Environmental Quality (DEQ).¹ The current MS4 General Permit (effective November 2018) authorizes the County's MS4 outfall discharges into surface waters of Virginia. As a condition of the MS4 General Permit, the County is required to develop and implement a Public Education and Outreach Program² designed to:

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

The purpose of this Public Education Outreach Plan (PEOP) is to identify the community involvement approach Loudoun County will use to promote methods to reduce the discharge of pollutants in stormwater runoff. The Department of General Services (DGS) is responsible for managing the PEOP for Loudoun County's Stormwater Management (SWM) program. The activities identified in this plan apply to the unincorporated urbanized areas of Loudoun County that are contained within the County's MS4 permit area. Loudoun County operates an MS4 as defined by the 2010 US Census (Figure 1).

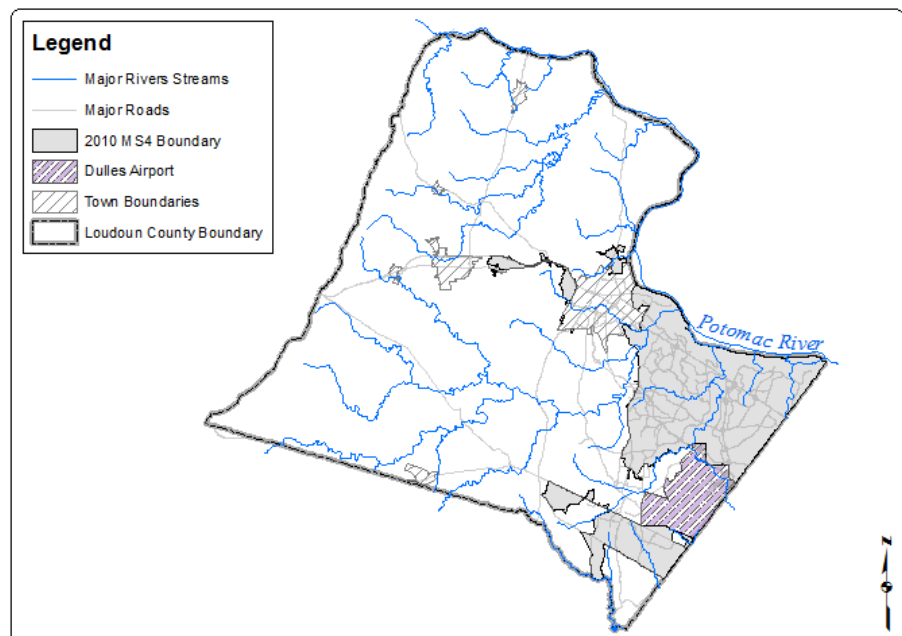


Figure 1. Loudoun County 2010 Urbanized Area

The County has historically placed, and continues to place, a high priority on stormwater pollution prevention. As the County addresses the requirements of the 2018 MS4 General Permit, it remains committed to providing education and outreach to its citizens and businesses.

¹ 9VAC-890-40

² 9VAC-890-40, Part I E 1 (a)



2.0 High-Priority Stormwater Issues

The MS4 General Permit requires that the County identify “no less than three high-priority stormwater issues to meet the goal of educating the public”.³ As part of its compliance effort under the previous MS4 General Permit (2013), the County identified bacteria impacts on water quality, illicit discharges, nutrient impacts on water quality, and sediment impacts on water as high-priority stormwater issues and has chosen to maintain its selection as high-priority stormwater issues during the current MS4 General Permit (2018). The rationale and importance for the selection of each high-priority stormwater issue selected are described in Table 1.

Table 1. Rationale and Importance for the Selection of High-Priority Stormwater Issues

High-Priority Stormwater Issue	Rationale and Importance for Selection
Bacteria Impacts on Water Quality	2016 305(b)/303(d) Water Quality Assessment Integrated Report has identified bacteria as the cause of impairments in segments of numerous streams in the County's MS4 service area including Broad Run, Bull Run and tributaries to the Potomac River. Given the identified bacterial impairments, the County has identified bacteria as a high-priority stormwater issue.
Illicit Discharges	Given the predominance of minimizing pollutant discharge from illicit discharges in the MS4 General Permit, the County has identified illicit discharges as a high-priority stormwater issue. In previous versions of the PEOP, the County chose to concentrate on illicit discharges from swimming pools. In this updated version, the County has chosen to concentrate on all illicit discharges as a large percentage of illicit discharges identified in Loudoun County have been unrelated to swimming pool discharges.
Nutrient Impacts on Water Quality	Excessive nutrients (nitrogen and phosphorus) have been identified as a source of impairment in the Chesapeake Bay. As a regulated point source, the County is required to reduce the nutrient load that is discharged from its MS4. Proper application of nutrients such as fertilizers can improve water quality and assist the County in meeting these reductions. Therefore, the County has identified nutrients as a high-priority stormwater issue.
Sediment Impacts on Water Quality	Sediment has been attributed as a factor in the benthic impairment of Goose Creek, Bull Run, and the Chesapeake Bay. Given that water quality impairments have been attributed to sediment, the County has identified sediment as a high-priority stormwater issue.

The MS4 General Permit requires the County to annually employ two (2) or more of the outreach strategies identified in Table 1 of the 2018 MS4 General Permit (Figure 2) to communicate with the public on the high-priority stormwater issues including how the target audience can minimize stormwater pollution. The strategies from the MS4 General Permit table (Figure 2) utilized by the County to meet this permit requirement are identified in the individual outreach efforts discussed throughout Section 4.0.

³ 9VAC-890-40, Part I E 1 (b)



Table 1 Strategies for Public Education and Outreach	
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, billboards, or storm drain stenciling
Media Materials	Information disseminated through electronic media, 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 organizations, or industrial officials

Figure 2. 2018 MS4 General Permit List of Strategies for Loudoun County Selection and Annual Use in Communicating with the Public

3.0 Loudoun County Departments and Partners Engaged in Public Education and Outreach Regarding High-Priority Stormwater Issues

Loudoun County's efforts to inform community members of how they can minimize the impacts of the selected high-priority stormwater issues are led by various County departments. To support the County in its efforts, the County partners with non-County organizations through relationships or funding mechanisms. The SWM program is responsible for determining the relationship of individual partner activities with MS4 General Permit compliance. The relationship between stormwater management public education and outreach and the County departments and partner organizations is presented in Figure 3, below.

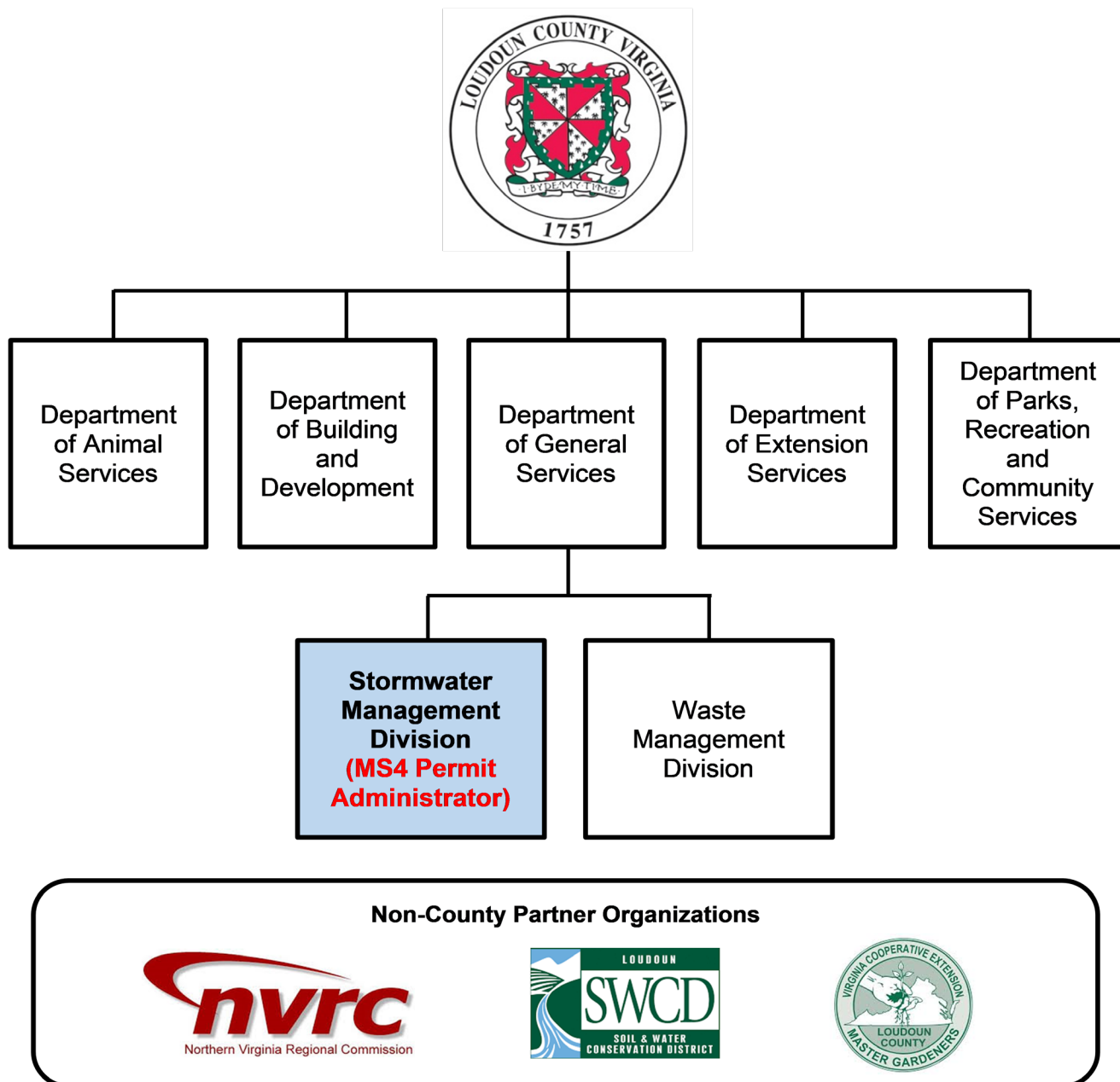


Figure 3. Relationship between SWM and Participating County Departments and Non-County Partner Organizations in Delivering High-Priority Stormwater Issue Public Education and Outreach.



Below is a description of County departments and non-County partner organizations that employ public education and outreach efforts that address and often provide guidance in reducing the stormwater impact regarding the high-priority stormwater issues identified by the County.

3.1 County Departments

The following are County departments that play a role in the County's public education and outreach efforts.

3.1.1 Department of General Service

Website: <https://www.loudoun.gov/110/General-Services>

DGS provides direct emergency and essential public works support to Loudoun County residents while providing effective and responsive facility and vehicle support to County government. Among DGS's responsibilities are the County's Stormwater Management Division (SWM), Waste Management Division (WMD) and implementation of the Clean Waters Initiative.

3.1.2 Stormwater Management Division

Website: <https://www.loudoun.gov/686/Stormwater-Management-Program>

SWM administers the County's MS4 General Permit compliance efforts. In addition to acting as the compliance hub, SWM provides general public education and outreach efforts regarding the County's stormwater program.

3.1.3 Waste Management Division

Website: <https://www.loudoun.gov/127/Waste-Management>

WMD is responsible for operating the County's solid waste management facility; managing public recycling drop-off centers and hazardous waste collection services; and supporting recycling opportunities for electronics, automotive wastes, and other materials. Specific to MS4 Public Education and Outreach, WMD oversees the household hazardous waste collection program which provides residents opportunities to properly dispose of household hazardous wastes; thus, minimizing the potential for illegal dumping and illicit discharges.

3.1.4 Loudoun County Department of Animal Services

Website: <https://www.loudoun.gov/4118/Animal-Services>

The Department of Animal Services (DAS) is responsible for implementing the County's animal services programs including pet adoption, animal control, and pet licensing. Specific to implementation of high-priority stormwater issue public education and outreach, DAS investigates pet waste complaints as well as 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; thereby, minimizing the potential for bacteria to be captured in stormwater runoff and discharged through MS4 outfalls.

3.1.5 Loudoun County Department of Building and Development

Website: <https://www.loudoun.gov/96/Building-Development>

The Department of Building and Development (B&D) provides oversight of all phases of construction within the County, including acting as its local erosion and sediment control (E&SC) and Virginia Stormwater Management Program authority. In addition to its regulatory responsibilities, B&D provides extensive educational awareness materials to the development community that are aimed at minimizing sediment discharge through better site management and erosion and sediment control.



3.1.6 Loudoun County Department of Parks, Recreation and Community Services

Website: <https://www.loudoun.gov/4119/Parks-Recreation-Community-Services>

The Department of Parks, Recreation and Community Service (PRCS) provides County residents opportunities for recreation and leisure while supporting community services. As a community service, PRCS allows residents to exercise their pets at their park facilities. PRCS coordinates with DGS in the placement of dog waste stations at their facilities and promotes proper clean-up and disposal of dog waste. The use of dog waste stations and associated signage provide opportunities for County residents to minimize the potential for bacteria to be captured in stormwater runoff and discharged through MS4 outfalls.

In addition, PRCS leads volunteer park clean-up days at various facilities throughout the year in which litter and other wastes are collected and properly disposed of. This public participation opportunity minimizes the floatables and other potential stormwater pollutants from being discharged into receiving waters.

3.1.7 Department of Extension Services

Website: <http://loudouncountymastergardeners.org/>

The Department of Extension Services (DES) is Loudoun County's unit of Virginia Cooperative Extension (VCE) and serves its residents and local governments. DES staff members and volunteers develop and present education programs using research-based information published by Virginia's land-grant universities, Virginia Tech, and Virginia State University. Among its many missions, DES supports the County's efforts at minimizing nutrient and sediment pollutants in stormwater runoff that discharge through the County's MS4 system. An example of DES's public awareness and outreach associated with MS4 stormwater runoff includes the Extension Services Master Gardener (EMG) program which is comprised of a group of volunteers that are organized and trained by DES.

3.2 Non-County Participating Organizations

The following are non-County organizations that play a role in the County's public education and outreach efforts:

3.2.1 Northern Virginia Regional Commission

Website: <https://www.novaregion.org/>

The Northern Virginia Regional Commission (NVRC) is a regional council of thirteen-member local governments, including Loudoun County, in the Northern Virginia suburbs of Washington DC. NVRC's chief roles and functions have focused on providing information, performing professional and technical services for its members, and serving as a mechanism for regional coordination. NVRC efforts are supported by annual contributions from its members, local governments, by appropriations of the Virginia General Assembly, and by a variety of grants, contracts, and fees from both governmental and private sector sources. Current programs and projects address a wide array of local government interests and include numerous public education and outreach efforts aimed at minimizing the high-priority stormwater issues identified by the County, as well as providing educational outreach on Coastal and Chesapeake Bay resources, shoreline management, and residential stormwater best practices. NVRC manages the Northern Virginia Clean Water Partners (NVCWP) which is a regional stormwater education initiative by and for Northern Virginia jurisdictions that uses cable television ads, website ads, and a website (<https://www.onlyrain.org>) to encourage the public to keep pollutants from flowing into storm drains.



3.2.2 Keep Loudoun Beautiful

Website: <http://www.keeploudounbeautiful.org/>

Keep Loudoun Beautiful (KLB) is an all-volunteer, 501(c)(3) tax-exempt non-profit organization with a mission to maintain the natural beauty and visual quality of Loudoun County; encourage and educate citizens to keep Loudoun beautiful; promote public awareness of environmental challenges and common-sense solutions, like reducing, reusing, and recycling; and, improve County trash disposal and eliminate illegal dumping. KLB's public education and outreach efforts include providing "Green Tips" and organizing public participation for community and watershed clean-up events aimed at minimizing the litter and other trash from entering receiving waters. To assist KLB in its efforts, Loudoun County waives disposal fees for wastes collected as part of the clean-up events.

3.2.3 Loudoun County Soil and Water Conservation District

Website: <http://www.loudounsoilandwater.com/>

The Loudoun County Soil and Water Conservation District (SWCD) is a political subdivision of the Commonwealth of Virginia that is funded by federal, state, local, and private funding streams. The SWCD, in partnership with the County, offers various programs aimed at addressing high-priority stormwater issues including storm drain marking projects, watershed education exhibits, family stream day, and promoting the voluntary use of best management practices (BMPs) including rain barrels and tree planting. Most recently, the SWCD has taken over application of the Virginia Conservation Assistance Program in which Loudoun County property owners can apply for and receive cost-share grants for the implementation of voluntary BMPs. The SWCD also provides classroom education to school-age children including Enviroscape© lessons and sponsors events, such as Rain Barrel Workshops. The SWCD public education and outreach efforts support the County's efforts in minimizing pollutants in stormwater runoff.

3.3 Other Non-Government Organizations

Numerous other non-government organizations (NGOs) within the County advocate environmental stewardship through public education and outreach programs independent of the County's PEOP. The NGO messages often supplement the County's efforts in communicating the issues regarding the high-priority stormwater issues and how the public can assist in minimizing their impacts on water quality. While these independent education and outreach initiatives are not part of the County's overall effort at addressing high-priority stormwater issues, they do provide a platform to increase public awareness on minimizing pollutants associated with high-priority stormwater issues upon which the County can explore cooperative messaging and delivery and coordinate informally or formally through a memorandum of understanding (MOU). Active NGOs in the County include:

- Loudoun County Watershed Watch (<http://www.loudounwatershedwatch.org/>)
- Loudoun Environmental Stewardship Alliance (<http://loudounnature.org/>)
- Loudoun Water (<https://www.loudounwater.org/>)
- Piedmont Environmental Council (<https://www.pecva.org/>)
- Audubon Naturalist Society (<https://anshome.org/>)



4.0 Strategies for Providing Public Education and Outreach on Selected High-Priority Stormwater Issues

Loudoun County, through its departments and non-County participating organizations, utilizes numerous strategies to provide public outreach and education for the selected high-priority stormwater issues. Table 2 provides a summary of the strategies that the County utilizes for each high-priority water quality issue identified.

Table 2. Summary of Strategies to be Implemented for Providing Public Education and Outreach on Selected County High-Priority Stormwater Issues

Loudoun County High-Priority Stormwater Issues				
Strategies	Bacteria Impacts on Water Quality	Illicit Discharges	Nutrient Impacts on Water Quality	Sediment Impacts on Water Quality
Traditional Written Materials	✓	✓	✓	✓
Alternative Materials	✓			
Signage	✓	✓		
Media Materials	✓	✓	✓	✓
Speaking Engagements				✓
Curriculum Materials			✓	
Training Materials				✓

Sections 4.1 through 4.4 provide details regarding the strategies and associated messaging the County implements for each of the high-priority stormwater issues. Each strategy contains the following:

- Target Audience
- Availability of materials for public consumption
- Responsibility parties for implementing the strategy
- Location of resources
- Items to be included in the County's MS4 Annual Report



4.1 High-Priority Stormwater Issue 1: Bacteria Impacts on Water Quality

The County employs numerous outreach efforts to minimize bacteria contribution to receiving waters from its MS4. These efforts concentrate on reducing the bacteria contribution associated with improper pet waste management and include the use of the following strategies:

- Strategy 1 - Traditional written materials as described in Section 4.1.1
- Strategy 2 - Media materials as described in Section 4.1.2
- Strategy 3 - Signage as described in Section 4.1.3
- Strategy 4 - Alternative materials as described in Section 4.1.4

4.1.1 Traditional Written Materials

SWM has developed both English and Spanish versions of a “Scoop the Poop” brochure. This brochure outlines the issues associated with pet wastes while informing pet owners of ways they can manage pet wastes so that bacteria impacts are minimized.

Table 3. Description of County's use of "Scoop the Poop" Brochure to Communicate Issues Associated with Bacteria Impacts on Water Quality

Traditional Written Materials - Scoop the Poop Brochure	
Target Audience	Loudoun County Dog Owners
Public Availability	Year-round; hard copies of the brochure are provided to County libraries and distribution upon request.
SWM Responsibility	SWM to make cooperating partners aware of the brochure's availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital version of the brochure on its web page.
	SWM to continue to print and distribute the brochure at County libraries.
	SWM to continue to print and distribute the brochure at applicable County events in which it participates.
Resource Location	Hard copies of the brochure are provided to County libraries on a regular basis and are distributed to the general public and homeowner associations (HOAs) upon request.
	The brochure is available electronically in both English and Spanish on the County's website. The English version is available at: https://www.loudoun.gov/DocumentCenter/View/32600/Pet-Waste-Brochure-English-PDF The Spanish version is available at: https://www.loudoun.gov/DocumentCenter/View/129389/Pet-Waste-Brochure-Spanish-PDF
MS4 Annual Reporting	A link to the “Scoop the Poop” brochure.



4.1.2 Media Materials

On behalf of Loudoun County, and the other members of the Northern Virginia Clean Water Partners (NVCWP), NVRC produces and provides a regional multi-media program comprised of an informational website and an annual advertisement blitz across internet and television. NVCWP's efforts are aimed at providing simple ways for pet owners to love their pets and protect the environment.

Table 4. Description of County's use of the NVCWP's Multi-Media Program to Communicate Issues Associated with Bacteria Impacts on Water Quality

Media Materials - NVCWP Multi-Media Program	
Target Audience	Northern Virginia Dog Owners
Public Availability	Year-round
NVRC – NVCWP Responsibility	NVCWP must continue to meet the requirements of the MOU which may include producing and providing annual regional public education and outreach advertising blitzes while maintaining their website as directed by the regional partnership.
	NVCWP to continue to prepare an annual report that summarizes the activities completed during the reporting period and evaluates the program's outreach.
SWM Responsibility	SWM to continue to ensure County's participation in NVCWP.
Resource Location	Information regarding the NVRC-NVCWP program can be found at https://www.onlyrain.org/pets .
MS4 Annual Reporting	A copy of the latest NVCWP annual report.

4.1.3 Signage

PRCS and SWM implement a cooperative outreach program aimed at encouraging pet waste management at County parks. The program involves the installation, maintenance, and promotion of dog waste stations. SWM maintains a contract with a private firm to install and maintain dog waste stations, including signs. PRCS promotes the availability of the dog waste stations through its online "Find-A-Facility" search engine that identifies which parks have dog waste stations.

Table 5. Description of County's use of Signage at Dog Waste Stations to Communicate Issues Associated with Bacteria Impacts on Water Quality

Signage - Dog Waste Station Signs	
Target Audience	Dog Owners using Loudoun County Park Facilities
Public Availability	Year-round
PRCS Responsibility	PRCS to coordinate with SWM to continue to identify potential locations for placement of dog waste stations.
	PRCS to promote the usage of dog waste stations on web page and in publications.
	PRCS to maintain an updated list of parks with dog waste stations on its "Find-A-Facility" search engine.
SWM Responsibility	SWM to coordinate with PRCS to continue to identify potential locations for dog waste stations.
	SWM to develop and implement a schedule to install dog waste stations at locations identified through coordination with PRCS.
	SWM to ensure continued installation and maintenance of dog waste stations at County PRCS facilities.



Signage - Dog Waste Station Signs	
Resource Location	Dog owners can locate County park facilities with dog waste stations by searching PRCS's on-line "Find-A-Facility" search engine at https://www.loudoun.gov/Facilities .
MS4 Annual Reporting	Total number of new dog waste stations brought online during the permit year.

4.1.4 Alternative Materials

In an outreach initiative to reach owners of newly adopted dogs from DAS, SWM provides DAS pet waste bag leash dispensers and brochures. DAS provides these leash dispensers and written materials to individuals who adopt dogs either directly from their facility or from one of their mobile adoption events. DAS also provides these pet waste bag leash dispensers at public education and outreach events regarding pet adoption.

Table 6. Description of County's use of Pet Waste Bag Leash Dispensers and Adoption Handouts to Communicate Issues Associated with Bacteria Impacts on Water Quality

Alternative Materials - Pet Waste Bag Leash Dispensers and Adoption Handouts	
Target Audience	Owners of Dogs Newly Adopted from DAS
Public Availability	Year-round and at scheduled adoption events
DAS Responsibility	DAS to hand out pet waste bag leash dispensers to individuals adopting dogs at their facility or at one of their mobile adoption events.
	DAS to hand out pet waste leash dispensers to individuals at public education and outreach events regarding pet adoption.
	DAS to provide SWM a list of the events, including event name, location, and date, at which the pet waste bag leash dispensers were distributed.
SWM Responsibility	SWM to provide DAS pet waste bag leash dispensers and Scoop the Poop brochures for continued distribution during dog adoptions.
Resource Location	The DAS Animal Shelter is located at 39820 Charles Town Pike, Waterford, VA 20197. Scheduled DAS adoption events can be found at https://www.loudoun.gov/538/Pet-Adoption-Events .
MS4 Annual Reporting	A list of events including the location and date where DAS distributed pet waste bag leash dispensers.

4.2 High-Priority Stormwater Issue 2: Illicit Discharges

The County continues to stress the importance of eliminating unauthorized non-stormwater discharges through MS4 outfalls in its public education and outreach program. In addition to promoting community reporting of illicit discharges through the use of the Loudoun Express Request (LEx), which allows citizens to report concerns to the County 24-hours a day via the internet at <https://www.loudoun.gov/3055/Report-an-Issue> and mobile applications by downloading the app from the App Store and Google Play, the County continues to maintain its Stormwater Reporting Line (703-777-0117).

To combat sources of illicit discharges, the County employs numerous outreach efforts to report and eliminate illicit discharges and include the use of:

- Strategy 1 - Traditional written materials as described in Section 4.2.1
- Strategy 2 - Media materials as described in Section 4.2.2
- Strategy 3 - Signage as described in Section 4.2.3



4.2.1 Traditional Written Materials

SWM has developed both English and Spanish versions of numerous brochures that identify potential activities that may result in illicit discharges and what the public can do to eliminate them. SWM outreach materials include a brochure specific to illicit discharge identification and notification, and informational sheets that address activities specific to commercial establishments/industries that are likely to have a high potential for illicit discharges and stormwater pollution, including automotive care, food industry, lawn care, outdoor washing, pet wastes, pool operations, sediment, and vehicle repair.

Table 7. Description of County's use of Illicit Discharge Brochures and Information Sheets to Communicate Issues Associated with Illicit Discharges

Traditional Written Materials - Illicit Discharge Brochures and Information Sheets	
Target Audience	General Public; Loudoun County Businesses and Homeowners
Public Availability	Year-round
SWM Responsibility	SWM to make cooperating partners aware of the brochure's availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital versions of the brochures on its web page.
	SWM to routinely review and update its brochures.
Resource Location	Digital versions of the individual brochures are available at https://www.loudoun.gov/2094/Stormwater-Education-Outreach
MS4 Annual Reporting	A link to the SWM Stormwater Education and Outreach web page.

4.2.2 Media Materials

On behalf of Loudoun County, and the other members of the NVCWP, NVRC produces and provides a regional multi-media program comprised of an informational website and an advertisement blitz across internet and television. NVCWP's efforts are aimed at providing home-owners information on the proper use and disposal of potential stormwater pollutants such as automotive fluids, wash wastewater, paints and stains, and household hazardous wastes.

Table 8. Description of County's use of NVCWP's Multi-Media Program to Communicate Issues Associated with Illicit Discharges

Media Materials - NVCWP Multi-Media Program	
Target Audience	Northern Virginia Homeowners
Public Availability	Year-round
NVRC – NVCWP Responsibility	NVCWP must continue to produce and provide annual regional public education and outreach advertising blitzes while maintaining their website as directed by the regional partnership.
	NVCWP to continue to prepare an annual report that summarizes the activities completed during the reporting period and evaluates the program's outreach.
SWM Responsibility	SWM to continue to ensure County's participation in NVCWP.
Resource Location	Information regarding the NVRC-NVCWP program can be found at https://www.onlyrain.org/home-maintenance .
MS4 Annual Reporting	A copy of the latest NVCWP annual report.

4.2.3 Signage



SWM coordinates volunteer efforts to mark neighborhood storm drains. This effort is designed to increase awareness of volunteer groups such as Boy Scouts and Girl Scouts, and also members of the community where the storm drains have been marked as draining straight to receiving waters.

Table 9. Description of County's use of Storm Drain Markers to Communicate Issues Associated with Illicit Discharges

Signage - Storm Drain Markers	
Target Audience	Volunteer Groups such as Boy Scouts and Girl Scouts; General Public
Public Availability	Year-round
SWM Responsibility	SWM to promote the storm drain marking program among partners and other interested groups.
	SWM to continue to coordinate storm drain marking activities between volunteers and the Virginia Department of Transportation (VDOT) if applicable.
	SWM to provide the necessary materials such as maps, markers, and glue for volunteers to complete storm drain marking projects.
Resource Location	https://www.loudoun.gov/2094/Stormwater-Education-Outreach
MS4 Annual Reporting	The number of storm drain marking activities completed during the reporting period.



4.3 High-Priority Stormwater Issue 3: Nutrient Impacts on Water Quality

Loudoun County and its partners have developed a consistent message aimed at property owners and landscape professionals regarding the impacts to the Chesapeake Bay from excessive nutrient application on turf and urban landscapes. These efforts collectively concentrate on responsible turf and landscape management practices regarding the application of fertilizers and yard waste management. These efforts include the use of:

- Strategy 1 - Traditional written materials as described in Section 4.3.1
- Strategy 2 - Media materials as described in Section 4.3.2
- Strategy 3 - Curriculum as described in Section 4.3.3

4.3.1 Traditional Materials

SWM has developed and distributes “A Resident’s Guide to Lawn Care for a Cleaner Environment” brochure. This brochure outlines the water quality issues associated with excessive nutrients while informing the target audience of ways they can reduce their impact.

Table 10. Description of County's use of "A Resident's Guide to Lawn Care for a Cleaner Environment" Brochure to Communicate Issues Associated with Nutrients

Traditional Written Materials - A Resident's Guide to Lawn Care for a Cleaner Environment Brochure	
Target Audience	Loudoun County Homeowners
Public Availability	Year-round
SWM Responsibility	SWM to make cooperating partners aware of the brochure's availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital version of the brochure on its web page.
	SWM to continue to print and distribute the brochure at applicable County events in which it participates.
Resource Location	The English version can be found at: https://www.loudoun.gov/DocumentCenter/View/32603/Lawn-Care-Brochure-English-PDF
	The Spanish version can be found at: https://www.loudoun.gov/DocumentCenter/View/129402/Lawn-Care-Brochure-Spanish-PDF
MS4 Annual Reporting	A link to the “A Resident’s Guide to Lawn Care for a Cleaner Environment” brochures.

4.3.2 Media Materials

The County’s strategy to educate the public as to the impact of excess nutrients to the Chesapeake Bay and how they can minimize their contributions includes multiple media-centered County and regional efforts.

Clean Waters Initiative

DGS oversees the County’s Clean Waters Initiative, which is a web-based outreach effort employed to encourage implementation of the County’s Chesapeake Bay Watershed Implementation Plan commitments while supporting local, healthy communities. The Clean Waters Initiative outlines how the public can be the solution to water quality impacts associated with nutrients and sediment whether at home, on the farm, and as a community. The Clean Waters Initiative promotes environmentally proactive actions, local events, and acts as a gateway for local projects and programs. Specific to nutrient management, the Clean Waters Initiative promotes proper lawn fertilizer application for homeowners and implementation of nutrient management plans for common community properties. The Clean Waters Initiative provides a gateway to other locally available



resources such as the EMG program as well as the Virginia Department of Conservation and Recreation's (DCR) information on Urban Nutrient Management.

Table 11. Description of County's Clean Waters Initiative used to Communicate Issues Associated with Nutrients

Media Materials - Clean Waters Initiative	
Target Audience	Loudoun County Homeowners and Community Groups
Public Availability	Year-round
DGS Responsibility	DGS to maintain an updated Clean Waters Initiative website that includes updated local events and project opportunities.
SWM Responsibility	N/A
Resource Location	Information on the DGS Clean Waters Initiative can be found at: https://www.loudoun.gov/3493/Clean-Waters-Initiative
MS4 Annual Reporting	N/A

NVCWP

On behalf of Loudoun County, and the other members of the NVCWP, NVRC produces and provides a regional multi-media program comprised of an informational website and an annual advertisement blitz across internet and television. NVCWP's efforts are aimed at providing homeowners information on the proper landscape management including when to apply fertilizer and how to manage grass clippings.

Table 12. Description of County's use of Media Materials to Communicate Issues Associated with Nutrients

Media Materials - NVCWP Multi-Media Program	
Target Audience	Northern Virginia Homeowners
Public Availability	Year-round
NVRC-NVCWP Responsibility	NVCWP must continue to produce and provide annual regional public education and outreach advertising blitzes while maintaining their website as directed by the regional partnership. NVCWP to continue to prepare an annual report that summarizes the activities completed during the reporting period and evaluates the program's outreach.
SWM Responsibility	SWM to continue to ensure County's participation in NVCWP.
Resource Location	Information regarding the NVRC-NVCWP program can be found at https://www.onlyrain.org/gardening .
MS4 Annual Reporting	A link to the latest NVCWP annual report.

4.3.3 Curriculum Materials

Each spring, the EMG offers the Healthy Virginia Lawns Program, which promotes proper lawn care through administration of a fee-based program in which interested residential property owners coordinate with the EMG to conduct an on-site analysis of the property owners' yards and develop detailed nutrient management plans. In addition, the speakers are available to speak on a wide range of topics through the EMG's Speaker Bureau Program. Additionally, EMG promotes healthy lawns through its brochure titled Healthy Virginia Lawns. EMG has also developed a Speakers Bureau. Interested parties who are interested in topics such as lawn maintenance, mulching, composting and rain gardens can contact the Speakers Bureau to have someone speak to their club or organization.



Table 13. Description of County's use of EMG's Healthy Virginia Lawns Program to Communicate Issues Associated with Nutrients

Curriculum Materials - Healthy Virginia Lawns Program	
Target Audience	Loudoun County Homeowners
Public Availability	The Healthy Virginia Lawns program is available in the spring each year.
EMG Responsibility	EMG to continue implementation of the Healthy Virginia Lawns program.
SWM Responsibility	SWM to promote the availability of the Healthy Virginia Lawns Program.
Resource Location	Information regarding the Healthy Virginia Lawns program is available at http://loudouncountymastergardeners.org/programs/healthy-virginia-lawns/ .
MS4 Annual Reporting Item	The number of participating homeowners.



4.4 High-Priority Stormwater Issue 4: Sediment Impacts on Water Quality

Similar to its efforts at minimizing the impacts of nutrients on downstream receiving waters, Loudoun County has developed a consistent message regarding the impacts to local waters and the Chesapeake Bay from excessive sedimentation. These efforts collectively concentrate on minimizing impacts from both sediment discharge from the anthropogenic activity and in-stream erosion from the unregulated discharge of stormwater and include the utilization of the following methods:

- Strategy 1 - Traditional written materials as described in Section 4.4.1
- Strategy 2 - Media materials as described in Section 4.4.2
- Strategy 3 - Training materials as described in Section 4.4.3
- Strategy 4 - Speaking engagements as described in Section 4.4.4

4.4.1 Traditional Written Materials

SWM has developed both English and Spanish versions of a “Resident’s Guide to Sediment Reduction for a Cleaner Environment” brochure. This brochure outlines the issues associated with pet wastes while informing property owners of ways they can minimize the amount of sediment leaving their properties.

Table 14. Description of County’s use of its “Resident’s Guide to Sediment Reduction for a Cleaner Environment” to Communicate Issues Associated with Sediment

Traditional Written Materials - Resident's Guide to Sediment Reduction for a Cleaner Environment	
Target Audience	Loudoun County Residents
Public Availability	Year-round
SWM Responsibility	SWM to make cooperating partners aware of the brochure’s availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital versions of the brochures on its web page.
	SWM to routinely review and update its brochures.
Resource Location	The English version can be found at https://www.loudoun.gov/DocumentCenter/View/129393/Sediment-English-PDF .
	The Spanish version can be found at https://www.loudoun.gov/DocumentCenter/View/129394/Sediment-Spanish-PDF .
MS4 Annual Reporting	A link to the “A Resident’s Guide to Lawn Care for a Cleaner Environment” brochures.

4.4.2 Media Materials

As part of the Clean Waters Initiative, DGS prioritizes the use of stormwater management facilities at County residences to minimize stormwater runoff and reduce in-stream erosion caused by uncontrolled stormwater runoff. DGS promotes the value of both rain barrels and rain gardens in capturing stormwater runoff to minimize impact to the aquatic environment. The Clean Waters Initiative website provides links to partner resources such as the NVRC’s Residential Rain Gardens program and the Loudoun County Soil and Water Conservation District Rain Barrel program.

Clean Waters Initiative

DGS oversees the County’s Clean Waters Initiative. The Clean Waters Initiative is a web-based outreach effort employed to encourage implementation of the County’s Chesapeake Bay Watershed Implementation Plan commitments while supporting local, healthy communities. See the previous discussion in Section 4.3.2 for a full description of the Clean Waters Initiative.

**Table 15. Description of County's Clean Waters Initiative used to Communicate Issues Associated with Sediment**

Media Materials - Clean Waters Initiative	
Target Audience	Loudoun County Residents
Public Availability	Year-round
DGS Responsibility	DGS to maintain an updated Clean Waters Initiative website that includes an updated local events and project opportunities.
SWM Responsibility	N/A
Resource Location	Clean Waters Initiative information regarding rain barrels can be found at https://www.loudoun.gov/3495/At-Home .
	Clean Waters Initiative information regarding rain gardens can be found at https://www.loudoun.gov/3495/At-Home .
MS4 Annual Reporting Item	N/A

Resource Program

B&D's Forest Resource Program promotes the value of forested stream buffers in maintaining streambank stability and reducing sediment in downstream receiving waters. Additionally, the Forest Resource Program provides information on planting and maintaining trees, links to additional resources, and annual Arbor Day information.

Table 16. Description of County's use of Media Materials to Communicate Issues Associated with Sediment

Media Materials - Forest Resource Program	
Target Audience	Loudoun County Residents
Public Availability	Year-round
B&D Responsibility	B&D to maintain an updated Forest Resource Program website that includes an updated local vents and project opportunities.
SWM Responsibility	N/A
Resource Location	Information regarding B&D's Forest Resource Program is available at https://www.loudoun.gov/3537/Forested-Stream-Buffers .
MS4 Annual Reporting	N/A

4.4.3 Training Materials

Through its Natural Resources Program, B&D provides the development community access to information resources regarding:

- Environmental and cultural resources
- Forest, soils, and geology
- Natural features
- Water and hydrology

By providing this information to the development community and making members of the development community aware of it during meetings between individual developers and County staff, the County improves



the knowledge and understanding of how to minimize the discharge of sediment during land disturbing activities and provides valuable information to the development community for incorporation into site designs.

Table 17. Description of County's use of the Natural Resources Program's Training Materials to Communicate Issues Associated with Sediment

Training Materials - Natural Resources Program	
Target Audience	Development Community
Public Availability	Year-round
B&D Responsibility	B&D to maintain an updated Natural Resources website that includes updated local events and project opportunities.
	B&D to promote (and when appropriate, distribute) the available Natural Resources materials to the development community.
SWM Responsibility	N/A
Resource Location	Information for the development community regarding Natural Resources is available at https://www.loudoun.gov/1321/Natural-Resources .
MS4 Annual Reporting	N/A

4.4.4 Speaking Engagements

Members of the EMG Speakers Bureau Program provide speakers to interested clubs and organizations. Among the wide range of available environmental stewardship topics are those such as rain gardens, mulching, and natural landscapes, which are promoted to reduce stormwater runoff and reduce in-stream erosion.

Table 18. Description of County's use of EMG's Speakers Bureau Program to Communicate Issues Associated with Sediment

Speaking Engagements - EMG Speakers Bureau Program	
Target Audience	Loudoun County Residents
Public Availability	Year-round
EMG Responsibility	EMG to conduct speaking engagements to promote stormwater BMPs aimed at reducing stormwater runoff and stormwater pollution.
SWM Responsibility	SWM to promote the availability of the EMG Speakers Bureau Program to provide speakers to community groups regarding the management of stormwater runoff.
Resource Location	Information for the development community regarding Natural Resources is available at http://loudouncountymastergardeners.org/ .
MS4 Annual Reporting	A list, including community group, date, and location of SWM-related speaking engagements conducted by EMG.



5.0 Public Participation Opportunities

In conjunction with the public education and outreach efforts, the County and its partners offer numerous public participation events that are designed to minimize the impacts of high-priority stormwater issues on downstream receiving waters. These events are promoted on individual sponsor web sites and occur throughout the year. Public participation events include household hazardous waste collection days, rain barrel workshops, and watershed cleanup events.

5.1 Household Hazardous Waste Collection Days

The WMD sponsors household hazardous waste collection days throughout the year. At these events, County residents can dispose of unwanted household hazardous wastes and materials such as gasoline and household chemicals. In addition to promoting the events on its web site, WMD promotes the household hazardous waste collection events through social media including Facebook and Twitter. Information regarding household waste collection events is available at <https://www.loudoun.gov/344/Upcoming-Events>.

5.2 Rain Barrel Workshops

In partnership with Loudoun County and the Towns of Leesburg, Lovettsville and Purcellville, the Loudoun County Soil and Water Conservation District (SWCD) sponsors a Rain Barrel program and holds occasional Rain Barrel workshops throughout the County. Rain Barrel workshop events are promoted on the SWCD website, <http://www.loudounsoilandwater.com/>.

5.3 Watershed Cleanup Events

Keep Loudoun Beautiful (KLB) sponsors watershed cleanup events throughout the year. These events are designed to gather trash and debris from the banks of local waters to reduce floatables and other solid pollutants. Information regarding watershed cleanup events is available at <http://www.keeploudounbeautiful.org/KLBcanoe.html>.



6.0 Public Reporting

To facilitate public participation relating to Public Education and Outreach and Public Involvement and Participation, the County has established a stormwater reporting telephone number, and website for stormwater management concerns, including the discovery of illegal dumping to the MS4 or the discovery of any other illicit discharge. In addition, the mobile app Loudoun Express (LEx) Request was developed as a citizen request system for members of the public to submit requests or report concerns, including illicit discharges. It is the County's goal to investigate reported potential illicit discharges within three (3) calendar days of receipt.

The County maintains the following tools to facilitate public reporting of stormwater concerns:

- The County's stormwater reporting telephone number is: 703-777-0117.
- The County's Stormwater Management Program web page, including how to "Report a Problem", is located at the following address:
<https://www.loudoun.gov/686/Stormwater-Management-Program>.
- The County's web page to download LEx is located at the following address:
<https://www.loudoun.gov/3055/Report-an-Issue>.



Paddleboarder Potomac River Gorge
Photo by Michael Kircher

Northern Virginia Clean Water Partners

2019 Summary

WORKING TOGETHER FOR HEALTHY STREAMS AND RIVERS

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 2019 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



2019 Campaign Overview and Accomplishments

In 2019, 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 and the [Only Rain Down the Storm Drain](http://www.onlyrain.org) 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-channel media campaign, partners participated in local events to raise awareness and encourage positive behavior change in residents. Television and internet ads featured the well-known national symbol of non-point source pollution; the rubber ducky.



33,591,119

Total household television impressions*

769,300

Total digital impressions (internet banner ads and in-stream video ads)

9,416

Number of times the ads aired from July 2018- June 2019

6,674

Visits to the www.onlyrain.org website

4,000

Pet waste bag dispensers distributed

500

Online Annual Survey Responses

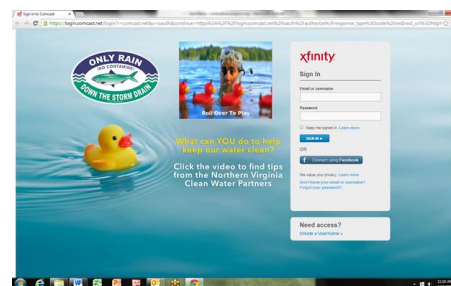
>75%

Percent of target audience reached

Throughout the campaign year, the Partners made the following efforts to educate the public and promote awareness of stormwater pollution:

- From July 2018 through June 2019, aired four Public Service Announcements on 20 English language cable TV networks, and five Spanish language networks a total of 9,416 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.



- In 2019, the Partners also implemented a strategy aimed at raising awareness about stormwater pollution called **"Write as Rain"**. The effort used stencils and an eco-friendly rain resistant spray (called RainWorks) to blanket the region's sidewalks and thoroughfares with fun and educational motivational

messages about stormwater that appear when the surfaces are wet. The goal of the effort was to raise public awareness about the environmental impacts of storm water pollution.



- 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 2019 survey include:

General Awareness

- Roughly one third of respondents either don't know where storm water ends up or believes that it goes to a wastewater treatment plant.
- 15% of respondents recalled seeing the ad on TV after watching the video clip in the survey.
- Of those who recalled seeing the ads, 47 percent state they already take action to protect clean water, 32 percent state they now pick up their pet waste more often, 8 percent state that they now properly dispose of motor oil, and 25 percent state they plan to fertilize fewer times per year.
- When shown the Only Rain Down the Storm Drain logo, 57 percent of the respondents recognized it compared to 54 percent in 2013. This increase indicates that **awareness of the logo has increased over time.**
- Less than half of respondents feel at least somewhat confident that they would know where to report potential water pollution but, only 38 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 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 (64%) 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 (64%) indicated that email newsletters with reminders and quick tips and/or online resources would help them take action to protect clean water.

Understanding Behaviors

In addition to capturing responses to questions regarding the effectiveness of the campaign, this year's survey honed in on the 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 but was the third most common reason in 2019.

75% of lawn and garden owners fertilize their lawns at least once per year. **Among those who fertilize once a year, 14 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. **About half of the respondents reported using an herbicide to treat weeds in their lawn or garden.**

Among those who fertilize their lawn, 75 percent have never had or were not sure if their soil had been tested for fertility or pH and fifty five percent reported using a slow release fertilizer.

In a new question for 2018, after reading a description of a rain barrel, rain garden, and conservation landscaping, respondents were asked if they had implemented these features at their home or had heard about them. Six percent reported having a rain barrel, while two percent reported having a rain garden, and seven 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 (83%) or take used oil to a gas station or hazmat facility for recycling (8%). **Approximately four 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.**

NORTHERN VIRGINIA 2019 WATER QUALITY SURVEY

Although the entirety of the Northern Virginia region is in the Potomac River watershed, many Northern Virginians are underinformed about actions they can take to reduce pollution in stormwater runoff.



Where do you believe stormwater goes?

68%

of NoVA residents think it eventually ends up in the Potomac River or Chesapeake Bay



AND

Around 1/3 of NoVA residents either don't know where it goes or believe **it goes to a wastewater treatment plant.**



42%

of Northern Virginians feel at least somewhat confident that they would know where to **report potential water pollution.**

BUT ONLY

38%

would report water pollution if they saw it.



About four in ten residents of Northern Virginia feel they are most **prevented from taking action** to protect clean water because they **DON'T KNOW WHAT TO DO.**



1/4

About **1/4** of NoVA residents have seen or received **information about reducing water pollution** in the past 12 months.

Although improperly disposed pet waste is a major source of bacteria in stormwater,

ONLY 15%

of dog owners in Northern Virginia believe **water pollution** is the most important reason to pick up after your pet.

75% of lawn owners in Northern Virginia **fertilize** their lawn at least once a year.

ONLY 6% fertilize once in the Fall, even though fertilizing **once a year in the fall** is better for local waterways.



30%

of car/truck owners wash their car/truck **at home.**

40%

use **environmentally friendly** detergent.

28%

wash on the grass or other **surface that absorbs water.**

10%

don't use any detergent - **only water.**

About 1/3 of NoVA residents are **unaware** of whether their locality has a specific place to drop off



HOUSEHOLD HAZARDOUS WASTE

One in five Northern Virginians



ARE INTERESTED IN GETTING A RAIN BARREL.

Only Rain Down the Drain

www.onlyrain.org

For more information:

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2019 Northern Virginia Clean Water Partners

Fairfax County | Arlington County | Loudoun County | Stafford County | Fairfax Water |
City of Alexandria | City of Fairfax | 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



Virginia Coastal Zone
MANAGEMENT PROGRAM



Northern Virginia Regional Commission

Summary prepared by NVRC on behalf of the Partners

August, 2019

COUNTY OF LOUDOUN



DEPARTMENT OF GENERAL SERVICES

Memorandum

Date: August 21, 2019

To: Stormwater Team

From: Chris Stone, Stormwater Chief, *CS*
Loudoun County Department of General Services (DGS)

Subject: Procedures for Public Involvement and Participation in the Stormwater Program

Purpose

The purpose of this memo is to outline procedures for the Loudoun County Stormwater Group related to receiving public comments and for proper documentation of those comments. This memo was specifically developed to document the procedures called for in Part I E 2 a of the VADEQ MS4 GP, dated November 1, 2018.

Overview

Loudoun County has a variety of methods for the public to report concerns of any kind. For stormwater-related concerns, the public can notify county staff via the following methods:

- Loudoun Express Request (LEx). This is a web based systems that allows the public to submit a request via a computer or mobile application.
- Loudoun County Stormwater Website (www.loudoun.gov/stormwater [link](#))
- Loudoun County Stormwater reporting line 703.777.0117.
- Loudoun County Stormwater email stormwater@loudoun.gov



Procedures

1. Illicit discharges, improper disposal, or spills to the MS4.
 - a. Follow the reporting procedures outlined in the latest *Illicit Discharge Detection and Elimination (IDDE) Procedure*.
 - b. All reports from the public or Staff are to be entered and tracked through the LEx system.
 - c. The county will strive to respond to these reports within 1 working day.
2. Procedures for public input on the MS4 Program Plan
 - a. The current version of the Loudoun County MS4 Program Plan shall be posted to the Loudoun County Stormwater website.
 - b. Anyone may also request a printed copy or digital copy (pdf) of the Plan.
 - c. The Loudoun County Stormwater Group will respond as appropriate to any public comments received regarding the MS4 Program Plan. All comments received and responses will be saved to a folder on the stormwater file server.
3. Procedures for public input or complaints
 - a. It shall be the goal of the Stormwater Group to respond as appropriate to public input or complaint regarding a stormwater concern within two business days.
 - b. All complaints received from the public will be entered into the LEx system.
4. Procedures for maintaining documentation of public input received on the MS4 program and associated MS4 Program Plan and the County's response.
 - a. All public input related to IDDE and stormwater complaints will be documented in the LEx system.
 - b. All input related to the Program Plan will be saved in an appropriate folder on the stormwater file server.

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	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	57.99	PL21	-77.361313	39.028070
AB109	2.747865	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.00	PL21	-77.362323	39.025951
AB1200	89.114605	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	39.96	PL21	-77.380829	39.046338
AB1211	7.473138	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	51.80	PL21	-77.379827	39.047228
AB1227	1.209761	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.79	PL21	-77.379327	39.048490
AB1231	2.158107	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	76.49	PL21	-77.380320	39.046369
AB1236	2.757412	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	62.27	PL21	-77.379231	39.047333
AB124	1.616600	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.71	PL21	-77.362063	39.032062
AB1260	19.173763	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	34.85	PL21	-77.378143	39.048754
AB1307	26.768929	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	61.86	PL21	-77.383233	39.032668
AB1373	3.624742	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	52.75	PL21	-77.380019	39.031206
AB1375	4.180294	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.81	PL21	-77.381332	39.031899
AB1377	0.785271	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.25	PL21	-77.380837	39.031555
AB1411	0.634581	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	99.57	PL21	-77.384525	39.027582
AB1414	0.661578	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	59.67	PL21	-77.385450	39.027712
AB1419	1.947180	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.89	PL21	-77.385631	39.027399
AB142	2.662957	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.17	PL21	-77.362289	39.032280
AB1422	3.537836	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.05	PL21	-77.386205	39.027243
AB1444	37.869278	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	37.21	PL21	-77.382509	39.028013
AB1458	1.649641	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.63	PL21	-77.381529	39.027900
AB1475	3.108022	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.66	PL21	-77.380487	39.027810
AB1482	2.343479	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	54.27	PL21	-77.379406	39.028153
AB1489	5.143787	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	80.00	PL21	-77.380080	39.029208
AB149	9.313605	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.30	PL21	-77.363832	39.033537
AB1491	1.517072	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.51	PL21	-77.380505	39.028229
AB1493	2.178457	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	86.82	PL21	-77.381133	39.028099
AB1495	1.701857	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.35	PL21	-77.379237	39.028854
AB1500	3.062969	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.90	PL21	-77.379221	39.031089
AB1509	39.853026	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	52.09	PL21	-77.378023	39.030191
AB1512	0.460481	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.93	PL21	-77.377887	39.030152
AB153	2.942631	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	87.87	PL21	-77.364085	39.034660
AB1532	0.445320	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.69	PL21	-77.377884	39.029278
AB1535	0.413494	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	61.97	PL21	-77.377788	39.029365
AB154	21.807541	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.90	PL21	-77.364097	39.035480
AB1549	2.209738	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	19.01	PL21	-77.355239	39.041009
AB1551	0.853226	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.11	PL21	-77.351583	39.037570
AB1569	21.290848	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	97.65	PL21	-77.377167	39.050146
AB1761	3.109619	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.63	PL21	-77.383502	39.027541
AB1766	6.526958	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	87.21	PL21	-77.382261	39.027421
AB191	2.994613	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.94	PL21	-77.364070	39.036496
AB1913	17.259695	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	68.10	PL21	-77.377986	39.014481
AB1947	0.165531	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OFFICE_GENERAL	43.33	PL21	-77.375263	39.018683
AB1955	2.143500	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	53.67	PL21	-77.374233	39.017636
AB1956	1.429875	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	58.68	PL21	-77.374219	39.017596
AB1982	6.496608	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	91.31	PL21	-77.372166	39.017130
AB1986	2.277885	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MISC	63.92	PL21	-77.371106	39.015577
AB2015	6.645809	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	94.41	PL21	-77.380202	39.015640
AB2022	5.024016	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	33.11	PL21	-77.379969	39.015409
AB2032	0.243801	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.377828	39.014426
AB2033	14.239984	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	99.07	PL21	-77.377741	39.014399
AB2049	1.173753	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.376683	39.013936
AB23	17.773685	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	54.37	PL21	-77.367736	39.023944
AB257	8.425504	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	46.16	PL21	-77.361897	39.039358
AB267	4.134121	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	43.41	PL21	-77.362210	39.039312
AB273	7.894237	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	35.64	PL21	-77.362076	39.039881
AB3018	1.208543	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484613	39.025830
AB3021	5.884108	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484206	39.025835
AB3056	11.144166	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484806	39.022184
AB3099	9.444686	020700080903	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	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483004	39.020949
AB3109	2.361069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484006	39.020742
AB3127	8.199570	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485882	39.020915
AB3134	2.565196	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484671	39.021226
AB3141	3.576840	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485080	39.019715
AB3144	3.501528	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486922	39.019004
AB3147	2.980198	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486825	39.022452
AB3193	5.511019	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487809	39.019072
AB3195	0.187824	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487815	39.018951
AB3197	2.987143	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488146	39.018928
AB3209	1.895448	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486492	39.018661
AB3214	2.199689	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489076	39.019054
AB3218	1.674677	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489971	39.018902
AB3224	1.608825	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486672	39.017515
AB3237	6.953903	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487253	39.015993
AB3238	2.229782	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487280	39.015843
AB3249	2.318441	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486946	39.016968
AB3291	12.950265	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487323	39.014886
AB3325	22.895238	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491388	39.018550
AB3330	0.148884	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491778	39.018608
AB3333	7.895737	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492488	39.018731
AB3341	2.177254	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492828	39.018800
AB3348	1.370276	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491162	39.018737
AB3350	3.102961	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492779	39.018839
AB3358	2.960639	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490575	39.018933
AB3370	4.175494	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490014	39.019001
AB3390	0.876603	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477104	39.002076
AB3391	0.698567	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479049	39.002928
AB3392	0.129257	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480562	39.003447
AB3393	0.140599	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481188	39.003652
AB3394	2.148517	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481450	39.003720
AB3395	4.057978	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482661	39.003693
AB3400	17.069537	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.479655	38.993663
AB3402	3.180013	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486762	39.002432
AB3403	4.952749	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486468	39.002356
AB3404	0.748602	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486085	39.002182
AB3406	10.662758	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.485811	39.002087
AB3474	3.044846	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496427	39.025534
AB3484	11.944405	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495504	39.028391
AB3507	3.064338	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495494	39.029962
AB3510	1.169732	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495405	39.029279
AB3522	7.279815	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491070	39.029690
AB3533	5.101504	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491433	39.030093
AB3546	1.844901	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495647	39.030836
AB3552	3.261268	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495511	39.031949
AB3556	1.272720	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495093	39.033042
AB356	0.368217	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	57.59	PL21	-77.362277	39.043502
AB3571	3.829233	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494809	39.034119
AB3577	10.069114	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500104	39.032307
AB358	0.611796	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.41	PL21	-77.361937	39.042351
AB360	1.181752	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.77	PL21	-77.362310	39.040900
AB3625	6.367238	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496658	39.029441
AB3627	1.995505	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499327	39.029301
AB3637	4.647361	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496934	39.027541
AB3688	2.792474	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499525	39.028954
AB3689	31.658707	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499549	39.028955
AB3691	16.729703	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502591	39.029018
AB3738	4.382827	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504537	39.032501
AB3741	14.287974	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504685	39.032663

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
AB3753	10.116777	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506661	39.031654
AB3775	4.079354	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502627	39.032827
AB39	1.906613	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.14	PL21	-77.364400	39.026546
AB399	2.923511	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	73.39	PL21	-77.357449	39.042119
AB412	3.155701	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.21	PL21	-77.355047	39.054411
AB413	73.819430	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	52.67	PL21	-77.355071	39.054399
AB429	27.709533	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.33	PL21	-77.356005	39.054326
AB47	2.387231	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.80	PL21	-77.365607	39.026686
AB498	3.092719	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	86.20	PL21	-77.359477	39.053381
AB51	2.523609	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.48	PL21	-77.366733	39.026972
AB517	10.130998	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.78	PL21	-77.361850	39.053030
AB524	4.677497	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.56	PL21	-77.361977	39.050730
AB56	4.156622	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	1.81	PL21	-77.363260	39.027060
AB579	10.938476	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.68	PL21	-77.361623	39.050426
AB59	0.771865	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.363508	39.026956
AB632	20.740718	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.53	PL21	-77.362427	39.049631
AB690	4.483661	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.75	PL21	-77.357842	39.043328
AB700	2.228821	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.50	PL21	-77.356941	39.042298
AB719	1.489305	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.17	PL21	-77.359510	39.043758
AB72	3.158238	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.35	PL21	-77.364581	39.029333
AB723	33.793157	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.99	PL21	-77.359268	39.044454
AB727	8.247915	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	39.01	PL21	-77.359855	39.043288
AB738	2.762042	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	29.84	PL21	-77.360198	39.043969
AB752	1.502068	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.25	PL21	-77.363088	39.044043
AB756	1.010955	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	100.00	PL21	-77.355179	39.041131
AB759	1.500808	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	99.80	PL21	-77.354415	39.041910
AB761	1.189190	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.83	PL21	-77.353054	39.042188
AB763	20.006103	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	70.76	PL21	-77.354500	39.042132
AB784	3.333119	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.75	PL21	-77.355629	39.042315
AB79	3.307617	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.67	PL21	-77.366643	39.027584
AB8	7.730373	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.25	PL21	-77.368087	39.024421
AB86	3.503291	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.37	PL21	-77.366135	39.029539
AB88	1.811984	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.06	PL21	-77.362713	39.029516
AB921	1.504448	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	63.17	PL21	-77.348846	39.052942
AB924	1.739781	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	100.00	PL21	-77.348582	39.053170
AB938	2.507220	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.77	PL21	-77.365013	39.044176
AJ107	0.638548	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	59.63	PL21	-77.382414	39.010302
AJ1079	49.880928	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424569	39.021206
AJ1082	0.465902	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424938	39.020648
AJ1089	0.252087	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424644	39.020714
AJ109	0.520004	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.71	PL21	-77.383174	39.010565
AJ1090	2.185521	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424397	39.020680
AJ111	4.515517	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	53.22	PL21	-77.383627	39.010835
AJ1115	0.776557	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424421	39.020089
AJ1132	7.323069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428262	39.018230
AJ1145	0.319046	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426272	39.020610
AJ1167	10.747452	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429449	39.018267
AJ1170	2.068869	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429748	39.016820
AJ1181	10.596478	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431241	39.020577
AJ1187	15.187093	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430906	39.022080
AJ1227	20.291389	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430326	39.024611
AJ1234	48.911064	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430329	39.025696
AJ131	4.453728	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	44.93	PL21	-77.381880	39.010460
AJ1322	6.262160	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430865	39.027608
AJ1335	1.504506	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427228	39.017295
AJ1366	25.581069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418313	39.026245
AJ157	16.542518	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	87.40	PL21	-77.381290	39.015952
AJ1676	17.704879	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404771	39.029027
AJ1685	0.751151	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405016	39.029889

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
AJ1688	4.757923	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404093	39.030077
AJ1696	22.803748	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404134	39.030927
AJ1708	0.354849	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405283	39.028534
AJ1712	0.528037	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405036	39.029073
AJ1719	3.057069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431796	39.021057
AJ1727	1.032450	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432570	39.017424
AJ1761	32.290601	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.415003	39.045023
AJ1810	3.725950	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414415	39.046088
AJ1903	13.888591	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418525	39.049797
AJ193	12.217409	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	48.50	PL21	-77.378396	39.014320
AJ1989	11.741543	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414961	39.048536
AJ1993	5.657904	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414271	39.047575
AJ1996	10.827754	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413858	39.047769
AJ2011	4.474994	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414121	39.049372
AJ2026	7.196863	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413766	39.046484
AJ205	1.314841	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.98	PL21	-77.376524	39.013274
AJ2088	1.421829	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414650	39.049343
AJ2101	7.484414	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.415992	39.052147
AJ2112	0.565248	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.415712	39.052458
AJ241	5.687152	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	86.96	PL21	-77.374456	39.012370
AJ26	12.853100	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	46.30	PL21	-77.384192	39.010241
AJ2658	7.103586	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.06	PL45	-77.507173	38.895044
AJ2662	10.326663	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.17	PL45	-77.507094	38.893823
AJ268	4.635721	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	50.20	PL21	-77.379039	39.009647
AJ2698	4.602091	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.72	PL45	-77.509706	38.898873
AJ27	0.075544	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.43	PL21	-77.384149	39.010244
AJ2708	0.855690	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551682	38.934190
AJ2710	0.674089	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551739	38.933961
AJ2734	30.034708	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	48.05	PL42	-77.551865	38.914424
AJ2735	5.590896	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	49.89	PL42	-77.550639	38.916574
AJ2786	1.180129	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	66.69	PL42	-77.552379	38.923684
AJ2787	58.480131	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	37.69	PL42	-77.552551	38.923791
AJ2788	33.673792	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	COM_OTHER_PUBLIC	81.50	PL42	-77.550770	38.923496
AJ2789	9.917781	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	76.07	PL42	-77.550994	38.923384
AJ2857	1.743244	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501592	39.004446
AJ2859	5.483403	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501775	39.003290
AJ2861	6.582543	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501217	39.008923
AJ2906	15.792550	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552826	38.932108
AJ2907	1.937915	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552040	38.931999
AJ291	26.709892	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	26.05	PL21	-77.376463	39.009717
AJ293	1.016387	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	48.93	PL21	-77.378585	39.009597
AJ2939	2.209141	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544957	38.939239
AJ2948	6.378479	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	61.65	PL42	-77.550706	38.916752
AJ2949	1.044496	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	58.75	PL42	-77.552031	38.917832
AJ2951	4.363286	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.504814	38.923792
AJ2952	0.423677	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	99.85	PL45	-77.505981	38.923018
AJ2956	16.500405	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	50.40	PL45	-77.506386	38.922065
AJ2958	13.964208	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_HEAVY_IND	39.63	PL45	-77.504935	38.924102
AJ2959	9.433280	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_HEAVY_IND	36.08	PL45	-77.504477	38.924019
AJ30	0.368470	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	100.00	PL21	-77.384687	39.011152
AJ3030	8.166284	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	52.26	PL42	-77.551005	38.923059
AJ306	1.671701	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	54.29	PL21	-77.380516	39.010018
AJ3066	0.736321	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508991	39.008043
AJ3067	0.288426	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510351	39.008023
AJ3068	0.409311	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510669	39.008406
AJ3069	0.304063	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511247	39.008399
AJ3070	1.847260	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511706	39.008456
AJ3071	4.350785	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512868	39.006341
AJ3072	3.548789	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512330	39.006858

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
AJ3073	1.759447	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513457	39.005894
AJ3074	0.349544	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515214	39.004988
AJ3075	0.785010	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514442	39.005004
AJ3078	6.275898	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511140	39.000464
AJ3082	10.032562	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505170	39.003109
AJ3083	4.374808	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502649	39.004558
AJ3084	0.238235	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502567	39.005066
AJ3132	0.344461	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.542748	38.928231
AJ3140	3.074107	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.504841	38.923822
AJ3143	3.574482	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	51.95	PL45	-77.505289	38.923566
AJ3144	11.965860	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	41.66	PL45	-77.505438	38.923006
AJ315	1.819594	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	76.42	PL21	-77.376022	39.009851
AJ3248	8.686376	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	56.49	PL45	-77.532300	38.920560
AJ325	3.283227	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	26.40	PL21	-77.381053	39.010073
AJ3274	8.441680	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501698	39.009089
AJ3275	1.646972	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519627	39.032366
AJ3282	1.863110	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498738	39.006082
AJ3283	1.961591	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509132	39.003445
AJ3284	5.746034	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508811	39.004921
AJ3286	2.803946	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511180	39.006613
AJ329	1.614447	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	56.61	PL21	-77.381361	39.010258
AJ3319	0.122781	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551961	38.933535
AJ3320	3.392135	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552053	38.933547
AJ3321	34.800073	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551446	38.934277
AJ3348	4.344938	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	76.79	PL42	-77.549574	38.918434
AJ3364	1.105201	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	99.18	PL45	-77.506587	38.922428
AJ3367	2.511424	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	56.42	PL45	-77.506544	38.922322
AJ3375	7.529459	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_LIGHT_IND_FLEX	61.13	PL45	-77.483087	38.914826
AJ3393	2.707653	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545161	38.928370
AJ3394	0.812018	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545177	38.928453
AJ3438	1.366904	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	77.72	PL45	-77.522525	38.917304
AJ3439	0.660099	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	99.92	PL45	-77.522961	38.916861
AJ3440	10.572597	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.22	PL45	-77.523488	38.916702
AJ3443	1.026110	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.74	PL45	-77.524104	38.916747
AJ3444	8.204812	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	82.80	PL45	-77.520562	38.916199
AJ3482	1.088508	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508984	39.003956
AJ353	6.586381	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	36.89	PL21	-77.380194	39.009806
AJ3530	34.154552	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530301	38.981738
AJ3570	1.336129	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544374	38.933114
AJ360	2.406642	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	50.18	PL21	-77.379518	39.009402
AJ3604	10.910932	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	44.47	PL45	-77.520094	38.918028
AJ3605	7.129885	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	36.64	PL45	-77.519182	38.917579
AJ3608	7.975074	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.19	PL45	-77.529073	38.918029
AJ3610	1.847711	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	45.97	PL45	-77.524450	38.917664
AJ3611	0.302033	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	71.74	PL45	-77.524526	38.917675
AJ3612	1.636646	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	63.46	PL45	-77.523523	38.917794
AJ3613	2.829039	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	31.08	PL45	-77.522657	38.918512
AJ3614	0.344737	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.12	PL45	-77.521959	38.917992
AJ3615	2.628315	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	51.69	PL45	-77.525156	38.917833
AJ3633	4.365157	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	30.79	PL45	-77.537311	38.912807
AJ365	2.431958	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	53.24	PL21	-77.378341	39.009336
AJ367	2.328226	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	100.00	PL21	-77.377497	39.009200
AJ3702	6.736508	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551185	38.934228
AJ3716	13.505408	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545032	38.932673
AJ3779	2.715052	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544189	38.933057
AJ3780	4.497211	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544205	38.933213
AJ3781	4.433100	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.543931	38.933745
AJ3782	0.823841	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544091	38.934120
AJ3783	0.238536	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544220	38.934143

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
AJ3795	14.324205	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	65.32	PL42	-77.549075	38.919793
AJ381	43.391938	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.24	PL21	-77.396043	39.008144
AJ3819	0.511223	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	47.13	PL45	-77.528741	38.917806
AJ3821	0.360105	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.14	PL45	-77.528675	38.917745
AJ3823	1.305396	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	69.01	PL45	-77.525645	38.917903
AJ3824	1.394236	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	71.28	PL45	-77.526151	38.917848
AJ3825	1.572870	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	50.71	PL45	-77.526669	38.917765
AJ3826	1.312850	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	55.89	PL45	-77.526964	38.917617
AJ3827	1.338436	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	31.44	PL45	-77.527438	38.919852
AJ3828	1.413586	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	41.65	PL45	-77.526118	38.920039
AJ3829	0.817878	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	21.11	PL45	-77.524856	38.919855
AJ3830	7.276262	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.82	PL45	-77.527904	38.920109
AJ3831	3.696348	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.17	PL45	-77.531045	38.920369
AJ3833	0.171758	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	7.88	PL45	-77.530964	38.920607
AJ3885	2.772247	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505451	39.006314
AJ39	0.714469	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	39.11	PL21	-77.383603	39.010527
AJ3906	3.330646	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544825	38.933231
AJ3907	5.902772	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545422	38.936014
AJ3940	1.891070	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545487	38.927481
AJ4064	5.597269	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.45	PL45	-77.532665	38.916360
AJ4065	6.955665	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.68	PL45	-77.531086	38.916095
AJ4068	0.498754	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	0.31	PL45	-77.522535	38.920326
AJ4069	7.747202	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	54.52	PL45	-77.521881	38.920646
AJ4070	1.023885	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	44.15	PL45	-77.521871	38.920151
AJ4081	2.879036	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505557	39.006333
AJ4100	4.671240	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502583	39.005518
AJ4133	0.368241	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544985	38.935600
AJ4134	4.980819	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545672	38.936405
AJ4136	3.790567	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544557	38.934616
AJ4137	3.076658	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544606	38.933860
AJ4152	20.195698	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545133	38.931763
AJ4230	4.125326	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	65.01	PL45	-77.522505	38.921745
AJ4231	9.679704	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	64.53	PL45	-77.522907	38.922109
AJ4233	1.275955	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	23.64	PL45	-77.523838	38.922687
AJ4235	1.230648	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.07	PL45	-77.524503	38.922901
AJ4237	25.331431	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	70.09	PL45	-77.523893	38.923980
AJ4252	23.638136	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	38.06	PL45	-77.517484	38.918756
AJ4255	4.019973	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.86	PL45	-77.531092	38.914982
AJ4256	7.432470	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	52.77	PL45	-77.529413	38.921105
AJ4344	1.271878	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	70.00	PL42	-77.549171	38.919722
AJ4412	1.170373	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.48	PL45	-77.536545	38.912582
AJ4413	1.539230	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.535007	38.916801
AJ4414	3.882092	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.10	PL45	-77.536146	38.913017
AJ4417	5.705926	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	37.34	PL45	-77.525616	38.922523
AJ442	13.918355	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.409136	38.988952
AJ4449	12.029159	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	40.10	PL45	-77.535646	38.919277
AJ4451	4.281081	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.24	PL45	-77.536789	38.918266
AJ4453	41.397275	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	34.46	PL45	-77.537076	38.916985
AJ4507	4.929747	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.545272	38.938565
AJ4509	41.743857	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	45.04	PL42	-77.550257	38.914888
AJ4511	2.812528	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	72.89	PL42	-77.551582	38.919055
AJ452	7.170292	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408372	38.993131
AJ453	5.898374	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.410248	38.993780
AJ4534	3.336155	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544903	38.939515
AJ454	4.975945	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412189	38.993984
AJ4544	1.570361	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.12	PL42	-77.551804	38.919454
AJ4547	5.729438	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	74.57	PL42	-77.552366	38.918401
AJ4548	2.880836	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	64.34	PL42	-77.551831	38.916839
AJ4589	0.051221	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.536062	38.912617

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
AJ4590	5.567034	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	100.00	PL45	-77.533703	38.914214
AJ4591	12.805337	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	99.43	PL45	-77.533909	38.914730
AJ467	10.863058	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413071	38.994595
AJ4710	1.733237	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	18.41	PL42	-77.550975	38.915880
AJ4736	12.727876	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544927	38.939271
AJ4742	0.570731	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544844	38.939414
AJ4754	0.965283	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552857	38.932874
AJ4887	0.957193	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	20.20	PL42	-77.551254	38.915962
AJ496	17.609629	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413972	38.995811
AJ50	1.250335	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	52.21	PL21	-77.382822	39.010270
AJ516	2.117697	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.402594	38.997835
AJ521	3.745320	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403538	38.997270
AJ530	3.999481	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.94	PL21	-77.366475	39.042418
AJ531	10.839746	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.74	PL21	-77.366453	39.042371
AJ534	28.838332	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.83	PL21	-77.367976	39.045662
AJ552	1.879118	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.404347	38.996686
AJ564	0.623585	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409656	38.998394
AJ569	22.836828	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409393	38.998032
AJ573	3.225940	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409454	38.997311
AJ575	2.131087	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408754	38.996317
AJ577	0.290040	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408434	38.996085
AJ581	2.389309	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408274	38.995954
AJ599	3.228681	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405802	38.995904
AJ600	1.019606	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406275	38.995601
AJ601	1.880381	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406659	38.995389
AJ604	0.076533	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.407251	38.995529
AJ736	1.578010	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419938	39.008590
AJ737	1.000770	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419788	39.009171
AJ79	2.040867	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	52.61	PL21	-77.385913	39.011892
AJ811	30.542626	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418491	39.016719
AJ84	6.052237	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	59.42	PL21	-77.384440	39.012067
AJ846	2.885035	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416020	39.016235
AJ848	5.142913	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415537	39.015973
AJ856	40.682401	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413543	39.015526
AJ867	9.365923	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413387	39.015525
AJ869	5.092150	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413769	39.015139
AJ882	6.138270	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421451	39.020507
AJ887	16.562407	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421663	39.020589
AJ888	0.324532	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421692	39.020599
AJ905	3.358621	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418995	39.021430
AJ911	6.093774	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419235	39.021474
AJ940	14.261924	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421878	39.016042
AJ942	12.444706	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423203	39.016687
AJ972	27.646600	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415174	39.023096
AJ98	8.000090	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	49.94	PL21	-77.387976	39.016119
BC107	0.430087	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437015	38.978883
BC33	3.149950	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MISC	100.00	PL21	-77.371075	39.017134
BC6	4.716324	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.17	PL45	-77.489171	38.895196
CH10003	2.544111	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514018	39.029186
CH10007	6.751357	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515162	39.030757
CH10013	2.027766	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515663	39.030063
CH10014	2.729570	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517283	39.028123
CH10020	1.665702	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516058	39.028923
CH10022	0.763964	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523997	39.026652
CH10025	2.718293	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524620	39.026553
CH10028	2.698995	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524770	39.026072
CH1003	2.143879	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.57	PL21	-77.367588	39.049248
CH10030	0.659555	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524947	39.025777
CH10033	2.812170	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523578	39.026397

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
CH10034	1.560680	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523475	39.026351
CH10041	6.946141	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.525291	39.025508
CH10049	2.039533	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.522051	39.025976
CH10071	2.377281	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518847	39.024502
CH10072	6.656008	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518794	39.024476
CH1008	3.631304	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.56	PL21	-77.367339	39.049724
CH10087	1.141222	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516288	39.023552
CH10088	1.355553	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516356	39.023569
CH10119	6.345526	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517249	39.020766
CH10133	3.290583	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517212	39.020777
CH1014	1.984420	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.15	PL21	-77.365869	39.049502
CH10144	8.940804	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.526028	39.025758
CH10168	17.536517	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.523743	39.027984
CH102	1.384133	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	70.57	PL21	-77.351293	39.036037
CH10202	17.106730	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520892	39.029016
CH10206	7.382880	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518960	39.029187
CH1022	14.315363	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.31	PL21	-77.367873	39.051022
CH10236	1.893502	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.522698	39.027530
CH10253	1.749843	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.521596	39.021351
CH10271	6.283317	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520160	39.020058
CH10273	16.095536	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520169	39.019944
CH10308	5.223011	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514734	39.028716
CH10318	2.552217	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513928	39.026198
CH10322	2.213350	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520755	39.027085
CH10333	1.427352	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519440	39.028526
CH10336	0.973456	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517871	39.027273
CH10338	2.936764	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516260	39.025979
CH10345	4.543024	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518077	39.026668
CH10349	1.386547	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515668	39.027752
CH10352	0.966280	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514801	39.026697
CH10361	5.387718	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514629	39.026104
CH10387	10.810860	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514302	39.025995
CH10389	1.389768	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514640	39.022224
CH10394	2.511277	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516505	39.023042
CH10400	1.661823	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516664	39.021639
CH10406	3.030911	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517796	39.019667
CH10413	1.256135	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496245	39.024440
CH10421	1.382497	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496416	39.022932
CH10437	8.211330	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494887	39.022508
CH10438	0.723013	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495081	39.022479
CH10439	0.412469	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495607	39.022602
CH10442	0.958680	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496515	39.022455
CH10445	0.593461	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496375	39.021930
CH10460	9.252245	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496575	39.021304
CH10474	1.995877	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496657	39.019499
CH10487	6.137810	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.93	PL16	-77.503164	39.087601
CH10504	4.472479	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	63.73	PL16	-77.502635	39.087397
CH10507	0.019010	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	89.09	PL16	-77.502540	39.087745
CH10510	0.393159	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	86.51	PL16	-77.502718	39.088033
CH10518	17.897861	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_OTHER_PUBLIC	51.53	PL16	-77.501900	39.085873
CH10547	6.801573	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	43.81	PL16	-77.498110	39.084302
CH1056	3.450999	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.77	PL21	-77.368977	39.051929
CH10565	19.020608	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_OTHER_PUBLIC	55.81	PL16	-77.499750	39.084841
CH10599	82.035415	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.488954	39.091047
CH1061	24.785834	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.03	PL21	-77.372600	39.051572
CH10672	5.126196	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	VACANT	80.17	PL16	-77.498498	39.085083
CH10695	4.000263	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510365	39.014336
CH10714	9.677208	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507856	39.013671
CH10743	8.850698	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510173	39.013823

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
CH10769	2.970503	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508622	39.013228
CH10790	7.552043	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506920	39.011932
CH10793	2.405758	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504252	39.010872
CH10803	2.883459	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505204	39.011190
CH10808	0.771700	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506033	39.011774
CH10819	2.518779	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505970	39.009367
CH10838	9.604233	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508118	39.009771
CH10851	0.554462	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511004	39.010341
CH10864	3.065341	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511365	39.009114
CH10896	5.477371	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511694	39.014415
CH10904	0.968679	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500093	39.014020
CH10906	1.372835	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499990	39.013619
CH10913	3.261327	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499761	39.015420
CH1092	11.655329	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	27.59	PL21	-77.375015	39.051722
CH10925	2.456822	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499539	39.013636
CH10933	2.133859	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499035	39.013986
CH10936	0.663476	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498444	39.014488
CH1095	2.066414	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_NON_PUBLIC	27.64	PL21	-77.376320	39.050931
CH10951	1.534927	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512428	39.009143
CH10953	2.613830	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513270	39.009115
CH10964	11.552557	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499607	39.012834
CH11021	4.309517	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	41.57	PL14	-77.527904	39.023239
CH11025	2.496892	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	63.95	PL14	-77.528522	39.022457
CH11026	6.242356	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	38.80	PL14	-77.529162	39.021616
CH11032	1.352714	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	10.25	PL14	-77.531268	39.020352
CH11033	9.054331	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	32.25	PL14	-77.531701	39.020332
CH11039	6.996031	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503892	39.066003
CH1111	2.306115	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.60	PL21	-77.377136	39.052240
CH1114	10.352147	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	32.01	PL21	-77.378791	39.052373
CH11150	5.903078	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	40.59	PL16	-77.503268	39.089505
CH11190	2.346383	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	32.28	PL16	-77.500134	39.086271
CH11192	1.625953	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	0.47	PL16	-77.500001	39.086597
CH11203	8.138732	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	47.38	PL16	-77.498155	39.086846
CH11293	8.473625	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.486206	39.078444
CH11319	0.117640	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.497953	39.082153
CH11324	3.572215	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	12.37	PL16	-77.497104	39.082720
CH11325	80.877887	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	26.51	PL16	-77.497575	39.082490
CH11348	6.658900	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	83.02	PL16	-77.510287	39.088851
CH11358	0.618375	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	50.76	PL16	-77.512288	39.089781
CH1136	16.429987	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	49.47	PL21	-77.380809	39.052823
CH11360	16.441737	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	38.99	PL16	-77.512995	39.089950
CH11395	1.187055	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	43.93	PL16	-77.508229	39.089711
CH11396	15.054298	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.49	PL16	-77.508565	39.089561
CH11401	3.421676	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	67.41	PL16	-77.509728	39.088773
CH1141	0.902029	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	66.35	PL21	-77.381833	39.052831
CH11425	1.832499	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	69.42	PL16	-77.512974	39.089303
CH11430	6.186090	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	72.81	PL16	-77.514364	39.088290
CH11440	1.989331	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.12	PL16	-77.516356	39.089831
CH11467	1.555680	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	72.31	PL16	-77.507601	39.100315
CH11469	1.460021	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.25	PL16	-77.506000	39.100027
CH11479	7.533843	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.83	PL16	-77.505778	39.099948
CH11490	14.388730	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	59.16	PL16	-77.508641	39.099608
CH11499	0.522957	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	0.01	PL16	-77.513738	39.097525
CH11508	7.709858	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	61.71	PL16	-77.512854	39.097468
CH1229	0.950732	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.365385	39.045176
CH1232	0.645214	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.364791	39.044806
CH1237	3.109254	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	21.24	PL21	-77.367951	39.045645
CH1243	16.084085	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	71.16	PL21	-77.369693	39.046440
CH125	14.520504	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.89	PL21	-77.354428	39.036421

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
CH1275	1.011410	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	96.20	PL21	-77.375806	39.050204
CH130	0.800026	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	60.37	PL21	-77.354384	39.037025
CH132	1.981132	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	48.14	PL21	-77.354344	39.036495
CH1342	0.596664	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	99.79	PL21	-77.378553	39.050136
CH140	4.520168	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	45.02	PL21	-77.353208	39.037723
CH144	0.251031	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	51.04	PL21	-77.354605	39.037685
CH1510	2.079325	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.03	PL21	-77.365149	39.043229
CH1513	4.283256	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.89	PL21	-77.363520	39.042706
CH1517	5.727589	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	56.66	PL21	-77.363844	39.041434
CH1524	3.617133	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.61	PL21	-77.365046	39.038711
CH1532	20.997056	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	47.83	PL21	-77.365724	39.037318
CH1543	4.190247	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.95	PL21	-77.365537	39.036487
CH1545	53.132696	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	44.72	PL21	-77.365421	39.034898
CH1593	1.218752	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.16	PL21	-77.365288	39.033080
CH162	0.551021	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	0.64	PL21	-77.354711	39.035916
CH1693	2.487666	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.25	PL21	-77.368745	39.029662
CH1697	1.394482	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.50	PL21	-77.370050	39.031633
CH17	1.296728	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.34	PL21	-77.356997	39.030700
CH1701	4.512620	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.91	PL21	-77.368373	39.030828
CH1703	8.013285	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.94	PL21	-77.370309	39.032518
CH1714	4.692815	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	58.49	PL21	-77.364208	39.030120
CH1719	0.927746	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.92	PL21	-77.365782	39.030770
CH1726	18.163882	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.00	PL21	-77.371653	39.030728
CH1732	1.085042	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.33	PL21	-77.370091	39.030323
CH1742	21.157144	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.00	PL21	-77.372786	39.030693
CH1753	6.038193	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.57	PL21	-77.367420	39.031443
CH1755	1.462075	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.13	PL21	-77.372999	39.030218
CH177	1.125576	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	35.89	PL21	-77.351226	39.038175
CH1820	6.943917	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	77.55	PL21	-77.384799	39.033129
CH1822	2.176840	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	100.00	PL21	-77.383560	39.032830
CH1833	13.856403	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.50	PL21	-77.367567	39.041752
CH1854	7.189146	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.21	PL21	-77.371343	39.041034
CH1858	5.381194	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	56.76	PL21	-77.372246	39.040256
CH1864	3.711672	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.82	PL21	-77.367669	39.042054
CH1867	11.954228	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.28	PL21	-77.370593	39.042120
CH188	39.726292	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	34.29	PL21	-77.349451	39.040801
CH1895	36.731920	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	58.57	PL21	-77.370743	39.041997
CH1896	1.865973	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.85	PL21	-77.371369	39.041528
CH1901	3.387294	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.24	PL21	-77.372167	39.040663
CH1905	6.198428	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.51	PL21	-77.373598	39.039825
CH1917	0.943555	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	94.04	PL21	-77.377756	39.039112
CH1919	39.528161	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	37.13	PL21	-77.376257	39.039181
CH1950	49.644712	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	33.66	PL21	-77.379276	39.038101
CH1951	0.900853	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	80.84	PL21	-77.379281	39.038090
CH1952	50.224515	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	29.20	PL21	-77.379061	39.037919
CH1994	48.651291	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	43.29	PL21	-77.373338	39.039478
CH20	4.649210	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.01	PL21	-77.359195	39.028931
CH2085	3.477405	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	65.09	PL21	-77.374505	39.039160
CH2091	5.377873	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	68.35	PL21	-77.375240	39.038919
CH2095	0.629299	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	51.38	PL21	-77.377191	39.037967
CH2096	8.264366	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	53.85	PL21	-77.377453	39.037562
CH2125	16.265018	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	47.54	PL21	-77.377866	39.037546
CH216	0.574789	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	62.90	PL21	-77.351785	39.037816
CH2167	11.712692	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.81	PL21	-77.383897	39.006406
CH218	1.047298	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	54.55	PL21	-77.352035	39.037892
CH219	0.230723	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.85	PL21	-77.352084	39.037902
CH2201	3.498597	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.72	PL21	-77.382245	39.006061
CH2204	6.768651	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.63	PL21	-77.380815	39.006114
CH2224	19.381312	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	57.44	PL21	-77.386300	39.006716

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
CH2238	8.150555	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.75	PL21	-77.387879	39.007169
CH2243	2.075344	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.88	PL21	-77.390650	39.007525
CH2247	50.573868	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.99	PL21	-77.389796	39.007700
CH2254	4.663068	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	55.96	PL21	-77.391408	39.007087
CH2260	2.583562	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	61.78	PL21	-77.394449	39.007631
CH2261	3.203047	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	61.73	PL21	-77.394455	39.007629
CH2270	2.218544	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	81.12	PL21	-77.395533	39.007813
CH2287	1.235835	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.19	PL21	-77.394764	39.005602
CH2295	2.570577	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	42.17	PL21	-77.396183	39.003917
CH2296	54.730534	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	44.58	PL21	-77.396317	39.003968
CH2334	10.541952	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	45.71	PL21	-77.394106	39.005371
CH234	2.761576	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	52.27	PL21	-77.353984	39.038460
CH2351	1.120286	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	73.70	PL21	-77.391585	39.002679
CH2359	3.613183	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	48.05	PL21	-77.391193	39.003888
CH2378	12.268243	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	43.27	PL21	-77.393715	39.005884
CH2385	2.264278	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	42.81	PL21	-77.390473	39.005219
CH2386	6.614003	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	49.14	PL21	-77.390413	39.005218
CH239	0.895597	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	54.63	PL21	-77.352881	39.038037
CH2399	1.248658	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	71.58	PL21	-77.389871	39.006043
CH24	36.667381	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.21	PL21	-77.359228	39.031087
CH2414	1.654323	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	62.98	PL21	-77.390281	39.006356
CH2418	9.897893	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.81	PL21	-77.391665	39.001911
CH2419	4.605908	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.54	PL21	-77.391715	39.001919
CH2477	46.277232	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.24	PL21	-77.386808	39.004710
CH248	2.334622	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	52.52	PL21	-77.354338	39.040436
CH2485	27.701529	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.36	PL21	-77.384862	39.003149
CH249	10.648899	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	49.17	PL21	-77.354300	39.040449
CH2511	1.419916	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.48	PL21	-77.385164	39.003369
CH2515	2.805645	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	85.85	PL21	-77.386242	39.005442
CH2517	1.490095	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.03	PL21	-77.384257	39.004999
CH2531	5.759179	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.77	PL21	-77.383450	39.004494
CH2569	2.655862	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.76	PL21	-77.386969	39.006034
CH2645	5.527661	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	62.43	PL21	-77.392494	38.998841
CH2646	14.557083	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	56.63	PL21	-77.392545	38.998859
CH2650	5.421763	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	79.36	PL21	-77.392189	38.999878
CH2657	11.394005	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.60	PL21	-77.392053	39.000699
CH266	4.535720	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	52.73	PL21	-77.351616	39.041096
CH269	1.652815	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	55.02	PL21	-77.352435	39.041310
CH2696	12.280589	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.31	PL21	-77.392333	38.999933
CH277	2.166926	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	66.21	PL21	-77.350979	39.037773
CH2786	36.144318	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	51.23	PL21	-77.396123	39.007968
CH284	6.476966	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.16	PL21	-77.350460	39.037590
CH2874	72.907128	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.87	PL21	-77.392762	38.997944
CH2875	19.334870	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.16	PL21	-77.392799	38.997955
CH2959	2.986806	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418333	39.007116
CH2965	8.853655	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416609	39.007068
CH2970	3.209131	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414914	39.004737
CH2975	13.471062	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414256	39.003982
CH2980	2.307383	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412933	39.003425
CH2985	3.996330	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412072	39.001845
CH2995	2.730149	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411596	39.000376
CH2999	3.671381	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411324	39.000013
CH3	60.575104	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	16.63	PL21	-77.355884	39.031287
CH3003	3.343019	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409989	38.998974
CH301	1.184894	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	76.44	PL21	-77.348942	39.037493
CH3016	3.935697	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419517	39.003350
CH3023	6.737882	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419730	39.004444
CH3025	2.950398	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419920	39.005582
CH3035	6.334133	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419311	39.002173

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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH3038	72.502436	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419334	39.002065
CH3052	12.223412	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418157	39.001068
CH3055	4.079909	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416937	39.001370
CH3064	6.423384	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416926	39.000028
CH3071	4.053356	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415727	38.999045
CH3076	7.725149	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414903	38.998564
CH3081	2.651960	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414642	38.997846
CH3088	5.077523	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414438	38.997319
CH3112	2.595956	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420230	39.005200
CH3122	12.993615	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419678	39.003354
CH3197	11.381789	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418656	39.000140
CH3199	2.595380	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.417831	39.000361
CH3214	8.169283	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416744	38.999380
CH3215	0.826818	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415328	38.998065
CH3232	1.533934	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415130	38.997536
CH3240	20.225480	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414313	38.996222
CH336	4.224808	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	78.33	PL21	-77.349941	39.043038
CH3360	59.277381	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405343	39.002086
CH3361	2.292564	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405347	39.002118
CH3376	3.954903	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406617	39.002158
CH3412	5.863954	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426401	38.994814
CH3414	0.342591	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426634	38.994746
CH3439	7.429319	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424950	38.993692
CH3440	1.692238	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424985	38.993839
CH3442	5.025478	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425100	38.994068
CH3449	0.201250	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425094	38.993642
CH3452	5.276198	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427047	38.994645
CH3463	3.595901	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430249	38.994783
CH3485	2.753051	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425363	38.993518
CH3488	0.626144	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425694	38.992895
CH3500	6.983148	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425201	38.991596
CH3521	13.382928	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431361	38.991360
CH357	5.036099	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.351577	39.041328
CH3631	13.847561	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.434599	39.001348
CH3632	4.984336	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.434633	39.001299
CH3711	3.621627	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426940	39.002082
CH3717	29.083944	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427816	39.002106
CH3718	8.369406	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427860	39.002245
CH3728	3.542564	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427420	39.002756
CH3760	2.097729	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425368	39.002298
CH3786	13.662628	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422504	39.006111
CH3882	72.018723	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423718	39.002263
CH3897	1.146936	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423062	39.003803
CH3900	7.583041	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422291	39.005057
CH3916	2.031196	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421297	39.006171
CH3928	3.396313	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420985	39.007098
CH3929	17.394121	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421077	39.007319
CH4029	5.247696	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429290	39.011451
CH4030	2.551547	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429282	39.011469
CH4050	3.737241	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428030	39.016779
CH4062	3.648326	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428758	39.012507
CH4084	0.094385	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420613	39.007373
CH4085	8.725895	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420586	39.007360
CH4089	0.588996	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420311	39.007215
CH4104	4.616609	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414981	39.006338
CH4113	105.898198	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412242	39.005487
CH4151	4.896281	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421438	39.007582
CH4177	3.288009	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421228	39.010306
CH4182	3.101317	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422493	39.010392

Loudoun County Virginia
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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
CH4193	4.008858	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424264	39.010431
CH4205	3.888955	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425264	39.009739
CH4211	4.830176	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426117	39.009113
CH4214	2.029702	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426419	39.008953
CH4252	0.187830	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429147	39.011579
CH4275	4.001373	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414254	38.996414
CH4286	6.786593	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427663	38.989679
CH4293	3.722535	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427617	39.007391
CH4308	2.889542	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427374	39.014412
CH4315	0.457218	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428320	39.013070
CH4317	3.299744	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427843	39.013401
CH4335	1.112829	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426021	39.012137
CH4336	0.607965	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426057	39.012440
CH4348	1.936675	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427342	39.013677
CH4351	1.010031	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428690	39.012304
CH4353	0.558977	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428426	39.012913
CH4361	5.224652	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425912	39.011540
CH438	6.267884	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	47.85	PL21	-77.349614	39.043192
CH4383	0.605294	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425687	39.010234
CH4393	6.414238	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426819	39.008690
CH4394	1.103334	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426761	39.008573
CH444	52.963414	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	50.65	PL21	-77.349142	39.043594
CH4489	1.270171	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431529	38.988357
CH4517	2.150487	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429869	38.983648
CH4574	5.626584	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.422690	38.963967
CH4589	7.658425	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414931	39.015270
CH4609	11.524047	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418895	39.014850
CH462	1.352942	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	51.34	PL21	-77.349992	39.043085
CH4620	0.632913	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416213	39.015517
CH4624	2.566057	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420016	39.014885
CH4647	9.112902	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421590	39.011125
CH4667	1.663723	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422190	39.011121
CH4683	9.258391	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422348	39.015862
CH469	0.745989	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	53.00	PL21	-77.351551	39.043549
CH4704	14.875845	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424113	39.011419
CH4738	4.979565	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425373	39.013966
CH478	18.060197	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	49.74	PL21	-77.351666	39.043726
CH4807	11.703085	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419881	39.009655
CH4818	3.263480	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420612	39.010654
CH4837	8.346624	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	36.73	PL21	-77.382447	39.052627
CH4840	0.545376	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	59.11	PL21	-77.383251	39.052893
CH4842	2.649029	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	53.32	PL21	-77.383898	39.052783
CH4855	3.641700	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	62.28	PL21	-77.384528	39.052937
CH4856	1.867175	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.21	PL21	-77.385199	39.053044
CH4864	47.365805	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	33.05	PL21	-77.386015	39.052118
CH4868	1.601075	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	61.42	PL21	-77.386535	39.053031
CH4874	28.919707	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	24.99	PL21	-77.387717	39.052739
CH492	0.910118	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	29.62	PL21	-77.352025	39.043276
CH5013	11.283782	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394955	39.050426
CH5044	3.473279	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395926	39.050259
CH5052	3.474798	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397178	39.050940
CH5143	7.054317	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394924	39.045529
CH5161	8.027772	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392952	39.044012
CH5181	0.296488	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398292	39.048907
CH5184	6.713198	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397901	39.048457
CH5203	3.593272	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398391	39.048879
CH5215	6.180666	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397823	39.049905
CH5257	4.348339	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.391227	39.053099
CH5258	33.617811	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	46.37	PL21	-77.390877	39.053011

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
CH5272	19.357158	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394206	39.051099
CH5282	51.607409	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.390725	39.043625
CH5289	1.022074	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.390972	39.043537
CH5323	4.394871	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392586	39.043339
CH5329	18.572962	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391430	39.040896
CH5442	7.186082	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393843	39.042952
CH5448	2.005016	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393103	39.043851
CH5453	3.029804	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393570	39.043758
CH5476	13.956102	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398550	39.038397
CH5491	1.057639	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399181	39.038787
CH5507	13.093919	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393473	39.042050
CH5523	16.525047	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391518	39.039401
CH5590	3.637479	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395504	39.036153
CH5595	1.641058	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395978	39.036841
CH5597	1.085208	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396228	39.037397
CH5605	14.430496	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396948	39.038196
CH5612	0.461431	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397942	39.039148
CH5624	1.320369	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397406	39.039915
CH565	1.436245	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_CHURCH	1.36	PL21	-77.352617	39.042235
CH5688	78.819402	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391694	39.035533
CH5689	14.486988	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391906	39.035631
CH5704	0.707215	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394676	39.035529
CH5708	37.478560	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395694	39.035693
CH5744	1.772374	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391511	39.036060
CH5757	2.990550	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391724	39.037888
CH5829	0.827084	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394602	39.044316
CH5836	1.996092	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395831	39.044467
CH5843	9.628322	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396567	39.043243
CH5861	8.170024	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395963	39.044593
CH5894	13.943344	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401188	39.045780
CH5916	1.335106	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401932	39.043719
CH5926	5.215357	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400929	39.042852
CH5950	12.243039	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401268	39.041839
CH5959	4.336092	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399694	39.039527
CH5961	3.260108	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401978	39.041581
CH5975	9.507087	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403365	39.040475
CH6012	10.285811	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400262	39.039099
CH6014	0.891806	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400438	39.039529
CH6023	0.902079	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399687	39.038835
CH6047	3.956225	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405591	39.038113
CH6052	10.420832	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404341	39.039267
CH6126	5.682081	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406166	39.036041
CH6128	1.393915	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403557	39.034426
CH6138	6.084708	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404784	39.035255
CH6139	0.112814	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404911	39.035230
CH6142	6.772042	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.402702	39.033964
CH617	4.330787	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	61.24	PL21	-77.342157	39.047176
CH6170	4.058468	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404144	39.033458
CH6179	3.679345	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405544	39.034728
CH62	2.199448	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	68.96	PL21	-77.358078	39.030724
CH6203	1.122124	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401552	39.033658
CH6223	5.504897	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405578	39.035087
CH6225	1.271887	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405680	39.035178
CH6256	5.496803	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408708	39.035432
CH6260	0.664400	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407485	39.035915
CH6272	2.680797	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408084	39.035786
CH634	16.053247	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.98	PL21	-77.346262	39.049378
CH6360	0.289017	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398693	39.031934
CH6361	15.775822	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399089	39.032033

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
CH6399	5.822451	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396837	39.029686
CH6400	0.298901	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396894	39.029722
CH6411	0.999244	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400595	39.033742
CH6414	0.873631	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400638	39.033138
CH6419	1.442971	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400123	39.032248
CH6431	1.339139	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398223	39.031609
CH6432	6.104099	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398278	39.031431
CH6547	1.673259	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396305	39.029671
CH6550	0.927045	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395396	39.029575
CH6570	79.736485	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397783	39.029573
CH6571	0.813226	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397474	39.029499
CH6576	0.476789	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398137	39.030017
CH6578	2.102920	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398044	39.029900
CH6581	4.489751	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394749	39.029343
CH6582	0.718342	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394991	39.029547
CH659	9.350142	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.25	PL21	-77.344458	39.049502
CH6606	0.932912	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394502	39.029241
CH6607	6.743927	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.394256	39.029121
CH6610	1.356462	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.393615	39.028690
CH6613	0.888744	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392923	39.028602
CH6625	0.952968	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.392246	39.027265
CH6626	1.201206	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391719	39.027796
CH6637	8.779892	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391657	39.027983
CH6652	2.958557	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439046	39.048482
CH6653	0.981843	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.438999	39.048072
CH6677	2.176122	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441793	39.047092
CH6679	2.483930	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441363	39.047065
CH668	4.819798	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.43	PL21	-77.343949	39.050292
CH6682	14.582170	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440083	39.046968
CH6690	6.892522	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440761	39.050862
CH6693	1.269931	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460041	39.059069
CH6710	5.892997	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460693	39.057637
CH6716	4.746637	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461766	39.061035
CH6724	2.120783	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450707	39.049692
CH6738	1.403014	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447884	39.027757
CH6756	0.748730	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464871	39.057004
CH6761	1.146675	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464433	39.057186
CH6801	5.094549	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465672	39.060574
CH6808	2.883342	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464905	39.059470
CH6809	1.885734	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464686	39.058051
CH6819	2.442454	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464237	39.058605
CH682	4.292030	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.30	PL21	-77.345662	39.049792
CH6830	3.267441	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464705	39.057492
CH6833	6.097636	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465856	39.059467
CH6835	6.410309	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466256	39.060077
CH6837	6.768370	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466804	39.060612
CH6854	5.724741	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470193	39.063353
CH6867	3.939292	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476023	39.061052
CH687	2.013218	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	73.22	PL21	-77.344464	39.050233
CH6880	2.209349	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477139	39.058997
CH6890	0.462306	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477256	39.058945
CH6891	15.532916	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477250	39.058976
CH6930	4.656723	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475609	39.052875
CH6944	7.964397	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476025	39.051410
CH6952	5.884068	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475396	39.051513
CH6968	0.576512	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471806	39.049027
CH6972	1.528058	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471071	39.048672
CH6973	11.729666	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470982	39.048653
CH7073	46.468913	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481784	39.049329

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
CH7093	9.791190	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480495	39.046119
CH7094	9.527916	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480496	39.046102
CH7208	20.162711	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467452	39.033810
CH7235	1.713381	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463714	39.034894
CH7236	1.571656	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463494	39.034853
CH7237	0.430656	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463245	39.034826
CH7241	1.607399	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462403	39.034143
CH7257	9.185763	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459634	39.034175
CH7319	7.168280	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477939	39.061289
CH7321	6.910037	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478485	39.061832
CH7336	1.856776	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479946	39.057980
CH7343	3.882334	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478663	39.056788
CH7344	1.177302	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478536	39.056393
CH7345	0.343012	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478302	39.056144
CH7359	3.248814	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478045	39.055844
CH7366	21.618365	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479502	39.056888
CH7386	7.340425	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477529	39.054768
CH7387	4.137365	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477025	39.054733
CH7412	0.799193	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477426	39.051135
CH7422	3.101417	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478232	39.051004
CH7423	1.102399	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478763	39.051236
CH7438	0.563934	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480140	39.051312
CH7440	3.941037	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481043	39.051470
CH7453	1.682471	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481502	39.049920
CH7455	1.603102	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480888	39.049416
CH7459	1.792939	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478383	39.049061
CH7464	1.494280	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479843	39.049190
CH7466	1.575444	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479984	39.049206
CH7480	3.870745	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477489	39.048263
CH7483	4.288624	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477161	39.047866
CH7496	4.816542	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477681	39.046602
CH7501	1.620458	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477677	39.048820
CH7507	2.718264	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476859	39.048579
CH7509	1.503395	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475601	39.047991
CH7511	2.713613	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474990	39.048486
CH7517	2.255417	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474484	39.048130
CH7519	0.897984	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473396	39.048886
CH7535	11.448771	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481106	39.051667
CH7569	29.572205	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479846	39.051762
CH7578	21.603939	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478344	39.054129
CH7638	6.343214	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477321	39.067614
CH7658	6.046851	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480489	39.065848
CH7661	1.788547	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480804	39.065334
CH7711	1.089623	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472647	39.045757
CH7715	2.381431	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473566	39.046994
CH7721	8.815197	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476038	39.046905
CH7723	3.146793	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477242	39.046652
CH7724	5.274108	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477666	39.046513
CH7737	1.216765	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472650	39.045042
CH78	6.881197	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	42.87	PL21	-77.350870	39.035620
CH786	0.630265	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	43.59	PL21	-77.343967	39.050452
CH791	0.642483	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	60.21	PL21	-77.342667	39.050325
CH7942	0.878219	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481951	39.041066
CH8037	6.066011	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474602	39.057251
CH8042	2.775532	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475550	39.058367
CH8045	1.735035	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476208	39.058557
CH8070	3.864892	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473019	39.056546
CH8075	0.975558	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471585	39.055333
CH8078	2.365814	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470987	39.054226

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
CH8082	1.682103	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470057	39.053157
CH8089	2.659365	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471499	39.050964
CH8095	15.126211	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472764	39.052655
CH8099	1.087746	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473508	39.051931
CH8105	2.047424	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474602	39.052468
CH8111	2.748119	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475385	39.052885
CH8127	0.731712	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476471	39.059669
CH8129	0.639814	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476673	39.058806
CH8143	0.320406	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477652	39.051226
CH8144	8.810895	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476220	39.053381
CH8179	2.347222	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472657	39.051512
CH8183	1.929734	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472281	39.051223
CH8184	2.430251	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471728	39.050963
CH8193	0.957071	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471035	39.050270
CH8197	1.925408	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470324	39.049633
CH8208	5.406135	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470018	39.048932
CH8232	10.698655	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468619	39.044679
CH8233	40.882484	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468634	39.044669
CH8273	1.888149	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467273	39.044159
CH828	23.484158	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	51.70	PL21	-77.341614	39.056770
CH8325	17.474386	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465923	39.040328
CH8355	15.422508	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465442	39.037607
CH8360	92.665153	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467791	39.037928
CH8368	3.437170	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466272	39.037595
CH8458	4.673265	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466786	39.037388
CH8459	0.201128	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467311	39.037600
CH8476	10.926754	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463585	39.035837
CH8484	2.847313	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463899	39.036892
CH8490	0.943111	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466333	39.037354
CH8520	2.105568	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461223	39.039135
CH8530	3.069691	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462840	39.035648
CH8531	1.057674	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462380	39.035506
CH8539	0.530170	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463194	39.036248
CH8547	9.818921	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463539	39.036846
CH855	10.410366	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	22.06	PL21	-77.335897	39.050729
CH8574	3.241447	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462493	39.033774
CH8600	2.531557	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464728	39.032896
CH8602	2.603955	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463874	39.032503
CH8608	2.399790	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466065	39.033301
CH8615	1.353093	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466543	39.033151
CH8617	4.575729	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467526	39.033589
CH8644	8.075668	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467771	39.032556
CH8645	12.276045	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467794	39.032536
CH8720	1.727180	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445186	39.026605
CH8722	1.214501	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445836	39.026920
CH8726	1.732246	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444933	39.026023
CH8728	0.184073	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444325	39.025756
CH8732	8.239996	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441901	39.025849
CH8735	1.666180	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443465	39.027402
CH8749	2.072749	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447476	39.023778
CH8750	6.018884	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447477	39.023901
CH8755	4.470777	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447081	39.022840
CH8757	2.529664	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446910	39.021860
CH8763	1.512152	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447485	39.021352
CH8764	0.299504	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447231	39.021321
CH8766	0.969984	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447247	39.020579
CH8795	4.839449	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433548	39.018871
CH8810	0.544280	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436134	39.020609
CH8820	15.661900	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437852	39.020889

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
CH8835	2.193855	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435576	39.023103
CH8837	2.865748	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435165	39.023069
CH8838	10.194054	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435118	39.023114
CH8841	0.638007	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436302	39.023135
CH8844	3.505314	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457846	39.026703
CH8856	5.498888	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432690	39.016037
CH8868	2.525953	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432444	39.014715
CH8873	23.105656	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.79	PL45	-77.496092	38.901147
CH8883	35.963466	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	67.77	PL45	-77.495523	38.901430
CH8925	1.771925	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.94	PL45	-77.496843	38.901288
CH8954	4.455575	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.28	PL45	-77.497916	38.902742
CH8957	1.679921	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.41	PL45	-77.498488	38.902959
CH8964	1.598582	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.29	PL45	-77.498345	38.902357
CH8972	1.593303	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.10	PL45	-77.498260	38.902025
CH898	2.693484	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.89	PL21	-77.339153	39.052149
CH9016	8.050201	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.04	PL45	-77.506873	38.900653
CH9020	0.686751	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	17.93	PL45	-77.507388	38.900288
CH9023	0.502137	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	0.19	PL45	-77.507139	38.900250
CH9081	45.539000	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	57.98	PL45	-77.505628	38.899456
CH9082	0.904816	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.40	PL45	-77.505921	38.899568
CH91	0.995582	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.65	PL21	-77.350329	39.037215
CH9108	1.855534	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	26.38	PL45	-77.497335	38.901139
CH9117	0.805057	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	53.14	PL45	-77.497494	38.900143
CH912	5.553111	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	50.11	PL21	-77.337944	39.049647
CH9120	2.793801	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	77.02	PL45	-77.497529	38.900030
CH9122	2.017899	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	57.99	PL45	-77.497559	38.899153
CH9135	0.680374	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	52.81	PL45	-77.497512	38.898103
CH9139	3.106812	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	54.27	PL45	-77.497211	38.897706
CH9149	3.494693	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	65.62	PL45	-77.496893	38.896650
CH9152	1.969010	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	82.88	PL45	-77.496822	38.896308
CH9154	3.496547	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	50.85	PL45	-77.496804	38.895315
CH9188	4.298194	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	48.34	PL45	-77.496771	38.894291
CH9197	2.390415	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	38.12	PL45	-77.496952	38.893384
CH9220	9.647476	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.71	PL45	-77.496456	38.890928
CH9241	4.820236	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	75.62	PL45	-77.496324	38.889477
CH9242	6.131177	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.54	PL45	-77.496174	38.889194
CH9286	7.128160	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.23	PL45	-77.501262	38.889915
CH9288	7.454713	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.59	PL45	-77.501241	38.890635
CH9315	9.060524	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.73	PL45	-77.501252	38.891595
CH9341	10.689602	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	30.76	PL45	-77.501085	38.893253
CH9377	15.459160	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	29.21	PL45	-77.500822	38.895339
CH9424	16.892696	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	51.93	PL45	-77.501102	38.897250
CH943	1.680599	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.91	PL21	-77.338772	39.048194
CH9466	4.387122	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.64	PL45	-77.501322	38.893230
CH9494	1.731943	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	62.23	PL45	-77.502168	38.890286
CH9508	8.462217	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.30	PL45	-77.505388	38.893168
CH9518	8.292362	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.07	PL45	-77.505025	38.894503
CH954	9.259860	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	3.98	PL21	-77.339448	39.046948
CH9541	10.422881	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.45	PL45	-77.506959	38.897118
CH9563	1.638714	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.47	PL45	-77.489609	38.909247
CH9568	36.262737	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.29	PL45	-77.490185	38.908237
CH9573	0.636922	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.09	PL45	-77.489496	38.908800
CH9576	0.645906	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_NON_PUBLIC	0.30	PL45	-77.489511	38.907717
CH9608	22.910038	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.04	PL45	-77.490253	38.906167
CH961	6.787109	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	9.34	PL21	-77.340763	39.046479
CH9613	2.386161	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.05	PL45	-77.487582	38.906585
CH9622	3.016224	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.93	PL45	-77.484949	38.907865
CH9676	78.936195	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	42.31	PL45	-77.510870	38.898439
CH9704	4.649132	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.47	PL45	-77.510213	38.900064

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
CH9709	11.137680	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.41	PL45	-77.510567	38.901237
CH9710	0.321750	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	32.82	PL45	-77.510602	38.901435
CH972	2.298654	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	33.86	PL21	-77.369849	39.046522
CH9781	15.935475	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	67.34	PL14	-77.523643	39.016300
CH9814	8.148640	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	68.96	PL14	-77.527484	39.022243
CH982	13.803534	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	75.43	PL21	-77.367406	39.048480
CH9852	27.882521	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517873	39.017672
CH9853	5.258543	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518181	39.017636
CH986	1.068049	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.42	PL21	-77.367607	39.047141
CH9861	17.146422	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	70.90	PL14	-77.523173	39.016270
CH9893	3.852676	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519112	39.019228
CH9894	0.730748	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519194	39.019104
CH991	2.399687	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	84.07	PL21	-77.368313	39.046069
CH9919	5.612480	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520042	39.023742
CH9920	14.611406	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520623	39.023997
CH9944	12.505338	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518768	39.026355
CH9964	5.655023	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517556	39.029167
CH9966	0.284015	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517521	39.029254
CH9971	2.669879	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517831	39.029508
CH9996	1.340504	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515019	39.030252
CP10001	4.900002	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455388	39.057736
CP10022	0.600814	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460084	39.057640
CP1010	0.327814	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.562090	38.936466
CP10114	4.491848	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455841	39.049775
CP10155	5.639402	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491221	39.049045
CP10179	0.339123	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492115	39.050368
CP10180	1.642484	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491925	39.050329
CP10188	0.861841	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493528	39.048840
CP10192	0.317192	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493130	39.048346
CP10193	1.119085	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493327	39.048490
CP10196	0.607411	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493576	39.048852
CP10203	6.321176	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418087	39.028267
CP10229	5.410395	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.417749	39.028958
CP10278	6.858422	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500043	39.029613
CP10288	3.594256	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500287	39.054385
CP10291	8.271206	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500634	39.054533
CP10334	7.741223	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501694	39.056399
CP10338	4.350078	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501463	39.055964
CP10400	1.163817	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413479	38.974311
CP1042	14.695890	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558164	38.935435
CP1044	2.768815	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558401	38.935491
CP1058	3.587718	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	37.86	PL45	-77.528984	38.931643
CP1061	1.684765	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_MEDICAL	95.72	PL45	-77.529097	38.931328
CP1065	5.046515	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_CHURCH	78.49	PL45	-77.528975	38.931048
CP1068	0.318138	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	16.94	PL45	-77.528822	38.931133
CP10731	13.320789	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412904	38.974721
CP1084	0.296483	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_MEDICAL	94.26	PL45	-77.529887	38.932302
CP1193	0.421061	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_LIGHT_IND_FLEX	58.57	PL45	-77.471691	38.916606
CP1278	3.455643	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511622	38.983695
CP1280	1.527272	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508198	38.983927
CP1284	1.144271	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508360	38.984169
CP1299	3.207452	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506533	38.986504
CP1325	0.765089	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483436	38.995596
CP1326	3.868717	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483354	38.996135
CP1359	1.337993	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483631	38.997475
CP1370	3.706073	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483000	38.996739
CP1372	0.381318	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482588	38.996029
CP1374	0.216878	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482756	38.996312
CP1380	0.938679	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.481692	38.996065

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
CP1391	2.289892	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474884	39.002248
CP1408	4.299772	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472631	39.006525
CP1410	1.675489	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472551	39.006629
CP1416	5.087801	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470972	39.007745
CP1435	2.495658	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464734	39.008690
CP1440	3.299148	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462020	39.008527
CP1466	0.269847	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457093	39.010445
CP1468	3.733232	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457138	39.010379
CP1478	2.556844	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482290	39.003541
CP1481	5.510119	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481778	39.003381
CP1509	55.293707	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482966	39.004021
CP1511	3.756151	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482964	39.003949
CP1512	1.016032	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482856	39.004004
CP1556	12.963160	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456283	39.002668
CP1633	2.534554	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.531091	38.973538
CP164	3.367930	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	35.74	PL42	-77.565740	38.921121
CP165	0.878747	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	63.32	PL42	-77.565731	38.920684
CP1653	7.557987	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	36.17	PL14	-77.528747	38.996312
CP1667	10.844201	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	33.60	PL14	-77.528120	38.995935
CP1668	2.141737	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	51.94	PL14	-77.526765	38.996281
CP172	73.506833	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MULTI_USE	26.28	PL42	-77.565080	38.921169
CP1728	3.402022	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	PUBLIC	72.73	PL14	-77.530261	38.997533
CP1798	4.634708	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	92.53	PL14	-77.529293	38.996227
CP1807	3.145197	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	100.00	PL14	-77.530645	38.994330
CP1808	5.565428	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	100.00	PL14	-77.531669	38.994244
CP1824	16.970624	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	90.41	PL14	-77.531723	38.994295
CP1857	1.303014	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	89.43	PL14	-77.529527	38.993743
CP1861	0.303911	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	100.00	PL14	-77.529847	38.993506
CP1863	0.838391	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	89.28	PL14	-77.529081	38.993244
CP1875	2.907616	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	62.10	PL14	-77.531406	38.995244
CP1894	9.782729	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_OTHER_PUBLIC	88.93	PL14	-77.535430	38.991518
CP1895	23.539957	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_MFA	35.10	PL14	-77.535371	38.991123
CP1910	2.551154	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507283	39.008776
CP1956	2.216171	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502332	39.009153
CP1960	1.906406	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503913	39.008898
CP1961	0.914306	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505170	39.008882
CP1962	3.233545	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505777	39.008862
CP1963	1.495308	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506523	39.008773
CP1967	0.291023	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502006	39.009723
CP1970	0.353648	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502560	39.010056
CP1972	9.869644	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502864	39.010483
CP1985	0.802255	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506482	39.012740
CP1990	0.241546	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502512	39.009921
CP2054	4.048839	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464335	39.015649
CP2083	9.347454	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491158	39.007051
CP2101	30.250266	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481565	39.017065
CP2150	1.972106	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437581	39.022215
CP2204	1.168693	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428680	38.990852
CP2209	3.273557	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429550	38.990667
CP2221	4.602539	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430470	38.991000
CP2224	0.792358	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428217	38.990838
CP2225	0.306043	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427931	38.991245
CP2227	1.224086	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427298	38.991455
CP2229	0.951020	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426735	38.991635
CP2232	0.378069	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426282	38.991938
CP2247	7.847757	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428497	38.991065
CP2250	0.443634	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427977	38.990142
CP230	10.159900	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	58.84	PL42	-77.561198	38.922276
CP2356	59.878164	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411012	38.976987

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
CP2358	0.148407	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430393	39.015427
CP2366	9.207935	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432069	39.014571
CP2381	4.771586	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431101	39.016178
CP2386	12.216180	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430422	39.015262
CP2420	1.412228	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487847	39.039605
CP2431	1.041600	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515892	39.031971
CP2438	2.471432	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517181	39.032303
CP2445	5.871871	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516826	39.032721
CP2449	4.547708	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515761	39.033503
CP2472	1.571567	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487655	39.038868
CP2477	0.416797	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.520248	39.031617
CP2481	14.774228	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.519132	39.031761
CP250	3.383114	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	54.31	PL42	-77.564313	38.921137
CP251	3.898324	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	61.53	PL42	-77.564834	38.921596
CP2538	3.011622	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465774	39.050846
CP2562	3.534685	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467213	39.052151
CP2567	4.781689	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463770	39.049914
CP2582	1.566890	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462445	39.050157
CP2592	2.286643	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462962	39.051144
CP2593	2.777311	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463328	39.052611
CP2659	0.987166	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457819	39.042673
CP2668	4.974225	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459480	39.041642
CP2785	33.508718	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454341	39.059362
CP2832	4.395592	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454113	39.059271
CP2883	7.937284	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451919	39.058164
CP2886	0.504877	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451458	39.057805
CP2895	6.979541	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451417	39.057870
CP2915	1.315451	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452330	39.057760
CP2945	0.639491	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451742	39.057851
CP3038	3.501284	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426964	39.019043
CP331	14.578287	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	63.04	PL42	-77.562993	38.918436
CP358	1.404283	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	60.27	PL42	-77.559724	38.911390
CP362	0.660883	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	52.75	PL42	-77.560543	38.911481
CP373	3.116221	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	45.56	PL45	-77.541148	38.923970
CP374	5.704983	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.62	PL45	-77.540974	38.924408
CP394	2.918176	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.89	PL45	-77.541182	38.923546
CP398	0.290102	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	35.86	PL45	-77.542608	38.925699
CP402	0.953940	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.60	PL45	-77.542548	38.925775
CP408	0.781963	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	32.97	PL45	-77.543065	38.926588
CP419	1.372118	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.46	PL45	-77.541720	38.925737
CP429	0.715180	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	56.26	PL45	-77.540616	38.925503
CP438	0.992222	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	44.54	PL45	-77.539618	38.926214
CP4507	2.138468	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484496	39.040602
CP4508	73.996571	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484730	39.040645
CP4515	1.317264	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484888	39.040632
CP4516	6.996806	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485123	39.040493
CP4563	43.745109	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	53.64	PL42	-77.561695	38.916271
CP4649	17.720331	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.89	PL45	-77.532166	38.918511
CP4685	1.177994	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	58.67	PL45	-77.535810	38.910759
CP4694	0.922653	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	62.55	PL45	-77.536338	38.910339
CP4695	0.852572	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	60.12	PL45	-77.536985	38.909773
CP470	3.538244	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	21.15	PL45	-77.543471	38.925865
CP4701	0.359112	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	52.57	PL45	-77.537142	38.909643
CP4708	8.937442	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	46.87	PL45	-77.537361	38.910013
CP4709	8.725999	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	55.29	PL45	-77.537288	38.910300
CP4723	14.268814	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	35.65	PL45	-77.537868	38.908782
CP4738	0.325484	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	2.99	PL45	-77.538752	38.907244
CP476	6.613148	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	91.46	PL45	-77.543688	38.925460
CP6073	4.583002	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.524034	39.034563

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
CP6080	4.585159	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.525302	39.032352
CP616	1.874807	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	58.82	PL45	-77.540692	38.910791
CP6320	4.910197	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.552100	38.934419
CP6368	10.942788	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551967	38.936924
CP6369	0.798847	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551898	38.937133
CP6375	2.847840	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551895	38.938288
CP638	10.968001	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	58.92	PL45	-77.536473	38.922185
CP6410	4.515752	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560472	38.932940
CP6411	1.111098	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560748	38.932633
CP6430	9.020817	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559771	38.934759
CP6544	16.571410	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560119	38.930065
CP6584	3.430902	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559962	38.930086
CP6588	11.695739	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560872	38.930119
CP6589	4.386022	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.561069	38.930282
CP706	8.669461	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.539233	38.936759
CP7300	3.680421	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506174	38.990066
CP7306	1.284216	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505906	38.991710
CP7319	4.436346	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505775	38.992998
CP7329	2.038012	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506148	38.993212
CP7355	12.001851	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508876	38.990548
CP7359	18.189704	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508872	38.990994
CP738	2.788591	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.546196	38.939375
CP7438	17.672867	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509694	38.990971
CP7439	0.482266	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509384	38.991123
CP7442	0.776145	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509039	38.991308
CP7447	0.389988	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.510422	38.989719
CP7458	0.658756	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505502	38.991448
CP747	1.613395	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.547907	38.940113
CP7526	11.615928	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505835	38.990725
CP7533	1.029959	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505858	38.990203
CP755	2.991926	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.548702	38.940418
CP762	1.550771	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.548147	38.940196
CP7667	5.373005	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	91.47	PL14	-77.524701	39.014261
CP7669	10.530698	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	66.11	PL14	-77.524398	39.014378
CP768	0.785823	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.550282	38.940732
CP7681	0.802643	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	57.44	PL14	-77.523514	39.015690
CP7695	1.940587	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	34.58	PL14	-77.524642	39.015100
CP7697	5.785755	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	60.12	PL14	-77.524074	39.015369
CP7701	1.119417	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	37.89	PL14	-77.524638	39.014872
CP7710	2.833910	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	36.44	PL14	-77.523863	39.015043
CP7734	8.214178	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522965	38.989024
CP7745	1.085146	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482692	39.019798
CP7746	0.316352	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482458	39.019608
CP7759	6.154924	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484017	39.019728
CP7776	1.728315	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485553	39.018635
CP783	9.355698	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551336	38.939284
CP7838	15.264776	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492147	39.012608
CP7839	2.861885	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492130	39.012568
CP784	0.509697	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551793	38.939017
CP7841	1.213533	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491956	39.012148
CP7843	4.838506	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491124	39.012927
CP786	4.729510	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551777	38.939143
CP7875	4.236049	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492133	39.012634
CP7899	5.301839	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502023	39.013768
CP7902	6.486117	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502188	39.013768
CP7943	11.438033	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491967	39.044729
CP7985	12.089571	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457857	39.046855
CP8050	7.967943	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454842	39.046630
CP8069	2.399686	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433741	39.030642

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
CP8076	3.141354	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433860	39.030682
CP8092	13.243888	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436418	39.029219
CP8121	0.753507	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439959	39.013118
CP8162	25.339778	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442989	39.014122
CP8178	0.427763	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440472	39.010673
CP8223	6.660546	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	37.78	PL45	-77.483331	38.911370
CP8229	4.977604	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	34.11	PL45	-77.482721	38.911147
CP831	12.873782	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	54.04	PL45	-77.489165	38.913047
CP8385	1.819345	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.93	PL16	-77.505952	39.104394
CP8421	6.780272	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477553	39.020127
CP8425	1.291658	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478216	39.020207
CP8428	0.492447	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480354	39.018760
CP8434	1.856712	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	42.37	PL14	-77.528363	38.996946
CP8438	0.837780	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	64.04	PL14	-77.526589	38.997414
CP8443	0.318581	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	64.61	PL14	-77.526012	38.997161
CP8451	1.492552	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486179	38.999128
CP8454	0.592744	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486051	38.999098
CP8470	3.959005	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483882	38.998189
CP8472	1.121840	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483937	38.997985
CP8475	1.654736	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486208	38.998290
CP8476	0.433454	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.486293	38.998118
CP8481	8.122776	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412299	38.982608
CP8495	13.472575	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412201	38.982046
CP8510	7.020599	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411958	38.983548
CP864	9.149806	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	57.86	PL45	-77.487418	38.912493
CP8688	12.805853	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443129	39.048755
CP8691	1.719042	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445127	39.047574
CP8693	2.249421	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445567	39.047615
CP8698	7.387781	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447242	39.048657
CP8734	37.781591	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.652814	39.140432
CP874	1.232782	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	27.23	PL45	-77.486279	38.915320
CP8742	13.393527	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.646876	39.136980
CP8746	10.899511	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.646069	39.138002
CP8748	2.682824	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.645946	39.138931
CP8756	3.154415	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.574804	38.952626
CP8762	2.364588	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.575058	38.952456
CP8764	0.184067	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.575322	38.952847
CP8771	1.699365	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.574438	38.953738
CP8779	1.603714	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.572267	38.955034
CP8797	2.400276	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.636386	39.136581
CP8820	3.999260	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.504283	39.113879
CP8839	0.456983	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	50.13	PL42	-77.562782	38.910916
CP8843	0.203352	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.563612	38.910589
CP8871	6.172247	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	72.72	PL42	-77.566988	38.911846
CP893	3.311794	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MISC	55.67	PL45	-77.488718	38.911398
CP895	4.052581	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	0.86	PL45	-77.488760	38.911367
CP8956	13.023035	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	51.85	PL42	-77.566707	38.908568
CP8957	12.259065	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	34.01	PL42	-77.566684	38.908544
CP9016	1.029611	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.570902	38.912770
CP9021	3.759435	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MULTI_USE	49.75	PL42	-77.570935	38.914817
CP9047	0.587327	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run		0.00	PL42	-77.570837	38.911709
CP9053	2.541487	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	63.10	PL45	-77.497989	38.919242
CP9060	5.578437	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_MFST	45.05	PL45	-77.498075	38.919255
CP9117	4.295379	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	71.48	PL45	-77.504703	38.915860
CP9126	0.681936	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	57.27	PL45	-77.504777	38.917306
CP9128	12.200760	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	46.13	PL45	-77.504795	38.917478
CP9169	9.747020	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	44.50	PL45	-77.501761	38.919311
CP9189	0.113993	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522967	38.971636
CP9193	0.332244	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523826	38.972112

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
CP9230	7.724262	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470151	38.998875
CP9234	4.575444	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470347	38.999148
CP9321	3.155231	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432976	38.981521
CP9380	9.173334	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444180	38.986281
CP9433	4.480963	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503321	39.025501
CP9479	0.983141	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458255	39.034200
CP9483	2.058030	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458085	39.034629
CP949	14.433951	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	99.02	PL45	-77.488767	38.912927
CP9495	7.420081	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458060	39.035311
CP9500	1.460163	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456188	39.036053
CP9502	4.654594	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456733	39.036356
CP9530	10.222154	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457019	39.036378
CP9555	5.501479	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457043	39.037982
CP9561	3.370020	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455911	39.037273
CP9614	8.978314	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458340	39.030481
CP9624	19.296007	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461784	39.029485
CP9684	14.590844	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450606	39.040686
CP9685	19.831898	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450940	39.040573
CP9756	1.081049	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455623	39.048906
CP9760	0.725331	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457038	39.048180
CP9784	9.000714	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.458623	39.063204
CP9789	9.899356	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.458966	39.063784
CP9963	3.472801	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452123	39.054645
CP9965	4.397140	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451997	39.054982
CP9966	4.947035	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451886	39.055147
CP9990	0.889675	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454493	39.057246
CP9994	1.032407	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454697	39.057401
CS1	13.330424	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411060	39.004843
CS16	0.492103	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	64.13	PL14	-77.528602	39.003721
DB1027	8.603174	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.06	PL45	-77.496035	38.900418
DB1099	19.712810	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.14	PL45	-77.495773	38.895343
DB1131	1.687120	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.41	PL45	-77.495596	38.893769
DB1138	1.680858	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	54.57	PL45	-77.495594	38.894867
DB1164	12.649611	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.89	PL45	-77.496281	38.897365
DB1169	0.187721	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.30	PL45	-77.496746	38.897409
DB1191	0.792181	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	46.26	PL45	-77.479621	38.907569
DB1212	8.611847	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.39	PL45	-77.481106	38.908019
DB1219	2.947736	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.55	PL45	-77.483125	38.908378
DB1224	24.012500	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	57.97	PL45	-77.483562	38.908417
DB1266	2.994637	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.39	PL45	-77.510751	38.896853
DB1271	6.539175	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	40.67	PL45	-77.511287	38.897016
DB1295	6.183341	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	62.99	PL45	-77.511447	38.897608
DB1318	2.331574	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	33.21	PL45	-77.522819	38.902338
DB1321	0.296837	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.98	PL45	-77.522879	38.902918
DB1326	8.084555	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	47.98	PL45	-77.522668	38.903773
DB1327	1.986259	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	32.90	PL45	-77.522319	38.904583
DB1335	1.452749	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	23.69	PL45	-77.521988	38.905160
DB1336	0.966481	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	29.26	PL45	-77.521805	38.905538
DB1341	0.502336	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	8.68	PL45	-77.521918	38.906112
DB1344	12.691299	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.75	PL45	-77.521551	38.906038
DB1359	5.208134	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	59.34	PL45	-77.519978	38.908327
DB1366	0.997878	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	16.16	PL45	-77.518509	38.909105
DB1373	3.853708	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	22.56	PL45	-77.518533	38.909608
DB1382	2.204253	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500378	39.022446
DB1395	5.332587	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498408	39.020208
DB1406	2.858222	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500283	39.020204
DB1412	0.522312	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501256	39.021543
DB1413	13.293909	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501571	39.021362
DB1426	0.845511	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501364	39.020256

Loudoun County Virginia
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DB1472	1.101985	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502324	39.022122
DB1486	9.494252	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503682	39.022188
DB15	33.790312	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427203	39.029720
DB1515	22.431292	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502827	39.022657
DB1574	5.967257	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501068	39.022723
DB1588	27.070407	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498042	39.017832
DB1592	0.482388	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497782	39.018848
DB162	9.157015	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426503	39.037550
DB1620	0.520822	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498932	39.016045
DB1622	2.191831	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499151	39.016068
DB1625	1.841861	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498963	39.015358
DB1628	0.631771	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499133	39.015638
DB1638	5.281144	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499365	39.016508
DB1658	10.391295	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498863	39.018059
DB1688	6.146558	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498871	39.018759
DB1696	36.340491	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497862	39.023519
DB1702	2.239664	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497450	39.025019
DB1757	7.035701	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510664	39.025655
DB1797	3.638229	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509244	39.022638
DB1807	3.384854	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507471	39.022998
DB1811	2.131486	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506800	39.022363
DB1812	5.081637	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509380	39.022592
DB1822	0.293504	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508913	39.022324
DB1827	1.325342	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508856	39.021579
DB1835	0.787960	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508237	39.021794
DB1838	0.884479	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507384	39.021782
DB1845	2.930328	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507085	39.019983
DB186	16.891971	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425293	39.035877
DB1860	4.350029	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508106	39.019313
DB1862	0.678579	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507830	39.019341
DB1864	2.758109	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508011	39.018919
DB1888	10.516107	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506923	39.018593
DB1916	12.582573	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507172	39.013751
DB1947	33.216968	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511625	39.014773
DB195	8.612301	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425524	39.036854
DB196	35.455394	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425470	39.036931
DB1974	3.313714	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510964	39.019729
DB1975	0.269193	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510777	39.019779
DB1980	1.551762	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510618	39.020258
DB1993	7.866547	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512210	39.021711
DB2016	0.412633	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511229	39.024601
DB2019	5.559448	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510690	39.023494
DB2020	4.686078	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511040	39.023043
DB2029	0.564951	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509489	39.024068
DB2031	0.582140	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510087	39.024439
DB2033	1.706217	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511089	39.025416
DB2046	6.484818	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511464	39.024941
DB2130	0.152660	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513910	39.016519
DB2133	0.889322	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514505	39.016549
DB2168	13.792002	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.479718	39.079372
DB2209	12.576558	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481904	39.081217
DB2236	16.997125	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.480263	39.085558
DB2252	7.967327	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.478066	39.086651
DB2270	4.184039	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.478963	39.087359
DB2296	8.138692	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481271	39.087874
DB2307	3.580720	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.480919	39.089512
DB2318	4.705683	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477042	39.089376
DB2324	3.201744	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.476067	39.087617
DB2329	3.388318	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.480245	39.089834

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
DB2334	3.116611	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481483	39.088392
DB2338	3.635041	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481640	39.089125
DB2348	1.651188	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.483950	39.087328
DB2359	29.157794	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484088	39.086541
DB2400	8.703538	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482696	39.073350
DB2423	0.233087	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515101	39.016928
DB2431	5.213245	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517098	39.017816
DB2438	0.806806	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516947	39.017293
DB2439	2.448271	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517380	39.017200
DB2442	6.826396	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518557	39.016840
DB2460	4.214926	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516157	39.016497
DB2480	20.807851	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514559	39.015395
DB2493	4.694610	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513007	39.014511
DB2509	2.167285	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515020	39.010947
DB2517	9.632091	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513709	39.011437
DB2523	17.356828	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514205	39.009624
DB2610	17.093961	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517130	39.009496
DB2611	10.769721	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.518049	39.009555
DB2693	17.661144	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503763	39.061604
DB2738	1.786388	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502705	39.062355
DB2739	1.852435	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501693	39.063345
DB2745	6.656376	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500975	39.064575
DB2749	4.278414	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500701	39.065144
DB2784	0.414709	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.482190	39.081344
DB2793	15.477636	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484241	39.080873
DB2796	0.762179	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484792	39.080797
DB2797	33.111158	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.485224	39.080656
DB2908	5.179692	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484161	39.087946
DB30	1.157905	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427737	39.030448
DB3051	3.961022	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	77.62	PL16	-77.501936	39.094715
DB3068	1.457349	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	83.97	PL16	-77.503910	39.094245
DB316	11.652041	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421517	39.034379
DB395	0.622319	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441433	39.051380
DB44	13.592765	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429079	39.032796
DB448	0.231025	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432934	39.048008
DB449	3.455554	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433452	39.048240
DB453	1.283826	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432493	39.047178
DB456	2.022596	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431694	39.046656
DB462	0.409219	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432323	39.046338
DB464	0.385564	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431137	39.046257
DB468	0.238844	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431682	39.046747
DB470	0.526027	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.432341	39.047688
DB48	2.125801	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428883	39.032069
DB497	0.856678	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480816	39.065329
DB500	0.892069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480978	39.064425
DB502	0.976666	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481006	39.064355
DB513	7.203564	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481392	39.064366
DB514	0.181994	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481354	39.064378
DB524	3.060648	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480546	39.058095
DB56	15.711423	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424987	39.039929
DB57	7.440978	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425342	39.039387
DB60	2.684820	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426113	39.038836
DB700	2.912936	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	21.37	PL45	-77.502372	38.890072
DB703	0.229674	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	1.08	PL45	-77.503172	38.890464
DB706	0.132590	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.69	PL45	-77.504314	38.890989
DB73	4.691885	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427178	39.038382
DB765	5.154405	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.46	PL45	-77.495238	38.890959
DB780	15.867903	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	29.36	PL45	-77.495223	38.891221
DB870	10.499327	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.25	PL45	-77.491908	38.892781

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
DB894	3.166596	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.85	PL45	-77.491673	38.893421
DB911	6.094841	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.36	PL45	-77.491560	38.894790
DB916	61.749177	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	62.81	PL45	-77.490231	38.896753
DB983	2.735147	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.55	PL45	-77.491731	38.895518
DB993	7.963294	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	54.51	PL45	-77.491196	38.896742
DD133	7.968828	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.446117	38.985010
DD26	1.293569	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439870	38.997049
DD3	5.490009	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497093	39.027018
DD34	0.108260	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407664	39.036124
DD55	1.402752	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437275	38.978217
DD58	0.565476	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437891	38.978880
DD66	10.297222	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_CHURCH	55.76	PL45	-77.494054	38.914837
DD78	1.197308	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.417185	39.017046
DD8	0.958082	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436372	39.011538
DD86	4.167148	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	100.00	PL21	-77.389247	39.060360
DD9	0.080950	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447780	38.999067
DF123	8.180078	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463301	39.025872
DF148	6.983239	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426794	39.040608
DF153	0.581910	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428984	39.043413
DF158	5.455012	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474098	39.068211
DF16	1.078791	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.500514	38.985413
DF169	9.967862	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.504147	38.982191
DF185	9.446812	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475331	39.065803
DF188	1.679471	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448191	39.057834
DF190	10.023502	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405788	39.012375
DF196	4.638700	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474975	39.066253
DF21	10.306755	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	54.27	PL45	-77.500203	38.916522
DF278	0.660681	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500268	39.022500
DF28	16.705658	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468810	39.052989
DF66	14.435656	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.543094	38.931050
DF73	14.066609	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505260	38.979690
DF93	2.914337	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	58.82	PL14	-77.531298	39.020356
DK11558	2.006598	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515791	39.004217
DK11568	0.526598	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516217	39.004070
DK20037	3.566249	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516812	39.003613
DK30021	1.769864	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513043	39.005861
DK30234	3.303854	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396299	39.029583
DK30235	5.453264	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423777	39.019839
DK30238	2.146248	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.426562	39.016600
DK30239	3.003345	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424969	39.016043
DK30240	3.826431	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411431	39.008941
DK30241	0.475179	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411376	39.009033
DK30242	3.420739	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.411738	39.009004
DK30245	3.547472	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424559	38.990059
DK30246	6.738108	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408180	38.995977
DK30247	1.685062	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.407787	38.995715
DK30255	5.164703	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513328	39.005788
DK30257	9.108329	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514839	39.004375
DK30259	0.764877	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518724	38.983117
DK30260	4.044774	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518934	38.981138
DK30261	3.799165	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518730	38.981143
DK80001	0.071786	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.396549	39.029618
DW120	3.460361	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425897	38.983586
DW152	14.223935	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447372	38.982672
DW154	0.424193	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.363415	39.026991
DW155	1.115523	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	49.23	PL21	-77.377467	39.029777
DW156	1.310490	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	49.28	PL21	-77.377428	39.029765
DW212	2.052657	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463569	39.022850
DW26	19.038588	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	24.37	PL21	-77.356476	39.041778

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
DW29	1.134137	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	92.91	PL21	-77.363609	39.037768
DW43	14.636556	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	38.67	PL21	-77.358565	39.042558
DW46	1.816985	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.65	PL45	-77.523709	38.902793
DW48	43.529691	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469098	39.019580
DW52	11.930298	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	72.73	PL21	-77.346003	39.053744
GC1002	1.658159	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	68.08	PL14	-77.526486	39.005766
GC1216	3.610756	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	76.78	PL45	-77.515473	38.919493
GC1275	5.507200	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	81.14	PL42	-77.557164	38.909026
GC1276	2.873416	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	66.67	PL42	-77.557283	38.910257
GC1483	2.855381	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.83	PL45	-77.539238	38.914718
GC1515	0.518659	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	1.74	PL45	-77.524038	38.900392
GC1516	2.439770	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	23.93	PL45	-77.523873	38.900315
GC1517	12.740403	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	48.38	PL45	-77.522899	38.901969
GC1519	1.484855	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	48.06	PL45	-77.524041	38.903009
GC1520	2.772790	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.16	PL45	-77.523358	38.905199
GC1521	3.272319	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.71	PL45	-77.523217	38.906970
GC1522	0.405622	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	46.57	PL45	-77.523282	38.907331
GC1523	0.753758	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	PUBLIC	74.23	PL45	-77.522871	38.907845
GC1535	5.788006	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	53.62	PL45	-77.529851	38.928715
GC1536	1.779320	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	44.54	PL45	-77.529489	38.928583
GC1537	1.729982	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.16	PL45	-77.528526	38.927569
GC1538	1.737599	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.47	PL45	-77.532729	38.928668
GC1540	14.080360	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	49.09	PL45	-77.530551	38.925983
GC1541	4.443425	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	30.71	PL45	-77.531835	38.925799
GC1542	13.447747	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.75	PL45	-77.532260	38.925281
GC1543	20.813716	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551147	38.936367
GC1544	0.610393	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.551217	38.935731
GC1545	2.170653	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	34.74	PL42	-77.550284	38.926314
GC1546	12.488969	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	62.19	PL42	-77.550091	38.926269
GC1548	6.744006	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	75.90	PL42	-77.550697	38.924802
GC1552	20.170184	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	29.75	PL42	-77.551875	38.922053
GC2101	6.683125	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.494881	39.110486
GC2102	3.603232	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.495723	39.112531
GC2103	5.746417	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.490835	39.110085
GC2104	1.795569	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477030	39.087329
GC2105	19.512398	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.474762	39.087646
GC2109	57.797626	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.42	PL16	-77.506255	39.090656
GC2140	3.560390	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460986	39.041713
GC2141	2.063791	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462084	39.042247
GC2142	9.540642	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463742	39.042678
GC2246	20.054077	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460248	39.045092
GC2247	3.058793	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460194	39.045096
GC2248	2.361433	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460312	39.045187
GC2250	7.659233	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458969	39.045745
GC2257	0.652560	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459672	39.033598
GC2258	0.848317	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460501	39.033136
GC2259	1.454048	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461474	39.033220
GC2379	3.883234	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	96.70	PL16	-77.509589	39.060389
GC2380	23.227580	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505318	39.055932
GC2386	49.494875	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.69	PL16	-77.510749	39.063782
GC2390	5.386613	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460885	39.040832
GC2394	0.230858	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464234	39.042656
GC2395	14.326377	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462169	39.041496
GC2465	4.527499	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.29	PL16	-77.508827	39.086922
GC2469	6.060172	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498513	39.060670
GC2470	0.506217	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499132	39.059537
GC2553	12.028609	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461505	39.047969
GC2554	6.291295	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459522	39.046499
GC2555	4.870713	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.460271	39.045687

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
GC2556	9.658739	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461914	39.048199
GC2557	9.845813	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462714	39.048962
GC2654	1.793459	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493286	39.042780
GC2658	2.837380	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495093	39.060638
GC2659	2.503376	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496991	39.059293
GC2660	1.217400	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494842	39.059204
GC2661	1.901447	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496426	39.058202
GC2662	1.431058	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494756	39.057403
GC2737	20.005632	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	61.01	PL16	-77.490002	39.097863
GC2738	31.769611	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	46.65	PL16	-77.490575	39.098386
GC2812	8.508727	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	54.69	PL16	-77.495472	39.094446
GC2813	15.061832	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.71	PL16	-77.496789	39.094998
GC2814	1.481729	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.56	PL16	-77.498571	39.091578
GC2815	1.783280	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	73.87	PL16	-77.498875	39.092965
GC2817	31.543733	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	45.39	PL16	-77.506147	39.087276
GC547	44.527974	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	34.62	PL21	-77.352939	39.053355
GC548	1.915721	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	83.23	PL21	-77.352639	39.053473
GC908	19.087532	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.516512	38.987474
GC909	0.668726	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514469	38.985724
GC914	5.277139	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514360	38.985236
GC915	5.715832	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.513574	38.984548
GC919	9.397312	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514951	38.981517
GC922	21.866101	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.515851	38.981965
GC927	0.759035	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520841	38.988345
GC948	4.202617	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.512210	38.983579
GC979	39.783781	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.515775	38.993926
GC981	8.427568	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.513721	38.990507
GC982	1.192941	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.512444	38.991553
GC983	1.738538	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511495	38.991088
GC998	0.446388	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	83.02	PL14	-77.529537	39.006790
JC1	6.143555	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.73	PL45	-77.524812	38.916966
JC1026	4.958516	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504229	39.038945
JC1028	29.189394	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504611	39.038853
JC1050	2.256835	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505501	39.039738
JC1053	1.243767	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506888	39.039784
JC1056	1.259746	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507713	39.039570
JC1058	1.245318	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508677	39.038733
JC1063	1.036126	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509068	39.036670
JC1065	11.226328	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509054	39.037415
JC1067	5.216397	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508964	39.038562
JC1097	4.460681	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510186	39.038836
JC1098	2.160770	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511183	39.038729
JC1106	1.163833	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513178	39.037904
JC1125	5.531066	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509511	39.035194
JC1127	8.294368	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509505	39.035299
JC1144	2.885069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508997	39.035780
JC1146	4.017225	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514131	39.036696
JC11470	1.310638	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	70.38	PL42	-77.559654	38.913012
JC11476	0.931987	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	92.30	PL42	-77.559749	38.912961
JC11477	0.643145	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	56.10	PL42	-77.560053	38.913155
JC1148	0.991422	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514280	39.036750
JC11480	0.448327	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	58.71	PL42	-77.560231	38.913038
JC1175	1.340702	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515448	39.037758
JC1177	9.014762	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515520	39.037834
JC119	2.782182	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.52	PL45	-77.525824	38.908282
JC1206	3.519742	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498742	39.031617
JC1218	1.059284	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498593	39.031899
JC1220	2.345647	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499523	39.032632
JC1227	1.234333	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500450	39.033083

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
JC1231	23.531806	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500527	39.032947
JC1241	4.200866	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502471	39.033066
JC125	3.650641	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.13	PL45	-77.527722	38.908837
JC126	3.632073	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.53	PL45	-77.530257	38.910267
JC1277	3.863950	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488905	39.047043
JC135	22.839873	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	67.95	PL45	-77.531348	38.908032
JC1381	5.099088	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488359	39.056336
JC1390	3.586332	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488035	39.057047
JC1398	2.214418	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487450	39.058138
JC14	10.009016	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.17	PL45	-77.526272	38.916894
JC1403	7.359027	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486798	39.058995
JC1421	9.788660	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486916	39.059089
JC1439	5.394851	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487998	39.058735
JC1456	2.678306	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488263	39.057720
JC1459	0.777019	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488774	39.056080
JC148	7.039656	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	67.72	PL45	-77.529553	38.908184
JC1485	7.492587	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491552	39.057276
JC1488	6.108171	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491480	39.057760
JC1495	1.727550	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489154	39.054485
JC1498	2.839513	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491206	39.058678
JC1502	1.946675	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494548	39.060344
JC1518	5.896692	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490530	39.060841
JC1519	1.262047	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490847	39.060084
JC1529	17.703886	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491447	39.060665
JC1542	0.749098	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494018	39.062369
JC1549	3.399242	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494603	39.061035
JC1567	4.525048	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	56.65	PL16	-77.504210	39.068645
JC1584	0.451886	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	100.00	PL16	-77.502583	39.068939
JC1586	7.718811	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	57.18	PL16	-77.502592	39.069013
JC1588	0.182517	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	100.00	PL16	-77.501740	39.069240
JC1593	4.693479	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	62.55	PL16	-77.501292	39.069129
JC1604	1.282206	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	100.00	PL16	-77.501420	39.068865
JC1630	1.866015	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	67.05	PL16	-77.506284	39.071670
JC1631	3.513853	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	51.26	PL16	-77.506197	39.072060
JC1656	12.650041	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	47.64	PL16	-77.501078	39.072828
JC1662	1.351604	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	53.02	PL16	-77.503469	39.068678
JC168	5.377558	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	75.61	PL45	-77.526766	38.904152
JC1685	1.606200	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498517	39.066567
JC169	0.840525	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.66	PL45	-77.526356	38.904477
JC1693	3.664535	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499082	39.065899
JC1696	8.752060	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	49.29	PL16	-77.501656	39.068408
JC1716	1.263142	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.490302	39.075488
JC1717	6.840164	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	42.58	PL16	-77.490331	39.075529
JC173	3.184955	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.89	PL45	-77.528945	38.903851
JC1739	2.016283	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.496650	39.078587
JC1741	0.668456	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.496764	39.078625
JC1746	2.760451	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.496337	39.078994
JC1773	1.370765	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.502413	39.081325
JC1774	15.316475	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	10.35	PL16	-77.502451	39.081341
JC1790	0.392269	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.505580	39.082788
JC1791	0.996175	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.505457	39.082718
JC1800	8.314742	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	36.41	PL16	-77.510724	39.085522
JC1803	0.201949	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	PUBLIC	0.00	PL16	-77.512460	39.086335
JC1817	0.830691	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.516757	39.088781
JC1829	0.828351	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.512557	39.086895
JC1831	0.103052	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek		0.00	PL16	-77.512446	39.086872
JC1837	7.807332	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	57.25	PL16	-77.498521	39.087438
JC1849	29.190108	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	39.70	PL16	-77.498570	39.088034
JC186	3.847632	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.15	PL45	-77.532029	38.905513

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
JC1886	1.626558	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	70.98	PL16	-77.499333	39.089667
JC1963	38.663677	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	44.75	PL16	-77.511407	39.098299
JC202	9.164655	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.05	PL45	-77.525325	38.906492
JC2025	32.361429	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	52.62	PL16	-77.503665	39.098859
JC203	0.247665	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.65	PL45	-77.526104	38.906125
JC210	3.335412	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.98	PL45	-77.527680	38.904875
JC211	12.126380	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	45.11	PL45	-77.516910	38.904817
JC2124	3.835675	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.500593	38.984439
JC214	3.060378	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	64.25	PL45	-77.516895	38.905197
JC2152	1.304060	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521016	38.997757
JC2153	1.695269	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520822	38.995141
JC2154	12.162867	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.519567	38.991820
JC2226	3.529641	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495695	39.053580
JC2227	8.384919	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496371	39.054485
JC2228	4.887562	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496355	39.056681
JC2229	4.744647	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495989	39.055885
JC2230	3.394908	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500729	39.055498
JC2231	17.679955	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499732	39.053255
JC227	7.869750	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_GOLF_COURSE	56.14	PL45	-77.518895	38.907064
JC2294	0.742686	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504945	39.017746
JC2297	6.489880	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503171	39.017276
JC2299	2.978469	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503897	39.018802
JC2326	7.231368	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501817	38.987939
JC2327	4.432534	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502246	38.986403
JC2415	3.605004	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499093	39.052831
JC2417	3.252823	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496247	39.051334
JC2418	6.415344	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495639	39.051534
JC2419	6.689654	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495413	39.051517
JC2422	5.551043	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500334	39.059420
JC243	2.923416	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	50.76	PL45	-77.515464	38.908772
JC2492	0.691598	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517844	39.003002
JC2493	15.211603	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517818	39.002223
JC2494	0.507937	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517635	39.003623
JC2496	3.881794	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516340	39.006860
JC2498	0.089702	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516570	39.005514
JC2499	0.752474	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516100	39.006033
JC2515	9.423665	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.480620	38.991980
JC2516	20.950579	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482757	38.990316
JC2524	14.874180	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506006	38.986954
JC2527	1.594856	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502469	38.986434
JC2563	5.810536	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518899	38.990340
JC2565	5.710652	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.518502	38.989118
JC266	8.523929	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	40.95	PL45	-77.520504	38.909538
JC2696	3.854925	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515945	39.009085
JC2702	0.548616	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469717	39.054345
JC2704	14.330495	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470564	39.055019
JC2727	29.010101	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483276	38.990316
JC2744	9.232897	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502846	38.985532
JC2755	6.963961	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495260	39.045440
JC2813	3.880411	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501444	39.061305
JC2816	0.776180	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502020	39.061430
JC2817	7.485383	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499042	39.059419
JC2818	0.551159	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498197	39.060727
JC2819	2.925652	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497895	39.060992
JC2881	1.105382	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515425	39.006930
JC2882	3.373760	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512306	39.008628
JC2898	2.183457	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514856	39.008500
JC2899	3.533145	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517100	39.009124
JC2930	1.251487	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483263	38.989803

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
JC2931	3.610719	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483248	38.989461
JC2932	1.547562	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483203	38.989083
JC2953	4.499572	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499038	38.993397
JC2954	2.394493	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.495366	38.993881
JC2988	8.890581	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495865	39.046493
JC2991	0.812082	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497797	39.048660
JC30000	7.312353	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476343	39.021434
JC30001	2.090486	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476191	39.021503
JC30003	8.859281	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478094	39.021063
JC30004	1.202979	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487289	39.014411
JC30005	0.182207	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488185	39.013432
JC30006	0.326250	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488474	39.013089
JC30007	1.203379	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487625	39.014321
JC30009	9.880144	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.503979	39.000865
JC30010	1.456343	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.504227	39.001636
JC30011	1.578388	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.504451	39.002321
JC30012	18.030902	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507317	38.999038
JC30021	15.639745	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524105	38.990560
JC30024	2.980272	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522730	38.978694
JC30030	42.744262	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521584	38.971156
JC30034	22.224976	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.519927	38.973219
JC30037	8.161131	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522289	38.969694
JC30050	51.123464	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	COM_RETAIL	29.78	PL14	-77.537215	38.987150
JC30072	1.311042	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466644	39.049719
JC30073	10.229602	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466433	39.049409
JC30074	3.905119	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466382	39.050855
JC30075	3.223840	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	46.49	PL21	-77.354952	39.038633
JC30076	1.054993	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	60.59	PL21	-77.355059	39.039228
JC30077	1.006687	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	59.20	PL21	-77.355252	39.039826
JC30078	1.679662	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	45.05	PL21	-77.356141	39.037053
JC30079	9.337485	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	35.24	PL21	-77.356174	39.036883
JC30080	0.270074	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	78.90	PL21	-77.354780	39.036416
JC30081	1.813132	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	57.87	PL21	-77.355478	39.037574
JC30082	3.462296	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463732	39.048822
JC30083	7.346607	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465496	39.043486
JC30196	16.734932	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.657644	39.136458
JC30198	0.875785	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.658986	39.137001
JC30199	7.144229	020700080301	No	Chesapeake Bay	South Fork Catoctin Creek		0.00	PL02	-77.660350	39.136584
JC30217	6.616518	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	55.10	PL45	-77.527046	38.923126
JC30219	0.631830	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	31.74	PL45	-77.533076	38.921340
JC30220	7.594620	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	56.69	PL45	-77.533508	38.921262
JC30221	1.558564	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	62.67	PL45	-77.533684	38.921660
JC30222	2.406770	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	95.01	PL45	-77.533004	38.920916
JC30224	0.776693	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	85.05	PL45	-77.527438	38.923566
JC30226	2.443920	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.583728	38.950068
JC30227	5.844127	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.586304	38.950831
JC30228	3.594312	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.590283	38.951002
JC30229	16.688118	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.591985	38.950856
JC30230	1.581065	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.601246	38.952240
JC30231	4.156102	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.605764	38.949568
JC30233	17.437470	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.597529	38.947881
JC30234	5.224191	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.597664	38.945743
JC30236	1.209800	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.591461	38.947971
JC30243	83.552069	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	48.64	PL42	-77.559256	38.914487
JC30244	8.361722	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	52.77	PL42	-77.559820	38.914598
JC30247	1.111267	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	52.32	PL42	-77.560498	38.911585
JC30258	9.704087	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430383	38.995067
JC30260	23.900870	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	41.12	PL42	-77.550465	38.913322
JC30262	13.478631	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.82	PL45	-77.479102	38.905292

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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC30263	3.265506	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	61.06	PL45	-77.510860	38.912009
JC3093	0.397717	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487379	39.027170
JC3094	49.174284	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488355	39.026385
JC3096	10.208202	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488355	39.026347
JC3098	6.433624	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491686	39.020469
JC3106	6.801797	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471346	39.056094
JC3107	27.603158	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472094	39.056898
JC3125	0.636911	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483226	38.988565
JC3126	1.012777	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483880	38.987949
JC3127	2.498038	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.484404	38.987840
JC3155	11.369092	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496530	38.988468
JC3157	1.571002	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496362	38.986893
JC3199	13.013317	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496414	39.044589
JC3213	7.029827	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	64.85	PL16	-77.507896	39.104999
JC3214	1.552880	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	52.57	PL16	-77.509067	39.107063
JC3243	5.552625	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503502	39.059475
JC3246	2.300497	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503654	39.058175
JC3249	4.931582	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502160	39.057606
JC3250	1.710665	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491904	39.052987
JC3306	0.821414	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472285	39.057050
JC3321	5.310475	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.487164	38.988108
JC3323	2.415188	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.487711	38.988770
JC3364	14.818286	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509262	38.989043
JC3373	11.443359	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.525163	38.981043
JC3394	3.849981	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	68.46	PL16	-77.511959	39.106295
JC3395	6.217337	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	60.24	PL16	-77.512096	39.106489
JC3396	2.004240	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.10	PL16	-77.511971	39.107866
JC3397	1.536776	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.89	PL16	-77.510499	39.107603
JC3398	2.784310	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	87.16	PL16	-77.512740	39.109434
JC3454	0.946859	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492565	39.052440
JC3455	0.230234	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490550	39.053700
JC3457	1.049639	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491910	39.050977
JC3458	8.163494	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491646	39.050974
JC3459	1.838879	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491597	39.050796
JC3460	2.209989	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495129	39.050602
JC3461	0.522356	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494822	39.051377
JC3531	2.853876	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.494499	38.993399
JC3568	1.835542	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	58.56	PL16	-77.514468	39.109649
JC3569	1.481150	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.10	PL16	-77.514459	39.111057
JC3570	10.869541	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.68	PL16	-77.513802	39.106284
JC3639	16.697060	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482293	39.058433
JC3641	8.920487	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482686	39.059067
JC3643	12.011211	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481724	39.059106
JC3644	0.503446	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480902	39.058893
JC3706	5.443568	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473086	39.057223
JC3726	8.733158	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488582	38.994277
JC3758	13.798920	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508349	38.988376
JC3759	6.567967	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506905	38.986683
JC378	1.157312	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487246	39.030678
JC3909	1.450875	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465066	39.057721
JC3926	2.573588	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488764	38.994309
JC3929	0.939650	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489119	38.993511
JC3930	1.599957	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489035	38.994119
JC3931	1.207475	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488857	38.993377
JC3951	1.027013	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506773	38.988710
JC3961	4.520400	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.512062	38.984156
JC3982	35.146156	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	39.72	PL16	-77.518946	39.106863
JC3992	17.718966	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522698	38.979018
JC4046	0.575351	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481298	39.059763

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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
JC4108	2.491162	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465242	39.058471
JC4122	1.313017	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488759	38.993718
JC4123	2.083077	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489116	38.992800
JC4127	0.714801	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521823	38.984401
JC4157	2.868496	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489385	38.993119
JC4158	1.526175	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489624	38.992446
JC4159	0.583031	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489390	38.992393
JC4183	18.289994	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514308	38.986280
JC4184	2.814328	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509708	38.985378
JC4185	20.989063	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523268	38.983612
JC419	7.240849	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486551	39.034098
JC4200	3.875956	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.05	PL16	-77.511389	39.105122
JC4201	1.038278	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	63.16	PL16	-77.514071	39.105871
JC4202	0.329393	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	0.53	PL16	-77.514684	39.106355
JC4203	36.877501	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.83	PL16	-77.515655	39.106448
JC4208	37.884169	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522981	38.977493
JC4210	5.788570	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522422	38.977453
JC4211	9.706881	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521262	38.979356
JC4212	2.593555	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521779	38.978929
JC424	1.310612	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485705	39.035262
JC427	0.975605	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488122	39.034789
JC430	0.809108	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486596	39.035126
JC4323	15.176684	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522644	38.984154
JC4324	90.169703	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523189	38.983497
JC433	1.863135	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489024	39.035044
JC4344	1.304266	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489522	38.992087
JC4345	4.262041	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489890	38.990795
JC4346	1.468971	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489443	38.989998
JC4347	1.391922	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.488635	38.989364
JC4348	1.243982	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.489686	38.991816
JC4349	0.546079	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.490198	38.992098
JC436	2.273192	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490307	39.035560
JC4384	3.931920	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.527458	38.981219
JC4420	1.684578	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	62.13	PL16	-77.518722	39.101868
JC4422	16.778754	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	52.96	PL16	-77.508373	39.108428
JC4423	0.972747	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	71.91	PL16	-77.506238	39.108236
JC4425	1.203847	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.529242	38.981109
JC4431	33.250896	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.516648	38.979710
JC447	0.565276	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485603	39.037661
JC4512	14.161597	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	45.73	PL16	-77.508148	39.100567
JC4522	4.145243	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523317	38.981377
JC4523	0.219817	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523782	38.981531
JC4525	1.024415	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523156	38.981516
JC4526	0.809906	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523651	38.981708
JC4546	0.733944	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491093	38.992146
JC4547	4.875942	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491752	38.992531
JC4548	15.840970	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.492644	38.993436
JC458	2.961613	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487254	39.037391
JC4620	0.690425	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	56.87	PL16	-77.511794	39.110316
JC4621	1.580378	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	50.44	PL16	-77.511331	39.109830
JC4622	1.399074	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	52.02	PL16	-77.510950	39.109521
JC4623	1.419157	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	46.75	PL16	-77.510599	39.109227
JC4624	33.987644	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	40.14	PL16	-77.506401	39.108238
JC4639	2.924589	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469201	39.020374
JC4640	1.424693	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469919	39.020660
JC468	3.790721	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485785	39.036221
JC4723	2.532645	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522235	38.981785
JC4725	0.364994	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521586	38.982151
JC474	1.495385	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487424	39.036099

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
JC4741	8.227230	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.500100	38.986375
JC4742	1.213582	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.493027	38.993003
JC4743	1.437636	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.494065	38.993287
JC4744	6.519230	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.494347	38.993919
JC478	1.507599	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488624	39.036173
JC4815	1.266071	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	59.84	PL16	-77.509737	39.108580
JC4816	2.265880	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	44.30	PL16	-77.513153	39.111134
JC4817	13.535087	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	56.12	PL16	-77.512290	39.110520
JC4818	3.015591	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	59.86	PL16	-77.513864	39.111727
JC4819	0.278612	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	53.82	PL16	-77.514234	39.112307
JC484	0.969436	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489426	39.037062
JC4879	3.419353	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479837	39.020660
JC4880	3.096882	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480675	39.020658
JC4881	1.238927	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481154	39.020539
JC491	1.530140	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491345	39.037833
JC4914	1.165882	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491284	38.990896
JC4923	1.250644	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499327	38.985301
JC4925	1.617904	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497481	38.987083
JC4949	33.778733	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.527938	38.981388
JC4997	4.312025	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.495232	39.109790
JC4998	1.775517	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.496896	39.110240
JC501	2.624824	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491401	39.037879
JC5054	1.604894	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481539	39.020158
JC5055	3.537472	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482786	39.017843
JC5107	11.614203	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.91	PL16	-77.506317	39.100511
JC5115	1.333412	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491861	38.991922
JC5118	39.514429	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491857	38.989758
JC5119	1.133174	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.491802	38.989985
JC5126	5.255233	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509204	38.984648
JC516	13.556002	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489342	39.037729
JC517	6.534160	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506411	39.043249
JC5202	1.602193	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	69.21	PL16	-77.502521	39.100978
JC5203	2.159907	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.19	PL16	-77.502035	39.100622
JC5204	1.066424	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.68	PL16	-77.499068	39.098915
JC5345	1.910791	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522074	38.980175
JC5346	61.511343	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.523735	38.981615
JC5371	4.556555	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.528062	38.981495
JC5404	4.339915	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.496220	39.112697
JC5457	0.208404	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502786	39.061598
JC5463	0.299308	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501934	39.062291
JC5514	7.778636	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.14	PL16	-77.505087	39.100156
JC5517	8.732955	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.03	PL16	-77.503022	39.101699
JC552	2.437943	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505357	39.043474
JC5531	2.575348	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497318	38.992451
JC5532	2.520422	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497328	38.992421
JC5533	1.476624	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496021	38.992954
JC5534	1.740566	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.495931	38.992986
JC556	2.457789	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503264	39.044136
JC5566	4.293488	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.532289	38.983267
JC5567	0.224046	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521309	38.988878
JC5570	1.451630	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	60.90	PL16	-77.512807	39.109720
JC5578	5.639042	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	70.74	PL16	-77.501632	39.097829
JC5579	0.238787	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	46.34	PL16	-77.501658	39.097301
JC5580	4.308992	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.50	PL16	-77.501891	39.096636
JC5637	2.589603	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462401	39.056522
JC5638	3.290892	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463833	39.055420
JC5639	0.522472	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464329	39.055782
JC5644	7.520429	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499944	39.064391
JC566	4.546579	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503772	39.045155

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
JC5672	64.151330	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.489059	39.093368
JC5677	10.652081	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.481671	39.096107
JC5713	2.064571	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	80.72	PL16	-77.505556	39.103684
JC5729	1.274443	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.495019	38.993118
JC5733	2.914476	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498412	38.993223
JC5735	12.689037	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499850	38.991934
JC5736	1.166716	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499945	38.992145
JC5759	5.987940	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521369	38.989115
JC5763	15.558558	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520908	38.992608
JC5773	1.043135	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	61.26	PL16	-77.499235	39.097406
JC5774	7.909715	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	75.94	PL16	-77.503543	39.096098
JC5775	4.104015	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	78.55	PL16	-77.501639	39.096463
JC583	28.297086	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505209	39.045918
JC5832	0.487928	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464606	39.055895
JC5833	22.456372	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464749	39.055903
JC5845	3.572784	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503196	39.059052
JC5846	0.060746	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503236	39.058918
JC5870	11.351248	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.479988	39.093509
JC5871	10.036740	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.482289	39.097158
JC5872	45.071030	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	32.71	PL16	-77.486980	39.097565
JC589	8.571524	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504657	39.043271
JC5893	14.899412	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488826	39.054068
JC5894	2.952632	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489239	39.054141
JC5896	5.195860	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494629	39.053314
JC5913	10.538807	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.479934	38.992987
JC5937	2.091910	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501947	38.989611
JC5985	20.392810	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521366	38.994432
JC5988	1.391612	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520777	38.993953
JC5999	2.512841	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.483066	38.996828
JC600	1.333924	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505665	39.042860
JC6002	1.084073	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.482677	38.996034
JC6017	8.404714	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467909	39.062330
JC6020	22.291739	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475730	39.017512
JC6021	30.192565	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475702	39.017489
JC6023	2.816577	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490941	39.053588
JC603	0.977825	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505915	39.042942
JC6248	6.276704	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	COM_OTHER_NON_PUBLIC	44.96	PL42	-77.550805	38.925350
JC625	2.926897	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502133	39.039633
JC6299	8.163637	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.03	PL45	-77.533475	38.911544
JC6302	1.259087	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.55	PL45	-77.537875	38.907803
JC6303	3.259091	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.16	PL45	-77.534471	38.906093
JC6304	2.866181	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.03	PL45	-77.532233	38.906657
JC644	23.214575	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499329	39.042767
JC6484	30.552283	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	41.63	PL45	-77.514308	38.908468
JC6485	3.743743	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.64	PL45	-77.513213	38.907754
JC6488	32.056622	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	27.82	PL45	-77.511386	38.903260
JC651	1.158753	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503562	39.043750
JC6522	5.450309	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.35	PL45	-77.504091	38.911212
JC6545	3.258784	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	73.88	PL45	-77.500697	38.912054
JC6548	5.229934	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	58.59	PL45	-77.504676	38.912950
JC6549	1.881497	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	48.76	PL45	-77.502090	38.911344
JC6550	14.489251	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.12	PL45	-77.503286	38.908032
JC657	3.216257	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501483	39.043618
JC661	9.946107	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499551	39.039249
JC6646	1.530628	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.96	PL45	-77.496605	38.906002
JC6669	1.025121	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.20	PL45	-77.505727	38.905664
JC6671	41.656501	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.18	PL45	-77.505446	38.906469
JC6673	4.919562	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.52	PL45	-77.498047	38.905377
JC6674	0.131242	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.19	PL45	-77.498221	38.905292

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
JC6675	1.104772	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	94.65	PL45	-77.498314	38.905244
JC6677	2.688393	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.38	PL45	-77.497667	38.905119
JC6720	2.547893	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.37	PL45	-77.481694	38.905568
JC6823	4.214366	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	72.38	PL45	-77.490913	38.904966
JC6825	16.273192	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.49	PL45	-77.484253	38.905557
JC6829	1.478918	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.42	PL45	-77.481413	38.905260
JC6830	21.538689	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	59.71	PL45	-77.480401	38.905170
JC6831	11.288179	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.75	PL45	-77.483611	38.905121
JC6832	9.702223	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	70.21	PL45	-77.486474	38.904149
JC696	3.132580	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511976	39.043990
JC699	4.555420	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509262	39.043524
JC701	1.398501	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513241	39.044762
JC702	8.040351	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512204	39.043207
JC722	26.515488	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.515500	39.043911
JC724	0.460110	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514844	39.043949
JC728	3.979066	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512303	39.042888
JC735	17.659889	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511206	39.043300
JC75	12.515231	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	43.58	PL45	-77.523208	38.909376
JC758	3.609397	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508035	39.047439
JC76	23.072846	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	42.49	PL45	-77.523236	38.909274
JC763	6.052669	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507671	39.047272
JC765	18.141270	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507658	39.047494
JC804	14.491216	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509436	39.047652
JC807	3.678395	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509815	39.047713
JC836	5.439110	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512767	39.046404
JC896	5.724509	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508571	39.042877
JC897	4.998658	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507723	39.042837
JC921	11.876015	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507559	39.040148
JC923	2.978847	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508719	39.039409
JC937	1.431865	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509930	39.039333
JC939	1.488172	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506897	39.040516
JC943	3.777048	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505734	39.040327
JC950	0.901312	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504016	39.040587
JC958	3.469775	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503277	39.039773
JC963	10.419615	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502530	39.039285
JH1	1.183950	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513336	39.050189
KD30009	2.670082	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.582514	38.951914
KD30012	2.793529	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.604763	38.951025
KD30013	4.331235	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.603092	38.944340
KD30015	4.570514	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	60.52	PL42	-77.607572	38.944016
KD30018	8.619738	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.587098	38.949283
KD30019	6.383393	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.585443	38.949158
KS0122	6.353070	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	57.66	PL16	-77.496350	39.073154
KS0134	2.669111	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.550875	38.938856
KS0137	1.805035	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448571	39.018620
KS0139	0.962869	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448206	39.018690
KS0141	3.377106	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447839	39.018846
KS0146	0.524641	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421152	39.052543
KS0203	5.030057	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466370	39.028503
KS0226	1.798543	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	77.30	PL45	-77.486525	38.908378
KS0261	1.585461	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441938	39.049198
KS0364	0.923368	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MISC	98.63	PL42	-77.569148	38.896155
KS0365	1.058345	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MISC	98.91	PL42	-77.568925	38.896360
KS0366	0.486525	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	MISC	83.60	PL42	-77.568693	38.896689
KT10099	13.125912	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	50.51	PL16	-77.493585	39.078572
KT10191	6.821384	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.503674	38.994718
KT10197	2.075408	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.505717	38.993339
KW102	4.099251	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.17	PL45	-77.536670	38.908700
KW109	1.091081	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.482700	39.081120

Loudoun County Virginia
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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
KW114	29.901182	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	32.20	PL16	-77.494670	39.104110
KW12	2.089492	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401350	39.045283
KW120	2.575591	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.30	PL16	-77.502081	39.105177
KW131	1.409570	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423250	39.010520
KW201	5.291086	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	73.11	PL16	-77.499547	39.101459
KW264	15.448032	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517925	39.007862
KW298	0.731615	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.436243	38.978825
KW301	5.204800	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.04	PL16	-77.487919	39.102494
KW351	4.877132	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424829	39.015289
KW353	15.520285	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429164	39.011439
KW363	0.237128	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490322	39.034309
KW40	10.939734	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391530	39.025910
KW406	11.141990	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558565	38.936067
KW434	1.709578	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.57	PL45	-77.532852	38.911434
KW438	1.873022	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	57.20	PL45	-77.523412	38.903400
KW464	16.719137	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483353	39.066123
KW487	0.220428	020700080703	Yes	Goose Creek (Benthic), Chesapeake Bay	Sycolin Creek		0.00	PL15	-77.588279	39.085832
KW494	0.507885	020700080703	Yes	Goose Creek (Benthic), Chesapeake Bay	Sycolin Creek	MULTI_USE	56.49	PL15	-77.588402	39.085715
KW570	18.175021	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	43.04	PL45	-77.493605	38.909700
KW88	2.854034	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.371110	39.029246
MD104	7.632634	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411751	39.034299
MD109	2.254863	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411909	39.033739
MD114	4.368042	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412490	39.032927
MD126	1.697577	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413446	39.031884
MD1281	7.773717	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430319	39.046442
MD130	68.938016	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411686	39.032794
MD1334	1.593516	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425262	39.045318
MD1344	5.696453	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425700	39.045554
MD1353	0.784016	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425248	39.045635
MD1355	1.831668	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424200	39.045292
MD1360	2.874886	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424130	39.044897
MD1366	13.450062	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423833	39.045477
MD1435	0.556290	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423553	39.044956
MD1441	9.338992	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423120	39.044679
MD1444	2.762268	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423136	39.044635
MD1452	0.081514	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.425553	39.043460
MD1550	106.033762	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.422714	39.044522
MD164	6.611766	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409736	39.033967
MD1641	20.671643	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418671	39.050540
MD1667	21.168923	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439734	38.983547
MD1678	1.958931	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445268	38.982814
MD1684	0.229927	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444328	38.983260
MD1687	1.943789	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445225	38.984370
MD1689	1.097415	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445080	38.985141
MD1692	1.112213	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444978	38.985427
MD1697	4.528241	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444262	38.986192
MD1701	12.581505	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445036	38.985480
MD1748	104.848607	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443597	38.987011
MD1751	1.341613	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443891	38.986765
MD178	6.287013	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410738	39.033269
MD1782	2.120724	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444846	38.985717
MD1784	0.771348	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.445336	38.985190
MD1910	1.428731	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.451045	38.985885
MD1911	78.085456	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.450986	38.985797
MD1929	14.978096	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447333	38.982697
MD1937	4.122614	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447897	38.982823
MD1960	1.285623	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443296	38.983223
MD1965	0.571430	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447861	38.981664
MD1971	7.419602	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.447048	38.981991

Loudoun County Virginia
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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD1987	4.618544	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.450669	38.980715
MD1993	5.251525	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.450708	38.979763
MD200	1.621053	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414386	39.029611
MD2001	14.205961	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.448358	38.977835
MD2036	3.959840	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.444551	38.978476
MD204	0.432473	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412731	39.029582
MD206	2.737056	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412805	39.029396
MD2064	0.317952	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.446047	38.982233
MD2079	4.503469	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.443086	38.981664
MD2095	11.222144	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.440112	38.980984
MD2103	0.540638	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.438985	38.980147
MD218	1.795463	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414560	39.028998
MD222	1.948401	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414770	39.028438
MD2242	3.329528	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437956	38.979030
MD225	0.974567	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414773	39.028245
MD2255	3.448489	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.438747	38.980229
MD2264	3.014648	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439185	38.980699
MD2276	2.723669	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439777	38.981368
MD2278	0.421046	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.440333	38.982243
MD2280	0.451436	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.440320	38.981895
MD2282	1.073037	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439583	38.982740
MD2301	2.263719	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437411	38.983628
MD2306	4.397513	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.436716	38.983114
MD231	1.873026	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414934	39.027689
MD232	54.950717	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414974	39.027657
MD2323	3.678803	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.438991	38.983071
MD2344	15.125270	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.439054	38.980495
MD2365	11.048130	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435425	38.982958
MD25	2.920342	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418388	39.030553
MD2511	0.308840	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435847	38.983144
MD2524	4.463671	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.434158	38.982547
MD2533	0.673904	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433265	38.981928
MD2536	2.643379	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433198	38.981887
MD2537	2.126645	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433134	38.981818
MD2540	0.210365	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433065	38.981765
MD2572	4.712174	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430170	38.983156
MD2585	5.758903	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431562	38.984006
MD2588	1.206631	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431637	38.984200
MD2589	1.077424	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431604	38.984278
MD2593	1.284001	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432026	38.984662
MD2595	1.560276	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432011	38.984768
MD2612	4.002715	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432417	38.985491
MD2626	8.949353	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.433428	38.986426
MD2631	2.407405	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.432627	38.987419
MD2647	1.129829	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435494	38.978820
MD2649	1.329225	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.435235	38.978834
MD2650	40.444155	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.434704	38.978897
MD2652	4.246011	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.434702	38.978822
MD2663	2.761104	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431925	38.978692
MD2671	0.661454	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431024	38.977816
MD2708	1.357119	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451908	38.992372
MD2788	3.113265	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449656	38.994773
MD2789	3.076018	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449307	38.994180
MD2813	13.850469	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454063	38.995374
MD2831	7.493911	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454558	38.997188
MD2833	1.591637	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454630	38.997527
MD2838	4.338156	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455581	38.998396
MD2839	6.405309	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455720	38.998655
MD2883	2.079485	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451688	39.001373

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FCTID	Regulated Acres	HUC Code	Impaired	TMDL Name	Receiving Water	Majority Land Use	Majority Land Use Percent	VAHU6	Longitude	Latitude
MD2884	30.592097	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.451591	39.001419
MD2905	0.645659	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454860	39.001313
MD2910	0.635972	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455983	39.001281
MD2916	1.209889	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456261	39.001053
MD2918	6.977914	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456046	39.000977
MD2925	0.573470	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456630	38.999684
MD2928	1.512167	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456595	39.000246
MD2930	2.085889	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456562	38.999310
MD2945	0.973514	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456519	39.000881
MD2959	6.366256	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456554	39.001305
MD2961	0.492332	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457781	38.997469
MD2966	2.861305	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448462	39.001046
MD2972	0.524768	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449800	39.001689
MD2981	1.322040	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449394	39.002114
MD2982	14.417770	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449294	39.002048
MD2984	4.070612	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447571	39.001194
MD3003	1.794609	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445982	39.000157
MD3098	1.186676	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444636	39.005132
MD3099	11.658487	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444623	39.005133
MD3102	1.057895	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444136	39.005277
MD3103	11.348248	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445878	39.006445
MD3104	2.278719	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446302	39.006676
MD3109	1.452164	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445849	39.007156
MD3128	2.465393	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447556	39.007577
MD3164	1.260012	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443914	39.004963
MD3166	6.206542	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443624	39.004999
MD3190	2.901420	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442400	39.003940
MD3223	2.970101	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442959	39.003616
MD3228	8.486660	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442674	39.003147
MD3230	4.792554	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442454	39.002538
MD3261	3.206234	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443954	39.004528
MD3262	1.236798	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444860	39.000353
MD3268	23.102467	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444008	38.998924
MD3273	2.767958	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.443908	38.999076
MD3332	6.337439	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447728	38.998483
MD3337	1.183338	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447568	38.999222
MD3339	1.325842	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447528	38.999375
MD3344	1.878444	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447869	38.999482
MD3374	2.885947	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444356	38.995502
MD3375	3.715128	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444480	38.995434
MD3405	0.376297	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440084	38.998115
MD3407	2.568072	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439708	38.997711
MD3409	0.234438	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.439295	38.998234
MD3416	9.920331	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437097	38.999448
MD3420	3.464872	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448729	38.996145
MD3424	0.129152	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449676	38.996441
MD3425	9.020742	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449652	38.996350
MD3428	0.605099	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449563	38.996613
MD3430	16.682287	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448519	38.994046
MD3438	2.481203	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.449242	38.992755
MD3517	1.577626	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.437857	39.012196
MD3527	20.939328	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440683	39.010812
MD3550	3.356354	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436550	39.011513
MD3562	6.881226	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435722	39.012347
MD3675	157.378590	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441517	39.008450
MD3771	26.643994	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.05	PL45	-77.506860	38.901935
MD3791	1.261496	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.09	PL45	-77.506188	38.905811
MD3797	0.407582	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	18.13	PL45	-77.506478	38.906311
MD3804	2.258440	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	58.19	PL45	-77.506232	38.907013

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
MD3811	1.853018	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.96	PL45	-77.505981	38.907885
MD3814	1.724217	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	90.17	PL45	-77.505990	38.908357
MD3816	0.213557	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	27.59	PL45	-77.506053	38.908634
MD3817	3.746287	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.10	PL45	-77.506171	38.909152
MD3827	0.251421	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	30.40	PL45	-77.505904	38.909642
MD3828	5.018025	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.19	PL45	-77.505416	38.909534
MD3834	3.061205	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.39	PL45	-77.505295	38.908346
MD3843	1.389894	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	65.45	PL45	-77.505200	38.911409
MD3866	2.704981	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	76.18	PL45	-77.506288	38.909962
MD3872	1.162884	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.13	PL45	-77.506375	38.910692
MD3873	3.589936	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.57	PL45	-77.506064	38.911204
MD3880	1.712483	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.62	PL45	-77.505999	38.911760
MD3890	3.580719	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.70	PL45	-77.505804	38.912386
MD3892	0.180426	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	23.77	PL45	-77.505803	38.912648
MD3893	7.257461	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	61.43	PL45	-77.505748	38.913073
MD3907	2.519649	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	29.23	PL45	-77.505778	38.914471
MD3931	12.847573	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.44	PL45	-77.505829	38.915446
MD3960	0.153517	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_GENERAL	26.08	PL45	-77.506187	38.920484
MD3961	2.553556	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.40	PL45	-77.506083	38.920417
MD4000	7.581098	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	33.32	PL45	-77.506802	38.920796
MD4005	4.700963	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	44.11	PL45	-77.505531	38.920207
MD4015	8.010745	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	48.36	PL45	-77.505780	38.915459
MD4035	3.812314	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	34.12	PL45	-77.510511	38.916049
MD4036	3.825285	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	79.67	PL45	-77.510397	38.916156
MD4061	3.226498	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	19.13	PL45	-77.509776	38.917299
MD4062	8.170800	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	78.47	PL45	-77.509689	38.917185
MD4074	0.894253	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	5.73	PL45	-77.510856	38.916662
MD4087	3.832310	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.96	PL45	-77.508583	38.907312
MD4116	3.596161	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.27	PL45	-77.510209	38.912451
MD4119	2.212382	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	60.40	PL45	-77.510084	38.911623
MD4128	3.938376	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	80.31	PL45	-77.510106	38.910595
MD4140	7.190671	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	37.17	PL45	-77.494344	38.918555
MD4152	11.199359	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.01	PL45	-77.510616	38.909439
MD4161	2.817593	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	43.36	PL45	-77.510920	38.909623
MD4166	0.914035	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	59.11	PL45	-77.510961	38.910714
MD4173	1.253038	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	53.73	PL45	-77.512967	38.910291
MD4179	1.001155	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	60.25	PL45	-77.513816	38.910600
MD4228	35.407439	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	31.09	PL45	-77.514513	38.909974
MD4229	0.212733	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	18.66	PL45	-77.514641	38.909639
MD4303	1.880765	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	24.68	PL45	-77.510805	38.912996
MD4307	0.171933	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.73	PL45	-77.510496	38.913066
MD4310	10.069587	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.52	PL45	-77.510349	38.913311
MD433	1.352649	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407701	39.033511
MD435	9.651784	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409233	39.033988
MD4363	6.189110	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	81.28	PL45	-77.501723	38.891200
MD4383	5.524741	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	76.87	PL45	-77.501244	38.894260
MD4404	9.274233	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.04	PL45	-77.501159	38.895228
MD4427	9.371426	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	71.39	PL45	-77.501446	38.896927
MD444	0.802991	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409426	39.034948
MD445	1.293926	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410346	39.035336
MD4484	17.825140	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	25.03	PL45	-77.522967	38.909441
MD450	0.415188	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410970	39.034870
MD451	2.514953	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412484	39.035692
MD479	0.110608	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.424949	39.042058
MD486	0.422933	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427273	39.043242
MD491	0.069430	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429723	39.044442
MD497	0.134563	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430582	39.043971
MD500	0.107148	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.430542	39.044387
MD501	1.040042	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.429429	39.044351

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
MD508	26.085435	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.431834	39.035505
MD524	3.746953	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.402690	39.045887
MD529	2.638143	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403252	39.047223
MD537	9.468264	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406859	39.047376
MD543	14.823757	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408379	39.047765
MD572	24.155700	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403468	39.044085
MD611	3.968745	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406022	39.039477
MD62	3.522276	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413744	39.031916
MD624	15.720709	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404199	39.041512
MD631	2.004518	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403144	39.043372
MD642	1.777967	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.417482	39.054498
MD654	3.265052	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.419208	39.052765
MD660	5.146688	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.419340	39.053335
MD671	11.041791	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421051	39.052491
MD685	7.730644	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421127	39.052609
MD765	1.640131	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.421003	39.053117
MD769	1.560774	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.420382	39.054302
MD770	9.926009	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.420874	39.054593
MD789	0.445674	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.422236	39.054040
MD790	65.582869	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.422255	39.053992
MD795	4.625601	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418578	39.055498
MD840	34.706462	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.426605	39.057474
MD855	2.424151	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.419464	39.055882
MD866	2.301241	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.422758	39.057797
MD877	8.244681	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418347	39.056032
MD883	2.038636	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418463	39.056719
MD886	4.649552	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418544	39.057631
MD890	5.731196	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.417825	39.057423
MD900	3.922496	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.417874	39.055461
MD909	7.066143	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416693	39.054845
ME1008	0.392900	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403806	38.991804
ME1022	1.003554	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405031	38.991940
ME1025	1.450468	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406449	38.991823
ME1032	10.077087	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.405757	38.986812
ME1039	1.323363	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.406778	38.987229
ME1053	7.386860	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.407369	38.988433
ME1056	33.315280	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.407221	38.989605
ME1064	0.246304	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406729	38.992627
ME1065	7.682811	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406835	38.992738
ME1072	1.737331	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406107	38.993091
ME1074	2.367894	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406001	38.993140
ME1089	6.605837	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.408753	38.993860
ME1095	2.790443	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409376	38.993886
ME1100	5.875013	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412038	38.994228
ME1108	10.804570	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413813	38.995845
ME1129	1.221593	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412840	38.994887
ME1131	1.745377	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.409749	38.997903
ME126	23.259909	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.30	PL21	-77.362743	39.039228
ME134	4.199059	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.63	PL21	-77.375524	39.029474
ME142	2.537131	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	HOA	31.06	PL21	-77.374677	39.030065
ME1464	3.300032	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411022	38.976120
ME1486	28.143981	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413498	38.980616
ME15	0.442814	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	94.90	PL21	-77.340905	39.046090
ME155	1.340400	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	67.41	PL21	-77.375139	39.029150
ME1555	2.513234	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.415387	38.977674
ME159	0.429577	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	92.11	PL21	-77.375585	39.028954
ME161	0.835151	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	83.60	PL21	-77.375417	39.028917
ME1626	23.864970	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.417471	38.986043
ME1639	8.470900	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.423454	38.988212

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
ME1648	8.548693	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426329	38.989311
ME1650	4.697558	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.424860	38.989313
ME1666	7.473975	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.417452	38.978320
ME1667	4.229862	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419110	38.978286
ME1670	1.084879	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412841	38.977356
ME1681	0.201185	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.410947	38.976982
ME1715	4.724986	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428808	38.983641
ME177	130.558473	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	53.63	PL21	-77.376307	39.028235
ME1774	129.291893	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429031	38.983520
ME1801	7.321694	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.425113	38.978736
ME1804	2.125055	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.426495	38.978718
ME1819	7.346578	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427912	38.977257
ME1929	2.785400	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.405950	39.003053
ME2118	23.632978	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.51	PL21	-77.392074	39.017166
ME2122	2.343313	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	90.49	PL21	-77.391383	39.016874
ME2126	1.703795	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.47	PL21	-77.391153	39.016790
ME2129	2.884831	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	90.50	PL21	-77.390607	39.016549
ME2130	6.457179	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	44.09	PL21	-77.390152	39.016498
ME2131	0.385886	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.390016	39.016476
ME2152	7.500356	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	85.06	PL21	-77.389840	39.018840
ME2153	25.688799	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.93	PL21	-77.389979	39.018679
ME2154	4.032463	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	80.00	PL21	-77.389324	39.018384
ME2159	11.417099	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	72.34	PL21	-77.388603	39.018032
ME2174	1.079886	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.23	PL21	-77.389659	39.020498
ME2176	0.492883	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.23	PL21	-77.389523	39.020642
ME2178	2.631632	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.08	PL21	-77.389389	39.020836
ME2184	21.765460	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	GQ	36.09	PL21	-77.389721	39.021604
ME2185	0.669924	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_MFA	56.17	PL21	-77.390404	39.021378
ME2290	5.840117	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403185	39.010197
ME2318	52.277829	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403276	39.015353
ME2322	1.493153	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412027	39.009680
ME2325	2.003716	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.413022	39.008564
ME2332	7.756632	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415628	39.010031
ME2336	1.887681	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415824	39.009694
ME2345	25.247517	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415719	39.010472
ME2370	3.114736	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403305	39.015426
ME2374	1.050333	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.404714	39.015050
ME2393	1.637488	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406660	39.014804
ME2394	8.359419	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406309	39.015098
ME2410	2.010351	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406696	39.012583
ME2413	1.866045	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.406264	39.012250
ME2479	2.145740	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.414467	39.008258
ME2482	1.146026	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415066	39.008483
ME2484	0.496392	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.415363	39.008421
ME2495	2.368269	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416256	39.009098
ME2500	0.147182	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416673	39.008240
ME2507	0.285103	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416570	39.007708
ME2526	2.430931	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.416050	39.009669
ME2578	0.135774	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.412789	39.015308
ME2621	7.499473	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.407219	39.021407
ME2726	33.383669	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398880	39.027971
ME2731	2.083856	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399828	39.028235
ME2741	11.1113978	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398081	39.027520
ME2767	0.530377	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397778	39.027665
ME2870	0.448351	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399316	39.028444
ME2871	0.217168	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399849	39.028444
ME2940	0.971913	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404115	39.031046
ME2999	2.007185	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.391663	39.025932
ME3012	0.826865	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399027	39.029395

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
ME3028	4.443953	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403249	39.031824
ME3033	15.580790	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403330	39.031604
ME3035	1.260156	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403504	39.031673
ME3038	2.147154	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403293	39.032254
ME3057	5.764275	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399623	39.031018
ME3064	5.948538	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401417	39.033604
ME3078	0.951750	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407789	39.033898
ME3235	4.540186	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441923	39.067525
ME3534	1.174803	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484777	39.036583
ME3546	3.532457	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483733	39.037674
ME3554	9.254962	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483366	39.037071
ME3559	2.645860	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483282	39.036462
ME3567	3.382095	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483390	39.035322
ME3575	1.723109	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482002	39.039669
ME3579	1.396075	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481676	39.039768
ME3658	19.329123	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481699	39.032664
ME3687	2.361004	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482841	39.034481
ME3693	1.299080	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.482542	39.034036
ME3697	1.193459	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479961	39.032688
ME3699	2.950049	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479145	39.032775
ME37	6.435189	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	55.74	PL21	-77.366558	39.021319
ME3743	19.393321	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478323	39.032787
ME3760	5.645099	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475413	39.032468
ME3762	1.444006	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477754	39.032681
ME3784	1.251933	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483553	39.033468
ME3787	0.901096	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483374	39.032872
ME3794	1.010692	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483636	39.031965
ME3795	28.533621	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483655	39.031914
ME3833	4.399942	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483167	39.031736
ME3837	5.158431	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.481200	39.031676
ME3852	8.326586	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478885	39.031124
ME3854	1.383991	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478932	39.028412
ME3859	2.627996	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476678	39.031108
ME3865	3.636944	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477563	39.028816
ME387	0.266895	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	MULTI_USE	57.53	PL21	-77.382985	39.021047
ME3873	2.449493	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476358	39.029263
ME388	6.994200	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	37.73	PL21	-77.382724	39.020915
ME3882	2.595760	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474533	39.030103
ME3908	2.904036	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483373	39.027450
ME3921	9.273066	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479871	39.028031
ME3927	2.005114	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.483810	39.026737
ME3937	3.957266	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480385	39.026552
ME3941	13.631427	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480506	39.026178
ME3988	29.013203	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477258	39.026799
ME3989	0.801985	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477200	39.026831
ME4006	3.156590	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477446	39.027171
ME4007	1.205086	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477995	39.027864
ME4010	0.680229	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.478814	39.027808
ME4013	0.717928	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.477010	39.028324
ME4020	5.876218	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476336	39.028606
ME4047	4.590115	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474176	39.028945
ME4063	8.573504	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484432	39.027098
ME4066	1.485641	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485870	39.026882
ME4068	11.968678	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485973	39.027014
ME4095	5.177307	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474386	39.031733
ME4106	2.417412	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472474	39.029142
ME4111	5.848585	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471380	39.029329
ME4141	16.688826	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470450	39.025260
ME4199	29.470824	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471252	39.023777

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
ME4268	4.307518	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473142	39.029165
ME4295	0.170754	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469064	39.032745
ME4296	0.577803	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469250	39.032875
ME4299	0.185494	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469419	39.032205
ME4301	0.566215	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469988	39.032398
ME4305	2.786026	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470747	39.032466
ME4312	1.204535	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471519	39.032273
ME4313	0.703019	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471676	39.031996
ME4325	4.724782	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472666	39.032476
ME4330	0.811558	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473297	39.031304
ME4332	0.529032	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473252	39.032540
ME4334	1.759121	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473278	39.032950
ME4336	0.901760	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474349	39.033791
ME4338	1.090447	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475039	39.034405
ME4343	1.829216	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473366	39.033701
ME4346	2.058312	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473421	39.033717
ME4352	3.810592	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.473663	39.034650
ME436	17.023787	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	29.60	PL21	-77.376561	39.021908
ME4364	0.676907	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474767	39.035287
ME4369	1.262320	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475254	39.035503
ME4370	98.711540	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475996	39.035532
ME4422	0.292621	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469598	39.021615
ME4424	1.315106	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469203	39.021376
ME4427	1.939892	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468028	39.021348
ME4430	1.106365	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468218	39.021223
ME4444	3.552425	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468024	39.022346
ME4445	0.089113	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467844	39.022667
ME449	23.085748	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	71.38	PL21	-77.373775	39.023164
ME4541	12.918456	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469640	39.024913
ME4564	3.309285	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467158	39.025006
ME4609	3.634906	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468990	39.019690
ME4699	13.130537	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463611	39.022800
ME4703	8.779461	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463837	39.022893
ME4798	94.451734	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450640	39.016123
ME4799	3.440430	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450607	39.016028
ME490	12.867423	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	63.11	PL21	-77.373031	39.024575
ME4962	93.097202	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450331	39.018372
ME4967	1.725041	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450584	39.017868
ME5064	4.721041	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457310	39.012002
ME5074	2.099069	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458673	39.012647
ME5075	0.641019	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458759	39.012669
ME5079	2.383734	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459511	39.012713
ME5080	46.244040	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459557	39.012695
ME5081	0.557441	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459598	39.012647
ME5116	4.231852	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453124	39.013212
ME5120	0.957714	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452741	39.013090
ME5148	11.194400	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.452497	39.009832
ME5157	0.159789	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454701	39.014189
ME5158	1.634371	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454689	39.014226
ME5171	9.042140	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454830	39.013798
ME5187	5.715733	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.454880	39.010127
ME5217	3.352493	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465692	39.020487
ME5218	0.227072	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464842	39.021521
ME5269	1.362018	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458978	39.011897
ME5272	1.902760	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458661	39.011872
ME5294	1.104822	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.472520	39.022077
ME5327	0.623451	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484333	39.026133
ME5328	0.156861	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484358	39.026053
ME5388	1.124976	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.485247	39.037563

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
ME5627	0.344620	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487341	39.026460
ME5630	11.825366	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487204	39.026448
ME5649	0.895694	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484683	39.025841
ME5650	11.348166	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484685	39.025831
ME5672	5.381746	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479454	39.009443
ME5676	7.595926	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479534	39.009225
ME5678	55.350184	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.480742	39.009761
ME5730	9.334466	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.484234	39.007239
ME5733	13.857534	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.479560	39.012433
ME5754	10.147495	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489021	39.012885
ME5801	2.751337	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490156	39.012349
ME581	7.778609	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.26	PL21	-77.371497	39.021610
ME5834	12.620625	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488359	39.012840
ME5845	0.581325	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488855	39.012673
ME589	0.661464	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	87.05	PL21	-77.371425	39.022264
ME5953	13.678060	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476983	39.012559
ME5954	2.222605	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.476782	39.012609
ME745	13.736193	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	93.82	PL21	-77.374628	39.028809
ME746	4.331430	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	100.00	PL21	-77.373517	39.029171
ME756	6.163003	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.32	PL21	-77.394612	38.990792
ME760	2.438137	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	60.42	PL21	-77.395502	38.990026
ME829	22.576886	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403117	38.994552
ME838	28.903003	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.403536	38.994647
ME848	8.829861	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.404647	38.993429
ME863	0.761699	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.402638	38.991628
ME889	4.164263	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.402034	38.991165
ME90	15.257410	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFA	56.94	PL21	-77.343186	39.052588
ME922	42.940387	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	50.32	PL21	-77.397137	38.988405
ME930	16.638959	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	65.12	PL21	-77.398587	38.986931
RA0013	4.026277	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563790	38.935570
RA0049	0.520253	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.557870	38.935449
RA0051	0.634701	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.556605	38.935841
RA0087	1.841554	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.556005	38.935623
RA0158	3.617820	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.566644	38.929438
RA0167	6.091772	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.566603	38.928342
RA0187	6.493531	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.564236	38.929546
RA0189	0.181580	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563939	38.930076
RA1086	6.155462	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466064	39.019781
RA1101	22.262489	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465994	39.019733
RA1160	0.328139	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	0.05	PL42	-77.562595	38.918292
RA1170	0.149025	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	0.19	PL42	-77.561033	38.917490
RA1183	11.519901	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442253	38.996015
RA1219	28.328229	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563568	38.935265
RA1229	0.225171	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.563977	38.933454
RA1324	0.262237	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510262	39.007239
RA1328	1.116623	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509789	39.007683
RA1336	4.997048	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507123	39.006646
RA1367	2.830012	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.499199	39.004740
RA1379	2.655875	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.501566	39.005980
RA1381	2.747410	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	99.36	PL21	-77.387191	39.016349
RA1481	0.154026	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559968	38.933180
RA1482	0.035153	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559573	38.933216
RA1499	8.743771	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	36.33	PL47	-77.538506	38.930224
RA1540	0.572061	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.540704	38.931428
RA1541	0.855086	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497823	39.007691
RA1548	2.108849	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498443	39.006665
RA1568	49.287297	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498087	38.995371
RA1631	0.316373	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497613	38.996869
RA1633	0.828588	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497321	38.996843

Loudoun County Virginia
Regulated MS4 Outfall Table

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RA1635	1.753758	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496700	38.995442
RA1706	3.623350	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497250	38.998044
RA1717	7.238367	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.496996	38.999060
RA1724	1.665181	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.497091	39.003026
RA1730	0.479094	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.498688	39.002987
RA3668	4.851088	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.594517	38.958092
RA3676	2.181737	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.595040	38.956998
RA3683	3.647298	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.593287	38.954809
RA3689	4.418630	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.593715	38.954610
RA4800	5.479064	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.593719	38.954479
RA4812	1.614662	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.592978	38.954671
RA4823	4.204800	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.590672	38.954133
RA4852	13.666260	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.595455	38.944093
RA4879	3.896826	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.591007	38.957029
RA5647	1.263286	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.03	PL47	-77.528583	38.929775
RA5653	0.821535	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	22.32	PL47	-77.528098	38.929439
RA5659	0.586453	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.27	PL47	-77.526964	38.928840
RA5664	0.317087	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.05	PL47	-77.526555	38.928821
RA5669	0.409682	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.10	PL47	-77.526401	38.928648
RA5676	2.010727	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	0.76	PL47	-77.526101	38.928301
RA5681	0.150973	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.45	PL47	-77.525570	38.926210
RA5686	0.971747	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.10	PL47	-77.525469	38.925776
RA5690	0.186276	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.58	PL47	-77.525308	38.924769
RA6004	1.060272	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560865	38.931789
RA6007	3.965000	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560904	38.931652
RA6023	2.222016	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.560819	38.932486
RA6033	5.423243	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.558427	38.934356
RA6061	12.876247	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.559420	38.933213
RA6106	1.162868	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.557889	38.930228
RA6110	1.526424	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	54.90	PL47	-77.532304	38.930039
RA6116	28.676654	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	43.50	PL47	-77.533991	38.929940
RA6185	11.961756	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	44.30	PL47	-77.536515	38.927031
RA7638	0.117934	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	6.27	PL47	-77.528298	38.927304
RA7641	1.073415	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	44.98	PL47	-77.527688	38.927186
RA7648	8.454357	020700100802	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	48.19	PL47	-77.526682	38.925161
RA8578	0.755267	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507061	38.995078
RA9100	2.142220	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506300	38.993519
RC10	4.003237	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	53.60	PL16	-77.503088	39.107311
RC12	1.667153	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.496798	39.109150
RC16	4.591559	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	65.46	PL16	-77.489298	39.102668
RC17	5.277515	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	53.92	PL16	-77.500973	39.101648
RC18	1.898803	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.498807	39.110656
RC180	4.156337	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	59.75	PL16	-77.483156	39.102124
RC20	3.459654	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	68.50	PL16	-77.500382	39.106347
RC21	12.770049	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.488287	39.108907
RC24	4.619194	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	70.80	PL16	-77.500908	39.104807
RC26	6.002657	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	62.51	PL16	-77.492267	39.103844
RC28	2.617198	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.497163	39.109101
RC29	2.306374	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	71.80	PL16	-77.500253	39.106964
RC40	3.284272	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	53.89	PL16	-77.486130	39.102840
RC41	3.440300	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	50.40	PL16	-77.486461	39.103759
RC42	3.075217	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	54.79	PL16	-77.491346	39.103356
RC43	2.277387	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	63.26	PL16	-77.486780	39.104077
RC44	4.787621	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	52.22	PL16	-77.504571	39.106106
RC45	2.014594	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	81.44	PL16	-77.504259	39.106486
RC46	12.120467	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	58.23	PL16	-77.487289	39.105328
RC498	4.604909	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	74.48	PL16	-77.492880	39.103035
RC500	10.710076	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	64.41	PL16	-77.493564	39.104176
RC502	31.005075	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_GOLF_COURSE	41.24	PL16	-77.494038	39.104361

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
RC51	10.502478	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.498683	39.112225
RC510	2.114676	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	47.83	PL16	-77.502879	39.104780
RC513	1.768421	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.484977	39.105661
RC514	2.060125	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	50.03	PL16	-77.484180	39.102163
RC52	1.723893	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.499417	39.109622
RC54	1.799855	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	90.98	PL16	-77.488354	39.103235
RC55	1.763054	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	68.71	PL16	-77.486489	39.102580
RC56	4.050289	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.489820	39.108844
RC58	6.454310	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.91	PL16	-77.504715	39.105728
RC59	8.049244	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	92.29	PL16	-77.493250	39.101494
RC63	2.904931	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	COM_GOLF_COURSE	69.89	PL16	-77.499799	39.102396
RC64	4.428268	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.64	PL16	-77.503694	39.103147
RC65	14.362831	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.490326	39.108058
RC66	1.106664	020700080403	No	Chesapeake Bay	Limestone Branch - Potomac River		0.00	PL05	-77.488869	39.109798
RJ0052	6.567453	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475630	39.017490
RJ0055	9.914482	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.557372	38.937968
RJ0083	5.710596	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	59.13	PL42	-77.563486	38.910043
RJ0086	3.164378	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	25.76	PL45	-77.505235	38.914492
RJ0090	1.331269	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	47.61	PL45	-77.505457	38.914514
RJ0092	0.230061	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	46.17	PL45	-77.505622	38.914555
RJ0099	11.991313	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.422169	38.987400
RJ0100	0.559784	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.421326	38.987166
RJ0112	3.181912	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.565003	38.930584
RJ0119	0.750649	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	73.07	PL42	-77.549830	38.918231
RJ0134	1.263993	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	2.11	PL16	-77.503882	39.090518
RJ0215	0.039577	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488789	39.046628
RR27	1.670492	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467644	39.064402
RR29	0.200177	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467547	39.064378
RR35	0.259569	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467580	39.064989
RR51	2.261931	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468435	39.065427
RR61	0.263124	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463622	39.062438
RR9	1.051027	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475238	39.068171
SR11	6.250033	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	99.30	PL21	-77.374651	39.012869
SR122	6.875013	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.44	PL21	-77.387110	39.016682
SR125	5.426561	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	81.59	PL21	-77.385546	39.016613
SR126	6.604364	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	77.79	PL21	-77.384435	39.016811
SR127	4.001559	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	59.68	PL21	-77.383433	39.016848
SR128	3.403105	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.09	PL21	-77.382381	39.016521
SR13	0.255654	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.374350	39.012472
SR133	44.160783	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	47.87	PL21	-77.381249	39.016709
SR15	0.357828	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	98.69	PL21	-77.374041	39.012272
SR155	4.349410	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	17.58	PL21	-77.388084	39.017405
SR159	0.318192	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run		0.00	PL21	-77.388445	39.017844
SR161	4.367254	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	84.15	PL21	-77.388489	39.017980
SR163	0.201485	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	24.19	PL21	-77.388093	39.017400
SR166	5.187670	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	21.14	PL21	-77.389543	39.016393
SR17	1.319933	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	42.51	PL21	-77.373741	39.012145
SR170	10.566061	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	74.90	PL21	-77.388478	39.016301
SR217	6.781376	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	64.93	PL21	-77.386656	39.012085
SR252	12.816576	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	32.58	PL21	-77.384954	39.016354
SR268	84.399235	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	67.32	PL21	-77.392831	39.009466
SR274	5.952092	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	78.43	PL21	-77.392023	39.008669
SR276	1.448820	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	RES_SFD	69.10	PL21	-77.391405	39.008313
SR3	2.677350	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_RETAIL	100.00	PL21	-77.377192	39.014053
SR446	2.807426	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419995	38.988445
SR505	1.434783	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.423690	38.989501
SR506	52.886992	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.423819	38.989554
SR523	45.851504	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420528	38.988504
SR524	19.846717	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420577	38.988519

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
SR525	0.362403	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420841	38.988577
SR526	0.521783	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.421207	38.988102
SR538	2.042424	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.421947	38.987968
SR540	2.267262	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.422793	38.989069
SR546	2.302124	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412372	38.987665
SR560	1.379242	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413506	38.987280
SR563	0.450984	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413095	38.987357
SR568	4.762385	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.412949	38.987450
SR570	0.937995	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413235	38.986942
SR572	5.224245	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.413041	38.986568
SR582	102.532728	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.410920	38.988102
SR603	8.841058	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.411067	38.988133
SR607	7.302779	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.414610	38.986858
SR608	0.469882	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.414349	38.986990
SR609	0.529826	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.414094	38.987068
SR641	7.347715	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419624	38.987241
SR660	25.914186	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430270	38.986827
SR739	5.637117	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428100	38.983595
SR740	5.518765	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.427181	38.983769
WB1013	25.799207	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408916	39.056050
WB1034	3.195517	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406719	39.048313
WB1044	6.297893	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405839	39.049583
WB1049	2.346417	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403445	39.049599
WB1056	2.356731	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401141	39.048168
WB1063	4.782411	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400599	39.049849
WB1064	5.074792	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400604	39.050041
WB1066	5.360809	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.400467	39.049936
WB1111	12.910242	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406261	39.053033
WB1125	2.430787	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407036	39.055766
WB1145	7.819467	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405590	39.054172
WB1147	1.694124	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.403593	39.055578
WB1157	16.658558	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.401446	39.055210
WB1182	10.906817	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399691	39.053470
WB1184	0.749233	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.399521	39.054934
WB12091	20.410222	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	46.14	PL42	-77.551425	38.913105
WB1239	2.646388	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410525	39.057824
WB1243	3.270229	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412493	39.058160
WB12680	16.469183	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.507957	38.977414
WB1270	7.047153	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414116	39.058593
WB1273	1.755729	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412958	39.058228
WB1302	4.798662	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.395628	39.053081
WB1316	3.549978	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.397034	39.051665
WB1338	9.315918	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.398794	39.054802
WB1358	82.806988	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440980	39.052075
WB1532	9.424480	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433340	39.049421
WB1543	6.061108	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433932	39.050619
WB1544	0.251641	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.433908	39.050648
WB1595	2.731103	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436398	39.055779
WB1604	6.506782	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.436666	39.056446
WB1618	7.046559	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440208	39.058155
WB1646	13.325976	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.441037	39.062166
WB1655	4.430075	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440560	39.060199
WB1788	47.838686	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446268	39.057142
WB1798	2.919966	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440139	39.057879
WB1799	1.260535	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440115	39.057881
WB18	2.924673	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420360	39.033763
WB1855	21.029249	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442207	39.063733
WB1860	21.530737	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.446029	39.067969
WB1879	17.043181	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.449973	39.070185

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
WB1886	14.587595	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.451713	39.069333
WB1899	20.128813	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444808	39.066222
WB1954	6.524967	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445014	39.066338
WB2	36.200632	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420065	39.033593
WB20075	4.172925	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	57.01	PL21	-77.371363	39.025923
WB2122	1.152947	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468422	39.065698
WB2126	0.730295	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468615	39.065844
WB2279	45.647919	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.467129	39.073136
WB2281	0.883740	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.470197	39.068797
WB2317	3.428054	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456279	39.059814
WB2353	3.560594	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.453021	39.071145
WB241	3.235269	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.423853	39.035192
WB2434	5.662862	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.475474	39.068884
WB252	17.986233	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421489	39.034235
WB2545	22.062895	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.474909	39.074964
WB2573	3.448215	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.474560	39.075374
WB2576	2.660122	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.473881	39.075822
WB2584	0.628639	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.473661	39.076095
WB2588	6.278456	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.472903	39.077338
WB2633	7.542999	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.473857	39.073329
WB2650	19.833886	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.468685	39.073865
WB277	5.780318	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420684	39.033589
WB296	0.321648	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419876	39.033191
WB299	22.856185	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420161	39.033030
WB30027	3.187633	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	51.15	PL16	-77.498005	39.083533
WB30028	2.933673	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	80.30	PL16	-77.499863	39.088495
WB30030	1.805922	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487591	39.014446
WB30032	3.136967	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.474242	39.021989
WB30043	17.436835	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	71.37	PL42	-77.556542	38.908968
WB30271	10.222786	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418165	39.032054
WB30272	11.611389	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418187	39.032161
WB30273	2.257364	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418223	39.030176
WB30274	2.137099	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404962	39.027769
WB30275	44.735064	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405133	39.027992
WB30276	1.363458	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405299	39.028391
WB30280	23.844849	020700080905	Yes	Sugarland Run (Bacteria), Chesapeake Bay	Sugarland Run	COM_OTHER_PUBLIC	97.52	PL21	-77.370304	39.027829
WB30281	1.439415	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	MULTI_USE	98.41	PL16	-77.496378	39.079904
WB30282	25.569078	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFA	24.08	PL16	-77.496178	39.079815
WB30287	0.368975	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465454	39.067111
WB30289	7.960239	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.461609	39.068725
WB30293	23.807305	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.462037	39.070133
WB30295	7.069286	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.471000	39.068838
WB30296	3.563680	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.463109	39.072049
WB30297	2.024705	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.461861	39.072008
WB30298	0.402193	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467635	39.062582
WB30299	3.029293	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466462	39.061112
WB30300	20.301477	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.466213	39.061111
WB30302	0.306677	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467731	39.061597
WB30303	4.369784	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467805	39.061185
WB30304	2.767270	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.460524	39.071033
WB30305	5.522391	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.461536	39.070303
WB30306	7.141406	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461318	39.059920
WB30311	4.261138	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.476571	39.078715
WB30312	3.218492	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477427	39.078576
WB30313	3.430281	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.476410	39.078177
WB30314	92.396045	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.477118	39.078443
WB30316	2.126337	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.487634	39.093281
WB30321	5.311037	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484127	39.090250
WB30322	2.426006	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.485906	39.091745

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
WB30323	2.376599	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.484115	39.090638
WB30324	2.167442	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.486569	39.090313
WB30325	6.792612	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469200	39.049965
WB30326	1.580755	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468232	39.049767
WB30332	23.351487	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461686	39.026393
WB30333	13.893096	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.461738	39.026343
WB30338	2.199921	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459777	39.022976
WB30339	2.797361	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459233	39.022432
WB30346	5.732458	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445357	39.007808
WB30347	0.869773	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448149	38.996846
WB30348	1.900888	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.448273	38.996568
WB30360	11.656123	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442746	39.007077
WB30374	5.932328	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437504	38.992008
WB30382	11.511458	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.435881	39.002536
WB30391	0.867455	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.436060	38.984504
WB30392	64.741944	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.437373	38.984282
WB30397	0.103301	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.428547	38.989891
WB30398	1.010053	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.429165	38.989737
WB30401	0.391187	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430860	38.989851
WB30402	0.193817	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430435	38.990028
WB30403	0.143093	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430576	38.990502
WB30417	1.615509	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509352	38.981831
WB30418	13.021104	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.511756	38.981727
WB30422	1.360469	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514203	38.981298
WB30423	9.641568	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.510048	38.980310
WB30439	0.959606	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.514327	38.979937
WB30446	34.007290	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431788	38.988937
WB30447	0.525740	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431575	38.987731
WB30449	0.391234	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430794	38.988214
WB30450	0.414369	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430838	38.988400
WB30454	10.396850	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.419965	38.986566
WB30456	1.970481	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.420434	38.986927
WB30486	11.817171	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	77.47	PL14	-77.526966	39.012501
WB30488	4.481534	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	86.92	PL14	-77.528465	39.021027
WB30489	6.584158	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	76.14	PL14	-77.530286	39.017573
WB30490	2.014863	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	77.78	PL14	-77.529267	39.019875
WB30491	0.640422	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	52.90	PL14	-77.529293	39.020087
WB30493	1.614060	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	75.10	PL14	-77.531497	39.018189
WB30494	3.235121	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	80.17	PL14	-77.530733	39.018224
WB30496	22.120741	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521074	38.999329
WB30498	4.368289	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.521402	38.998631
WB30499	5.822647	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.520504	38.998787
WB30504	3.454030	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490807	39.012091
WB30505	1.189442	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490823	39.012101
WB30507	1.831432	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491829	39.012121
WB30508	27.696446	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491765	39.012106
WB30511	14.068788	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490705	39.020201
WB30512	2.134242	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488545	39.023055
WB30513	0.329204	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488554	39.023031
WB30514	5.366118	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	54.00	PL45	-77.540679	38.922767
WB30516	1.646851	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.43	PL45	-77.541527	38.921430
WB30517	22.297390	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	41.15	PL45	-77.541471	38.921421
WB30518	5.348005	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	66.80	PL45	-77.541095	38.922271
WB30519	5.772237	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	63.36	PL45	-77.541082	38.923285
WB30524	9.275819	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	54.31	PL42	-77.552396	38.921754
WB30527	1.540336	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	62.34	PL42	-77.552892	38.923115
WB30529	14.361785	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	72.46	PL42	-77.562274	38.910901
WB30530	0.200062	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	0.34	PL42	-77.562142	38.910830
WB30532	19.213603	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	73.88	PL42	-77.562458	38.913403

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
WB30534	2.682049	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	71.49	PL42	-77.561701	38.915802
WB30535	4.139010	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	67.16	PL42	-77.561587	38.917146
WB30536	1.230214	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_NON_PUBLIC	92.87	PL45	-77.534709	38.919015
WB30549	10.702041	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OFFICE_GENERAL	91.86	PL45	-77.471973	38.916416
WB30550	7.766636	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	97.77	PL45	-77.474521	38.912772
WB30551	5.754277	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	100.00	PL45	-77.474612	38.912528
WB30552	6.324774	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	VACANT	12.86	PL45	-77.473705	38.911806
WB30555	4.027460	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445968	39.028704
WB30556	3.140474	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445870	39.028729
WB30557	0.782688	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445501	39.028550
WB30558	2.328154	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.444044	39.029451
WB30559	1.062501	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.442813	39.028413
WB30561	2.455589	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.445295	39.033865
WB30563	25.972737	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.440643	39.032768
WB30565	3.091153	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.472682	39.083678
WB31005	3.065955	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493228	39.055997
WB31006	1.604144	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491983	39.056768
WB31007	0.733385	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492128	39.057025
WB31008	7.749993	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494224	39.058411
WB31009	4.694284	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493611	39.056221
WB31010	1.546871	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	56.67	PL42	-77.551069	38.913048
WB35	2.285562	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.421920	39.034630
WB369	1.800991	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418844	39.032081
WB373	1.007328	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418301	39.031695
WB386	12.501683	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418373	39.029203
WB389	3.083296	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.418147	39.029631
WB40456	0.525346	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.431119	38.989267
WB40458	8.084070	020700080902	No	Chesapeake Bay	Horsepen Run		0.00	PL18	-77.430973	38.990470
WB40480	0.953691	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	75.69	PL45	-77.537836	38.923342
WB422	3.791125	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409280	39.044426
WB428	6.459506	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.406941	39.043873
WB436	3.034267	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405021	39.043441
WB444	3.159187	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408880	39.040711
WB448	30.602497	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408585	39.039968
WB532	0.268767	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413536	39.044451
WB533	22.896931	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.414232	39.044775
WB562	4.891744	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410403	39.044223
WB571	6.514309	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.413382	39.044601
WB641	6.629018	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407925	39.037082
WB642	4.626525	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407896	39.036970
WB644	1.538781	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407641	39.036306
WB650	0.373681	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410114	39.036945
WB654	0.343195	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409795	39.036734
WB655	2.073243	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409652	39.036523
WB661	0.945851	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408361	39.035655
WB669	3.919566	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411352	39.037036
WB679	0.318555	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411711	39.037887
WB682	3.526940	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411885	39.037917
WB691	8.457056	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412248	39.037545
WB7	0.983559	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419916	39.033443
WB70105	1.910755	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447808	39.008631
WB70106	1.075032	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.447678	39.008731
WB721	3.186039	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412359	39.037432
WB732	1.457926	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412462	39.037001
WB737	0.570674	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.412010	39.036781
WB821	20.103825	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407805	39.051438
WB826	1.112903	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.405072	39.050758
WB828	1.189051	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.404969	39.050132
WB853	20.469078	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.409755	39.052125

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
WB860	1.831800	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408486	39.052682
WB862	2.715938	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408532	39.052746
WB864	1.524138	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407413	39.053448
WB870	1.620508	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.410877	39.052509
WB887	3.999605	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407932	39.054054
WB888	0.774143	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407784	39.054251
WB891	0.683807	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407260	39.054395
WB896	0.665784	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.407190	39.054102
WB901	0.513315	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408090	39.054540
WB902	0.443618	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.408081	39.054676
WB906	9.618823	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416872	39.054197
WB958	8.709759	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416187	39.053575
WB968	1.640979	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.411449	39.053275
WB994	1.783517	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418441	39.051587
WB995	2.441907	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.418546	39.051709
WB998	2.358128	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.416722	39.053040
WC30573	2.245937	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494596	39.061005
WC30582	0.503250	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468485	39.067056
WC30583	4.054057	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469090	39.066971
WJ1017	23.366591	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513803	39.054943
WJ1018	2.302169	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513691	39.054815
WJ1029	5.013558	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513123	39.054086
WJ1030	2.003808	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512189	39.054115
WJ104	11.432292	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	49.64	PL45	-77.512266	38.923579
WJ1084	8.512336	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513194	39.052098
WJ1162	15.846195	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513653	39.050504
WJ1189	17.583261	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510877	39.050790
WJ120	18.344619	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	51.83	PL45	-77.516803	38.921957
WJ1203	2.057686	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512235	39.049450
WJ124	20.943546	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	23.11	PL45	-77.511033	38.921749
WJ1263	29.066572	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514133	39.048125
WJ1275	19.406707	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513153	39.047814
WJ131	2.325880	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	49.41	PL45	-77.510785	38.921480
WJ1403	44.941654	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513004	39.048518
WJ1405	24.230919	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512812	39.039226
WJ1412	1.281706	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.512786	39.039221
WJ144	14.011084	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	42.64	PL45	-77.510718	38.919214
WJ1449	4.887086	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.513596	39.038108
WJ1454	7.939999	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517111	39.037934
WJ1467	19.451574	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517326	39.037805
WJ1496	3.471176	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.514912	39.035746
WJ1497	7.853332	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.516098	39.035714
WJ1518	11.389134	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.517757	39.035628
WJ1530	35.343773	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489652	39.050056
WJ1641	0.674440	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488034	39.066152
WJ1643	0.545740	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487626	39.065673
WJ1651	12.651847	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488527	39.067400
WJ1678	3.402685	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492701	39.067508
WJ1681	0.975528	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488569	39.066159
WJ1683	4.873136	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487904	39.065217
WJ1707	12.488582	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486488	39.065017
WJ1730	25.672575	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.486912	39.059071
WJ1735	4.274763	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493518	39.064424
WJ1737	0.167137	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493469	39.064558
WJ176	16.654477	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_MFA	31.54	PL45	-77.511368	38.916996
WJ1760	6.845359	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493161	39.065084
WJ1771	8.991387	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488886	39.066930
WJ1781	4.347413	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492715	39.067502
WJ1785	2.583013	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493153	39.066893

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
WJ1789	2.040739	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493373	39.066187
WJ1795	2.242974	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493320	39.065671
WJ1803	2.955744	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.493673	39.064351
WJ1806	17.167920	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494506	39.062456
WJ1825	4.736480	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498331	39.065003
WJ1830	4.466769	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497975	39.066157
WJ1840	18.366798	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497174	39.067146
WJ1855	2.333046	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497034	39.067800
WJ1868	10.072949	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496829	39.068665
WJ1894	12.525005	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.52	PL16	-77.496812	39.073353
WJ1903	2.776899	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	74.34	PL16	-77.498083	39.075054
WJ1907	2.924532	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.15	PL16	-77.500245	39.071815
WJ1913	3.033699	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	99.88	PL16	-77.500200	39.071717
WJ1915	9.548426	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	74.29	PL16	-77.500158	39.071508
WJ192	12.266291	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	43.56	PL45	-77.511346	38.915331
WJ1957	5.607155	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	76.00	PL16	-77.500034	39.070841
WJ1961	0.158983	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	100.00	PL16	-77.500558	39.071082
WJ1970	18.936424	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	RES_SFD	79.68	PL16	-77.500695	39.072455
WJ2	13.124258	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	38.39	PL45	-77.524682	38.916943
WJ2034	13.663381	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.475498	39.078701
WJ204	0.358274	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.511083	38.916268
WJ2042	0.895916	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.475663	39.078628
WJ2043	1.433924	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.475703	39.078622
WJ2068	0.354359	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470295	39.079732
WJ2073	2.904491	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470607	39.079210
WJ2091	22.829067	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471284	39.083538
WJ2117	9.512553	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471214	39.075873
WJ2118	2.130074	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471190	39.075869
WJ2126	0.340794	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470347	39.079950
WJ2128	11.594531	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.471017	39.080337
WJ2157	15.119300	020700080904	No	Chesapeake Bay	Selden Island - Potomac River		0.00	PL20	-77.470804	39.081008
WJ2178	1.288097	020700080704	Yes	Goose Creek (Benthic), Chesapeake Bay	Cattail Branch - Goose Creek	HOA	23.44	PL16	-77.504229	39.090786
WJ226	4.986119	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	37.05	PL45	-77.511438	38.914361
WJ250	2.944849	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	47.62	PL45	-77.516609	38.913324
WJ255	2.462631	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	31.13	PL45	-77.517687	38.914017
WJ267	5.392460	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	47.49	PL45	-77.517399	38.916225
WJ271	0.753371	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	60.10	PL45	-77.517539	38.916013
WJ272	0.724561	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	49.74	PL45	-77.517093	38.915437
WJ277	4.716973	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	54.97	PL45	-77.517204	38.914921
WJ301	4.125982	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	MULTI_USE	95.53	PL45	-77.516984	38.917717
WJ308	0.963556	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run		0.00	PL45	-77.517556	38.917290
WJ310	1.472592	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	0.19	PL45	-77.517222	38.917198
WJ316	1.404433	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	28.60	PL45	-77.518079	38.916426
WJ322	1.217869	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	8.87	PL45	-77.518383	38.915052
WJ337	24.438564	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_OTHER_PUBLIC	53.13	PL45	-77.520255	38.915334
WJ364	3.855806	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	24.43	PL45	-77.518385	38.914063
WJ367	5.578701	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	45.02	PL45	-77.520075	38.909654
WJ383	9.861803	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501948	39.038526
WJ390	2.319368	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500540	39.038585
WJ398	1.455142	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499871	39.038460
WJ401	1.751314	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498497	39.038494
WJ406	1.459635	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497445	39.038255
WJ412	31.251345	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494997	39.036396
WJ413	1.623194	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494918	39.036480
WJ419	1.600918	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494697	39.038091
WJ426	0.488335	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496326	39.038175
WJ427	3.973290	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494972	39.036150
WJ435	7.994357	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.495574	39.034628
WJ444	6.606605	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496083	39.034012

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
WJ466	4.532634	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.494012	39.035268
WJ473	3.180232	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492979	39.037141
WJ476	2.851147	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491672	39.035095
WJ482	8.750050	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492085	39.033345
WJ493	2.249035	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490584	39.030857
WJ503	4.797155	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489556	39.032102
WJ507	2.556093	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489102	39.032285
WJ510	0.131661	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.488856	39.032251
WJ515	1.132055	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487775	39.032858
WJ519	5.350444	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.489259	39.031579
WJ526	3.802274	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487535	39.031504
WJ530	2.719550	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490544	39.029925
WJ536	2.485723	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.490043	39.031463
WJ541	0.767150	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487423	39.031947
WJ542	1.344702	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487258	39.031725
WJ547	0.630626	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487196	39.030856
WJ572	1.693534	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.487462	39.033189
WJ576	2.894451	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492990	39.040131
WJ582	7.203577	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.492207	39.041470
WJ593	6.003892	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.491755	39.042692
WJ608	5.060332	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498373	39.043243
WJ610	7.132496	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499407	39.044069
WJ621	1.176112	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499777	39.045280
WJ626	1.326218	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499806	39.046070
WJ63	16.024478	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.38	PL45	-77.528574	38.915680
WJ632	2.194767	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500307	39.046280
WJ637	3.103645	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498762	39.048871
WJ64	3.488114	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	84.61	PL45	-77.528047	38.916047
WJ640	5.974858	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.498712	39.049002
WJ657	0.325496	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503455	39.045689
WJ660	2.550566	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503488	39.045610
WJ663	1.171625	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503754	39.045179
WJ675	3.955305	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503251	39.046549
WJ685	7.221635	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500571	39.046458
WJ69	10.826306	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	74.56	PL45	-77.528798	38.915509
WJ692	7.069803	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500613	39.048526
WJ707	3.506762	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.500505	39.050931
WJ708	2.966990	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.499538	39.050427
WJ719	5.314744	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503610	39.046772
WJ737	4.822315	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505886	39.046779
WJ762	9.402842	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.501396	39.051531
WJ764	0.798532	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.502662	39.052201
WJ768	10.360061	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.503759	39.052516
WJ82	3.157428	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	69.29	PL45	-77.529518	38.915404
WJ826	15.832922	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507022	39.047312
WJ828	1.520592	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.507040	39.047250
WJ837	1.180313	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.506092	39.046752
WJ843	2.107195	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.504602	39.046355
WJ859	1.883123	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.497335	39.039394
WJ875	9.694676	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.496731	39.039351
WJ886	11.628497	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505230	39.053303
WJ887	5.241045	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.505707	39.053508
WJ91	1.638340	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	64.85	PL45	-77.511916	38.922096
WJ911	4.743790	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509461	39.054545
WJ917	1.605545	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509164	39.054758
WJ924	1.821797	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509269	39.055553
WJ929	11.710556	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510516	39.057358
WJ950	3.085113	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511757	39.055244
WJ967	7.780628	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.509954	39.055812

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
WJ972	0.320370	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.511030	39.054587
WJ973	8.116172	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.510675	39.054507
WJ998	5.418419	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	VACANT	18.31	PL14	-77.515378	39.057640
WP3483	7.200089	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459517	39.049027
WP3520	2.755815	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502064	39.001426
WP3521	0.554550	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502168	39.001266
WP3522	0.291642	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.502320	39.001131
WP3523	1.860901	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	49.51	PL14	-77.523743	39.001159
WP3524	16.373869	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFD	37.49	PL14	-77.527523	39.002681
WP3526	2.093742	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	48.83	PL14	-77.528477	39.002906
WP3527	0.848546	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	57.83	PL14	-77.528911	39.002953
WP3528	10.455414	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	41.21	PL14	-77.528394	39.004020
WP3537	6.166573	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.508714	39.009536
WP3538	1.309111	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459759	39.003930
WP3539	2.419860	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.459534	39.004370
WP3546	10.230162	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.506573	38.982857
WP3547	5.958441	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.509201	38.980233
WP3548	2.715344	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	25.39	PL14	-77.529302	39.002500
WP3560	1.629569	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.508464	38.978365
WP3563	10.087834	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_MFST	39.09	PL14	-77.536967	38.987588
WP3564	1.455190	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	MULTI_USE	0.27	PL14	-77.536849	38.989573
WP3565	0.064083	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	94.70	PL14	-77.536748	38.989760
WP3566	1.734906	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	RES_SFA	62.61	PL14	-77.536542	38.989708
WP3567	2.262964	020700080702	Yes	Goose Creek (Benthic), Chesapeake Bay	Big Branch - Goose Creek	HOA	0.07	PL14	-77.535763	38.991209
WP3569	1.995682	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463580	39.021854
WP3570	3.120255	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.463335	39.022145
WP3571	1.701197	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464969	39.021316
WP3572	1.180442	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465056	39.021355
WP3573	6.115963	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465444	39.020068
WP3574	8.623174	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.465170	39.019496
WP3578	0.085531	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462840	39.026482
WP3579	0.359176	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462908	39.025390
WP3580	0.443918	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.462941	39.025344
WP3581	0.248929	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464028	39.029017
WP3582	7.056944	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.464424	39.028865
WP3583	2.227814	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467866	39.028674
WP3584	0.158195	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.467599	39.028913
WP3585	14.641097	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.468309	39.028187
WP3586	0.428952	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.469176	39.027987
WP3587	0.915542	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.450135	39.027816
WP3588	0.526044	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455214	39.029254
WP3589	0.800462	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455240	39.029355
WP3590	6.128322	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456985	39.031488
WP3591	0.426019	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456603	39.032047
WP3592	7.958163	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456836	39.031503
WP3593	6.580521	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.456041	39.032526
WP3594	0.641544	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.457965	39.031972
WP3607	1.782323	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFD	69.77	PL42	-77.563312	38.920513
WP3608	1.594257	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	57.26	PL42	-77.563334	38.921312
WP3609	1.501569	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	52.29	PL42	-77.561217	38.920723
WP3610	4.570198	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	RES_SFA	38.23	PL42	-77.561144	38.919503
WP3611	1.258157	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	57.11	PL42	-77.560951	38.920771
WP3612	0.331620	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	21.36	PL42	-77.562553	38.918843
WP3613	0.476040	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	11.62	PL42	-77.562612	38.918778
WP3614	5.177416	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	46.64	PL42	-77.556545	38.921122
WP3615	6.397626	020700100701	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Upper Bull Run	HOA	49.92	PL42	-77.556919	38.922155
WP3618	3.509923	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544474	38.936762
WP3620	0.197753	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544765	38.936678
WP3621	4.264899	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544847	38.936360

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
WP3622	7.197313	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.544030	38.935423
WP3627	12.749518	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	51.95	PL45	-77.530805	38.924238
WP3628	3.254324	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	61.16	PL45	-77.530278	38.924406
WP3629	1.051899	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	71.66	PL45	-77.531598	38.924678
WP3630	3.903023	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	59.95	PL45	-77.527777	38.923676
WP3631	5.007000	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	COM_RETAIL	68.63	PL45	-77.523279	38.925706
WP3632	0.481983	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	HOA	88.85	PL45	-77.500461	38.913314
WP3635	10.894498	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFA	55.20	PL45	-77.497120	38.912677
WP3637	12.034686	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	55.98	PL45	-77.495094	38.910320
WP3638	1.646207	020700100704	Yes	Bull Run (Bacteria/Benthic), Chesapeake Bay	Cub Run	RES_SFD	68.91	PL45	-77.494815	38.910372
WP3647	10.747276	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.419571	39.012124
WP3648	1.145805	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.420216	39.011281
WP3651	0.095246	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428232	39.041679
WP3652	1.335641	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427958	39.041528
WP3653	1.099262	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.427894	39.041038
WP3654	0.831453	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428259	39.040509
WP3655	0.806504	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.428732	39.038503
WP3675	0.498246	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524982	38.968743
WP3676	3.216048	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524522	38.968345
WP3677	2.076553	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.524126	38.967475
WP3678	7.743464	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.522564	38.968715
WP3679	28.275476	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.525331	38.970903
WP3680	22.000387	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.531530	38.967752
WP3690	5.116544	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.458317	39.048411
WP3691	2.412529	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.455236	39.048966
WP3692	2.361288	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453026	39.046899
WP3693	1.508654	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453457	39.047196
WP3694	6.814862	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453247	39.046273
WP3695	0.324832	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453234	39.046250
WP3697	1.005822	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453723	39.046338
WP3698	0.644226	020700080903	No	Chesapeake Bay	Beaverdam Run - Broad Run		0.00	PL19	-77.453669	39.046412
WP3699	0.305679	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530918	38.974519
WP3700	22.350270	020700080901	No	Chesapeake Bay	Lenah Run - Broad Run		0.00	PL17	-77.530609	38.975063



Loudoun County, Virginia

Department of General Services

801 Sycolin Road S.E., P.O. Box 7100, Leesburg, VA 20177-7100

Phone: (703) 771-5552 Fax: (703) 737-8008

Charles A. Mumaw, PE
Deputy Director
Manager Department of Public Works & Capital Projects
The Town of Leesburg, Virginia
25 West Market Street
P.O. Box 88
Leesburg, VA 20176

May 16, 2019

Subject: MS4 Interconnections

Mr. Mumaw,

In accordance with our VSMP MS4 Stormwater Permit, we are informing you that portions of our stormwater system discharge into the Town of Leesburg stormwater system. If you would like additional information about the contributing areas, please contact me and I will make every effort to answer your questions.

Sincerely

Chris Stone
Chief, Stormwater Management
Chris.Stone@loudoun.gov
571-258-3542



Loudoun County, Virginia

Department of General Services

801 Sycolin Road S.E., P.O. Box 7100, Leesburg, VA 20177-7100
Phone: (703) 771-5552 Fax: (703) 737-8008

Daniel Wells, PE
Acting Director, Northern Virginia Community College
Facilities Planning and Support Services, CW 310B
8333 Little River Turnpike
Annandale, VA 22003

May 16, 2019

Subject: MS4 Interconnections

Mr. Wells,

In accordance with our VSMP MS4 Stormwater Permit, we are informing you that portions of our stormwater system discharge into the Northern Virginia Community College – Loudoun Campus stormwater system. If you would like additional information about the contributing areas, please contact me and I will make every effort to answer your questions.

Sincerely

Chris Stone
Chief, Stormwater Management
Chris.Stone@loudoun.gov
571-258-3542



Loudoun County, Virginia

Department of General Services

801 Sycolin Road S.E., P.O. Box 7100, Leesburg, VA 20177-7100

Phone: (703) 771-5552 Fax: (703) 737-8008

Brian A. Leuck, PE
Manager, Engineering and Maintenance Department
Washington Dulles Airport
P.O. Box 17045
Washington, DC 20041-0045

May 16, 2019

Subject: MS4 Interconnections

Mr. Leuck,

In accordance with our VSMP MS4 Stormwater Permit, we are informing you that portions of our stormwater system discharge into the Dulles Toll Road stormwater system. If you would like additional information about the contributing areas, please contact me and I will make every effort to answer your questions.

Sincerely

Chris Stone
Chief, Stormwater Management
Chris.Stone@loudoun.gov
571-258-3542



Loudoun County, Virginia

Department of General Services

801 Sycolin Road S.E., P.O. Box 7100, Leesburg, VA 20177-7100

Phone: (703) 771-5552 Fax: (703) 737-8008

Pawan Sarang
VDOT – NOVA District – Location and Design
4975 Alliance Drive
Fairfax, VA 22030

May 16, 2019

Subject: MS4 Interconnections

Mr. Sarang,

In accordance with our VSMP MS4 Stormwater Permit, we are informing you that portions of our stormwater system discharge into the VDOT stormwater system. If you would like additional information about the contributing areas, please contact me and I will make every effort to answer your questions.

Sincerely

Chris Stone
Chief, Stormwater Management
Chris.Stone@loudoun.gov
571-258-3542



Loudoun County, Virginia

Department of General Services

801 Sycolin Road S.E., P.O. Box 7100, Leesburg, VA 20177-7100

Phone: (703) 771-5552 Fax: (703) 737-8008

Heather Ambrose
Fairfax County
12000 Government Center Parkway
Suite 449
Fairfax, VA 22035-0052

May 16, 2019

Subject: MS4 Interconnections

Ms. Ambrose,

In accordance with our VSMP MS4 Stormwater Permit, we are informing you that portions of our stormwater system discharge into the Fairfax County stormwater system. If you would like additional information about the contributing areas, please contact me and I will make every effort to answer your questions.

Sincerely

Chris Stone
Chief, Stormwater Management
Chris.Stone@loudoun.gov
571-258-3542



Loudoun County, Virginia

Department of General Services

801 Sycolin Road S.E., P.O. Box 7100, Leesburg, VA 20177-7100

Phone: (703) 771-5552 Fax: (703) 737-8008

Dana Singer
Town of Herndon, Public Works Department
777 Lynn Street
Herndon, VA 20170

May 16, 2019

Subject: MS4 Interconnections

Ms. Singer,

In accordance with our VSMP MS4 Stormwater Permit, we are informing you that portions of our stormwater system discharge into the Town of Herndon stormwater system. If you would like additional information about the contributing areas, please contact me and I will make every effort to answer your questions.

Sincerely

Chris Stone
Chief, Stormwater Management
Chris.Stone@loudoun.gov
571-258-3542

**Loudoun County Stormwater Management
Engineering Services**

ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROCEDURE

Version 2, June 10, 2019

Prepared for:



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

Updated by:



4229 Lafayette Center Drive, Suite 1850
Chantilly, Virginia 20151
703-870-7000



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Appendices

Appendix A: Loudoun County Illicit Discharge Enforcement Procedures

Appendix B: Loudoun County Dry Weather Field Screening Procedures



Definitions

Dry Weather	A period of at least 48 hours since the most recent runoff producing event. ¹
Illicit Discharge	Any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater, except discharges pursuant to a Virginia Pollutant Discharge Elimination System (VPDES) or state permit (other than the state permit for discharges from municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-870-400. ²
Municipal Separate Storm Sewer	A conveyance or system of conveyances otherwise known as a municipal separate storm sewer system, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains. ³
Outfall	A point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters. ⁴
Runoff Producing Event	<p>For purposes of this protocol, a “runoff producing event” is defined as:</p> <p>An event resulting from precipitation greater than 0.1 inches in magnitude and that occurs at least 48 hours from the previous measurable (greater than 0.1-inch rainfall) precipitation event.</p> <p>In this protocol, a runoff producing event constitutes “wet weather.” Precipitation measured at Dulles Airport should be used to determine if conditions are considered “wet weather” or “dry weather.”</p>
Surface Water	<ol style="list-style-type: none">1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;2. All interstate waters, including interstate wetlands;3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:<ol style="list-style-type: none">a. That are or could be used by interstate or foreign travelers for recreational or other purposes;b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; orc. That are or could be used for industrial purposes by industries in interstate commerce.

¹ Brown, Edward, Deb Caraco, and Robert Pitt. Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments; Water Permits Division, US EPA Office of Water and Wastewater, Washington, D.C., 2004, p.91

² 9VAC25-870-10 “Definitions.”

³ 9VAC25-870-10 “Definitions.”

⁴ 9VAC25-870-10 “Definitions.”



4. All impoundments of waters otherwise defined as surface waters under this definition;
5. Tributaries of waters identified in subdivisions 1 through 4 of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in subdivisions 1 through 6 of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (CWA) and the law, are not surface waters. Surface waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other agency, for the purposes of the CWA, the final authority regarding the CWA jurisdiction remains with the EPA.⁵

⁵ 9VAC25-870-10 "Definitions."



1.0 Background and Purpose

Loudoun County (County) operates a municipal separate storm sewer system (MS4) that is permitted through the Virginia General Permit for Stormwater Discharges from Small MS4s (MS4 General Permit) issued by the Virginia Department of Environmental Quality (DEQ).⁶ The MS4 General Permit authorizes the County's MS4 outfall discharges into surface waters of Virginia. As a condition of the MS4 General Permit, the County is required to develop and implement a program to detect and eliminate illicit discharges to its MS4.

The current MS4 General Permit (effective November 2018) states the requirement for the number of outfalls screened annually for illicit discharge as follows: "If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that not more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years."⁷ At the time of the revision of this procedure, the County has identified over 3,700 regulated MS4 outfalls county-wide.

The County's Illicit Discharge Detection and Elimination (IDDE) protocol was originally developed under the County's 2008 MS4 Program Plan which contained Best Management Practices (BMPs) to satisfy the six minimum control measures (MCMs), including development and implementation of IDDE procedures. Considering the amendments to the outfall screening requirements in the 2013 and, most recently the 2018, MS4 General Permits for illicit discharge and the County's experience from the previous three (3) permit cycles, the following IDDE procedure continues to improve the efficiency and precision of illicit discharge detection and elimination activities. The revised procedures aim to more efficiently identify and investigate illicit discharges by utilizing tested procedures along with program history to determine areas and commercial/industrial activities more susceptible to stormwater pollution in the County.

This IDDE program relies on a protocol that categorizes drainage areas for MS4 outfalls based on an evaluated risk of stormwater pollution. This categorization, which is based on the presence of specific commercial and industrial activities and the associated potential for illicit discharges and stormwater pollution, determines the appropriate methodology for identifying and investigating illicit discharges.

The County has historically placed and continues to place, a high priority on stormwater pollution prevention. As the County addresses the requirements of the 2018 MS4 General Permit, it remains committed to a sustained effort to identify and eliminate illicit discharges.

2.0 Legal Authority

Chapter 1096 of the Codified Ordinances of Loudoun County, Stormwater Management, was adopted October 20, 2003 and most recently revised in October 2018. Chapter 1096 outlines prohibited and allowable discharges, outlines the County's authority to inspect and monitor stormwater outfalls or other parts of the stormwater management system, and authorizes the County to correct any violations with written notification of non-compliance and issuance of penalties.

In addition, the County has two ordinances in effect that address the proper prevention and management of solid waste and litter (Chapter 1080 and 1088, Codified Ordinances of Loudoun County), which both include specific prohibitions for surface water contamination, inspection measures, and enforcement options. The County has also drafted and adopted a Hazardous Materials Emergency Response Plan as required under Title III Superfund Amendments and Reauthorization Act (SARA), PL 99-499.

The County's enforcement procedures are outlined in **Appendix A** of this document.

⁶ 9VAC-890-40

⁷ 9VAC-890-40, Part I, E (3)(c)(2)(c)



3.0 Loudoun County MS4 Outfalls

The County has a well-maintained MS4 outfall inventory that is routinely updated to identify outfalls resulting from new construction and development. The inventory is also subject to periodic refinement to ensure compliance with regulatory code (9VAC25-870-10) definitions, as outlined above. This protocol utilizes this County inventory to identify outfalls for screening.

The Department of General Services (DGS) regularly has new stormwater infrastructure mapped as new development occurs. As the newly mapped infrastructure is added to the existing inventory, MS4 outfalls are identified and drainage areas are delineated. All of these data are captured in the county's GIS stormwater data.

4.0 Illicit Discharge Detection and Elimination

4.1 Strategy for the Detection and Investigation of Illicit Discharges

The County uses three (3) primary tools for the detection and investigation of illicit discharges to its MS4:

1. Evaluation of commercial/industrial activities within the County's 2010 MS4 area that have a documented history of, or have an elevated potential for, discharging stormwater pollution to the County's MS4;
2. Dry weather screening;
3. Public reporting, including County staff, through the County's stormwater reporting telephone number, website, and mobile application (app); and
4. Investigations of potential and known illicit discharges.

The basis for the IDDE program is an evaluation that focuses on commercial/industrial activities that are known or are suspected to have a high potential for illicit discharges and stormwater pollution. This technique, as described in **Section 4.1.1**, drives the decision-making process and determines the appropriate methodology for outfall screening.

Based on the evaluation of commercial/industrial activities within the County's 2010 MS4 area, the County conducts dry weather field screening to detect illicit discharges at the point of discharge. This technique, as described in **Section 4.1.2**, evaluates the potential for illicit discharge within an outfall's drainage area.

The County also operates public reporting tools including a stormwater reporting telephone number, website, and mobile app through which citizens and County staff may notify County stormwater staff of potential illicit discharges. This technique, as described in **Section 4.1.3**, relies on the general public and County staff reporting potential stormwater pollution and illicit discharges.

Lastly, the County investigates all stormwater pollution and illicit discharges discovered either from dry weather screening activities or through complaints from citizens and County staff. The protocol for these investigations is described in **Section 4.5 and Appendix A**.

Utilizing these tools, as further described in the following sections, to identify areas that may reasonably be susceptible to an illicit discharge, the County prioritizes its potential, target outfalls and implements effective screening techniques in an attempt to address potential illicit discharges to its MS4. The County will continue to periodically prioritize outfalls on an as-needed basis (i.e., new outfalls are installed, illicit discharges are reported or identified, etc.).

4.1.1 Commercial/Industrial Activity Evaluation

Based on the County's IDDE implementation experience over the previous three (3) permit cycles (over 15 years), the County has chosen to focus on commercial/industrial activities within the 2010 MS4 area when choosing which outfalls to screen. Therefore, in order to prioritize outfalls for screening, the County has identified commercial/industrial activities that either have a documented history of, or have an elevated potential for,



stormwater pollution. Documented history includes a review of illicit discharge related reports or questions generated through the County's stormwater reporting mechanisms. In addition, to ensure the execution of the screening measures outlined below, the drainage-areas of the MS4 outfalls have been delineated. The County will continue to delineate drainage areas of all MS4 outfalls on a periodic basis as new development continues.

4.1.2 Dry Weather Screening

Dry weather screening entails inspecting the MS4's stormwater outfalls during periods of dry weather, as defined above, for evidence of flow. Flow in the MS4 during periods of dry weather may provide evidence of an illicit discharge to the system. Based on the County's experience with the implementation of dry weather screening and its record for the detection of illicit discharges to the MS4, this tool will continue to be used primarily at high-risk outfalls identified through a commercial/industrial activity evaluation and areas where illicit discharges have been identified in the past.

Based on the analysis of dry weather screening results and sample results and analysis, each outfall that receives screening is to be categorized into the following four (4) groups:

1. **Clear** – Outfalls categorized as Clear present the following conditions:
 - a. No dry weather flow at the time of the inspection;
 - b. The outfall or upstream node is observed to be wet but not flowing; or
 - c. Dry weather flow is observed at the outfall and through investigation of the flow, it is determined not to be a potential or actual illicit discharge (e.g., the source was determined to originate from groundwater).
2. **Suspect** – Outfalls categorized as Suspect present a visible and measurable dry weather flow at the time of the inspection, and upon investigation, the source of the flow is not able to be identified.
3. **Illicit** – Outfalls categorized as Illicit present visible and measurable dry weather flows at the time of the inspection and, upon investigation, the source of the flow is identified as not being composed entirely of stormwater or a natural flow (e.g., groundwater).
4. **Not Screened** – Outfalls categorized as Not Screened are outfalls and associated drainage areas that could not be accessed at the time of the inspection.

Additional detail on dry weather screening and analysis of dry weather screening results is included in **Sections 4.3 and 4.4** and field standard operating procedures for dry weather screening are included in **Appendix B**.

4.1.3 Reports of Illicit Discharge

Loudoun County has established a stormwater reporting telephone number, and website for stormwater management concerns, including the discovery of illegal dumping to the system or the discovery of any other illicit discharge. In addition, the County's mobile app, Loudoun Express (LEx) Request, was developed as a citizen request system for members of the public to submit requests or report concerns, including illicit discharges. It is the County's goal to investigate reported potential illicit discharges within three (3) calendar days of receipt.

The County maintains the following tools to facilitate public reporting of stormwater concerns:

- The County's stormwater reporting telephone number is: 703-777-0117.
- The County's Stormwater Management Program web page, including how to "Report a Problem", is located at the following address:
<https://www.loudoun.gov/686/Stormwater-Management-Program>.
- The County's web page to download LEx is located at the following address:
<https://www.loudoun.gov/3055/Report-an-Issue>.



4.2 Commercial/Industrial Activity Evaluation

Every year the County analyzes years of historic illicit discharge detection data to identify commercial/industrial activities within the County's 2010 MS4 area that have a documented history of, or have an elevated potential for, discharging stormwater pollution to the County's MS4. Historically, these commercial/industrial activities have included outdoor storage of equipment and materials, chemical usage (i.e., detergents, chlorine, etc.), material fabrication, etc.

Upon identification of the commercial/industrial activities, the County uses several sources to compile an initial comprehensive list of individual commercial/industrial facilities within the County's 2010 MS4 area. Resources to develop the list of individual facilities include:

- Commercial databases that are searchable by Standard Industrial Classification (SIC) code and keywords (e.g., Sales Genie, Google, Yelp);
- Results from previous dry weather screening and source reconnaissance efforts; and
- Loudoun County Health Department list of permitted swimming pools.

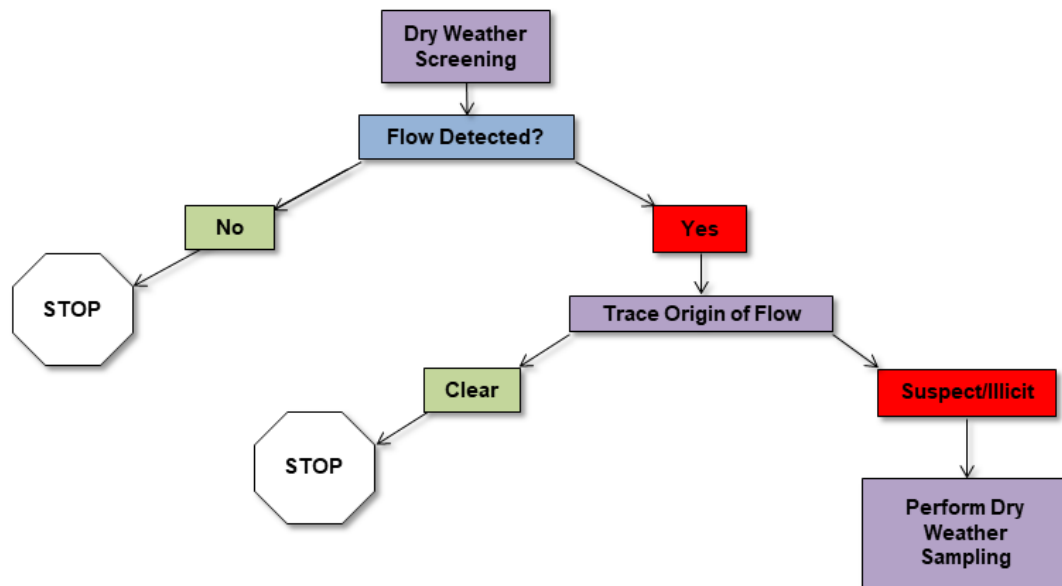
Based on the initial list, the County geolocates the identified facilities and then uses existing delineated drainage areas in GIS to determine the MS4 outfalls that are most susceptible to illicit discharges.

The County uses these resources, or similar resources, to update the list of facilities annually to identify new or changing facilities for future dry weather screening prioritization efforts.

4.3 Dry Weather Screening Protocol

Dry weather screening has been designed to identify illicit discharges to the MS4 at selected, known outfalls. Dry weather screening is a field exercise designed for execution after outfalls are selected during prioritization activities and is designed to assist County personnel in identifying illicit discharges during field activities. Dry weather screening includes visiting outfalls to identify the presence of flow at outfalls during dry weather.

For outfalls where flow is detected, the Screening Team should follow the procedures outlined in **Figure 1** and **Appendix B**. **Figure 1** outlines dry weather investigation procedures, noting a combined screening and source investigation approach that promotes efficiency. If flow is detected at the outfall, the Screening Team immediately attempts to visually trace the flow in upstream nodes to identify the origin of the flow. If the source is categorized as Suspect or Illicit, dry weather flow sampling is performed as close to the origin of the flow as possible.



- Clear: No flow present; Flow present but the source of flow is identified as being composed entirely as stormwater or natural flow
- Suspect: Flow present but the source of flow is not able to be identified
- Illicit: Flow present and the source of flow is identified as not being composed entirely of stormwater or natural flow

Figure 1: Dry Weather Field Screening Process

Dry weather sampling for outfalls with identified dry weather flow involves in-field water quality analyses and possible laboratory analyses, depending on the nature of the flow, as described in **Table 1** and **Table 2**.

If flow is detected at the outfall and the screening team is able to identify the source of the flow after investigation, dry weather flow sampling is performed as close to the source as possible. Dry weather sampling for an identified flow source includes all of the County's in-field water quality analyses and additional grab samples for laboratory analyses based on the suspected source of the discharge as presented in **Table 1**.

For outfalls where flow is not detected, a windshield survey of the drainage area, or portion of the drainage area, may be performed to identify any potential issues. Key factors in the decision to include a windshield survey for a particular drainage-area may include any complaint history recorded for the outfall or drainage area and the type of facility noted within the drainage area. If the windshield survey yields evidence of an illicit discharge, sampling procedures outlined below should be performed.



Table 1: Water Quality Analyses for Dry Weather Flows with an Identified Source

Test Type	Parameter	Suspected Source of Discharge
Grab Samples for In-Field Analysis	Temperature	Non-groundwater discharge
	Conductivity	Sewage, Washwater, Industrial or Commercial Liquid Wastes
	pH	Washwater, Industrial or Commercial Liquid Wastes
	Turbidity	Sewage, Washwater, Industrial or Commercial Liquid Wastes
	Ammonia	Sewage, Washwater, Industrial or Commercial Liquid Wastes
	Total Chlorine	Industrial or Commercial Liquid Wastes
	E. coli	Sewage
	Odor	Sewage, Chemicals, Detergents
	Color	Sewage, Washwater, Industrial or Commercial Liquid Wastes
	Floatables	Sewage, Oil, Suds
	Oily Sheen	Oil Products
	Transparency	Sewage, Washwater
Grab Samples for Laboratory Analysis	Fluoride	Potable Water, Industrial or Commercial Liquid Wastes
	MBAS-Surfactants	Sewage, Washwater, Industrial or Commercial Liquid Wastes
	Potassium	Sewage, Industrial or Commercial Liquid Wastes
	Oil and Grease	Presence of Fats and Oils, Kerosene, Lubricating and Road Oils
	TPH - GRO	Presence of Volatile Petroleum Hydrocarbons (i.e. Gasoline)
	TPH - DRO	Presence of Semi-volatile Petroleum Hydrocarbons (i.e. Diesel)

** TPH-GRO and TPH-DRO will only be tested if visual or olfactory indicators are present (e.g., smell of gasoline)

If flow is detected at the outfall, but the screening team is unable to identify the source of the flow after investigation, dry weather flow sampling is performed at the furthest upstream node with flow. Dry weather sampling for those outfalls without an identified source of flow includes all of the County's in-field water quality analyses as presented in **Table 1** and a standard set of laboratory analyses to include Ammonia, Fluoride, Surfactants, and Potassium.⁸ The screening team can use best professional judgment (BPJ) to obtain grab samples for additional laboratory testing based on nearby industries in the watershed. **Table 2** summarizes the water-quality analysis requirements for outfalls without an identified source of flow.

⁸ Brown, Edward, Deb Caraco, and Robert Pitt. Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments; Water Permits Division, US EPA Office of Water and Wastewater, Washington, D.C., 2004, p.122



Table 2: Water Quality Analyses for Dry Weather Flows without an Identified Source

Watershed Type	Required In-field Tests	Required Grab Samples for Laboratory Tests
Residential	All*	Ammonia, Fluoride, Surfactants, Potassium
Commercial/ Industrial	All*	Ammonia, Fluoride, Surfactants, Potassium, and Other Parameters based on Best Professional Judgement

* All in-field tests = Temperature, Conductivity, pH, Turbidity, Ammonia, Total Chlorine, E. Coli, Odor, Color, Floatables, Oily Sheen, Transparency

The results of in-field tests and laboratory analyses are used to either confirm the presence of an illicit discharge and help identify a potential source or confirm that observed dry weather flow is a natural flow (i.e., groundwater, spring, pond discharge, etc.) and therefore not an illicit discharge.

4.4 Analysis of Dry Weather Screening Results

If initial dry weather screening efforts do not identify the source, or sources, of a dry weather flow, additional activities may be required, including a desktop analysis of dry weather field screening results and/or additional field activities. The first course of action is to compare field and laboratory monitoring results to the established pass criteria that indicate potential illicit discharges contained in **Table 3** and **Table 4**. The pass criteria are based on the benchmarks provided in the *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*⁹ document and have been slightly revised to account for local conditions.

⁹Brown, Edward, Deb Caraco, and Robert Pitt. Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments; Water Permits Division, US EPA Office of Water and Wastewater, Washington, D.C., 2004



Table 3: Phase 1 Water Quality Field Analysis

Parameter	Unit	Method	Pass Criteria
Temperature	°F	Oakton Multi-Parameter PCSTestr™ 35 (or similar tester)	<64
Conductivity	µS/cm	Oakton Multi-Parameter PCSTestr™ 35 (or similar tester)	<500
pH	--	Oakton Multi-Parameter PCSTestr™ 35 (or similar tester)	6-9
Turbidity	NTU	Hach Colorimeter	<50
Ammonia	mg/L	Hach Colorimeter	<1.0
Total Chlorine	mg/L	Hach Colorimeter	<0.1
E. coli	CFU/100mL	Coliscan Easygel	400
Odor	Severity Index	Visual	Severity Index of 3*
Color	Severity Index	Visual	Severity Index of 3*
Floatables	Severity Index	Visual	Severity Index of 3*
Oily Sheen	Severity Index	Visual	Severity Index of 3*
Transparency	Severity Index	Visual	Severity Index of 3*

* Field observations will be rated by the relative severity using a scale from 1 to 3; 1 indicating no visual evidence of potential illicit discharge, and 3 indicating obvious signs of potential illicit discharge activity.

Table 4: Phase 2 Laboratory Analysis

Parameter	Unit	Method	Pass Criteria	Holding Times per Method
Ammonia	mg/L	SM 4500NH3D (19th Edition)	<1.00	24 hours/up to 28 days
Fluoride	mg/L	SM 4500F-C (19th Edition)	<0.25	28 days
MBAS-Surfactants	mg/L	SM 5540C (18th Edition)	<0.25	48 hours but regulatory holding time is not specified by SM 5540C (18th Edition)
Potassium	mg/L	EPA 200.7	<1.00	--

If all parameters are within the pass criteria, the flow is categorized as Clear and no further investigation is required. If any of the parameters are not within the pass criteria, an attempt to characterize the flow will be completed utilizing sample results and/or an additional desktop analysis utilizing data such as parcel information, existing building plans, and sanitary sewer survey from the area surrounding the subject outfall. Determining an illicit discharge source may also require the cooperation of local businesses, property owners, and other local agencies or entities.

If the source of the flow is still not able to be identified within six (6) months of the initial investigation, the County will document that the source remains unidentified. If the observed discharge is intermittent, the County will document that attempts to observe the discharge flowing were unsuccessful in accordance with 9VAC25-890-40, Part I, E(3)(c)(4).



4.5 Elimination and Enforcement

Outfalls identified as having a suspect or illicit discharge will immediately go into the elimination and enforcement phase as outlined below and in **Appendix A**.

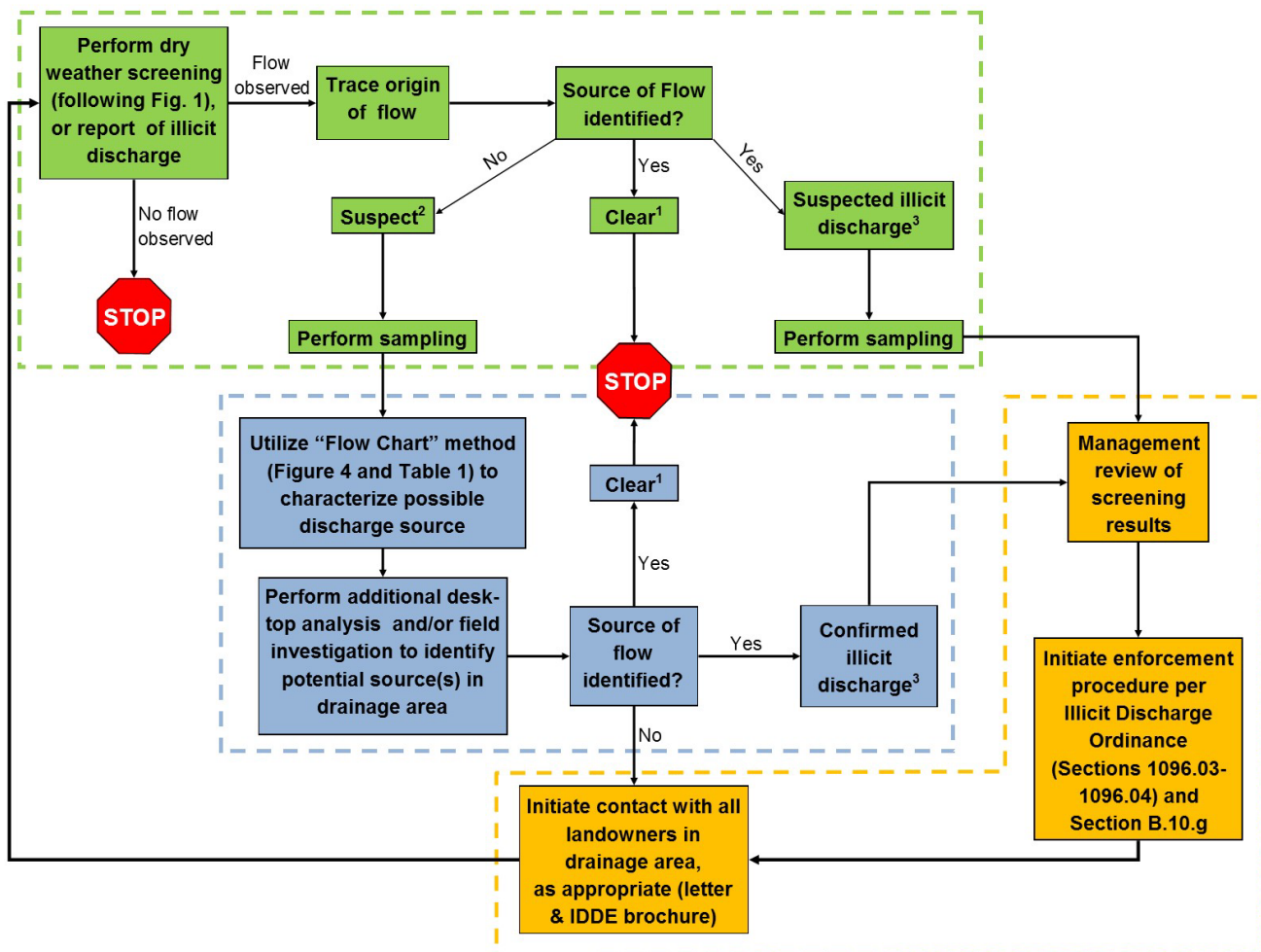
It should be noted that “priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety¹⁰ as required.

Loudoun County has enacted specific ordinances (as provided in **Section 2**) governing discharges to the MS4 and making illicit discharges to the system illegal. The ordinances also provide the County with a framework for legal action against violators. The County has established procedures (**Appendix A**) for initiating contact with property owners responsible for illicit discharges to the MS4 and proceeding with legal action against repeat violators.

Figure 2 outlines the process of illicit discharge source identification and elimination and demonstrates how dry weather screening results dictate the appropriate course of action. The County’s enforcement policy is incorporated in these procedures.

¹⁰ 9VAC-890-40, Part I, E (3)(c)(3)

Illicit Discharge Source Identification and Elimination Protocol



¹Clear: No flow observed at outfall, outfall wet but not flowing, or flow determined not to be an illicit discharge.

²Suspect: Measurable dry weather flow at outfall; source of flow unable to be identified.

³Illicit: Measurable dry weather flow at outfall; source of flow not comprised entirely of stormwater or natural flow.

Figure 2: Illicit Discharge Source Identification and Elimination Protocol

4.6 Reporting of Illicit Discharges

The County's Department of General Services - Stormwater Management Division reports its illicit discharge detection findings and investigations to the Virginia DEQ in its MS4 Annual Report in accordance with 9VAC25-890-40, Part I, E(3)(e).



Appendix A

Loudoun County Illicit Discharge Enforcement Procedures

**Loudoun County Stormwater Management
Engineering Services**

ILLICIT DISCHARGE ENFORCEMENT PROCEDURES

Version 2, May 24, 2019

Prepared for:



Loudoun County
Department of General Services
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Updated by:



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1.0 Background

In order to comply with the Virginia Pollutant Discharge Elimination System (VPDES) permit requirements, the Loudoun County Board of Supervisors enacted Chapter 1096, Stormwater Management, of the Codified Ordinances of Loudoun County. In Section 1096.01(c)(2) "discharge" is defined as:

... to dispose, deposit, spill, pour, inject, dump, leak
or place by any means, or that which is disposed,
deposited, spilled, poured, injected, dumped, leaked or
placed by any means.

And "illicit discharge" is defined as:

... any discharge to the stormwater management
system that is not composed entirely of stormwater, except
discharges pursuant to either a VPDES permit or
discharges resulting from fire fighting activities.

Section 1096.03, Discharges to the Stormwater Management System, makes most illicit discharges unlawful, spells out the exceptions, and provides Loudoun County with authority to inspect stormwater management facilities and sample the water in order to detect such discharges. Section 1096.04, Violations, defines notification requirements and penalties for unlawful illicit discharges.

2.0 Procedures

The Department of General Services discovers illicit discharges either through complaints from citizens, employee reporting, or through its Illicit Discharge Detection and Elimination (IDDE) program. The purpose of this policy is to establish a consistent protocol to use in responding to and eliminating illicit discharges. An effective IDDE program is based on a recognition that a majority of the dischargers do not realize that the discharge is illegal and do not know the impacts to their local streams.

The minority of dischargers that do realize it is illegal are usually seeking convenience or the avoidance of costs associated with proper disposal. Education about the law and the effects of the discharge is the first step in enforcement. Subsequent noncompliance is met with increasing enforcement actions from initial notices of violation to ultimate issuance of civil citations and injunctive relief to ensure the discharge is eliminated and remediated.



Step 1 - Office Set Up

- Review information on either the complaint or inspection record to prepare for a site visit.
- Consult the GIS data and the stormwater database to determine the outfall structure number (FCTID).
- Print paper maps showing the drainage area (or use electronic) to the reported outfall, and flow paths to and from suspected outfalls in the area of the discharge.
- Determine if the site has a VPDES industrial discharge permit.
- Gather materials such as a camera, forms, and maps.
- Determine property ownership.
- Determine the location of stormwater easements.

Step 2 - Site Visit

- Approach all investigations as though the ultimate result will be a legal action. Documentation is vital and may not be available at a later visit.
- Arrive at the site and seek owners or site contacts.
- Obtain owner and site contact information: name, address, email address, and phone number.
- Locate the outfall where the discharge was reported to have occurred.
- Verify that the discharge is still occurring.
- Look for evidence of past discharges around the outfall, i.e., staining, odor, and residue.
- Perform reconnaissance to determine the possible source of the discharge. Pull manhole covers if necessary.
- Take photographs of the suspected discharge.
- Instruct the owner/operator of the source of the discharge, if apparent, about the law and suggest possible solutions to prevent future discharges.
- Issue written notice of violation (per 1096.04) via certified mail within 7 working days of site visit. Letter needs to state items outlined in 1096.04 (a).

Step 3 - 2nd Site Visit (to be conducted within no more than 30 days of receipt of certified letter sent in Step 2)

- Observe that the discharge continues to enter the stormwater system.
- Specify to the owner / operator the measures needed to come into full compliance with the ordinance.
- Emphasize the criminal and civil enforcement penalties under 1096.04 (b)
- Issue 2nd written notice of violation (per 1096.04) via certified mail within 7 working days of site visit. Letter needs to state items outlined in 1096.04 (a).



Step 4 - Enforcement

- At this time assess the benefits of continuing with written notification and follow on site visits or sending this matter to the County Attorney's Office (CAO). If written notification is more appropriate, continue as outlined above and be sure to document all owner / operator contact. If it is appropriate at this time to turn the matter over to the CAO, see Step 5.

Step 5 - County Attorney

- Schedule a meeting to discuss this matter with the County Attorney.
- Provide the County Attorney copies of all files and evidence collected to date.
- Follow the direction / recommendations of the County Attorney.
- Provide support to the County Attorney in any way that is required.



Appendix B

Loudoun County Dry Weather Field Screening Procedures

**Loudoun County Stormwater Management
Engineering Services**

DRY WEATHER FIELD SCREENING PROCEDURES

Version 2, April 1, 2019

Prepared for:



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Definitions

For the purposes of this SOP, the following definitions apply:

Covered Activity	Any task, action, or event for which there are guidelines in this SOP.
Dry Weather	A period of at least 48 hours since the most recent runoff producing event.
Runoff Producing Event	For purposes of this protocol, a “runoff producing event” is defined as an event resulting from precipitation greater than 0.1 inches in magnitude and that occurs at least 48 hours from the previous measurable (greater than 0.1 inch) precipitation event.
Employee	Any person employed by the County, either directly or under contract, engaged in a covered activity.
Hazard	A situation posing potential harm to persons, property, or
Illicit Discharge	Any discharge to the municipal separate storm sewer (MS4) that is not composed entirely of stormwater, except discharges pursuant to a VPDES permit and discharges resulting from firefighting activities, with some other exceptions.
Supervisor	Any person employed by the County, or County contractor, and whose duties include overseeing others engaged in a covered activity.
Team Chief	Any County employee or County contractor assigned to oversee an inspection operation in the field.
Team Member	Any County employee or County contractor assigned to undertake an inspection task in the field.



1.0 Scope and Applicability

This standard operating procedure (SOP) outlines responsibilities and procedures to inspect stormwater outfalls and other structures for illicit discharges. Any flow in a MS4 during dry weather indicates that there may be an illicit discharge to the system.

The County's MS4 system is regulated by a permit granted by the Virginia Department of Environmental Quality (DEQ) under guidelines established in Phase II of the Virginia Pollution Discharge Elimination System (VPDES). Compliance with the procedures established in this SOP is required to meet the conditions of that permit. Frequency of inspection is outlined in the County's MS4 Program Plan.

This SOP is applicable to Loudoun County employees and its contractors assigned to inspect stormwater infrastructure for evidence of illicit discharges to the County's MS4.

2.0 Roles and Responsibilities

2.a Supervisors

Supervisors are responsible to:

1. Disseminate and implement this SOP;
2. Provide the materials and equipment necessary to carry out the requirements of this SOP;
3. Periodically review and update this SOP to account for changes in activities or regulatory requirements (County staff, or contractors at County direction);
4. Ensure that safety procedures are followed;
5. Provide appropriate training to employees undertaking the inspection tasks; and
6. Take appropriate action when inspection reports indicate evidence of illicit discharge (County staff or contractors at County direction).

2.b Team Chiefs

Inspection team chiefs are responsible to:

1. Implement this SOP;
2. Ensure safety precautions and operation notes are observed by all team members;
3. Report to Supervisors and other appropriate agencies if evidence of an illicit discharge is discovered;
4. Manage data following an inspection operation;
5. Report data to the DGS so that it can be entered into the County's GIS database system;
6. Conduct pre-task briefings to ensure readiness of equipment and team members to safely undertake the assigned inspection operations;
7. Contact and coordinate a sampling schedule with the water testing laboratory; and
8. Report to the supervisors any emergencies, hazardous situations, and suspected illicit discharges.

2.c Inspection Team Members

Inspection team members are responsible to:

1. Follow the guidelines contained in this SOP;
2. Follow the direction of the Team Chief;



3. Make inspections using the procedures outlined in this SOP;
4. Document findings made during inspections using the digital inspection form template provided in Section 11.a;
5. Conduct water quality testing of dry weather discharges;
6. Determine the likely source of any suspected illicit discharge; and
7. Report to the Team Chief any emergencies, hazardous situations, and suspected illicit discharges.

3.0 Contents

The remainder of this SOP has the following contents:

WARNING! This is an example of the appearance of safety precautions in this SOP as described below.

Safety (Section 4). Safety precautions are provided to identify possible hazards associated with the procedures in this SOP. The potential hazards are characterized, and avoidance measures are provided to ensure the safety of all inspection team employees. Safety precautions appear in the format shown above and immediately precede the activity to which they apply.

NOTE: This is an example of the appearance of an operational note as described below.

Operational Notes (Section 5). Operational notes present important information which, if not heeded, may cause a procedure to fail. Operational notes appear in the format shown above and immediately precede the activity to which they apply.

Required Equipment and Materials (Section 6). The equipment and materials needed to complete the tasks are summarized. Only the minimum required equipment is shown.

Inspection Procedures (Section 7). The procedures provided in this SOP guide the inspection team to successfully complete inspection tasks. Pre-site visit, site visit, and post-site visit tasks are given.

Field Sample Collection, Handling, and Testing (Section 8). Procedures for collecting and handling water samples are discussed. The procedures are those required by equipment manual instructions, laboratory protocols, and evidence chain of custody requirements.

Contacting Regulatory and Emergency Agencies (Section 9). Information on how to contact appropriate regulatory and emergency agencies is provided. Information is also given on indications to call and what to report.

Sample Record Keeping (Section 10). Information on record keeping requirements and importance.

Appendices (Section 11). Appendices include equipment operating procedures, sample forms, and source documents. Full testing procedures are provided for individual water quality parameters.



References (Section 12). References includes information regarding guidance documents referenced during the creation of these procedures.

4.0 Safety

Safety procedures must be followed by all inspection staff. Specific hazards which may be encountered during the inspection process include:

- Exposure to hazardous waste and materials;
- Removal of manhole covers;
- Exposure to traffic operations; and
- Exposure to reagents used in water quality testing.

In general, team members should never work alone. Inspections should be performed in teams of at least two. However, whenever a potential hazard exists, exposure to the hazard should be limited to the fewest number for the shortest time needed to complete the task.

Occupational Safety and Health Administration (OSHA) work safety standards and other applicable guidelines should be followed to protect workers from hazardous materials.

Each inspection team member should wear a County issued ID and approved safety vest at all times.

WARNING! No person should enter into a confined space, such as a manhole, in order to perform the procedures in this SOP.

4.a Hazardous Waste and Materials

Exposure to contaminants should be minimized. The inspection process does not require direct contact with hazardous materials or wastes. However, gases can collect in confined spaces which are combustible or harmful if inhaled. Team members are most likely to encounter such gases in covered manholes.

4.b Removing Manhole Covers

The following safety measures should be followed to avoid injury while opening manhole covers:

1. Bend knees, not waist. Do not lift the manhole cover with your back muscles. Use leg muscles and avoid twisting.
2. Wear steel-toed boots or safety shoes to protect feet.
3. Do not move manhole covers with hands or fingers.
4. Do not enter manholes under any circumstances. Confined space entry must only be done by properly trained and equipped persons.
5. Do not remove manholes unless they are round.



4.c Traffic Safety

When working in or adjacent to a traffic lane, mark the lane with traffic cones and/or signs to give adequate space for drivers to react and move around the work area. Wear safety vests or reflective clothing so that you will be visible to traffic.

4.d Water Quality Testing

When testing for water quality parameters using chemical reagents, follow the safety rules below:

1. Follow test procedures carefully and observe all precautionary measures. Read the entire procedure carefully before beginning.
2. Review Material Safety Data Sheets (MSDS) for each reagent chemical used during testing.
3. Do not smoke, eat, or drink in an area where toxic or irritating chemicals are used.
4. Use reagents and equipment only as directed in the test procedure.
5. Do not use damaged bottles or broken equipment.
6. Minimize all chemical exposures. Do not breathe vapors or let chemicals touch your skin. Wear clothing that covers skin. Wear nitrile gloves.
7. Carry at least one portable eyewash unit during all site visits.

5.0 Operational Notes

5.a Restrictions

If a structure to be inspected is located on private property, field crews need permission for access. This can be done by sending notice to property owners in advance, visiting properties directly, or leaving notes on doors explaining when the inspection will take place. Follow Loudoun County procedures for contacting property owners.

5.b Accessibility

Some structures may be located in inaccessible areas such as those with thick vegetation, steep slopes or are submerged in water. Team members should not risk injury in order to gain access to such structures. Procedures should be worked out with the Team Chief and Supervisors to provide safe access for the inspection team.



6.0 Required Equipment and Materials

Field crews are required to bring the following equipment to complete the tasks specified in the procedures:

Table 1: Equipment and Materials Required for Field Tasks

Function	Item	Purpose
Access Structures	Manhole hook	Removes manhole cover
	Crow bar	Removes manhole cover
	Sledge hammer	Removes manhole cover
	High powered lamps/flashlights	View structure contents
	GPS enabled device with digital base map	Find structures
Collect Samples	Medium-sized plastic waste bag	To dispose of nitrile gloves, paper towels, empty reagent “powder pillows,” and other waste material generated during sampling
	1 – 1L, 3 – 250 mL laboratory sample bottles and labels (one set for each structure to be inspected)	Stores sample to be sent to lab
	Small 2 oz. plastic travel bottles (one for each structure to be inspected)	Contains sample to be analyzed for E. coli using Coliscan Easygel
	Cooler and ice (or ice packs)	Preserves samples to be sent to lab
Test Water Quality	Hach DR/890 Colorimeter (or similar product), sample cells (3 per site) and reagent kits (ammonia, and total chlorine).	Tests for various water quality parameters
	Scissors or nail clippers	Opens reagent “powder pillow” packets
	Oakton Multi-Parameter PCSTestr™ 35 (or similar product)	Tests for conductivity
	Oakton Multi-Parameter PCSTestr™ 35 (or similar product)	Tests for temperature
	Oakton Multi-Parameter PCSTestr™ 35 (or similar product)	Tests for pH
	Filtered deionized water (or distilled water)	To calibrate colorimeter and clean sample equipment and containers
	Laboratory detergent (e.g., Alconox or Liquinox)	To clean Dipper or sampling container
	One 5-gallon bucket with lid	To clean Dipper or sampling container
	1 L glass or plastic container	To containerize reagent waste for proper disposal. See Section 8.a.
	Batteries	Replacement for water quality testing instruments
Record Data	Dip stick	Measure depth of flow
	GPS enabled tablet device with digital inspection forms	To record results of in-field analyses and any additional data (digital form provided)

**Table 2: Equipment and Materials Required for Safety**

Function	Item	Purpose
Safety	Digital camera, batteries, and extra memory	For pictures at all structures
	Gas monitor	To determine the presence of hazardous gas at a manhole or structure
	Portable eyewash kit	In case of chemical emergency
	Nitrile gloves	For collecting and testing samples
	Full coverage clothing (pants, long sleeves)	Should be worn at all times
	High visibility safety vest	Increase visibility to local traffic and residents
	Loudoun County contractor identification badge	Verify identity to property owners other greater public

7.0 Inspection Procedures

Use the following procedures to inspect Loudoun County outfalls for illicit discharges. These procedures should be followed by team members unless otherwise noted.

7.a Before Site Visit

The following are to be done in preparation for field inspections:

1. Determine if it is a DRY WEATHER day by:
 - a. Visiting the following National Weather Service website for Loudoun County:
<http://www.weather.gov/climate/index.php?wfo=lsx%20>
(alternately, <http://w1.weather.gov/data/obhistory/KIAD.html>)
 - b. Select Daily Climate Report, Dulles Airport, Archived Data, & select the dates that correspond to the past 48 hours. A window opens. Scroll down to “Precipitation” and locate the value for “yesterday.”
 - c. Dulles Airport within the past 48 hours.
 - d. If the total recorded above is not more than 0.1 inch, then it is a “dry weather” day and inspection may proceed that day.
 - e. Record value on the digital inspection form.

Note: Steps 2 to 9 of this section can be performed up to a week in advance of a site visit to save time on the day of the site visit.

2. Obtain the list of outfalls to be inspected from Supervisor or Team Chief.



3. Prepare mapping packages for all outfalls that contain the following:
 - a. Route directions.
 - b. Digital base map consisting of aerial photography with GIS layers & delineated outfall drainage areas.
 - c. Digital field forms with Outfall ID.
4. Identify outfalls with access issues by utilizing Loudoun County's GIS database.
5. Contact property owners for access permission to secured parcels.
6. Notify laboratory of expected samples.
7. Prepare sample cells and plastic 'dipper' for sampling as follows:
 - a. Rinse well with tap water.
 - b. Clean the sample cells and dipper with laboratory detergent using a soft-bristled brush. Sample cells that are scratched or etched should be disposed of and replaced with new sample cells.
 - c. Rinse well with deionized water or distilled water a minimum of four times.
 - d. Air dry.
8. Verify the accuracy of the Oakton Multi-Parameter PCSTestr™ 35 (or similar instrument) before use and periodically thereafter as follows:
 - a. Use the instrument to measure a standard solution with a known pH.
 - b. If necessary, follow calibration procedures outlined in the Oakton Multi-Parameter PCSTestr™ 35 (or similar instrument) user manual.
9. Verify the accuracy of the Oakton Multi-Parameter PCSTestr™ 35 (or similar instrument) before use and periodically thereafter as follows:
 - a. If necessary, follow calibration procedures outlined in the Oakton Multi-Parameter PCSTestr™ 35 (or similar instrument) user manual.
10. Conduct a pre-task briefing to ensure readiness of team and equipment to perform field inspections:
 - a. Gather equipment and check that it is working properly.
 - b. Check batteries.
 - c. Check expiration dates of reagent kits.
 - d. Review potential hazards as outlined in the project Health and Safety Plan.

7.b During Site Visit

The following are to be done for each structure inspected:

1. Visit the structure with at least one other team member.
2. Survey the area around the outfall to determine safety and accessibility.
3. If working in or near a traffic lane, use traffic cones to redirect road and pedestrian traffic away from work area.
4. Photograph the outfall.



5. Fill out an inspection form for each outfall.
 - a. Mark the ID number of the outfall on the form.
 - b. Note the outfall's material and condition.
 - c. Note the condition of the receiving stream and surrounding area.
 - d. Note the condition of surrounding vegetation.
 - e. Note whether flow is present and measure its depth with dip stick. If no flow is present, move on to the next outfall).
 - f. Approximate the velocity of the flow using a stick (or other floating object) and a known distance. Using a watch, record the amount of time it takes the object to travel the set distance. A minimum of three (3) velocity measurements should be recorded and averaged to determine approximate average velocity of the discharge. Note: to approximate volumetric flow rate, multiply the cross-sectional area of the flow by the velocity.
 - g. Note the distance, time and width.
 - h. Note whether there is an odor to the flow.
 - i. Note whether there is a color to the flow.
 - j. Note the presence of any floatables (i.e., algae, scum, and debris).
6. Remove the manhole cover as follows:
 - a. Position the manhole hook through the manhole hook hole.
 - b. Lift straight up with the legs (not the back).
 - c. Pull the lid off with the hook.
 - d. If you are unable to remove manhole other equipment may be necessary.

WARNING! Manhole covers are heavy. Improper handling can cause injury. See Section 4.b.

WARNING! Care must be taken to avoid creating a spark which could ignite explosive gases that might have accumulated under the lid.



7.c Determining the Source of Flow at an Outfall

If flow is identified at the outfall, Inspection Team Members must try to determine the source by inspecting upstream structures. Attempt to locate the source as follows:

1. Locate all structures immediately upstream on the digital base map.
2. Look for flow at structures upstream of outfall. If found continue to next structure upstream. Repeat if necessary.

Note: Follow all safety procedures outlined in Section 4.

3. For any structure where flow is found, continue to the next upstream structure until no flow is found, there are no upstream structures, or the source is identified.

Note: Do not attempt to contact occupants of facilities when performing the following tasks. Storm structures may be located inside private property and access may require coordination with occupants or owners. Loudoun County personnel will initiate contact with occupants or property owners following the County's Illicit Discharge Enforcement Policy, if necessary.

4. If a source of the flow is identified as a natural flow (i.e., groundwater, spring, pond discharge, etc.) cease the investigation.
5. If the source of the flow is identified as 'Illicit or "Suspect" flow, initiate sampling procedures outlined below.
6. If the source of the flow is not able to be identified, note any facilities in the drainage area that discharge to the structure.
7. Record these observations on the digital inspection form and through photos.



7.d Sampling Illicit or Suspect Flows

1. Collect a discharge sample with the long-handled sampling 'dipper' container.
2. Collect another 100 mL of sample for in-field analysis.
3. Follow procedures for sample collection, handling, and testing described below and in Section 8.

WARNING! Exposure to reagents used in the following procedures must be limited. See handling instructions in DR/890 operating manual and project Health and Safety Plan. Dissolved reagents should be disposed of properly, as outlined in the MSDS for each chemical. MSDSs for reagents used in the following procedures are referenced in Section 11.e.

4. Test the 100 mL collected sample for temperature, pH, and conductivity with the Oakton Multi-Parameter PCSTestr™ 35 (or similar instrument). Record the results on the inspection form.
5. Test the 100 mL collected sample for total chlorine with the DR/890 Colorimeter (or similar instrument).
 - a. Record the results on the digital inspection form.
 - b. Test the 100 mL collected sample for ammonia with the DR/890 Colorimeter (or similar instrument). Record the results on the inspection form. Note that discharges with ammonia nitrogen concentrations greater than 1.00 mg/L AND pH values greater than 8.5 may indicate toxic aquatic conditions.
6. Test the 100 mL collected sample for turbidity with the DR/890 Colorimeter (or similar instrument). Record the results on the inspection form.
7. Dissolved reagents and sample cell contents should be containerized and disposed of properly as described in the MSDSs for each chemical, referenced in Section 11.e.
8. Rinse the sample cells with deionized water after each test.

Note: Do not reuse the 'dipper' sampling container or sample cells until they have been cleaned as described in Section 7.a, Item 7. Laboratory sample bottles should never be reused.



9. If any parameters exceed the established benchmark, collect approximately 2 L of discharge and fill the one (1) – 1 L and three (3) – 250 mL plastic bottles provided by the laboratory. Label the laboratory sample bottles with Node ID (FCTID) number, date, and time. Place the sample bottles in a cooler with ice or ice packs. This sample may be sent to the laboratory for further analysis.

WARNING! Laboratory provided sample bottles may contain chemical preservatives that can be hazardous. Exercise caution when filling laboratory sample bottles to minimize the potential for interaction with these chemicals. Material Safety Data Sheets (MSMDs) for these chemical preservatives are referenced in Section 11.e.

10. Collect approximately 50 mL of discharge sample using a 2 oz. plastic travel bottle for E. coli analysis using the Coliscan® Easygel® bacteria testing kits.
 - a. Sample bottles should be labeled with Node ID (FCTID) number and placed on ice immediately following collection.

Note: Samples will be analyzed for E. coli using the Coliscan® Easygel® culture medium and an incubator back at the office. Detailed instructions on this process are referenced in Section 11.g.

Note: Plastic travel bottles used for E. coli sampling and analysis should not be reused.

11. Replace the manhole cover using the manhole hook. Make sure the cover is settled into the flange securely.

WARNING! Manhole covers are heavy. Improper handling can cause injury. See Section 4.b.

12. Note whether tests exceed any of the pass criteria limits and mark “Clear,” “Suspect,” or “Illicit” on the digital inspection form.
13. Clean inspection area and make sure that all equipment is removed from the area prior to leaving.



7.e Analytical Sample Preparation

1. Pack laboratory sample bottles from “Illicit” or “Suspect” outfalls following the procedures below:
 - a. Remove sample bottles from refrigerator or cooler just prior to shipping. Wrap sample in bubble wrap to prevent freezing.
 - b. Place sample in cooler lined with two large plastic trash bags
 - c. Pack cooler with sealed ice bags or the equivalent number of gel ice packs sufficient to maintain the sample temperature between 1° and 10°C during shipment. Use the amount of coolant appropriate for the season, geographic location, and cooler-type used (follow laboratory recommendations). NEVER USE DRY ICE. Knot and seal the two large plastic trash bags.
 - d. Separate samples by Outfall ID and place into sealed Ziploc bags.
 - e. Sign and date laboratory chain of custody form, place in a Ziploc bag in cooler and tape to inside of the lid.
 - f. Pack cooler tight to minimize movement. Use packing materials if necessary.
 - g. Seal and secure cooler by wrapping tape all the way around cooler. If applicable, place cooler into box and seal and secure box by wrapping tape all the way around the box. In this instance both the cooler and box are to be sealed and secured.
2. Send laboratory bottles containing samples collected at “Suspect” or “Illicit” structures to the laboratory.
 - a. Complete air bill and attach to cooler, retain shipper’s copy
 - b. Samples should be received by the laboratory within 24 hours of sampling, so samples should be shipped via overnight delivery so that they arrive the next morning.
3. Prepare E.coli samples from each outfall investigated and begin preparing Coliscan® Easygel® growth media. Follow detailed instructions included referenced in Section 11.g.
 - a. After the incubation period, inspect petri dishes and count all apparent colonies following the Coliscan® Easygel® instructions.
 - b. Record the number of total colonies and E.coli colonies counted for each outfall sample. Colony counts should be converted to number of colony-forming units (CFUs) per 100 mL of sample. Samples with E. coli concentrations over 400 CFU/100mL may indicate a potential sewage discharge or other significant contamination and should be investigated proximately. At a minimum, outfalls with illicit discharges containing E. coli concentrations greater than 400 CFU/100 mL should be resampled to confirm whether the discharge is intermittent or continuous. Additional investigation should proceed as outlined in Item 9 below.
 - c. Plastic sample bottles, petri dishes and Coliscan® Easygel® bottles should be disposed of properly, following directions outlined in the instructions referenced in Section 11.g.
4. Properly dispose of all municipal waste.
5. Transfer data collected in the field as follows:
 - a. Upload completed inspection forms from the GPS enabled tablet device to a designated computer.
6. Download photographs to a designated computer. Ensure that images are named appropriately to reflect identifiers used on the digital inspection forms.
7. If an illicit discharge was found, contact the DGS to notify them of the discharge for further investigation. This should be done no longer than 24 hours after finding the IDDE.



8. If no facility was identified as the source of the illicit discharge, follow-up inspection is required to determine if the discharge is intermittent, and to attempt to identify the source if the discharge is flowing.
 - a. Additional investigation to identify the source of a confirmed illicit discharge may require follow-up testing, evaluation of sampling results (in-field and laboratory) using the flow chart (Figure 4), further desktop analysis of the outfall area and surrounding infrastructure, or coordination with facilities and residences in the area of the 'Suspect' outfall. Follow instructions outlined in Section 7.c when attempting to visually identify discharge sources.
 - b. If the discharge is intermittent, a minimum of three separate investigations within six (6) months of the initial discharge detection during dry weather conditions must be made in an attempt to observe the discharge when it is flowing.
 - c. "If an illicit discharge is found, but within six (6) months of the beginning of the investigation, neither the source nor the same nonstormwater discharge has been identified, then the operator shall document such in accordance with the 9VAC25-890-40, Section II, B (3) (f)."¹
9. Further testing may be needed to determine exactly where and how the illicit discharges are entering the system such as with dye testing, smoke testing, or other methods. Refer to EPA's "Illicit Discharge Detection and Elimination" for further information on determining illicit discharge sources (USEPA, 2003).

8.0 Field Sample Collection, Handling, and Testing

8.a Using Reagent Powder Pillows

Dry powdered reagents packaged in individual "powder pillows" are used to test for total chlorine and ammonia with the DR/890 Colorimeter. Use the "powder pillows" as follows:

WARNING! Exposure to reagents used in the following procedures must be limited. See handling instructions in DR/890 operating manual and project Health and Safety Plan. Dissolved reagents should be disposed of properly, as outlined in the Material Safety Data Sheets (MSDS) for each chemical. MSDS for reagents used in the following procedures are referenced in Section 11.e.

1. Tap the pillow on a hard surface to collect the powdered reagent in the bottom.
2. Cut across the top of the pillow, from B to A, holding the pillow away from your face.
3. Using two hands, push both sides toward each other to form a spout.
4. Pour the pillow contents into the sample cell and continue the procedure according to the instructions. Tap the pillow to remove any powder from the corners.

¹ 9VAC25-890-40, Section II, 3 (c) (1) (e)



8.b Reagent Blank Correction

A reagent blank correction subtracts the color absorbed when running a test with deionized water from the sample result to correct for any background color due to reagents. To enter a programmed correction for the reagent blank:

1. Run the test using deionized water with each new lot of reagents.
2. Press READ to obtain the blank value.
3. Press SETUP, scroll to BLANK and Press ENTER. The display will show BLANK.
4. Enter the blank value just read from the instrument.
5. Press ENTER to accept the value as the blank to be subtracted from each reading.
6. The display will show 0.00 mg/L (resolution and units vary) and the sample cell icon will be displayed, indicating that the reagent blank feature is enabled and the blank value will be subtracted from each reading. Repeat the reagent blank adjust for each new lot of reagents.

Note: After entering a reagent blank adjust, the display may flash "limit" when zeroing if the sample used for zeroing has a lower absorbance value than the reagent blank.

To disable the reagent blank adjust feature, press SETUP, scroll to BLANK and press ENTER twice. The concentration readings will be displayed without subtracting the blank. The sample cell icon will no longer appear in the display. Do not use the reagent blank adjust feature if the procedure uses a reagent blank for zeroing.

9.0 Sample Record Keeping

It is important that all samples be labeled properly; using identifiers consistent with those used on the digital inspection forms and the Node ID (FCTID) number. The chain-of-custody to be included with the laboratory samples should be maintained in a manner consistent with the individual sample labels. To ensure that samples arrive in a timely manner, the EPA certified laboratory should be located as close to the sample sites as possible. Illicit discharges are against the law. It is important to follow proper procedures in order to protect the value of the data collected as admissible and credible evidence should legal enforcement be deemed appropriate.



10.0 Contacting Regulatory and Emergency Agencies

Immediately notify supervisors using the most effective available mode of communication (radio, cell phone, etc.) if any of the following situations arise:

1. Any person is seriously injured or is in immediate danger of injury or death for any reason.
2. The team suspects or discovers any situation requiring the immediate attention of emergency response teams.

Supervisors will call 911 and coordinate an emergency response. If, in the judgment of those on scene, the additional minute needed to contact supervisors first poses an unacceptable risk, call 911 directly.

Callers to 911 Emergency Response should be prepared to provide the following information and remain on scene until emergency responders arrive:

- a. The reason for calling (injury, combustible gas, etc.);
- b. Name of caller;
- c. Location of caller including address and nearest cross street;
- d. Obvious details of the emergency situation; and
- e. Any other information requested by the 911 dispatcher.

In the event hazardous materials are found or are suspected, leave the area immediately.

- a. All illicit discharges that are field observed should be reported following the procedures outlined in the Virginia Register of Regulations Volume 30, Issue 2, Title 9. Environment, 9VAC25-890-40.

11.0 Reference Documents

The following documents are made part of this SOP by reference:

- 11.a: Digital Inspection Report Form Template
- 11.b: Oakton Multi-Parameter PCS Testr 35TM
- 11.c: Hach DR/890 Colorimeter Procedure
- 11.d: Gas Detector Operator's Manual and Quick Reference Card
- 11.e: Material Safety Data Sheets (MSDSs)
- 11.f: Coliscan© Easygel© Instructions



11.a Digital Inspection Report Form Template

Illicit Discharge Dry Weather Screening Report
Loudoun County, Virginia

General Information							
1. Node ID	CP2209		8. Node Type:	Pipe_Out	Investigation Outcome: Suspect		
2. Inspectors	SO / KK		9. Node Material:	RCP			
3. Inspection Date:	06/18/2018		10. Node Size:	24"			
4. Last Rainfall (Date/Amount):	06/11/2018	0.74"	11. Node Condition:	Good			
5. Node Location (Lat/Long):	38.99067	-77.42955	12. Vegetation:	Normal			
6. Receiving Channel Type:	Stone		13. Deposits/Stains?	No			
7. Receiving Channel Condition:	Fair		14. Downstream ID?	N/A			
			15. Upstream ID:	CP2210			
16. Notes:							
Investigation							
17. Is there Flow?	Yes		24. Flow Rate (cfs):	<0.01			
18. Source of Flow:	Spring Hill Suites Hotel		25. Water Color:	1 (None)			
19. Potential Illicit Discharge?	Yes		26. Transparency:	1 (Clear)			
20. Samples Collected?	Yes		27. Oily Sheen:	1 (None)			
21. Follow-up Required?	Yes		28. Odor:	1 (None)			
22. Recommended Follow-up:	Investigation		29. Floating Matter:	1 (None)			
23. Suspect Flow?	Yes		30. Flow Source Class:	Unknown source			
31. Notes:	Flow originates from PVC pipe in the direction of the Springhill Suites at node CP2210.						
Water Quality Parameters		Sample Results		Method		Pass Criteria	
32. Temperature:	75.9	°F	OaktonPCSTstr 35	<64 °F	Fail		
33. Conductivity:	80.2	µS/cm	OaktonPCSTstr 35	<500 µS/cm	Pass		
34. pH:	7.63	S.U.	OaktonPCSTstr 35	6-9 S.U.	Pass		
35. Turbidity:	10	NTU	Hach Colorimeter	<50 NTU	Pass		
36. Ammonia:	0.73 limit	mg/L	Hach Colorimeter	<1.00 mg/L	Fail		
37. Total Chlorine:	0.09	mg/L	Hach Colorimeter	<0.1 mg/L	Pass		
38. Ammonia:	N/A	mg/L	Laboratory	<1.00 mg/L	N/A		
39. Fluoride:	N/A	mg/L	Laboratory	<0.25 mg/L	N/A		
40. Surfactants:	N/A	mg/L	Laboratory	<0.25 mg/L	N/A		
41. Potassium:	N/A	mg/L	Laboratory	<1.00 mg/L	N/A		
42. E. coli:	560	CFU/100mL	Coliscan Easygel	<400 CFU/100mL	Fail		
43. Oil & Grease:	N/A	mg/L	Laboratory	<5.00 mg/L	N/A		
44. TPH-GRO:	N/A	µg/L	Laboratory	<500 µg/L	N/A		
45. TPH-DRO:	N/A	mg/L	Laboratory	<0.500 mg/L	N/A		
Photographs							
Picture Numbers				Description			
1-2				Outfall			
3-4				Source			
Inspector Comments							



11.b Oakton Multi-Parameter PCS Testr 35™ (Electronic)

User manuals and additional data sheets for the Oakton Multi-Parameter PCS Testr 35™ can be downloaded here: <http://www.4oakton.com/SellSheets/35425-00,-05,-10.pdf>.

11.c Hach DR/890 Colorimeter Procedure (Electronic)

User manuals and additional data sheets for the Hach DR/890 Colorimeter can be downloaded here: <http://www.hach.com/dr-890-portable-colorimeter/product-downloads?id=7640439041>.

11.d Gas Detector Operator's Manual and Quick Reference Card (Electronic)

An Operator's Manual and Quick Reference Card for the specific gas monitor referenced in this Appendix can be found here: <http://gasmonitors.com/main.cfm?sub3=89&page=prodpage&pid=5>.

11.e Material Safety Data Sheets (MSDSs) (Electronic)

MSDSs for preservatives used in laboratory sample collection bottles can be found here: <http://www.msds.com/>.

MSDSs for specific reagents used with the Hach Colorimeter can be found through the following website:

<http://www.hach.com/chemistries-reagents-and-standards/category?productCategoryId=14371221850&platformWeb=Powder%2BPillows&secondPageNumber=1&isNew=false&pimContext=USen>.

11.f Coliscan® Easygel® Instructions (Electronic)

Instructions for bacteria sampling using the Coliscan® Easygel® medium can be found here: http://www.microbiologylabs.com/files/coliscan_water_inst.pdf.



12.0 References

1. USEPA. 2000. Storm Water Phase II Final Rule - Illicit Discharge Detection and Elimination Minimum Control Measure. Office of Water. EPA 833-F-00-007.
2. USEPA. 2003. Storm Water Phase II Menu of BMPs - Illicit Discharge Detection and Elimination. USEPA Office of Water. <http://cfpub2.epa.gov/npdes/stormwater/menuofbmps/illicit.cfm>.
3. Pitt, R., M. Lalor, D. D. Adrian, R. Field, and D. Barbe. 1993. Investigation of Inappropriate Pollution Entries into Storm Drainage System: A User's Guide. USEPA Office of Research and Development. EPA/600/R-92/238.
4. USEPA. 1999. National Pollutant Discharge Elimination System – Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges; Final Rule. Federal Registrar Vol. 64 No. 235 (December 8, 1999), pp. 68722-68851. 40 CFR Parts 9, 122, 123, and 124.
5. New England Interstate Water Pollution Control Commission (NEIWPCC). Illicit Discharge Detection and Elimination Manual – A Handbook for Municipalities. January 2003. www.neiwpcc.org/iddmanual.pdf.
6. Braun/Stone Environmental Inc., Dave, and Jim Pease/Vermont Department of Environmental Conservation. "Identifying Illicit Wastewater Discharges in Vermont." Runoff Rundown 43 (2011): n. pag. Summer 2011. Web. 19 Nov. 2013.
7. <http://archive.constantcontact.com/fs045/1101639006674/archive/1106448552728.html>.
8. Final Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater 2013, 78 Fed. Reg. 163,52192, 163,52193 (Aug. 22, 2013).



August 21, 2019

Mr. Chris Stone
Chief of Stormwater Management
Loudoun County
Department of General Services
P.O. Box 7100
801 Sycolin Road SE, Suite 300
Leesburg, VA 20175

RE: Permit 4 / Year 1 – Illicit Discharge Detection & Elimination Program (IDDE) Dry
Weather Screening Report of Findings

Dear Mr. Stone:

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, GKY & Associates, Inc. (GKY) conducted visual dry weather screening inspections on 325 outfalls that reside in drainage areas identified as having a high potential for illicit discharges.

The inspections included a visual evaluation of the conditions observed at each outfall. For each outfall inspected, GKY documented the observed conditions on an electronic field inspection form and obtained photo documentation (i.e., digital photographs). If dry weather flow was observed, the field team conducted an investigation to determine the source of the flow and obtained a sample if the flow was determined to be a potential or actual illicit discharge in accordance with the IDDE Procedure.

In the process of performing the inspections, GKY found it useful to categorize the outfalls into one (1) of three (3) categories (*Clear*, *Suspect*, and *Illicit*) based on the conditions found at each outfall. 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 350 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*.

Clear

Outfalls categorized as *Clear* presented the following conditions:

- No dry weather flow at the time of the inspection;
- The outfall or upstream node was observed to be 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	Initial Finding	% of Total Outfalls (325)
Clear	Dry	110	33.85%
	Wet but Not Flowing	28	8.62%
	Outfall Submerged (Upstream Node Screened and Dry)	66	20.31%
	Inaccessible/Not Found (Upstream Node Screened and Dry)	8	02.46%
	Not Able to Be Screened (e.g., Construction Activities)	1	00.31%
	Non-Suspect Flow*	93	28.61%
Subtotal		306**	94.16%

*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
- SWM pond discharge
- Manufactured/proprietary SWM facility
- Natural stream/channel
- Landscape irrigation
- Fire hydrant flushing

Attachment 1 includes digital copies of the inspection form, photolog, and a photo location map for each outfall categorized as *Clear*. Based on the observed conditions at outfalls categorized as *Clear*, no additional follow-up for these outfalls is required at this time. **Attachment 4** contains a table that displays the results of the inspections.

Suspect

Outfalls categorized as *Suspect* 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 (325)
Suspect	Suspect	12	3.69%
	Outfall Submerged (Upstream Node Screened and Suspect)	3	0.92%
Subtotal		15*	4.61%

***Attachment 4** shows 17 suspect outfalls because flow at several outfalls was traced to two (2) or more separate non-suspect 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 outfall categorized as *Suspect*. **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 outfalls categorized as *Suspect*.

Illicit

Outfalls categorized as *Illicit* 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 (325)
Illicit	Confirmed Illicit Discharge	4	1.23%
	Outfall Partially Submerged (Upstream Node Screened and Illicit)	0	0.00%
Subtotal		4	1.23%

Attachment 3 includes digital copies of the inspection form, photolog, and a photo location map for each outfall categorized as *Illicit*. **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*.

Dry Weather Screening Cumulative Results

The results of the inspections are summarized in **Table 4**.

Table 4. Cumulative Outfall Statistics Summary

Category	Total	% of Total Outfalls (325)
Clear	306	94.16%
Suspect	15	4.61%
Illicit	4	1.23%
Total	325	100.00%

Follow-Up Sampling

In accordance with 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 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 1 Inspection Reports for Outfalls Categorized as *Clear*
- Attachment 2. Permit 4/Year 1 Inspection Reports for Outfalls Categorized as *Suspect*
- Attachment 3. Permit 4/Year 1 Inspection Reports for Outfalls Categorized as *Illicit*
- Attachment 4. Permit 4/Year 1 Dry Weather Field Screening Results Table

Attachment 1

Permit 4/Year 1 Inspection Reports for Outfalls Categorized as *Clear*

Attachment 2

Permit 4/Year 1 Inspection Reports for Outfalls Categorized as *Suspect*

Attachment 3

Permit 4/Year 1 Inspection Reports for Outfalls Categorized as *Illicit*

Attachment 4

Permit 4/Year 1 Dry Weather Field Screening Results



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
AB1948	5736124	Closed	Grease Bin	3/18/2019	3/18/2019	LEx	Source Eliminated	Public Education	4/4/2019
AJ1167	5585806	Closed	Dumping - Unknown Material	2/7/2019	2/7/2019	County Staff	Isolated Incident	None	5/23/2019
AJ2205	5642658	Closed	Salt Storage	2/26/2019	2/26/2019	County Staff	Source Eliminated	Public Education	4/4/2019
AJ3890	4828171	Closed	Dumping - Unknown Material	9/11/2018	9/11/2018	SWM Website	Isolated Incident	None	9/24/2018
AJ4237	6726298	Open	Under investigation	10/10/2018	8/21/2019	Dry Weather Screening	Ongoing		
CH5950		Open	Dumping - Unknown Material	10/17/2018	8/21/2019	Dry Weather Screening	Ongoing		
DB1757		Closed	Not Applicable	10/17/2018	8/21/2019	Dry Weather Screening	No Action Required		9/4/2019
DK30235		Open	Stone Cutting Activities	3/20/2019	8/21/2019	Dry Weather Screening	Ongoing		
AB921		Closed	Not Applicable	4/22/2019	8/21/2019	Dry Weather Screening	No Action Required		9/4/2019
AB924		Closed	Not Applicable	4/22/2019	8/21/2019	Dry Weather Screening	No Action Required		
DW26		Open	Under investigation	10/23/2018	8/21/2019	Dry Weather Screening	Ongoing		
MD232		Open	Under investigation	3/28/2019	8/21/2019	Dry Weather Screening	Ongoing		
ME5650		Open	Under investigation	5/8/2019	8/21/2019	Dry Weather Screening	Ongoing		
WB30314		Open	Under investigation	4/24/2019	8/21/2019	Dry Weather Screening	Ongoing		
WP3631		Open	Under investigation	10/17/2018	8/21/2019	Dry Weather Screening	Ongoing		
AJ911	4686039	Closed	Erosion and Sediment Control Measure	8/15/2018	8/15/2018	Dry Weather Screening	Source Eliminated	Direct to Building and Development	8/15/2018
BC128	5200657	Closed	Maintenance Activities	11/14/2018	11/14/2018	County Staff	Source Eliminated	Training	3/6/2019
BC63	5831155	Closed	Stone Cutting Activities	3/28/2019	3/28/2019	Dry Weather Screening	Isolated Incident	Public Education	7/9/2019
Cameron Walk PL	4845776	Closed	Dumping - Unknown Material	9/14/2018	9/14/2018	SWM Reporting Telephone Number	Source Eliminated	Public Education	10/9/2018
CH11325	4686819	Closed	Wash water	8/15/2018	8/15/2018	Dry Weather Screening	Source Eliminated	None	8/15/2018
CH488	4686723	Closed	Pool Water	8/15/2018	8/15/2018	Dry Weather Screening	Source Eliminated	None	6/12/2019
CH8406	4950698	Closed	Dumping - Debris	10/5/2018	10/5/2018	SWM Reporting Telephone Number	Source Eliminated	Public Education	10/23/2018
CH8837	5781549	Closed	Construction Activities	3/19/2019	3/19/2019	Dry Weather Screening	Isolated Incident	None	5/23/2019
CH9162	4588283	Closed	Dumping - Debris	7/27/2018	7/27/2018	SWM Reporting Telephone Number	Source Eliminated	DGS Cleanup	8/2/2018



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CP6218	5944848	Closed	Dumping - Sediment	4/18/2019	4/18/2019	County Staff	No Action Required	None	4/18/2019
CP9406	5830740	Closed	Dumping - Unknown Material	4/1/2019	4/1/2019	Dry Weather Screening	No Action Required	None	4/3/2019
DB2556	6381646	Closed	Dumping - Paint	5/9/2019	5/9/2019	LEx	Isolated Incident	Public Education	7/29/2019
DD34	6381432	Closed	Dumping - Paint	5/23/2019	5/23/2019	County Staff	Source Eliminated	Public Education	7/31/2019
DD34	5830659	Open	Food Waste	3/28/2019	3/28/2019	Health Department	Ongoing		
DF190	5946081	Closed	Sanitary Sewer	4/9/2019	4/9/2019	Dry Weather Screening	Source Eliminated	Training	5/23/2019
DF275	5993657	Closed	Construction Activities	5/2/2019	5/2/2109	County Staff	Source Eliminated	Training	5/22/2019
GC1754	5993561	Open	Under investigation	4/29/2019	4/29/2019	Dry Weather Screening	Ongoing		
JC10102	5542910	Closed	Dumping - Sediment	1/2/2019	1/2/2019	County Staff	Source Eliminated	Public Education	1/25/2019
JC1800	5439472	Closed	Dumping - Sediment	1/9/2019	1/9/2019	County Staff	Source Eliminated	Public Education	1/10/2019
JC1914	6185803	Closed	Sanitary Sewer	5/22/2019	5/22/2019	SWM Reporting Telephone Number	Source Eliminated	None	5/22/2019
JC3923	4602131	Closed	Dumping - Debris	7/31/2018	7/31/2018	SWM Reporting Telephone Number	Source Eliminated	DGS Cleanup	7/31/2018
JC5635	5781666	Closed	Not Applicable	3/19/2019	3/19/2019	Dry Weather Screening	No Action Required	None	5/23/2019
JC6221	5076402	Closed	Pet Waste	10/18/2018	10/18/2018	SWM Reporting Telephone Number	Isolated Incident	Public Education	10/22/2018
JC75	6089936	Closed	Dumping - Unknown Material	5/21/2019	5/21/2019	LEx	Isolated Incident	None	7/29/2019
KW533	4687236	Closed	Not Applicable	8/15/2018	8/15/2018	Dry Weather Screening	Allowable Discharge	None	11/27/2018
MD3096	4687056	Closed	HVAC Condensate - Commercial	8/15/2018	8/15/2018	Dry Weather Screening	Source Eliminated	None	11/27/2018
ME1529	5830926	Closed	Construction Activities	4/3/2019	4/3/2019	County Staff	Isolated Incident	None	4/3/2019
ME2500	5944785	Open	Grease Bin	4/8/2019	4/8/2019	Dry Weather Screening	Ongoing		
Quillback Court	5993353	Closed	Maintenance Activities	5/1/2019	5/1/2019	SWM Reporting Telephone Number	Source Eliminated	Public Education	5/3/2019
RA5860	5543245	Closed	Salt Storage	1/31/2019	1/31/2019	County Staff	Isolated Incident	None	2/4/2019
UG0071	4763451	Closed	Groundwater	8/29/2018	8/29/2018	Dry Weather Screening	Allowable Discharge	None	8/29/2018
WB13017	4470196	Closed	Dumping - Unknown Material	7/6/2018	7/6/2018	SWM Reporting Telephone Number	Isolated Incident	None	7/13/2018
WB20433	4694926	Closed	Pool Water	8/16/2018	8/16/2018	Dry Weather Screening	Source Eliminated	None	10/9/2018
WB30032	5949244	Closed	Salt Storage	4/25/2019	4/25/2019	LEx	Source Eliminated	None	5/2/2019
WB30551	5943566	Open	Under investigation	4/8/2019	4/8/2019	Dry Weather Screening	Ongoing		



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Annual Report (VAR040067)

WB493	4965727	Closed	Pool Water	10/9/2018	10/9/2018	SWM Reporting Telephone Number	Allowable Discharge	None	10/9/2018
WP3693	5781149	Closed	Not Applicable	3/19/2019	3/19/2019	Resident Email	No Action Required	None	4/17/2019

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 County'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,

A handwritten signature in black ink, reading "Joseph H. Maroon".

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
*State Parks • Soil and Water Conservation • Natural Heritage • Outdoor Recreation Planning
Chesapeake Bay Local Assistance • Dam Safety and Floodplain Management • Land Conservation*



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.

A handwritten signature in blue ink that reads "James P. Edmonds". The signature is written over a horizontal line.

Name: James P. Edmonds

Title: Va. Stormwater Management Program Administrator, Dept. of Building & Development

**Loudoun County Stormwater Management
Engineering Services**

**STORMWATER BEST MANAGEMENT PRACTICE (BMP)
FACILITY INSPECTION AND MAINTENANCE PROCEDURE**

Version 1, August 21, 2019

Prepared for:



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

Updated by:



4229 Lafayette Center Drive, Suite 1850
Chantilly, Virginia 20151
703-870-7000



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Appendices

- Appendix A: Complete Structural Inspection Forms
Appendix B: Loudoun County Maintenance Guidelines
Appendix C: Loudoun County Private Stormwater BMP Enforcement Procedures



Definitions

Bathymetric Survey	The study of the “beds” or “floors” of water bodies, including the ocean, rivers, streams, and lakes. ¹
Best Management Practice	Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices, including both structural and nonstructural practices, to prevent or reduce the pollution of the surface waters and groundwater systems. ²
BMP Inventory	The roster of privately owned and publicly owned stormwater BMPs within Loudoun County.
Facility Standards Manual	The Loudoun County Facilities Standards Manual, as amended.
Non-Routine Maintenance	Maintenance activities that are major repairs requiring extended time and/or significant resources like riser replacement or cave-in/depression repair.
Preventive Maintenance or Routine Maintenance	Maintenance activities that do not require extended time and/or significant resources like minor vegetation and sediment removal, trash removal, and clearing of low flow orifices
Stormwater BMP	Structural stormwater practice to include wet and dry ponds, above-ground and below-ground filtering practices, and below-ground stormwater management facilities.
Stormwater Maintenance Agreement	An agreement between a private property owner and the County that establishes mutual responsibilities for maintenance of the stormwater management infrastructure where such infrastructure has uses in addition to stormwater management. Includes Facilities Maintenance Performance Agreements and Wet Pond Agreements.

¹ National Oceanographic and Atmospheric Administration (NOAA): <https://oceanservice.noaa.gov/facts/bathymetry.html>

² 9VAC25-870-10 “Definitions”



1.0 Background and Purpose

Loudoun County (County) operates a Municipal Separate Storm Sewer System (MS4) that is permitted through the Virginia General Permit for Stormwater Discharges from Small MS4s (MS4 General Permit) issued by the Virginia Department of Environmental Quality (DEQ). The MS4 General Permit authorizes the County's MS4 to discharge into waters of Virginia. As a condition of the MS4 General Permit, the County is required to develop and implement a program to inspect and maintain stormwater best management practices (BMPs) within the County. At the current time, Loudoun County has identified over 1,700 stormwater BMPs county-wide.

The current MS4 General Permit (effective November 2018) requires that an inspection and maintenance inspection program be developed and maintained for both public and private stormwater BMPs. Further, the MS4 General Permit requires that written inspection and maintenance procedures be developed and maintained to ensure adequate long-term operation and maintenance of stormwater BMPs.

This document addresses Loudoun County's requirements for the inspection and maintenance of public and private BMPs as outlined in the "Post-construction stormwater management for new development and development on prior developed lands" section of the MS4 General Permit. The structure, methodology, and tools contained in this procedure were developed to provide the County with an effective solution to inspecting and maintaining BMPs within the County's MS4 area while making efficient use of its available resources. The development and implementation of the procedures and processes contained in this document allow the County to operate an effective Stormwater BMP inspection and maintenance program that is compliant with the MS4 General Permit.

2.0 BMP Inventory

The County has a well-maintained stormwater BMP inventory that is routinely updated to incorporate newly constructed stormwater BMPs resulting from new construction and redevelopment. The inventory is maintained in accordance with Part I B 5 d of the MS4 General Permit.

The County's stormwater BMP inventory is cataloged in a GIS database containing all known permittee-owned and/or operated and privately-owned stormwater BMPs that discharge into the MS4. The database also includes all stormwater BMPs implemented by the permittee to meet the requirements of the Chesapeake Bay Total Maximum Daily Load (TMDL) and local TMDLs as required in Parts II A and II B respectively. The database includes, at a minimum, the information required by the MS4 General Permit.³

3.0 Authority

In accordance with the MS4 General Permit, the County has taken the appropriate steps to ensure it is authorized to implement an inspection and maintenance program for stormwater BMPs both owned and/or operated by the permittee (i.e., public stormwater BMPs) and also stormwater BMPs not owned by the permittee (i.e., private stormwater BMPs). The County's authority is outlined in the Loudoun County, VA Code of Ordinances, Chapter 1096 – Stormwater Management (1096).

3.1 Publicly Owned Stormwater BMPs

The MS4 General Permit states the County shall, "implement an inspection and maintenance program for those stormwater management facilities owned and operated by the permittee." Chapter 1096 requires that stormwater BMPs constructed within stormwater easements shall be inspected and maintained by the County to its original design capability. The County inspects publicly owned stormwater BMPs at varying levels on an annual basis as described in Section 4.0.

³ 9VAC-890-40, Part I E 5 d



3.2 Privately Owned Stormwater BMPs

The MS4 General Permit states the County shall “Implement an inspection and enforcement program for stormwater management facilities not owned by the permittee (i.e., privately owned).” The permit also states that the permittee shall, “utilize its legal authority for enforcement of the maintenance responsibilities if maintenance is neglected by the owner.”

In accordance with the requirements contained in the MS4 General Permit, Chapter 1096 states the responsibility for inspection and maintenance of privately-owned stormwater BMPs remains with the property owner and that such infrastructure shall be maintained to its original design capability.

Chapter 1096 further states that the responsibility for maintenance, repair, and replacement of stormwater BMPs associated with manufactured filtration devices and systems, pervious pavement and pavers, and underground detention facilities shall remain with the property owner. Further, Chapter 1096 states that “Owner responsibility for manufactured filtration devices and systems shall be guaranteed by a Facilities Maintenance Performance Agreement (FMPA) executed by the owner.” Responsibility for the inspection of manufactured filtration devices and systems shall also remain with the property owner unless the County has assumed inspection responsibilities under a FMPA or other stormwater maintenance agreement.

For stormwater BMPs designed to treat stormwater runoff primarily from an individual residential lot where no easements are present, responsibility for inspection, maintenance, repair, and replacement of facilities shall remain with the property owner.

4.0 Stormwater BMP Inspections

The inspection program consists of several inspection types with a varying level of review as described below. Those inspection types are as follows:

- Virginia Stormwater Management Program (VSMP) Notice of Termination
- Performance Bond Release
- Structural Inspections (Engineering Inspection)
- Annual Preventative Maintenance Inspections (Routine Inspections)
- Underground Stormwater BMP
- Pond Topographic Maps and Bathymetric Surveys
- Town of Leesburg Inspections

The County inspects all stormwater BMPs at the completion of construction to ensure that the facilities are constructed as designed. In addition, all stormwater BMPs are inspected at a minimum of once per year; however, the level of review varies. Structural inspections are conducted annually on 1/3 of the wet and dry ponds in the County’s inventory and routine annual inspections are conducted on the remaining 2/3 of the wet and dry ponds. All underground BMPs receive structural inspections annually.

To facilitate all the inspection types, the County has created, or is in the process of creating, Individual BMP Maintenance Plans (iBMPs) for all BMPs in the County’s stormwater BMP inventory. The iBMPs are designed to assist staff during inspection and maintenance activities. The plans provide pertinent information about each facility including control structure details, number of inflows, inspection and maintenance requirements, and unique facility specific notes/requirements like access issues, presence of baffle walls, or recent facility rehabilitation details.



The following sections describe each inspection type.

4.1 VSMP Notice of Termination

The VSMP inspection is conducted by the Department of General Services (DGS) with coordination from the VSMP administrator. The VSMP Administrator is functionally located in the Department of Building (B&D) and Development. These inspections consist of a detailed review of the approved design and as-built plans to ensure that stormwater BMPs are constructed as per the approved design plans and functioning as designed. These inspections occur once a request is received to terminate a VSMP permit. DGS generates an inspection report and punchlist for the owner to complete. Once the punchlist has been completed, the stormwater BMP is added to the County's inventory. Facility-specific forms used to document these inspections inventory can be found in Appendix A.

4.2 Performance Bond Release Inspections

The bond release inspection is conducted by DGS with coordination from the Infrastructure Control Team (ICT). The ICT is functionally located in B&D. These inspections consist of a detailed review of the approved design and as-built plans to ensure that stormwater BMPs are constructed as per the approved design plans and functioning as designed. These inspections occur once a request is received for the release of the performance and prior to being accepted into the County's stormwater BMP inventory. DGS generates an inspection report and punchlist for the owner to complete. Once the punchlist has been completed, the stormwater BMP is added to the County's inventory. Facility-specific forms used to document these inspections inventory can be found in Appendix A.

4.3 Structural Inspections (Engineering Inspections)

Structural inspections are conducted on 1/3 of the wet ponds and dry ponds and select bioretention facilities each year. These inspections include a thorough assessment of the dam embankment, control structure, principal spillway pipe, structural inflows, natural inflows, sediment forebays, high and low marsh areas, aquatic benches, and aquatic plants serving a water quality function. These inspections allow County staff to determine whether a stormwater BMP is functioning as designed and what type of maintenance or repair is required to either maintain its functionality or to restore the stormwater BMP back to functional. If a stormwater BMP is found to be not functioning as designed a maintenance plan must be developed to correct any issues and ensure its long-term functionality. The County uses detailed inspection checklists that are tailored to specific facility types to ensure that all structural components of the stormwater BMPs are evaluated during each inspection. Facility-specific forms used to document these inspections inventory can be found in Appendix A. Privately owned stormwater BMP enforcement procedures are described in Section 6 (Private Stormwater BMP Enforcement) and Appendix C.

4.4 Annual Preventative Maintenance Inspections (Routine Inspections)

Annual preventative maintenance inspections are conducted by Department of Public Works (DPW) staff and include a general assessment of the control structure, pond floor, inflows, and the outfall. Although all types of maintenance issues are reviewed, these inspections focus on identifying preventative maintenance issues such as sediment buildup, blocked low flow orifices, and overgrown vegetation. Using ArcGIS Online DPW staff document inspection results. If maintenance issues are identified, a work order is issued to correct any deficiencies.

4.5 Underground Stormwater BMP Inspections

Underground stormwater BMP inspections are conducted annually. These inspections include a thorough assessment of the control structure, outfall, inflows, and storage vaults. Like structural Inspections, the County uses facility-specific inspection checklists that are tailored to specific underground facility types to ensure that all structural components of the stormwater BMPs are evaluated during each inspection. These inspections allow



County staff to determine whether a stormwater BMP is functioning as designed and what type of maintenance is required to keep an underground stormwater BMP functioning as designed. The Underground Stormwater BMP Inspection form can be found in Appendix A.

4.6 Pond Topographic Maps and Bathymetric Surveys

In addition to the above inspections, bathymetric surveys are conducted on wet and dry ponds to determine how much sediment has accumulated within them. From these surveys, topographic maps are produced which allow the County to accurately plan and execute dredging projects needed to keep a stormwater BMP functioning as designed. To date, the County has surveyed most wet and dry ponds within its inventory that are ten years or older.

4.7 Town of Leesburg Inspections

The Town of Leesburg is an MS4 General Permit holder and requires all owners of property within the Town limits, which contain stormwater BMPs, to inspect those BMPs annually. The County annually conducts structural inspections on all County-owned stormwater BMPs within the Town of Leesburg, VA. These inspections must meet the Town's inspection requirements. Inspections are conducted annually and must be completed by December 31 of each calendar year. Inspections must also be stamped by a Virginia Professional Engineer (PE). Maintenance elements must be outlined in the inspection reports as to how they are to be repaired.

5.0 Maintenance Guidelines

The County's maintenance program for stormwater BMPs consists of both routine maintenance activities (e.g., mowing, sediment/debris/tree removal, etc.) and non-routine maintenance consisting of repair activities (e.g., dredging, replacement of riprap, vacuuming out underground BMP vaults, replacing BMP filter media, structural repair of control structures, etc.). As outlined in Chapter 1096, maintenance of stormwater BMPs, for which there are not County easements or wet ponds for which there is no Agreement for Maintenance of a Stormwater Management Pond (Wet Pond Agreement), is the responsibility of the property owner and must be maintained to their original design capability. In addition, for any underground detention and pervious pavement BMPs approved after the October 10, 2019 Stormwater Ordinance (1096) update, all maintenance for these BMPs will remain with the property owner. Although the County does not have any stormwater BMPs that are designed to treat stormwater runoff from an individual residential lot at the time of the development of this procedure, Chapter 1096 includes requirements for long-term maintenance of such BMPs.

In accordance with the MS4 General Permit, the County performs preventive maintenance on all County owned/maintained stormwater BMPs in the County's inventory to ensure they continue to perform as designed. Preventive maintenance includes activities like clearing low flow orifices of trash and debris, vegetation removal around structures and repairing areas of erosion. Preventive maintenance does not include aesthetic maintenance such as algae removal, landscaping, or mosquito control. Aesthetic maintenance is the responsibility of the property owner.

The County has developed maintenance guidelines for the following stormwater BMPs that are contained within its stormwater BMP inventory:

- Bioretention Facilities
- CDS/Hydrodynamic Separator Facilities
- Dry Pond Facilities
- Manufactured Filtration Device Facilities
- Oil/Water Separator Facilities



- Porous Pavement Facilities
- Sand Filter Facilities
- Tree Box Filter Facilities
- Underground Detention Facilities
- Vegetated Swale Facilities
- Wet Pond Facilities
- Wetland Facilities

The facility-specific maintenance guidelines can be found in Appendix B.

5.1 County Standards

The County's Maintenance Guidelines have been developed using the following standards:

- Only personnel, including County staff, maintenance workers, and general public trained in confined space entry (CSE) are to enter stormwater structures
- Trees and other woody vegetation are NOT allowed in easements or on stormwater pipes or other stormwater structures
 - If trees are in an easement, the County or its representative has the authority to remove them
- Woody and non-woody vegetation should be cleared within 25' of stormwater structures and stormwater pipes
- Vegetation should be removed from facility low flow channels
- All dam embankments should be mowed annually
- Top trash racks on riser structures should be locked
- Sediment accumulation should be removed from low flow orifices and from within stormwater structures
- Bioretention facilities
 - The berm should be maintained to ensure the appropriate depth of ponding
 - Ensure access to cleanouts, observation wells, and all other stormwater structures
 - Ensure BMP is draining
 - Aesthetic maintenance will be left up to the property owner
- Additional items as determined by the County

5.2 Maintenance Tracking

The County uses multiple asset management systems to assign and track inspection and maintenance activities for public stormwater BMPs. All maintenance is tracked using the County's Sprocket work order system. The work orders in Sprocket are assigned to County personnel and their representatives. Non-routine maintenance is tracked using the County's Job Order Contract (JOC) system. The County maintains a list of approved vendors that are contracted to complete necessary repairs to stormwater BMPs. Required maintenance items are tracked in both systems and work orders are closed-out once work has been completed.



5.3 Dredging

Dredging is a process by which excess material, such as debris, sediment, and/or trash, is removed from the floor of a wet or dry pond. The removal of this material may be necessary to keep a stormwater BMP functioning as designed. It may be evident that a wet or dry pond should be dredged simply by conducting an inspection but dredging projects may also be the result of a bathymetric survey and the resulting topographic maps.

The Loudoun County Sediment Disposal Flow Chart outlines the County's process for disposal of dredging spoils from stormwater BMPs.

6.0 Private Stormwater BMP Enforcement

In accordance with the MS4 General Permit, the County has implemented an enforcement program for stormwater BMPs not owned by the permittee.⁴ Per the County's enforcement program outlined in Chapter 1096,⁵ County staff are authorized to enter private property in order to assess maintenance needs.

If a stormwater BMP inspection finds that a privately maintained BMP is not functioning as designed or has a significant preventive maintenance need, DGS staff will send written notification to the owner outlining the maintenance deficiency(ies) and a timeframe to repair the BMP. The letter and any response and/or follow up actions shall be documented in the County's database. If the maintenance issue was preventive in nature (i.e., the BMP is functioning as designed), then there will be no further written follow up action. If the BMP was found "not functioning as designed" then the stormwater team will follow up with the owner by sending a 60- and 120-day letters as appropriate. After the 120-day letter, additional letters can be sent but the stormwater team shall contact the County Attorney's Office (CAO) for additional enforcement activities (e.g., notice of violation).

In accordance with Chapter 1096, if no corrective action is taken to address a notice of violation, the County may address maintenance issues identified and bill the private facility owner for all costs associated with the maintenance activities.

In addition, Chapter 1096 provides the County with the authority to issue civil penalties if corrective action is not taken to address a notice of violation. Civil penalties may include jail confinement for up to 12 months or a fine between \$2,500 and \$32,500.

The County's Private Stormwater BMP Enforcement Procedures can be found in Appendix C.

⁴ 9VAC-890-40, Part I E 5 c (1)

⁵ Chapter 1096.04



Appendix A

Structural Inspection Forms

Bioretention Assessment Form

Inspector: _____

Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

1	2	3
---	---	---

IMMEDIATE ACTION: _____

Riser Structure					Dam / Berm					
BMP:		Adjustable:	Y / N	Orifice Size:		SCORE	PHOTO	DESCRIPTION		
SCORE	PHOTO	DESCRIPTION				①②③○				
①○		Pad Lock Missing				①②③○		Toe Soft Spots Face		
①○		Trash Rack Missing				①②③○		Toe Soft Spots Back		
①②③○		Spalling				①②③○		Slope Erosion Face		
①②③○		Joint Failure				①②③○		Slope Erosion Back		
①②③○		Anti-vortex Condition				①②③○		Bare Spots Face		
①②③○		Trash Rack Blockage				①②③○		Bare Spots Back		
①②③○		Orifice Blockage				①②③○		Erosion of the Berm		
①②③○		Top Trash Rack Blockage				①②③○		Tree Removal		
①②③○		Manhole Condition				①②③○		Overgrown Vegetation		
①②③○		Inside Riser Blockage				①②③○		Animal Holes		
①②③○		Vegetation / External Obstructions				①②③○		Un-authorized Planting		
①②③○		Ladder / Steps Condition				①②③○		Trash and Debris		
①②③○		Other:				①②③○		Sediment Build-Up		
①②③○						①②③○		Other:		
Principal Spillway Pipe					Emergency / Overflow Spillway					
Pipe Size:		PSP Type:		Pipe Total:		Type:		Overland:	Y / N	
SCORE	PHOTO	DESCRIPTION				SCORE	PHOTO	DESCRIPTION		
①②③○		Spalling				①②③○		Erosion		
①②③○		Blockage				①②③○		Bare Spots		
①②③○		Joint Failure				①②③○		Overgrown Vegetation		
①②③○		Misaligned Joints				①②③○		Blockage		
①②③○		Separation				①②③○		Tree Removal		
①②③○		Other:				①②③○		Other:		
Outfall Downstream					Swale / Energy Dissipators					
Endwall:		Pipe End:		Flared End:		SCORE	PHOTO	DESCRIPTION		
SCORE	PHOTO	DESCRIPTION				①②③○				
①②③○		Spalling				①②③○		Erosion		
①②③○		Undermining				①②③○		Bare Spots		
①②③○		Separation				①②③○		Trash and Debris		
①②③○		Erosion				①②③○		Un-authorized Planting		
①②③○		Cave-In				①②③○		Overgrown Vegetation		
①②③○		Blockage				①②③○		Dissipator Condition - Rip Rap		
①②③○		Displaced Rip-Rap				①②③○		Sediment Deposition		
①②③○		Overgrown Vegetation				①②③○		Other:		
					Upstream Inflow(s)					
					Endwall:		Flared End:		Number:	
					SCORE	PHOTO	DESCRIPTION	1	2	
					①②③○		Spalling	3	4	
					①②③○		Undermining	5		
					①②③○		Separation			
					①②③○		Erosion			
					①②③○		Cave-In			
					①②③○		Blockage			
					①②③○		Displaced Rip-Rap			
					①②③○		Overgrown Vegetation			
					①②③○		Outflow Obstruction			
Encroachments					Level of Service Scoring Key					
SCORE	PHOTO	DESCRIPTION				①	High (1 day - 2 weeks)			
①②③○		Access Road				②	Moderate (2 - 5 weeks)			
①②③○		Retention Area				③	Low (2 months - 1 year)			
①②③○		Berm				○	Continue Routine Maintenance			
①②③○		Spillway								
Monitoring Well(s) & Recent Weather										
Holding Water Depth:										
Last Rainfall:										

Inspector Comments:

Wetlands Assessment Form

Inspector: _____

Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

--	--	--

1

2

3

IMMEDIATE ACTION: _____

Riser Structure						Dam / Berm								
BMP:		Adjustable:	Y / N	Orifice Size:		SCORE	PHOTO	DESCRIPTION						
SCORE	PHOTO	DESCRIPTION				①②③⊙								
①⊙		Pad Lock Missing				①②③⊙		Toe Soft Spots Face						
①⊙		Trash Rack Missing				①②③⊙		Toe Soft Spots Back						
①②③⊙		Spalling				①②③⊙		Slope Erosion Face						
①②③⊙		Joint Failure				①②③⊙		Slope Erosion Back						
①②③⊙		Anti-vortex Condition				①②③⊙		Bare Spots Face						
①②③⊙		Trash Rack Blockage				①②③⊙		Bare Spots Back						
①②③⊙		Orifice Blockage				①②③⊙		Erosion of the Berm						
①②③⊙		Top Trash Rack Blockage				①②③⊙		Tree Removal						
①②③⊙		Manhole Condition				①②③⊙		Overgrown Vegetation						
①②③⊙		Inside Riser Blockage				①②③⊙		Animal Holes						
①②③⊙		Vegetation / External Obstructions				①②③⊙		Un-authorized Planting						
①②③⊙		Ladder / Steps Condition				①②③⊙		Trash and Debris						
①②③⊙						①②③⊙		Sediment Build-Up						
Principal Spillway Pipe						Emergency / Overflow Spillway								
Pipe Size:		PSP Type:		Pipe Total:		Type:		Overland:		Y / N				
SCORE	PHOTO	DESCRIPTION				SCORE	PHOTO	DESCRIPTION						
①②③⊙		Spalling				①②③⊙		Erosion						
①②③⊙		Blockage				①②③⊙		Bare Spots						
①②③⊙		Joint Failure				①②③⊙		Overgrown Vegetation						
①②③⊙		Misaligned Joints				①②③⊙		Blockage						
①②③⊙		Separation				①②③⊙		Tree Removal						
Outfall Downstream						Upstream Inflow(s)								
Endwall:		Pipe End:		Flared End:		Endwall:		Flared End:		Number:				
SCORE	PHOTO	DESCRIPTION				SCORE	PHOTO	DESCRIPTION		1	2	3	4	5
①②③⊙		Spalling				①②③⊙		Spalling						
①②③⊙		Undermining				①②③⊙		Undermining						
①②③⊙		Separation				①②③⊙		Separation						
①②③⊙		Erosion				①②③⊙		Erosion						
①②③⊙		Cave-In				①②③⊙		Cave-In						
①②③⊙		Blockage				①②③⊙		Blockage						
①②③⊙		Displaced Rip-Rap				①②③⊙		Displaced Rip-Rap						
①②③⊙		Overgrown Vegetation				①②③⊙		Overgrown Vegetation						
①②③⊙		Downstream Blockage				①②③⊙		Outflow Obstruction						
①②③⊙		Handrail Status				①②③⊙		Handrail Status						
①②③⊙		Tree Removal				①②③⊙		Misaligned Joints						
Sediment Forebay						Pond Floor Low Flow								
Pond Coverage:						Trickle Ditch Total:			Type:					
SCORE	PHOTO	DESCRIPTION				①②③⊙		Sedimentation						
①②③⊙		Trash and Debris				①②③⊙		Detoured Flow Line						
①②③⊙		Bare Spots				①②③⊙		Obstructions						
①②③⊙		Sediment Deposition				①②③⊙		Erosion / Trenching / Roots						
①②③⊙		Erosion				Micropool								
Pond Coverage:						Pond Coverage:								
SCORE	PHOTO	DESCRIPTION				SCORE	PHOTO	DESCRIPTION						
①②③⊙		Trash and Debris				①②③⊙		Trash and Debris						
①②③⊙		Undesired Vegetation				①②③⊙		Bare Spots						
①②③⊙		Silted-In / Debris 75%				①②③⊙		Sediment Deposition						
①②③⊙		Spillway Obstruction/Debris/Blockage				①②③⊙		Erosion						
High / Low Marsh						Level of Service Scoring Key								
Pond Coverage:						①	High (1 day - 2 weeks)							
SCORE	PHOTO	DESCRIPTION				②	Moderate (2 - 5 weeks)							
①②③⊙		Trash and Debris				①②③⊙		Tree Removal						
①②③⊙		Bare Spots				①②③⊙		Undesired Vegetation						
①②③⊙		Sediment Deposition				①②③⊙		Silted-In / Debris 75%						
①②③⊙		Erosion				①②③⊙		Obstructions / Blockage						
①②③⊙		Ponding Water				Level of Service Scoring Key								
①②③⊙		Tree Removal				①	High (1 day - 2 weeks)							
①②③⊙		Undesired Vegetation				②	Moderate (2 - 5 weeks)							
①②③⊙		Silted-In / Debris 75%				③	Low (2 months - 1 year)							
①②③⊙		Obstructions / Blockage				⊙	Continue Routine Maintenance							
①②③⊙		Obstructions / Blockage												

Inspector Comments: _____

Infiltration System Inspection Form

Inspector: _____

Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

--	--	--

1

2

3

IMMEDIATE ACTION: _____

Notes / Specifications:

Accessibility & Signs			Type of Facility			
SCORE	PHOTO	DESCRIPTION	Trench:		Dry Well:	
① ② ③ ○		Site Accessibility	Dam / Berm			
① ② ③ ○		Facility Sign	SCORE	PHOTO	DESCRIPTION	
① ② ③ ○		Facility Labeling	① ② ③ ○		Toe Soft Spots Face	
① ② ③ ○		Other:	① ② ③ ○		Toe Soft Spots Back	
Trench Area			① ② ③ ○		Slope Erosion Face	
SCORE	PHOTO	DESCRIPTION	① ② ③ ○		Slope Erosion Back	
① ② ③ ○		Bare Spots	① ② ③ ○		Bare Spots Face	
① ② ③ ○		Sediment Deposition	① ② ③ ○		Bare Spots Back	
① ② ③ ○		Condition of Grass or Gravel	① ② ③ ○		Sediment Build-Up	
① ② ③ ○		Erosion	① ② ③ ○		Erosion of the Berm	
① ② ③ ○		Ponding Water	① ② ③ ○		Tree Removal	
① ② ③ ○		Trash and Debris	① ② ③ ○		Overgrown Vegetation	
① ② ③ ○		Un-authorized Planting	① ② ③ ○		Animal Holes	
① ② ③ ○		Elimination of Trench	① ② ③ ○		Un-authorized Planting	
① ② ③ ○		Repair Geotech Filter Fabric	① ② ③ ○		Trash and Debris	
① ② ③ ○		Other:	① ② ③ ○		Other:	
Energy Dissipators / Buffer Strip			Control Structure			
SCORE	PHOTO	DESCRIPTION	Orifice Size:		Adjustable:	Y / N
① ② ③ ○		Erosion	SCORE	PHOTO	DESCRIPTION	
① ② ③ ○		Bare Spots	① ② ③ ○		Spalling	
① ② ③ ○		Trash and Debris	① ② ③ ○		Joint Failure	
① ② ③ ○		Un-authorized Planting	① ② ③ ○		Anti-vortex Condition	
① ② ③ ○		Overgrown Vegetation	① ② ③ ○		Orifice Blockage	
① ② ③ ○		Dissipator Condition - Rip Rap	① ② ③ ○		Manhole Condition	
① ② ③ ○		Sediment Deposition	① ② ③ ○		Inside Control Structure Blockage	
① ② ③ ○		Other:	① ② ③ ○		Ladder / Steps Condition	
Observation Well			① ② ③ ○		Weir Wall Condition	
SCORE	PHOTO	DESCRIPTION	① ② ③ ○		Other:	
① ② ③ ○		Water Level	Encroachments			
① ② ③ ○		Blockage	SCORE	PHOTO	DESCRIPTION	
① ② ③ ○		Erosion	① ② ③ ○		Access Road	
① ② ③ ○		Sediment Build-Up	① ② ③ ○		Trench Area	
① ② ③ ○		Trash and Debris	① ② ③ ○		Berm	
① ② ③ ○		Other:	① ② ③ ○		Vehicles	
Mosquito Habitat Location			① ② ③ ○		Other:	
SCORE	PHOTO	DESCRIPTION	Level of Service Scoring Key			
① ② ③ ○		Trench Area	①	High (1 day - 2 weeks)		
① ② ③ ○		Outfall	②	Moderate (2 - 5 weeks)		
① ② ③ ○		Inflow	③	Low (2 months - 1 year)		
① ② ③ ○		Other:	○	Continue Routine Maintenance		

Inspector Comments:

Level Spreader/Plunge Pool Assessment Form

Inspector: _____

Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / Parcel ID : _____

Watershed: _____

District: _____

Score Totals:

1	2	3
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IMMEDIATE ACTION: _____

Level Lip / Control Structure					Dam / Berm							
BMP:		Material:		Dimensions:		SCORE	PHOTO	DESCRIPTION				
SCORE	PHOTO	DESCRIPTION			①②③⊙							
①⊙		Unevel			①②③⊙			Toe Soft Spots Face				
①②③⊙		Spalling / Rotting / Rust			①②③⊙			Toe Soft Spots Back				
①②③⊙		Blockage / Obstruction / Clog			①②③⊙			Slope Erosion Face				
①②③⊙		Settlement			①②③⊙			Slope Erosion Back				
①②③⊙		Undercutting			①②③⊙			Bare Spots Face				
①②③⊙		Erosion			①②③⊙			Bare Spots Back				
①②③⊙		Joint Failure			①②③⊙			Erosion of the Berm				
①②③⊙		Overtopping			①②③⊙			Tree Removal				
①②③⊙		Low Flow Blockage			①②③⊙			Overgrown Vegetation				
①②③⊙		Other:			①②③⊙			Animal Holes				
Low Flow Pipe					①②③⊙			Un-authorized Planting				
Pipe Size:		Material:		Pipe Total:		①②③⊙		Trash and Debris				
SCORE	PHOTO	DESCRIPTION			①②③⊙			Sediment Build-Up				
①②③⊙		Spalling			①②③⊙			Other:				
Level Spreader Outfall / Buffer Area												
①②③⊙		Blockage			Buffer Type:	Forested	Grass	Developed				
①②③⊙		Joint Failure			SCORE	PHOTO	DESCRIPTION					
①②③⊙		Misaligned Joints			①②③⊙			Erosion				
①②③⊙		Separation			①②③⊙			Bare Spots				
①②③⊙		Other:			①②③⊙			Overgrown Vegetation				
Low Flow Outfall Downstream					①②③⊙			Blockage				
SCORE	PHOTO	DESCRIPTION			①②③⊙			Tree Removal				
①②③⊙		Spalling			①②③⊙			Other:				
①②③⊙		Undermining			Swale / Energy Dissipators							
①②③⊙		Separation			Type:							
①②③⊙		Erosion			SCORE	PHOTO	DESCRIPTION					
①②③⊙		Blockage			①②③⊙			Erosion				
①②③⊙		Displaced Rip-Rap			①②③⊙			Bare Spots				
①②③⊙		Overgrown Vegetation			①②③⊙			Trash and Debris				
①②③⊙		Downstream Blockage			①②③⊙			Overgrown Vegetation				
①②③⊙		Tree Removal			①②③⊙			Dissipator Condition - Rip Rap				
①②③⊙		Other:			①②③⊙			Sediment Deposition				
Basin Floor					①②③⊙			Other:				
SCORE	PHOTO	DESCRIPTION			Inflow Pipe / Splitter Box / Bypass Channel							
①②③⊙		Erosion			Type:		Sheet/Concentrated:					
①②③⊙		Silt Build Up			SCORE	PHOTO	DESCRIPTION	1	2	3	4	5
①②③⊙		Blockage / Obstruction / Clog			①②③⊙		Spalling					
①②③⊙		Tree Removal / Overgrown Vegetation			①②③⊙		Undermining					
①②③⊙		Adequate Ground Cover			①②③⊙		Separation					
①②③⊙		Other:			①②③⊙		Erosion					
Plunge Pool					①②③⊙		Blockage					
SCORE	PHOTO	DESCRIPTION			①②③⊙		Displaced Rip-Rap					
①②③⊙		Erosion			①②③⊙		Overgrown Vegetation					
①②③⊙		Silt Build Up			①②③⊙		Outflow Obstruction					
①②③⊙		Tree Removal / Overgrown Vegetation			①②③⊙		Misaligned Joints					
①②③⊙		Blockage / Obstruction / Clog			①②③⊙		Trash/Debris					
①②③⊙		Displaced Rip-Rap			①②③⊙		Handrail Status					
①②③⊙		Liner Condition			①②③⊙		Other:					
①②③⊙		Handrail Status			Level of Service Scoring Key							
①②③⊙		Other:			①	High (1 day - 2 weeks)						
Monitoring Well(s) & Recent Weather					②	Moderate (2 - 5 weeks)						
Holding Water Depth:					③	Low (2 months - 1 year)						
Last Rainfall:					⊙	Continue Routine Maintenance						

Inspector Comments:

Manufactured BMP Assessment Form

Inspector: _____

Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

1	2	3
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IMMEDIATE ACTION: _____

Facility Type (Circle One):				Oil Grit Separator		Filterra		Vortechincs		Stormchamber		Stormfilter	
Accessibility						Catridge Chamber (2nd)							
SCORE	DESCRIPTION					SCORE	PHOTO	DESCRIPTION					
①○	Accessibility					①②③○		Trash Rack Damage					
①②③○	Other:					①②③○		Trash Rack Missing					
Inflow Pipe / Inlet						①②③○		Install Trash Rack					
SCORE	PHOTO	DESCRIPTION				①②③○		Water Level					
①②③○		Blockage				①②③○		Oil / Silt Removal					
①②③○		Damage				①②③○		Ladder / Steps Condition					
①②③○		Joint Failure				①②③○		Oil Barrier Damage					
①②③○		Trash / Debris Removal				①②③○		Flow Control Damage					
①②③○		Erosion				①②③○		Other:					
①②③○		Cave-In				Outlet Chamber (3rd)							
①②③○		Energy Dissipator				SCORE	PHOTO	DESCRIPTION					
①②③○		Other:				①②③○		Access					
Outlet Pipe						①②③○		Trash Rack Damage					
SCORE	PHOTO	DESCRIPTION				①②③○		Trash Rack Missing					
①②③○		Blockage				①②③○		Water Level					
①②③○		Damage				①②③○		Trash / Debris / Silt Removal					
①②③○		Joint Failure				①②③○		Ladder / Steps Condition					
①②③○		Trash / Debris Removal				①②③○		Other:					
①②③○		Erosion				Filterra							
①②③○		Cave-In				Tree Type:							
①②③○		Other:				SCORE	PHOTO	DESCRIPTION					
Forebay Chamber (1st)						①②③○		Access					
SCORE	PHOTO	DESCRIPTION				①②③○		Grate Condition					
①②③○		Access				①②③○		Blockage / Obstruction / Clog					
①②③○		Joint Failure				①②③○		Cleanout Access / Damage					
①②③○		Trash / Debris / Silt Removal				①②③○		Trash / Debris / Silt Removal					
①②③○		Damage				①②③○		Underdrain Pipe Blockage / Obstruction / Clog					
①②③○		Blockage				①②③○		Vegetation Condition					
①②③○		Trash Rack Damage				①②③○		Other:					
①②③○		Trash Rack Missing				Stormchamber							
①②③○		Water Level				SCORE	PHOTO	DESCRIPTION					
①②③○		Ladder / Steps Condition				①②③○		Manhole Condition					
①②③○		Swirl Concentrator Damage				①②③○		PVC Top & Neck					
①②③○		Other:				①②③○		Chamber Blockage / Obstruction / Clog					
Records						①②③○		Weir Wall Condition					
YES / NO	DESCRIPTION					①②③○		Bottom Screen Damage / Blockage / Clog					
Yes / No	Inspections were conducted as per County Records					①②③○		Catch Basin Condition					
Yes / No	Maintenance was done as per County Records					Level of Service Scoring Key							
Yes / No	Maintenance Record Made Available					①	High (1 day - 2 weeks)						
Monitoring Wells						②	Moderate (2 - 5 weeks)						
Holding Water Depth:						③	Low (2 months - 1 year)						
Last Rainfall:						○	Continue Routine Maintenance						

Inspector Comments: _____

<h1>Pervious Pavement Inspection Form</h1>					Inspector: <div>Cert <input type="radio"/> PE <input checked="" type="radio"/></div>	
					Inspector: <div>Cert <input type="radio"/> PE <input checked="" type="radio"/></div>	
					Date: <div></div>	
Site ID: <div></div>		Facility ID: <div></div>		Facility Name: <div></div>		
Address: <div></div>		Coordinates / ParID : <div></div>				
		Watershed: <div></div>		District: <div></div>		
Functional? <div><input type="checkbox"/> Yes <input type="checkbox"/> No</div>		Scoring Key		<div>①</div> High Priority / Non-functional		
				<div>②</div> Moderate Priority / Approaching Non-functional		
				<div>③</div> Low Priority / Functional		
				<div>⦿</div> No Priority / Continue Routine Maintenance		
				<div>⊗</div> Not Applicable		
Score Totals: <div><div>1</div><div>2</div><div>3</div></div>						
Notes / Specifications: <div></div>		Facility Specific Info: <div></div>				
Facility Type / Addl Facility Info: <div></div>						
Signs			Weather Conditions			
SCORE	PHOTO	DESCRIPTION	Last Rainfall	Date:	Amount:	
<div>①②③⦿⊗</div>		Facility Sign	Current weather conditions?			
<div>①②③⦿⊗</div>		Facility Labeling				
Accessibility						
Access Comments: <div>0</div>			ACCESS PROBLEMS (Circle)		NEXT STEP (Circle One)	
New Access Comments for EAM:			Locked Gate / Fence		Coordinate with Owner	
			Stuck / Broken Cover		Return for Re-inspection	
SCORE	PHOTO	DESCRIPTION	Equipment Needed: <div></div>		Request Photos from Owner	
<div>①⦿⊗</div>		Overall Facility Access	Other: <div></div>		Contact MSMD	
<div>①②③⦿⊗</div>		Component Access: <div></div>			Other: <div></div>	
Parking Lot						
SCORE	PHOTO	DESCRIPTION	COMMENTS / DIMENSIONS			
<div>①②③⦿⊗</div>		Trash / Debris / Sediment <div>Description / Amount:</div>				
<div>①②③⦿⊗</div>		Asphalt / Concrete Condition				
<div>①②③⦿⊗</div>		Other: <div>Description:</div>				
Permeable Pavement						
	Type (Paver/Concrete/Asphalt): <div></div>		Infiltration:		Underdrain: <div></div>	
SCORE	PHOTO	DESCRIPTION	COMMENTS / DIMENSIONS			
<div>①⦿⊗</div>		Ponding Water (after dry weather)				
<div>①②③⦿⊗</div>		Trash / Debris / Sediment <div>Description / Amount:</div>				
<div>①②③⦿⊗</div>		Vegetation				
<div>①②③⦿⊗</div>		Pavement Functionality (Infiltration)	ASTM 1701/1701M: Infiltration Rate of In Place Pervious Concrete			
<div>①②③⦿⊗</div>		Surface Damage (Cracking / Settlement)				
<div>①②③⦿⊗</div>		Broken or Missing Pavers				
<div>①②③⦿⊗</div>		Tree Dripline Over Pavement				
<div>①②③⦿⊗</div>		Evidence of Sand/Salt Application				
<div>①②③⦿⊗</div>		Other: <div></div>				
	Observation Well / Cleanout (if applicable)					
<div>①⦿⊗</div>		Missing				
<div>①⦿⊗</div>		Cap Missing / Stuck				
<div>①⦿⊗</div>		Water / Sediment Observed in Well				
<div>①②③⦿⊗</div>		Damaged				
<div>①②③⦿⊗</div>		Other: <div></div>				
Emergency Overflow / Outfall Structure						
			Emergency Overflow Provided?	Yes / No		
SCORE	PHOTO	DESCRIPTION	COMMENTS / DIMENSIONS			
<div>①②③⦿⊗</div>		Blockage <div>(③ < 25% < ② < 75% < ①)</div>				
<div>①②③⦿⊗</div>		Trash / Debris / Sediment <div>Description / Amount:</div>				
<div>①②③⦿⊗</div>		Damage / Deterioration				
<div>①②③⦿⊗</div>		Overgrown Vegetation / External Obstruction				
<div>①②③⦿⊗</div>		Manhole Condition				
<div>①②③⦿⊗</div>		Ladder / Steps Condition				
<div>①②③⦿⊗</div>		Downstream Pipe Condition				
<div>①②③⦿⊗</div>		Other: <div>Description:</div>				
	Underdrain Pipe		Required by Plans?	Yes / No		
<div>①⦿⊗</div>		Missing / Not Found				
<div>①⦿⊗</div>		Flow-Reduction Orifice Missing (if required)				
<div>①②③⦿⊗</div>		Blockage <div>(③ < 25% < ② < 75% < ①)</div>				
<div>①②③⦿⊗</div>		Damage / Deterioration				
<div>①②③⦿⊗</div>		Other: <div>Description:</div>				
Other						
SCORE	PHOTO	DESCRIPTION	LOCATION			
<div>①②③⦿⊗</div>		Encroachments				
<div>①②③⦿⊗</div>		Modifications				
<div>①②③⦿⊗</div>		Mosquito Habitat				
<div>①②③⦿⊗</div>		Evidence of Possible Illicit Discharge, Call to Report (703-877-2800: Inspection, Maint., & Enforc. Section)				
INSPECTOR COMMENTS						

FCTID	Test Site	Pre-Wetting Time (sec) (1 Gallon)	Test Volume (Gallons)	Test Time (sec)	Average Test Time (sec)	Infiltration Rate (in/hr)	Average Infiltration Rate (in/hr)	Pass/Fail
PA	1	0	1	300	300.0	24.5	24.51	PASS
	2	0	1	300		24.5		
	3	0	1	300		24.5		
Average Infiltration Rate >= 24.5 in/hr: PASS – Continue Routine Maintenance								
Average infiltration Rate < 24.5 in/hr: FAIL – Maintenance Required								

9.1 Calculate the infiltration rate (*I*) using consistent units as follows:

$$I = \frac{KM}{(D^2 * t)}$$

where:

I = Infiltration rate, mm/h [in./h],

M = Mass of infiltrated water, kg [lb],

D = Inside diameter of infiltration ring, mm [in.],

t = time required for measured amount of water to infiltrate the concrete,

K = 4 583 666 000 in SI units or 126 870 in [inch-pound] units.

NOTE 4—The factor *K* has units of (mm³·s)/(kg·h) [(in.³·s)/(lb·h)] and is needed to convert the recorded data (*W*, *D*, and *t*) to the infiltration rate *I* in mm/h [in./h].

Sandfilter Inspection Form

Inspector:

Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

IMMEDIATE ACTION:

1 2 3

Facility Type (circle one):			Austin Sand Filter		DC Sand Filter		Delaware Sand Filter		
Accessibility				Austin Sand Filter Dam / Berm / Weir Wall					
SCORE	PHOTO	DESCRIPTION		SCORE	PHOTO	DESCRIPTION			
①②③⊙		Manholes, Frames and Covers		①②③⊙		Toe Soft Spots Face			
①②③⊙		Vents		①②③⊙		Toe Soft Spots Back			
①②③⊙		Obstruction to Structure		①②③⊙		Slope Erosion Face			
①②③⊙		Steps and / or Ladders Condition		①②③⊙		Slope Erosion Back			
①②③⊙		Top Slab - Cracks or Spalling		①②③⊙		Bare Spots Face			
①②③⊙		Lift Lugs and / or Parging		①②③⊙		Bare Spots Back			
①②③⊙		Erosion Around Structure		①②③⊙		Cave-In Over PSP Back			
Sedimentation Chamber / Pond Floor				①②③⊙		Cave-In Over PSP Face			
SCORE	PHOTO	DESCRIPTION		①②③⊙		Cave-In Over PSP Top			
①⊙		Trash Rack Missing		①②③⊙		Animal Holes Face			
①⊙		Elbows Missing		①②③⊙		Animal Holes Back			
①⊙		Elbows Correction		①②③⊙		Tree Removal Back Slope			
①②③⊙		Trash Rack Obstructed		①②③⊙		Tree Removal Face Slope			
①②③⊙		Joint Failure		①②③⊙		Tree Removal Top of Dam			
①②③⊙		Cracks and / or Displacement		①②③⊙		Overgrown Vegetation Face Slope			
①②③⊙		Silted-In, Debris and / or Trash		①②③⊙		Overgrown Vegetation Back Slope			
①②③⊙		Spalling		①②③⊙		Overgrown Vegetation Top of Dam			
①②③⊙		Leaking		①②③⊙		Un-authorized Planting			
①②③⊙		Debris / Trash on Orifice / Standpipe		Austin Sand Filter Principal Spillway Pipe					
①②③⊙		Riser Condition - Damaged or Deteriorated		Pipe Size:		PSP Type:		Pipe Total:	
①②③⊙		Trees / Vegetation		SCORE	PHOTO	DESCRIPTION			
①②③⊙		Condition of Inlets / Pipes		①②③⊙		Spalling			
Outfall Chamber / Pipe				①②③⊙		Blockage			
SCORE	PHOTO	DESCRIPTION		①②③⊙		Joint Failure			
①②③⊙		Silted-In, Debris and / or Trash		①②③⊙		Misaligned Joints			
①②③⊙		Outfall Pipe		Upland Characteristics					
①②③⊙		Condition of Chamber		SCORE	PHOTO	DESCRIPTION			
①②③⊙		Spalling		①②③⊙		Silt / Debris			
①②③⊙		Joint Failures		①②③⊙		Bare Area - Soil			
①②③⊙		Leakage		①②③⊙		Parking Lot - Sand			
①②③⊙		Condition of Dewatering Drain and Gate Valve		Sand Filter / Filtration Basin					
①②③⊙		Endwall, Headwall and End Sections		SCORE	PHOTO	DESCRIPTION			
Mosquito Habitat Location				①②③⊙		Silted- In / Debris			
SCORE	PHOTO	DESCRIPTION		①②③⊙		Cracks and / or Displacement			
①②③⊙		Sedimentation Chamber / Pond Floor		①②③⊙		Leakage			
①②③⊙		Outfall Chamber		①②③⊙		Structure of the Chamber			
①②③⊙		Control Structure		①②③⊙		Oil / Chemical Accumulation on Gravel / Sand			
①②③⊙		Sand / Filtration Chamber		①②③⊙		Filter Fabric			
Encroachments				①②③⊙		Vegetation			
SCORE	PHOTO	DESCRIPTION		①②③⊙		Spalling			
①②③⊙		Access Road		①②③⊙		Joint Failure			
①②③⊙		Spillway		Level of Service Scoring Key					
①②③⊙		Vegetation		①	High (1 day - 2 weeks)				
①②③⊙		Pond		②	Moderate (2 - 5 weeks)				
①②③⊙		Embankments		③	Low (2 months - 1 year)				
Oil/Grit Maintenance Records				⊙	Continue Routine Maintenance				
YES / NO	DESCRIPTION								
Yes / No	Inspections were conducted as per County Records								
Yes / No	Maintenance was done as per County Records								
Yes / No	Maintenance Record Made Available								

Tree Box Filter Inspection Form

Inspector: _____
Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

1

2

3

Notes / Specifications:

Maintenance Priority		Weather Conditions	
①	High Priority / Non-functional	Has it rained within the last 24 hours?	Yes / No
②	Moderate Priority / Barely Functional	Has it rained within the last 48 hours?	Yes / No
③	Low Priority / Functional	Has it rained within the last 72 hours?	Yes / No
⦿	No Priority / Continue Routine Maintenance	Current weather conditions?	

Inflow							
Str # of Inflow Pipe(s):							
SCORE		DESCRIPTION		COMMENTS / DIMENSIONS			
①⦿		Access					
①②③⦿		_____ % Blockage					
①②③⦿		Trash / Debris / Sediment					
①②③⦿		Deterioration: Spalling / Erosion / Undermining					
①②③⦿		Damaged: Joint Separation / Failure					
①②③⦿		Other: _____					

Filter Box / Control Structure				
Str #:				
SCORE		DESCRIPTION		COMMENTS / DIMENSIONS
①⦿		Access / Condition of Grate		
①②③⦿		Trash / Debris / Sediment		
①②③⦿		Deterioration: Joint Separation / Failure		
①②③⦿		Damaged: Spalling / Erosion / Undermining		
Plant Material				
①⦿		Missing / Dead		
①②③⦿		Blocked / Buried (_____ % Blockage)		
①②③⦿		Damaged / Diseased		
①⦿		Invasive Species		
①②③⦿		_____ % Weed Coverage		
Mulch				
①⦿		Missing		
①②③⦿		Blocked / Buried (_____ % Blockage)		
①⦿		Mulch to desired thickness?		
①②③⦿		Other: _____		
Observation Well / Clean Out				
①⦿		Missing		
①②③⦿		Blocked / Buried (_____ % Blockage)		
①②③⦿		Damaged		
①⦿		Water / sediment observed in well?		
①②③⦿		Other: _____		

Emergency Overflow (if applicable) / Outfall				
Str #:				
SCORE		DESCRIPTION		COMMENTS / DIMENSIONS
①⦿		Access		
①②③⦿		_____ % Blockage		
①②③⦿		Trash / Debris / Sediment		
①②③⦿		Deterioration: Spalling / Erosion / Undermining		
①②③⦿		Damaged: Joint Separation / Failure		
①②③⦿		Tree Over / Near the Structure		
①②③⦿		Other: _____		

Encroachments			Mosquito Habitat Location		
SCORE		LOCATION	SCORE		LOCATION
①⦿			①⦿		

COMMENTS

Underground Detention Inspection Form

Inspector: _____

Date: _____

Site ID: _____ Facility ID: _____

Address: _____

Facility Name: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

1	2	3
---	---	---

Notes / Specifications:

Maintenance Priority		Weather Conditions	
①	High Priority / Non-functional	Has it rained within the last 24 hours?	Yes / No
②	Moderate Priority / Barely Functional	Has it rained within the last 48 hours?	Yes / No
③	Low Priority / Functional	Has it rained within the last 72 hours?	Yes / No
⦿	No Priority / Continue Routine Maintenance	Current weather conditions?	

Inflow(s)									
Str # of Inflow Pipe(s):									
SCORE		DESCRIPTION				COMMENTS / DIMENSIONS			
①⦿		Access							
①②③⦿		Trash / Debris / Sediment							
①②③⦿		_____ % Blockage							
①②③⦿		Deterioration: Spalling / Erosion / Undermining							
①②③⦿		Damaged: Joint Separation / Failure							
①②③⦿		Tree Over / Near the Structure							
①②③⦿		Other: _____							

Detention Pipe / Chamber / Vault									
Str #:									
SCORE		DESCRIPTION				COMMENTS / DIMENSIONS			
①⦿		Access							
①②③⦿		Trash / Debris / Sediment							
①②③⦿		Deterioration: Spalling / Erosion / Undermining							
①②③⦿		Damaged: Joint Separation / Failure							
①②③⦿		Tree Over / Near the Structure							
①②③⦿		Ladder / Steps Condition							
①②③⦿		Other: _____							

*Underground Trench Only									
Str #:									
SCORE		DESCRIPTION				COMMENTS / DIMENSIONS			
①⦿		Access							
		Observation Well / Clean Out							
①⦿		Missing							
①②③⦿		Blocked / Buried (_____ % Blockage)							
①②③⦿		Damaged							
①②③⦿		Water / sediment observed in well?							
①②③⦿		Other: _____							

Control Structure									
Str #:									
SCORE		DESCRIPTION				COMMENTS / DIMENSIONS			
①⦿		Access							
①②③⦿		Trash / Debris / Sediment							
①②③⦿		Deterioration: Spalling / Erosion / Undermining							
①②③⦿		Damaged: Joint Separation / Failure							
		Flow Restrictor							
①⦿		Missing							
①②③⦿		Blocked / Buried (_____ % Blockage)							
①②③⦿		Damaged							
		Trash Rack							
①⦿		Missing							
①②③⦿		Blocked / Buried (_____ % Blockage)							
①②③⦿		Damaged							
①②③⦿		Other: _____							

Outfall					
Str #:					
SCORE		DESCRIPTION		COMMENTS / DIMENSIONS	
①⊕		Access			
①②③⊕		Trash / Debris / Sediment Removal			
①②③⊕		% Blockage			
①②③⊕		Deterioration: Spalling / Erosion / Undermining			
①②③⊕		Damaged: Joint Separation / Failure			
①②③⊕		Tree Over / Near the Structure			
①②③⊕		Other: _____			
Encroachments			Mosquito Habitat Location		
SCORE		LOCATION	SCORE		LOCATION
①⊕			①⊕		
COMMENTS					

Vegetated Swale Inspection Form

Inspector: _____
Date: _____

Site ID: _____

Facility ID: _____

Facility Name: _____

Address: _____

Coordinates / ParID : _____

Watershed: _____

District: _____

Score Totals:

1

2

3

Notes / Specifications:

Maintenance Priority		Weather Conditions	
①	High Priority / Non-functional	Has it rained within the last 24 hours?	Yes / No
②	Moderate Priority / Barely Functional	Has it rained within the last 48 hours?	Yes / No
③	Low Priority / Functional	Has it rained within the last 72 hours?	Yes / No
⦿	No Priority / Continue Routine Maintenance	Current weather conditions?	

Inflow									
Str # of Inflow Pipe(s):									
SCORE		DESCRIPTION			COMMENTS / DIMENSIONS				
①⦿		Access							
①②③⦿		Trash / Debris / Sediment							
①②③⦿		_____ % Blockage							
	Pipe								
①②③⦿		Deterioration: Spalling / Erosion / Undermining							
①②③⦿		Damaged: Joint Separation / Failure							
①②③⦿		Tree Over / Near the Structure							
①②③⦿		Other: _____							
	Overland								
①②③⦿		Damaged: Bald Spots / Erosion							
①②③⦿		Other: _____							

Vegetated Swale			
SCORE		DESCRIPTION	COMMENTS / DIMENSIONS
①⦿		Access	
①②③⦿		Trash / Debris / Sediment	
①②③⦿		Deterioration: Bald Spots / Erosion	
①②③⦿		Damaged: Channelization	
①②③⦿		Condition of vegetated cover	
	Check Dams		
①⦿		Missing	
①②③⦿		Blocked (_____ % Blockage)	
①②③⦿		Damaged	
①②③⦿		Other: _____	
	Observation Well / Clean Out		
①⦿		Missing	
①②③⦿		Blocked / Buried (_____ % Blockage)	
①②③⦿		Damaged	
①⦿		Water / sediment observed in well?	
①②③⦿		Other: _____	
	Bioswales Only:		
①⦿		Plants Missing / Dead	
①②③⦿		Plants Damaged / Diseased	
①⦿		Invasive Species	
①②③⦿		_____ % Weed Coverage	

Outfall					
Str #:					
SCORE		DESCRIPTION			COMMENTS / DIMENSIONS
①⦿		Access			
①②③⦿		Trash / Debris / Sediment			
①②③⦿		_____ % Blockage			
①②③⦿		Deterioration: Spalling / Erosion / Undermining			
①②③⦿		Damaged: Joint Separation / Failure			
①②③⦿		Tree Over / Near the Structure			
①②③⦿		Other: _____			

Encroachments			Mosquito Habitat Location		
SCORE		LOCATION	SCORE		LOCATION
①⦿			①⦿		

COMMENTS

Pond / Wetland Inspection Form										Inspector: <div>Cert PE</div>	
										Inspector: <div>Cert PE</div>	
										Date:	
Site ID:		Facility ID:		Facility Name:							
Address:				Coordinates / ParID :							
				Watershed:		District:					
Functional? <input type="checkbox"/> Yes <input type="checkbox"/> No				Scoring Key		① High Priority / Non-functional					
						② Moderate Priority / Approaching Non-functional					
						③ Low Priority / Functional					
						⦿ No Priority / Continue Routine Maintenance					
						⊗ Not Applicable					
Score Totals: <div><div>1</div><div>2</div><div>3</div></div>											
Notes / Specifications:				Facility Specific Info:							
Facility Type / Addl Facility Info:											
Signs						Weather Conditions					
SCORE	PHOTO	DESCRIPTION				Last Rainfall		Date:		Amount:	
③⦿⊗		Facility Sign				Current weather conditions?					
③⦿⊗		Facility Labeling									
Accessibility											
Access Comments:						ACCESS PROBLEMS (Circle)			NEXT STEP (Circle One)		
New Access Comments:						Locked Gate / Fence			Coordinate with Owner		
						Heavy Vegetation			Return for Re-inspection		
SCORE	PHOTO	DESCRIPTION				Stuck / Broken Cover			Request Photos from Owner		
①⦿⊗		Overall Facility Access				Equipment Needed:					
①②③⦿⊗		Component Access:				Other:			Other:		
Control Structure											
Function:		Orifice Size:		Type (Circle): Riser Structure / Pipe End / Weir / Other:							
SCORE	PHOTO	DESCRIPTION				COMMENTS / DIMENSIONS					
①②③⦿⊗		Damage / Deterioration Description:									
①②③⦿⊗		Vegetation / External Obstructions									
①②③⦿⊗		Other: Description:									
	Low-Flow Orifice and Trash Rack										
①⦿⊗		Orifice Plate Missing / Non-Functional									
①⦿⊗		Trash Rack Missing / Non-Functional									
①②③⦿⊗		Blockage (③ < 25% < ② < 75% < ①)									
①②③⦿⊗		Damage / Deterioration Description:									
	Top Trash Rack and Anti-Vortex Plate										
①⦿⊗		Pad Lock Missing									
①②③⦿⊗		Blockage (③ < 25% < ② < 75% < ①)									
①②③⦿⊗		Damage / Deterioration Description:									
	Riser Interior										
①②③⦿⊗		Trash / Debris / Sediment Description / Amount:									
①②③⦿⊗		Ladder / Steps Condition									
①②③⦿⊗		Manhole Condition									
	Principal Spillway Pipe, Upstream End					1	2	3	4	5	6
①②③⦿⊗		Blockage (③ < 25% < ② < 75% < ①)									
①②③⦿⊗		Spalling / Deterioration									
①②③⦿⊗		Separation / Misaligned Joints									
Dam / Berm and Emergency Spillway											
										Sep Auxillary Spillway:	
SCORE	PHOTO	DESCRIPTION	FACE SLOPE		TOP OF DAM		BACK SLOPE		EMERG. SPILLWAY		
			Score	Comments	Score	Comments	Score	Comments	Material:		
①②③⦿⊗		Toe Soft Spots							Score	Comments	
①②③⦿⊗		Cave-In									
①②③⦿⊗		Slope Erosion Area:									
①②③⦿⊗		Bare Spots Area:									
①②③⦿⊗		Animal Holes									
①②③⦿⊗		Tree Removal Num/Size:									
①②③⦿⊗		Woody Vegetation									
①②③⦿⊗		Overgrown Non-woody Veg.									
①②③⦿⊗		Trash / Debris / Sediment									
①②③⦿⊗		Alterations: Description:									
①②③⦿⊗		Other: Description:									
①②③⦿⊗		Blockage at Emergency Spillway (③ < 25% < ② < 75% < ①)									
①②③⦿⊗		Damage / Deterioration at Emergency Spillway Description:									
Outfall Structure / PSP Downstream End											
Material:		Size:		End Type:		Pipe Total:					
SCORE	PHOTO	DESCRIPTION				1	2	3	4	5	6
①②③⦿⊗		Blockage (③ < 25% < ② < 75% < ①)									
①②③⦿⊗		Trash / Debris / Sediment Description / Amount:									
①②③⦿⊗		Erosion / Undermining Area:									
①②③⦿⊗		Spalling / Deterioration									
①②③⦿⊗		Separation / Misalignment									
①②③⦿⊗		Overgrown Vegetation / Tree Removal									
①②③⦿⊗		Handrail Status									
①②③⦿⊗		Manhole Condition									
①②③⦿⊗		Ladder / Steps Condition									
①②③⦿⊗		Downstream Channel Condition									
①②③⦿⊗		Other:									

Pond / Wetland Inspection Form

Page 2

Site ID: _____

Facility ID: _____

Facility Name: _____

Pond Floor / Pool

SCORE	PHOTO	DESCRIPTION	COMMENTS / DIMENSIONS											
①	⊙⊗	Water Level Inconsistent with Plans												
①②③	⊙⊗	Trash / Debris / Sediment <i>Description / Amount:</i>												
①②③	⊙⊗	Overgrown Vegetation												
①②③	⊙⊗	Tree Removal <i>Number / Size:</i>												
①②③	⊙⊗	Erosion / Bare Spots <i>Area:</i>												
①②③	⊙⊗	Other: <i>Description:</i>												
	Trickle Ditch / Low Flow Channel		Shown on Plans:		Yes / No		Ditch Material:		Ditch Total:					
①	⊙⊗	Not Found / Completely Covered												
①②③	⊙⊗	Trash / Debris / Sediment <i>Description / Amount:</i>												
①②③	⊙⊗	Blockage <i>(③ < 25% < ② < 75% < ①)</i>												
①②③	⊙⊗	Erosion / Trenching / Roots <i>Description:</i>												
①②③	⊙⊗	Detoured Flow Line <i>Description:</i>												
①②③	⊙⊗	Damage / Deterioration <i>Description:</i>												
①②③	⊙⊗	Other: <i>Description:</i>												
	Sediment Forebay and Micropools		1	2	3	4	5	6						
Type of Pond Cell (<u>E</u> orebay, <u>M</u> icropool, <u>W</u> etland Cell, etc.)														
①	⊙⊗	Inconsistent with Plans												
①②③	⊙⊗	Erosion / Bare Spots <i>Area:</i>												
①②③	⊙⊗	Trash / Debris / Sediment <i>Description / Amount:</i>												
①②③	⊙⊗	Overgrown Vegetation												
①②③	⊙⊗	Tree Removal <i>Number / Size:</i>												
①②③	⊙⊗	Displaced Rip Rap												
①②③	⊙⊗	Weir Condition <i>Type:</i>												
①②③	⊙⊗	Other: <i>Description:</i>												
	Wetland Habitat		Signs Posted:		Yes / No		Plants in Inventory:							
Type(s): Pretreatment: Forebay / Vegetated buffer area / Grass filter strip / Grass channel / Other: _____														
	Type of Wetland (Emergent/Forested)													
①②③	⊙⊗	Unhealthy / Damaged												
①②③	⊙⊗	Vegetation is overgrown?												
①②③	⊙⊗	Submergent Vegetation	Observed				Specified							
		Veg 1.												
		Veg 2.												
		Veg 3.												
		Veg 4.												
①②③	⊙⊗	Emergent Vegetation	Observed				Specified							
		Veg 1.												
		Veg 2.												
		Veg 3.												
		Veg 4.												
①②③	⊙⊗	Undesired Vegetation (Cattails / Phragmites)	Observed											
		Veg 1.												
		Veg 2.												
		Veg 3.												
		Veg 4.												
①②③	⊙⊗	>15% of Undesirable Vegetation?												
①②③	⊙⊗	Plants consistent with plans?												
①②③	⊙⊗	Posted Sign Condition												
①②③	⊙⊗	Other: <i>Description:</i>												
Upstream Inflow(s)														
SCORE	PHOTO	DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
		End Type / Overland:												
		Pipe Material:												
		Pipe Size:												
①②③	⊙⊗	Blockage <i>(③ < 25% < ② < 75% < ①)</i>												
①②③	⊙⊗	Trash / Debris / Sediment <i>Description / Amount:</i>												
①②③	⊙⊗	Erosion / Undermining <i>Area:</i>												
①②③	⊙⊗	Spalling / Deterioration												
①②③	⊙⊗	Separation / Misalignment												
①②③	⊙⊗	Overgrown Vegetation / Tree Removal												
①②③	⊙⊗	Handrail Status												
①②③	⊙⊗	Downstream Channel Condition												
①②③	⊙⊗	Other:												
Other														
SCORE	PHOTO	DESCRIPTION	LOCATION											
①②③	⊙⊗	Encroachments												
①②③	⊙⊗	Modifications												
①②③	⊙⊗	Mosquito Habitat												



Appendix B

Loudoun County Maintenance Guidelines



BIORETENTION/RAINGARDENS

1. Bioretention/Raingarden facilities must function as designed according to the approved site plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Ensure access to cleanouts, observation wells, and all other stormwater structures.
5. Overgrown vegetation is not necessarily an issue.
6. Clear trash and debris from all associated structures (e.g., control, outfall, cleanouts, underdrains, etc.).
7. Clear all woody and non-woody vegetation within 25' of stormwater structures.
8. Clear all woody vegetation from the berm.
9. Ensure the berm is maintained to allow for appropriate depth of ponding.
10. Inspect the facility for evidence of reduced infiltration capacity. For example, ponded water observed 48 hours after a storm event likely indicates there is an infiltration problem.
11. Inspect all observation well for standing water.
12. The vegetation in the bioretention should be healthy, pest free, and conform to the landscape plans for the facility. Perform landscape maintenance as described in the approved site plan.



CDS/HYDRODYNAMIC SEPARATORS

1. CDS/Hydrodynamic Separator facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Clear grass and plant material on and around the manhole covers and access doors.
5. Maintain access doors and manholes in good working condition to allow entry, inspection, and maintenance of the underground facility.
6. Remove debris, trash, and sediment buildup from the facility chamber including from inside the separation cylinder.
7. Remove blockages and obstructions from the inflows and inlet flume.
8. Keep stormwater inlets and outlets clear of debris and inspect after major rainfall storm events.
9. Repair areas of erosion around stormwater inlets and outlets and around manhole covers and access doors to prevent further damage.



DRY PONDS

1. Dry pond facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Seed and mow as necessary to maintain a healthy stand of grass, preferably 6 to 8 inches in height.
5. Repair and stabilize eroded areas throughout the facility.
6. Keep the back, top, and front of the dam clear of trees, shrubs and vines.
7. Regularly inspect the dam and vicinity for animal holes or burrows. Fill the holes and stabilize erosion caused by tunneling.
8. Clear all woody and non-woody vegetation within 25' of stormwater structures.
9. Clear trash and debris from all associated structures (e.g., control, outfall, cleanouts, underdrains, etc.).
10. Regularly inspect the riser, outfall, principal spillway pipe, and any other concrete structures for evidence of cracking, spalling, or deterioration. Repair as necessary
11. Ensure the principal spillway pipe is clear of blockages and sediment.
12. Regularly inspect the outfall channel for evidence of erosion, blockages, or standing water. Maintain as necessary.

NOTE: These guidelines do not include requirements for aesthetic maintenance (i.e., mosquito control, algae maintenance, etc.).



MANUFACTURED FILTRATION

1. Filtration facilities must function as designed according to the approved site plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Clear grass and plant material on and around manhole covers and access doors.
5. Maintain access doors and manholes in good working condition to allow entry, inspection, and maintenance of facilities.
6. Remove debris, trash, and sediment buildup from the weir wall, BMP orifice, and facility chambers.
7. Remove blockages and obstructions from inflows.
8. Keep stormwater inlets and outlets clear of debris and inspect after major storm events.
9. Repair areas of erosion around stormwater inlets and outlets and around manhole covers and access doors to prevent further damage.
10. Typical indicators of required maintenance include: excess sediment loading on vault floors or on top of cartridges, standing water present for more than 24 hours after a storm event, plugged cartridge media, release of hazardous material, or presence of a pronounced scum line. If any of these conditions are observed, consult a trained/licensed professional to determine what maintenance to the filtration facility is required.



OIL-WATER SEPARATORS

1. Oil-Water Separator facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Clear grass and plant material on and around the manhole covers and access doors.
5. Maintain access doors and manholes in good working condition to allow entry, inspection, and maintenance of the underground facility.
6. Remove debris, trash, and sediment buildup from the facility chambers.
7. Remove blockages and obstructions from the inflows.
8. Keep stormwater inlets and outlets clear of debris and inspect after major rainfall storm events.
9. Repair areas of erosion around stormwater inlets and outlets and around manhole covers and access doors to prevent further damage.



POROUS PAVEMENT

1. Porous Pavement facility must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Conduct annual vacuuming in the spring. A vacuum sweeper must be used that does not use water spray, as spraying may lead to subsurface clogging.
5. Check the infiltration functionality of the porous pavement by looking in the observation well three (3) days following a storm event more than 1/2 inch in depth. If standing water is still observed in the well after three days, this is a clear sign of clogging.
6. Inspect the surface of the porous pavement for evidence of sediment deposition, organic debris, staining, or ponding that may indicate surface clogging. If any signs of clogging are noted, schedule a vacuum sweeper (no brooms or water spray) to remove deposited material. Re-test for infiltration.
7. Inspect the structural integrity of the pavement surface, looking for signs of surface deterioration, such as slumping, cracking, spalling or broken pavers. Replace or repair affected areas as necessary.
8. Inspect cleanouts and outfall structure for sediment and debris. Remove as necessary.



SAND FILTERS

1. Sand filter facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Remove all grass and plant material on and around manhole covers and access doors to allow entry, inspection, and maintenance of the facility.
5. Maintain access doors and manholes in good working condition to allow entry, inspection, and maintenance of the facility.
6. Monitor the water level in the filter chamber on a quarterly basis and after every large storm event to ensure proper draining. Remove blockages and obstructions from the inflows.
7. Pump out the sediment chamber after each annual inspection. If the chamber contains an oil skim, this should be removed by a trained/licensed professional. The remaining material may then be removed by vacuum pump and disposed of in an appropriate landfill. After each cleaning, refill the sediment chamber to an approximate depth of three (3) feet, or as specified on approved plans, with clean water to reestablish the water seals.
8. When the filter will no longer draw down within the required 40-hour period, remove the top layer of #57 stone and the filter cloth and replace with new materials. At a minimum, this should be replaced every five years. Remove any discolored or sediment-contaminated sand and replace with new material per the approved plans.
9. Keep the dewatering valve in a closed position, except during maintenance.



TREE BOX FILTERS/FILTERRAS®

1. Tree Filter facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Clear inlet of obstructions, allowing free distributed flow of water into the unit. Remove excess sediment and trash accumulation as needed.
5. Clear the filter box of excess trash and debris.
6. Ensure the mulch cover is approximately 3" deep and replace annually.
7. Ensure stormwater drains freely and evenly through mulch cover. Ponded water in the filter box could be indicative of clogging due to excessive fine sediment accumulation or spill of petroleum oils. If ponded water is observed, contact the manufacturer for further investigation.
8. Plants and soil should be healthy and pest free. If necessary, contact the manufacturer for advice.
9. Ensure plant species conform to the approved site plans. If plant growth is excessive, trim/prune plants in accordance with typical landscaping and safety needs.
10. Inspect the concrete structure for visible cracks and ensure it is in good working condition. Repair the vault if cracks wider than 1/2 inch are observed or if evidence of soil particles entering the structure through the cracks are observed.
11. Remove sediment and debris from the outfall structure and underdrain.



UNDERGROUND DETENTION

1. Underground Detention facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Clear grass and plant material on and around the manhole covers and access doors.
5. Maintain access doors and manholes in good working condition to allow entry, inspection, and maintenance of the underground facility.
6. Remove debris, trash, and sediment buildup from the weir wall and BMP orifice in the control structure.
7. Remove debris, trash and sediment buildup from the underground storage pipes or chambers as needed to prevent the weir wall and BMP orifice in the control structure from becoming clogged and to ensure adequate storage volume for the designed rainfall storm event.
8. Remove blockages and obstructions from the inflow.
9. Keep stormwater inlets and outlets clear of debris and inspect after major rainfall storm events.
10. Repair areas of erosion around stormwater inlets and outlets and around the access manhole covers and access doors to prevent further damage.



VEGETATED SWALES

1. Swale facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Seed and mow as necessary to maintain a healthy stand of grass, preferably 3 to 6 inches in height. Stabilize and re-seed bare spots.
5. Remove debris, trash, grass clippings, and leaves from the swale bed.
6. Remove accumulated sediment and blockages from the surface of the swale, re-establishing vegetation.
7. Inspect the swale for evidence of reduced infiltration capacity when ponded water is present 48 hours after a storm event. Drill, aerate, or till the surface layer to restore infiltration capacity.
8. Remove blockages from swale inlets (curb cuts, pipes, etc.) and outlet.
9. Restore eroded areas throughout the swale, including the inflows, side slopes, outlets, trench surface, and swale bed.



WET PONDS

1. Wet pond facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Seed and mow the dam, berm, and upstream slopes as necessary to maintain a healthy stand of grass, preferably 6 to 8 inches in height.
5. Repair and stabilize eroded areas throughout the facility.
6. Keep the back, top, and front of the dam clear of trees, shrubs and vines.
7. Regularly inspect the dam and vicinity for animal holes or burrows. Fill the holes and stabilize erosion caused by tunneling.
8. Clear all woody and non-woody vegetation within 25' of stormwater structures.
9. Clear trash and debris from all associated structures (e.g., control, outfall, cleanouts, underdrains, etc.).
10. Regularly inspect the riser, outfall, principal spillway pipe, and any other concrete structures for evidence of cracking, spalling, or deterioration. Repair as necessary
11. Ensure the principal spillway pipe is clear of blockages and sediment.
12. Regularly inspect the outfall channel for evidence of erosion, blockages, or standing water. Maintain as necessary.

NOTE: These guidelines do not include requirements for aesthetic maintenance (i.e., mosquito control, algae maintenance, etc.).



WETLANDS

1. Wetland facilities must function as designed according to the approved facility plan.
2. Consult the appropriate iBMP card.
3. Only individuals with OSHA approved Confined Space Entry training may enter stormwater structures.
4. Remove trash and debris from the wetland area.
5. Harvest vegetation when there is a 50% reduction in the original open water surface area.
6. Restore eroded areas throughout the wetland.
7. Clear all woody and non-woody vegetation within 25' of stormwater structures.
8. Remove trash and debris from the control structure.
9. Regularly inspect the control structure for evidence of cracking, spalling, or deterioration. Repair any damage to the structure.



Appendix C

Loudoun County Private Stormwater BMP Enforcement Procedures

COUNTY OF LOUDOUN



DEPARTMENT OF GENERAL SERVICES

Memorandum

Date: August 20, 2019

To: Stormwater Team

From: Chris Stone, Stormwater Chief *CS*

Subject: Private BMP Inspection and Enforcement Procedures

Purpose

The purpose of this memorandum is to outline the procedures for inspecting private stormwater Best Management Practices (BMPs) and conducting the follow-up property owner notifications to ensure the long-term maintenance and functionality of the stormwater BMP.

Authority

1096.02 – Maintenance of the Stormwater Management System, Loudoun County Codified Ordinances.

Definitions

Private BMP – In Loudoun County, a post-construction stormwater BMP is considered a private BMP if the County is not authorized to conduct maintenance on the BMP. Typical examples include but are not limited to:

1. Stormwater BMPs without a stormwater easement dedicated to the County
2. Wet retention ponds (wet ponds) without a recorded Agreement for Maintenance of a Stormwater Management Pond (aka Wet Pond Agreement)
3. Manufactured filtration BMPs with a recorded Facilities Maintenance Performance Agreement.
4. Underground detention BMPs and pervious pavement BMPs approved after October 10, 2018
5. BMPs located inside of Virginia Department of Transportation maintained rights-of-way, Dulles International, Airport property and rights-of-way, Dulles Greenway property and rights-of-way, and the County's incorporated towns.

BMP Inspection

The County shall inspect all BMPs as outlined in the current stormwater management plan, including private BMPs. The schedule for inspection will vary depending on the BMP type. In cases where private BMPs are found to be not functioning as designed or to have significant preventative maintenance items, the stormwater team will draft a letter and notify the owner(s) of record.

Private BMP Notification

If a BMP inspection finds that a privately maintained BMP is not functioning as designed or has a significant preventative maintenance need, the stormwater team will issue a letter to the owner outlining the maintenance deficiency(s) and a timeframe to repair the BMP. The initial letter will be a notification letter and will not be a Notice of Violation (NOV) letter.

Private BMP Notification Follow-Up

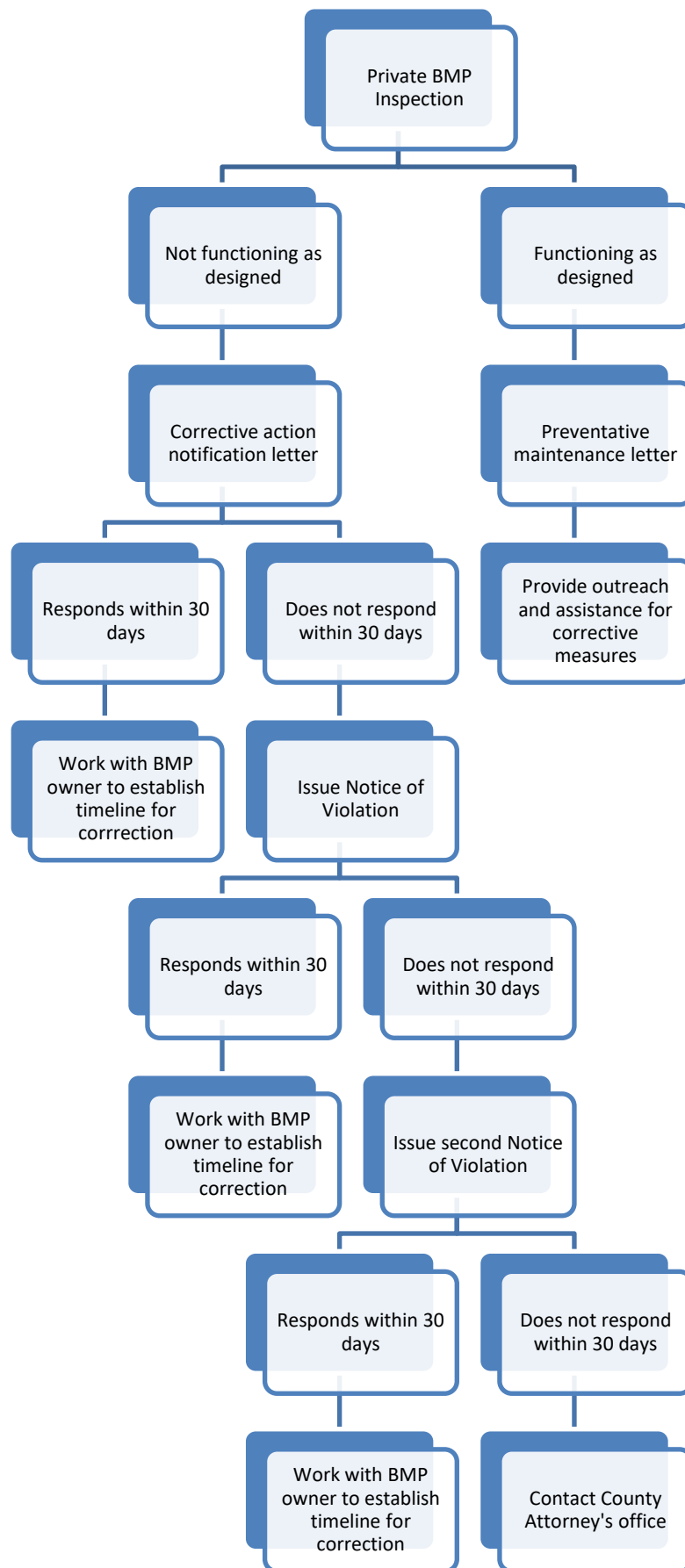
If the inspection found that the BMP is “not functioning as designed” and the owner(s) does not contact the County within 30 (calendar) days of the date of the first letter, an NOV letter will be issued to the property owner(s). The letter shall identify the maintenance items necessary to bring the BMP back into compliance, and shall also contain a time frame in which to complete the maintenance issues identified.

If there is no response to the first NOV letter within 30 calendar days, a second NOV letter will be issued to the property owner(s). The second NOV shall identify the maintenance items necessary to bring the BMP back into compliance, and shall also contain a time frame in which to complete the maintenance issues identified.

If there is no response to the second NOV letter, additional NOV letters may be issued but the stormwater team shall contact the County Attorney’s Office for guidance on the best path forward to achieve compliance.

A flow chart detailing the County’s private BMP inspection and enforcement process follows.

Private BMP Inspection and Enforcement Process



Loudoun County Virginia
BMPs Identified Within the MS4 Area from July 1, 2018 - June 30, 2019

FCTID	BMP Type	BMP Sub Type	Acres Treated	Pervious Acres	Imperv. Acres	Online Date	VAHUC6	Owner	Maint. Agmnt.	CB TMDL	Last Inspection	Longitude	Latitude
BT0060	Bioret		4.60	3.70	0.89	12/28/2018	PL19	County	Yes	<null>	<null>	-77.413538	39.022316
BT0061	Bioret		3.39	3.33	0.06	12/28/2018	PL19	County	Yes	<null>	<null>	-77.413934	39.021615
BT0062	Bioret		4.15	4.11	0.04	12/28/2018	PL19	County	Yes	<null>	<null>	-77.414499	39.020601
BT0064	Bioret		2.04	0.97	1.06	9/18/2018	PL14	County	Yes	<null>	<null>	-77.524780	39.004921
BT0065	Bioret		1.41	0.84	0.57	11/26/2018	PL19	County	Yes	<null>	<null>	-77.418738	39.027580
BT0066	Bioret		0.44	0.44	0.00	9/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.433225	39.018465
DP0046	Pnd_Dry	Extended Detenton	0.75	0.43	0.33	8/26/2018	PL19	County	Yes	<null>	On Bond	-77.438603	38.996721
FT0012	Fltrra		0.27	0.27	0.00	4/4/2019	PL19	County	Yes	<null>	4/12/2019	-77.461691	39.052858
FT0013	Fltrra		0.45	0.45	0.00	4/4/2019	PL19	County	Yes	<null>	4/12/2019	-77.461749	39.053049
OW0004	Oil Water Separator		<null>	<null>	<null>	10/9/2018	PL18	<null>	Yes	<null>	On Bond	-77.425226	38.978512
SW0016	Grass_Swale		1.34	0.32	1.02	12/14/2018	PL19	County	Yes	<null>	<null>	-77.457994	39.060524
SW0017	Dry_Swale		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.451418	38.999051
UG0071	Jellyfish		1.34	1.32	0.02	3/26/2019	PL19	County	Yes	<null>	On Bond	-77.439075	38.996290
UG0072	Jellyfish		1.40	1.37	0.03	2/5/2019	PL19	County	Yes	<null>	On Bond	-77.439003	38.996504
UG0073	Jellyfish		1.03	1.03	0.00	2/5/2019	PL19	County	Yes	<null>	On Bond	-77.438617	38.996560
UG0074	Jellyfish		8.91	8.00	0.90	9/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.435719	39.019203
UG0075	Jellyfish		3.97	3.96	0.01	9/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.432723	39.018518
UG0076	Jellyfish		3.16	3.16	0.00	9/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.433812	39.018404
UG0079	Jellyfish		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.451287	38.999598
UG0080	CDS		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.451162	38.998982
UG0081	Strmfltr		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.450852	39.000105
UG0082	Jellyfish		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.450260	39.000114
UG0083	Jellyfish		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.448776	39.000072
UG0084	Jellyfish		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.448325	38.999152
UG0085	Jellyfish		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.448426	38.998905
UG0086	CDS		<null>	<null>	<null>	12/14/2018	PL19	<null>	Yes	<null>	On Bond	-77.449079	38.999002
UG0087	Undrgrnddet	StormTech	2.73	2.29	0.45	4/17/2019	PL21	County	Yes	<null>	<null>	-77.391584	39.024119

Loudoun County Virginia
BMP Inspections (Private Ownership) Within the MS4 Area from July 1, 2018 - June 30, 2019

FCTID	Inspection Date	Functioning As Designed	Enforcement Action Taken
AB1418	4/23/2019	Yes	Preventative Maintenance Letter Sent
AB1703	6/21/2019	No	NOV Issued
AJ11	4/9/2019	Yes	Preventative Maintenance Letter Sent
AJ1684	6/19/2019	Yes	Preventative Maintenance Letter Sent
AJ847	4/24/2019	Yes	Preventative Maintenance Letter Sent
BC34	3/1/2019	Yes	Preventative Maintenance Letter Sent
BC35	3/1/2019	No	Maintenance Required Letter Sent
CH2034	5/15/2019	Yes	Preventative Maintenance Letter Sent
CH2388	4/10/2019	Yes	Preventative Maintenance Letter Sent
CH3417	4/8/2019	Yes	Preventative Maintenance Letter Sent
CH3722	4/9/2019	Yes	Preventative Maintenance Letter Sent
CH4115	4/10/2019	Yes	Preventative Maintenance Letter Sent
CH6231	6/21/2019	Yes	Preventative Maintenance Letter Sent
CH6580	6/21/2019	Yes	Preventative Maintenance Letter Sent
CH8845	4/1/2019	Yes	Preventative Maintenance Letter Sent
CP8690	5/28/2019	Yes	Preventative Maintenance Letter Sent
CP8695	5/28/2019	Yes	Preventative Maintenance Letter Sent
CP9231	4/10/2019	Yes	Preventative Maintenance Letter Sent
DF118	8/8/2019	Yes	Preventative Maintenance Letter Sent
MD1270	4/25/2019	Yes	Preventative Maintenance Letter Sent
MD2092	2/26/2019	Yes	Preventative Maintenance Letter Sent
MD2619	2/27/2019	No	Maintenance Required Letter Sent
MD2890	4/1/2019	Yes	Preventative Maintenance Letter Sent
MD3548	4/10/2019	Yes	Preventative Maintenance Letter Sent
RJ0147	4/10/2019	Yes	Preventative Maintenance Letter Sent
SR489	4/2/2019	No	NOV Issued
SR529	4/2/2019	Yes	Preventative Maintenance Letter Sent
WB1569	5/30/2019	Yes	Preventative Maintenance Letter Sent
WB50065	2/27/2019	Yes	Preventative Maintenance Letter Sent
WB564	4/25/2019	Yes	Preventative Maintenance Letter Sent

Loudoun County Virginia
BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2018 - June 30, 2019

FCTID	Inspection Date	Functioning As Designed	Description of Maintenance
AB110	4/24/2019	Yes	NA
AB1304	6/15/2019	Yes	NA
AB1350	4/23/2019	Yes	NA
AB1433	4/23/2019	Yes	Preventative Maintenance Only
AB1648	5/15/2019	Yes	Preventative Maintenance Only
AB1948	4/23/2019	Yes	Preventative Maintenance Only
AB1980	4/23/2019	Yes	NA
AB2012	4/9/2019	No	Preventative Maintenance Only
AB258	4/24/2019	Yes	NA
AB335	4/26/2019	Yes	Preventative Maintenance Only
AB343	4/26/2019	Yes	Parge pipe inside riser and parge pipe separations.
AB386	4/24/2019	Yes	Preventative Maintenance Only
AB668	4/26/2019	Yes	Preventative Maintenance Only
AB725	4/24/2019	Yes	NA
AB845	4/26/2019	Yes	Preventative Maintenance Only
AJ1114	4/10/2019	Yes	Preventative Maintenance Only
AJ1129	4/24/2019	Yes	NA
AJ1185	4/24/2019	Yes	NA
AJ1226	4/24/2019	Yes	JOC project is planned for this facility from recent inspection. Closing this ticket to prevent duplication.
AJ1232	6/21/2019	Yes	Preventative Maintenance Only
AJ1658	6/19/2019	Yes	Preventative Maintenance Only
AJ1703	6/19/2019	Yes	Preventative Maintenance Only
AJ1755	4/25/2019	Yes	See SW-FHP-0092. JOC project has already been set up.
AJ180	4/9/2019	Yes	NA
AJ191	4/10/2019	Yes	Preventative Maintenance Only
AJ20	4/10/2019	Yes	Preventative Maintenance Only
AJ2110	4/25/2019	Yes	NA
AJ231	6/21/2019	Yes	Preventative Maintenance Only
AJ244	4/10/2019	Yes	NA
AJ294	8/8/2019	Yes	Remove trees and vegetation at the dam and pond floor.
AJ498	2/28/2019	Yes	Remove trees from the dam. Remove the pipe obstructions. Repair the separation and cave in.
AJ588	6/21/2019	Yes	NA
AJ769	4/17/2019	Yes	Preventative Maintenance Only
AJ783	4/18/2019	Yes	Preventative Maintenance Only
AJ801	4/17/2019	Yes	Preventative Maintenance Only
AJ829	4/18/2019	Yes	Preventative Maintenance Only
AJ845	4/24/2019	Yes	NA
AJ884	4/24/2019	Yes	NA
AJ938	6/19/2019	Yes	Preventative Maintenance Only
BC1	5/15/2019	Yes	NA
BC105	2/27/2019	Yes	NA
BC108	4/8/2019	Yes	NA
BC109	4/8/2019	Yes	Preventative Maintenance Only
BC110	4/9/2019	Yes	Preventative Maintenance Only
BC125	4/26/2019	Yes	NA
BC126	4/23/2019	Yes	Preventative Maintenance Only
BC3	4/1/2019	Yes	Preventative Maintenance Only
BC31	4/23/2019	Yes	Preventative Maintenance Only
BC55	6/2/2019	No	NA
BC59	4/18/2019	Yes	Preventative Maintenance Only
BC60	4/1/2019	Yes	NA
BC63	4/24/2019	Yes	NA
BC64	3/2/2019	Yes	Preventative Maintenance Only
BC65	4/8/2019	Yes	Preventative Maintenance Only

Loudoun County Virginia
BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2018 - June 30, 2019

FCTID	Inspection Date	Functioning As Designed	Description of Maintenance
BC68	4/1/2019	Yes	NA
BC69	4/1/2019	Yes	NA
BC7	4/10/2019	Yes	NA
BC8	4/25/2019	Yes	Preventative Maintenance Only
CH1922	5/15/2019	Yes	Preventative Maintenance Only
CH2180	4/10/2019	Yes	Preventative Maintenance Only
CH2478	4/10/2019	Yes	Preventative Maintenance Only
CH25	4/24/2019	No	PO issued to Wood for study period for retrofit/repair.
CH3180	4/8/2019	Yes	Preventative Maintenance Only
CH3224	4/8/2019	Yes	Preventative Maintenance Only
CH3246	4/8/2019	Yes	Preventative Maintenance Only
CH3265	4/8/2019	Yes	NA
CH3284	4/9/2019	Yes	NA
CH3294	4/8/2019	Yes	Preventative Maintenance Only
CH3332	4/8/2019	Yes	Preventative Maintenance Only
CH3410	4/8/2019	Yes	NA
CH3445	4/8/2019	Yes	NA
CH3465	4/9/2019	Yes	NA
CH3472	4/8/2019	Yes	Preventative Maintenance Only
CH3482	4/8/2019	Yes	Preventative Maintenance Only
CH3522	4/9/2019	Yes	NA
CH3568	4/8/2019	No	Add a low flow orifice plate. Remove the sediment/veg from the pond floor. Remove sediment at the inlet pipes and add rip rap.
CH3653	4/8/2019	Yes	NA
CH3703	4/9/2019	Yes	Preventative Maintenance Only
CH3994	4/10/2019	Yes	Preventative Maintenance Only
CH4116	4/10/2019	Yes	NA
CH4135	3/1/2019	Yes	NA
CH4149	4/10/2019	Yes	NA
CH4206	4/24/2019	Yes	Preventative Maintenance Only
CH4243	4/16/2019	Yes	Remove the trees & veg from the pond floor. Remove sediment at the inlet pipes and add rip rap. Repair the pipe separations.
CH4249	4/19/2019	Yes	Remove the sediment & dirty stone at the stack pipe and rebed in clean stone. Remove sediment and blockages at the inlet pipes. Add new rip rap.
CH4311	6/19/2019	Yes	NA
CH4573	2/28/2019	Yes	Preventative Maintenance Only
CH4586	4/17/2019	Yes	NA
CH4615	4/17/2019	Yes	NA
CH4646	4/16/2019	Yes	NA
CH4684	4/24/2019	Yes	NA
CH4702	4/16/2019	Yes	NA
CH4726	4/24/2019	Yes	NA
CH4739	4/23/2019	Yes	Preventative Maintenance Only
CH4789	4/16/2019	Yes	NA
CH4809	4/16/2019	Yes	Remove the sediment & dirty stone at the stack pipe and rebed in clean stone. Remove trees from the pond floor.
CH4821	4/16/2019	Yes	NA
CH5745	6/19/2019	Yes	NA
CH5856	4/25/2019	Yes	NA
CH6270	6/19/2019	Yes	NA
CH788	4/29/2019	Yes	Preventative Maintenance Only
CH792	4/29/2019	Yes	Preventative Maintenance Only
CH8797	4/24/2019	Yes	Preventative Maintenance Only
CK1001	4/2/2019	Yes	NA
CP10270	5/30/2019	Yes	Preventative Maintenance Only
CP3115	4/9/2019	Yes	NA
CP8070	5/30/2019	Yes	NA
CP9341	2/26/2019	Yes	Remove the obstruction at low flow orifice. Remove the obstructions at inlet pipes

Loudoun County Virginia
BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2018 - June 30, 2019

FCTID	Inspection Date	Functioning As Designed	Description of Maintenance
CP9375	2/26/2019	Yes	NA
CW2	2/28/2019	Yes	Preventative Maintenance Only
CW8	3/1/2019	Yes	NA
DB106	5/30/2019	Yes	Preventative Maintenance Only
DD59	2/26/2019	Yes	Preventative Maintenance Only
DF119	8/8/2019	Yes	NA
DF143	5/30/2019	Yes	Preventative Maintenance Only
DF186	5/30/2019	Yes	Remove the debris from the control structure. Complete the tree removal and erosion repair at the pond floor.
DF218	4/24/2019	Yes	Preventative Maintenance Only
DF237	4/29/2019	Yes	Preventative Maintenance Only
DK50002	4/10/2019	Yes	NA
DW1	4/25/2019	Yes	Preventative Maintenance Only
GC555	2/28/2019	Yes	NA
JC50048	4/8/2019	Yes	Preventative Maintenance Only
KS0219	4/16/2019	Yes	NA
KS0221	4/10/2019	Yes	Preventative Maintenance Only
KS0264	2/26/2019	Yes	NA
KS0520	4/18/2019	Yes	NA
KW77	6/19/2019	Yes	Preventative Maintenance Only
KW79	4/26/2019	Yes	Preventative Maintenance Only
KW80	4/24/2019	Yes	NA
MD1429	4/25/2019	Yes	Preventative Maintenance Only
MD1481	4/25/2019	Yes	Preventative Maintenance Only
MD1561	4/29/2019	Yes	Preventative Maintenance Only
MD1745	2/26/2019	Yes	NA
MD1769	2/27/2019	Yes	NA
MD1811	2/26/2019	Yes	Preventative Maintenance Only
MD2052	2/26/2019	Yes	Preventative Maintenance Only
MD2230	2/26/2019	Yes	Preventative Maintenance Only
MD2512	2/27/2019	Yes	NA
MD2573	4/2/2019	Yes	Preventative Maintenance Only
MD2683	2/26/2019	Yes	Preventative Maintenance Only
MD2871	4/1/2019	Yes	Preventative Maintenance Only
MD2967	4/10/2019	Yes	Preventative Maintenance Only
MD3	4/18/2019	Yes	Preventative Maintenance Only
MD3101	4/10/2019	Yes	NA
MD3436	2/27/2019	Yes	NA
MD414	6/15/2019	Yes	NA
MD483	5/30/2019	Yes	Remove the debris and blockage at the low flow orifice.
MD96	6/27/2019	Yes	Preventative Maintenance Only
ME1220	2/28/2019	Yes	Remove the sediment & vegetation at low flow orifice and the pond floor. Repair the erosion at the unmapped inlet. Remove the pipe obstruction.
ME1262	2/28/2019	Yes	Remove the debris at trash rack. Repair the erosion at the pond floor. Remove the sediment and debris at the inlet pipes and add new rip rap.
ME1278	4/15/2019	Yes	Preventative Maintenance Only
ME1423	3/1/2019	Yes	Preventative Maintenance Only
ME1462	3/1/2019	Yes	Preventative Maintenance Only
ME1476	3/1/2019	Yes	Remove the sediment & add new rip rap at the inlet pipes. Repair the cave in at unmapped inlet pipe.
ME1519	4/2/2019	Yes	Preventative Maintenance Only
ME1529	4/2/2019	Yes	Preventative Maintenance Only
ME1578	4/2/2019	Yes	NA
ME1653	4/2/2019	Yes	NA
ME1777	4/2/2019	No	Repair the concrete riser. Trees to be removed by The Care of Trees.
ME1802	4/2/2019	Yes	Preventative Maintenance Only
ME1817	4/2/2019	Yes	Remove the sediment and dirty surge stone at the stack pipe and replace with clean stone. At the inlet pipes, remove the sediment.
ME2183	6/21/2019	Yes	NA

Loudoun County Virginia
BMP Inspections (Public Ownership) Within the MS4 Area from July 1, 2018 - June 30, 2019

FCTID	Inspection Date	Functioning As Designed	Description of Maintenance
ME2316	4/17/2019	Yes	NA
ME2316A	4/18/2019	Yes	NA
ME2408	4/17/2019	Yes	NA
ME2411	4/17/2019	Yes	Preventative Maintenance Only
ME2418	4/17/2019	Yes	Preventative Maintenance Only
ME2499	4/16/2019	Yes	Preventative Maintenance Only
ME265	4/29/2019	Yes	Preventative Maintenance Only
ME266	4/29/2019	Yes	NA
ME2701	6/19/2019	Yes	Preventative Maintenance Only
ME2865	6/19/2019	Yes	NA
ME315	4/29/2019	Yes	Remove the sediment at the stack pipe and add new stone. Remove the sediment at the inlet pipes and add rip rap.
ME384	4/29/2019	Yes	Preventative Maintenance Only
ME422	4/23/2019	Yes	Preventative Maintenance Only
ME445	4/29/2019	Yes	Preventative Maintenance Only
ME4701	4/1/2019	No	Project is already active via a previous Sprocket ticket and JOC SW-MCI-0119
ME491	4/23/2019	Yes	NA
ME5076	4/10/2019	Yes	Repair the pipe separations. Remove the trees at the outfall. Remove the vegetation at the inlet pipe.
ME741	6/21/2019	Yes	Remove the vegetation, trees and sediment from the pond floor. Stabilize the low flow area.
ME869	3/1/2019	Yes	NA
ME885	3/1/2019	Yes	Preventative Maintenance Only
QC50107	2/26/2019	Yes	NA
RJ0136	4/29/2019	Yes	Preventative Maintenance Only
SR214	4/9/2019	Yes	NA
SR230	4/9/2019	Yes	Remove the debris & sediment at the stack pipe. Reparge around the low flow. Remove the sediment at the inlet pipe and add rip rap.
SR319	4/2/2019	Yes	NA
SR653	4/2/2019	Yes	Project is already active via a previous Sprocket ticket and JOC SW-FHP-0074
SR735	4/2/2019	Yes	Preventative Maintenance Only
WB1300	4/25/2019	Yes	NA
WB1334	4/25/2019	Yes	NA
WB1355	5/30/2019	Yes	Preventative Maintenance Only
WB1525	4/29/2019	Yes	Remove the sediment from inside the structure and low flow orifice.
WB1539	4/29/2019	Yes	Remove the debris at the low flow orifice and trash rack. Parge the cracks and separations from inside the riser for the outfall pipe.
WB1859	5/30/2019	Yes	NA
WB1876	5/30/2019	Yes	NA
WB1884	5/25/2019	Yes	NA
WB1900	5/30/2019	Yes	NA
WB463	5/15/2019	Yes	Remove the trees and vegetation from the pond floor. Remove the sediment from the low flow area and stablize.
WB50057	4/1/2019	Yes	Preventative Maintenance Only
WB50058	4/1/2019	Yes	NA
WB50062	2/27/2019	Yes	NA
WB50080	4/2/2019	Yes	Preventative Maintenance Only
WB738	6/19/2019	Yes	NA
WB827	4/30/2019	Yes	Preventative Maintenance Only



LOUDOUN COUNTY POLLUTION PREVENTION/GOOD HOUSEKEEPING STANDARD OPERATING PROCEDURE

ROAD, STREET AND PARKING LOT MAINTENANCE

OBJECTIVE

It is the goal and intent of Loudoun County to conduct road, street and parking lot maintenance in a manner that protects water quality.

RESPONSIBILITY

The County employee conducting road, street and parking lot maintenance is responsible for coordinating and executing the activities in this operating procedure.

PROCEDURE

- Sweep roads, streets, and parking areas on a regular schedule.
 - Cleaning should be based on usage and field observations of waste accumulation.
- Provide a sufficient number and type of litter receptacles to reduce the amount of trash and litter in the area, where appropriate.
- General Clean-up Methods
 - A light water spray may be used to wash down areas of light debris (cigarette butts, etc.) after storm drains have been blocked to contain wash water and debris.
 - Spot clean heavy buildups of fuels and related materials.
- Mechanical Sweeping
 - Clean roads, streets and parking lots using mechanical sweepers equipped with a dust sprinkler.
 - Deposit debris collected by sweepers at the dewatering facility located at Fleet Maintenance.
 - Clean street sweepers in accordance with the Vehicle/Large Equipment Washing Procedure.
- Concrete Sawing and Surface Repair
 - Schedule asphalt and concrete activities for dry weather.
 - Take measures to protect any nearby storm drain inlets and adjacent watercourses, prior to breaking up asphalt or concrete (e.g. place sand bags around inlets or work areas).
 - When making saw cuts in pavement, use as little water as possible and perform during dry weather.
 - Cover each storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets.



LOUDOUN COUNTY POLLUTION PREVENTION/GOOD HOUSEKEEPING STANDARD OPERATING PROCEDURE

- After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site.
- Alternatively, a small onsite vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.
- **Deicing**
 - Reduce or eliminate the need for deicing products by manually clearing sidewalks and driveways prior to deicer use.
 - Mix and store liquid and solid deicing products indoors or under cover.
 - Follow manufacturer's instructions and use only enough to break the ice/pavement bond.
 - Only utilize deicing agents that are in compliance with local, state, and federal regulations.
 - Calibrate application equipment at least annually.
 - Do not apply on vegetation or near waterways.
 - Clean equipment in accordance with the Small Equipment Washing SOP.
- **Pavement Marking**
 - Schedule pavement marking activities for dry weather.
 - Load and transfer paint away from storm drains.
 - Use drop cloths and drip pans in paint-mixing areas.
 - Properly maintain application equipment
 - Capture all clean-up water
 - Dispose of clean-up water properly or allow to evaporate.

Spill Response

- Protect storm drains if necessary (i.e., cover, berm, or diversion valve).
- Should spills or leaks occur at any time during fueling activities, conduct spill cleanup immediately by using spill kits as directed. Do not hose down spills – use “dry” cleanup methods.
- Dispose of the collected waste at the Fleet Maintenance Facility or County Landfill.
- Notify x3227 of any spills greater than 5 gallons that occur. If no one is immediately available, call 703-777-0117.
- Immediately call 911 if a spill presents a threat to health or safety or is otherwise considered an emergency.
- Refer to the Spill Response Procedure for additional information.

**Loudoun County Stormwater Management
Engineering Services**

MS4 General Permit Training Plan

Version 2, September 4, 2019

Prepared for:



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Acronyms

B&D	Building and Development
BMP	Best Management Practice
DEQ	Department of Environmental Quality
DGS	Department of General Services
F&R	Fire and Rescue
HPMF	High Priority Municipal Facility
HP-SWPPP	High Priority Facility Stormwater Pollution Prevention Plan
IDDE	Illicit Discharge Detection Elimination
MS4	Municipal Separate Storm Sewer System
P2/GH	Pollution Prevention/Good Housekeeping
PRCS	Parks, Recreation, and Community Services
PY	Permit Year
SOP	Standard Operating Procedure
SWM	Department of General Services - Stormwater Management Division
VDACS	Virginia Department of Agriculture and Consumer Services



1.0 Introduction / Overview

Loudoun County (County) operates a Municipal Separate Storm Sewer System (MS4) that is regulated under the Virginia Department of Environmental Quality's (DEQ) General Permit for Stormwater Discharges from Small MS4s (MS4 General Permit). The current MS4 General Permit (effective November 2018) authorizes the County's MS4 to discharge into waters of Virginia. As a condition of the MS4 General Permit, the County is required to develop and implement a written plan for training applicable County staff and contractors.

This document addresses the County's requirements for pollution prevention and good housekeeping training as outlined in the 2018 MS4 General Permit (VAR040067). The structure and methodology contained in this procedure were developed to provide the County with an effective training program while making efficient use of its available resources. The County's Department of General Services - Stormwater Management (SWM) Division is responsible for implementing this plan.

2.0 MS4 General Permit Training Plan Requirements

The MS4 General Permit requires that a written training plan be developed, and implemented to ensure that applicable County staff and contractors are trained on proper pollution prevention and good housekeeping techniques.

Specifically, Part I E 6 m of the MS4 General Permit requires that the County develop a training plan 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 (VDACS) 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.



Further, Part I E 6 n of the MS4 General Permit requires that the County maintain documentation of each training event conducted by the County to fulfill the requirements of Part I E 6 m for a minimum of three (3) 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
3. The objective of the training event

Part I E 6 o of the MS4 General Permit allows the County to meet the training requirements in Part I E 6 m, in total or in part, through participation in regional training programs involving two (2) or more MS4 permittees; however, specifies that the County remains responsible for ensuring compliance with the training requirements.

3.0 Training Program

To satisfy the requirements of the Part I E 6 m of the MS4 General Permit, the County has developed a comprehensive training program that consists of the following three (3) types of training:

- High-Priority Municipal Facility Stormwater Pollution Prevention Plan (SWPPP) Training (including Stormwater Pollution Prevention/Good Housekeeping (P2/GH) Procedures)
- Stormwater Best Management Practice (BMP) Facility Inspection Training
- Excal Visual online MS4 Stormwater Pollution Prevention and Illicit Discharge Training

3.1 High-Priority Facility Stormwater Pollution Prevention Plan (HP-SWPPP) Training (including Stormwater Pollution Prevention/Good Housekeeping (P2/GH) Procedures)

The County has developed an employee training program for County staff located at facilities that have been designated as a high-priority municipal facility (HMPF) that require a HP-SWPPP. County facilities that are required to implement a HP-SWPPP are as follows:

- Central Warehouse and Maintenance Facility (Public Works Facility)
- Claude Moore Park (PRCS Facility)
- Potomack Lakes Sportsplex (PRCS Facility)
- Trailside Maintenance Facility (PRCS Facility)

The training is intended for operations staff at the facilities regarding pollution prevention and covers the components and goals of the HP-SWPPP, and includes such topics as daily and weekly site checks, quarterly facility inspections, spill prevention and response, material management practices, and source control measure operation and maintenance. The training presentation also covers the following County-developed Pollution Prevention/Good Housekeeping (P2/GH) standard operating procedures (SOPs) that are applicable to each facility:

- Vehicle/Equipment Maintenance and Repair
- Vehicle/Equipment Parking and Storage
- Vehicle/Equipment Washing
- Vehicle/Equipment Fueling

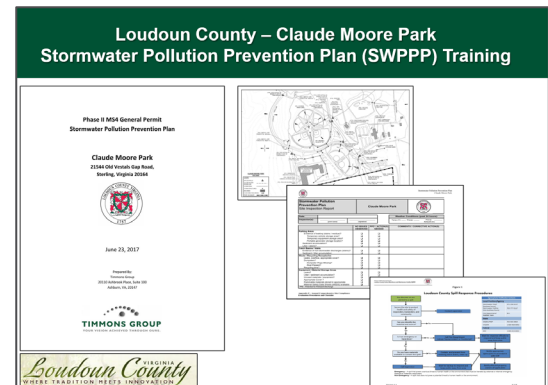


Figure 1. Stormwater BMP Facility Inspection Training Materials.



- Storm Sewer System Cleaning/Maintenance
- Land Disturbance
- Landscaping and Grounds Maintenance
- Road, Street, & Parking Lot Maintenance
- Loading & Unloading Operations
- Material Storage
- Waste Management
- Pool Operation and Maintenance
- Non-Stormwater Discharges
- Spill Response

3.2 Excal Visual Online Stormwater Pollution and Illicit Discharge Training

The County utilizes the Excal Visual online training modules for training to provide P2/GH and illicit discharge identification training to applicable County personnel that are not located at a HP_SWPPP facility. Specifically, the County uses Excal Visual's "Rain Check" and "Illicit Discharge Detection & Elimination - IDDE a grate concern" modules to provide training for applicable staff. Documentation of training is maintained through Excal Visual's web training program.

3.2.1 Rain check - Stormwater Pollution Prevention for MS4s

The Rain heck training for MS4s video focuses on BMPs that are important to many municipal operations such as good housekeeping, spill response, materials storage and handling, landscape maintenance, and street maintenance. The module is approximately 31 minutes long and focuses on employees working in fleet maintenance, garages, parks, recreation facilities, street maintenance, and other departments. The video also shows employees how to spot potential "illicit discharges" occurring around the County. The training includes the following chapters:

CHAPTER 1: Introduction

CHAPTER 2: Good Housekeeping & Spill Prevention

CHAPTER 3: Spill Control & Response

CHAPTER 4: Vehicle Fueling

CHAPTER 5: Vehicle & Equipment Maintenance

CHAPTER 6: Vehicle & Equipment Washing

CHAPTER 7: Materials Management

CHAPTER 8: Waste Management

CHAPTER 9: Municipal Facility Maintenance

CHAPTER 10: Parking Lots & Streets

CHAPTER 11: Storm Drain System Cleaning

CHAPTER 12: Landscaping & Grounds Maintenance

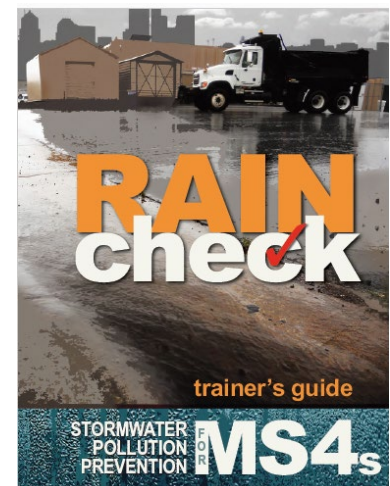


Figure 2. Excal Visual "Rain Check" Training Module Materials



CHAPTER 13: Working Over or Near Surface Waters

CHAPTER 14: Conclusion

3.2.2 IDDE - a grate concern

Excal Visual also offers an IDDE training program that is complementary to the Rain Check training program. The IDDE module is approximately 14 minutes long and focuses on the hazards of illicit discharges and shows employees how to spot them. It shows typical illicit discharges occurring at their source (at storm drain inlets) and at outfalls. The module also shows what evidence of past illicit discharges looks like. It instructs employees to report any suspected illicit discharges.



Figure 3. Excal Visual IDDE Training Module

3.3 Stormwater Best Management Practice (BMP) Facility Inspection Training

The County has also developed a Stormwater BMP Facility Inspection Training for County personnel responsible for the inspection and maintenance of stormwater BMP facilities (Appendix B). The training focuses on educating personnel on the design and function of the BMP types in the County's stormwater BMP inventory and how to maintain properly functioning BMPs. The training includes the following topics:

- Illicit discharges
- Effects of polluted stormwater on the environment
- Basic protocols of stormwater BMP facility purpose and design
- Why properly functioning BMPs matter
- Routine vs. non-routine maintenance
- Basic field inspection processes, including examples of the routine items likely to be found most often by inspectors, along with some lesser-known problem indicators



Figure 4. Stormwater BMP Facility Inspection Training Materials.

4.0 Training Schedule

The MS4 General Permit requires training on a biennial basis. The County has staggered training across individual permit years (PYs) to ensure annual awareness of best practices utilized as a part of the execution of daily tasks and duties.

County departments/positions that fall within the areas described in the MS4 General Permit requiring training are located in the following Departments:

- Department of General Services (DGS)
- Parks, Recreation, and Community Services (PRCS)
- Fire and Rescue (F&R) ¹

The departments that receive respective training topics are shown in by Permit Year in Table 1.

¹ F&R responds to hazardous material spills and has a separate spill response training program and requirements.

**Table 1. Training Summary Matrix**

County Staff	PY 1	PY 2	PY 3	PY 4	PY 5
Department of General Services (DGS)					
Stormwater Management (SWM) Division Staff	<ul style="list-style-type: none">▪ BMP Facility▪ Excal Visual	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility
Public Works Staff	<ul style="list-style-type: none">▪ BMP Facility▪ Excal Visual	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)▪ BMP Facility
Parks, Recreation & Community Services (PRCS)					
HP-SWPPP Site Staff	<ul style="list-style-type: none">▪ Excal Visual	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)	<ul style="list-style-type: none">▪ HP-SWPPP (with P2/GH)
Other Applicable PRCS Staff	<ul style="list-style-type: none">▪ Excal Visual	<ul style="list-style-type: none">▪ Excal Visual	<ul style="list-style-type: none">▪ Excal Visual	<ul style="list-style-type: none">▪ Excal Visual	<ul style="list-style-type: none">▪ Excal Visual

5.0 Contractors

The County has developed and includes standard contract language requiring municipal contractors who engage in activities that have the potential to discharge pollutants to use appropriate control measures and procedures to minimize the discharge of pollutants to the County's MS4.

6.0 Certifications

In addition to the training indicated in this plan, employees and contractors must maintain applicable certifications. Certifications must be maintained in accordance with the following:

1. Virginia Pesticide Control Act
2. Virginia Erosion and Sediment Control Law and Attendant Regulations
3. Virginia Stormwater Management Act and Attendant Regulations

6.1 Virginia Pesticide Control Act

Employees and contractors who apply pesticides and herbicides on behalf of the County are trained or certified in accordance with the Virginia Pesticide Control Act.

6.2 Virginia Erosion and Sediment Control Law and Attendant Regulations

The County's Department of Building and Development (B&D) plan reviewers, inspectors, program administrators, and construction site operators have received the appropriate training and certifications required under the Virginia Erosion and Sediment Control Law and attendant regulations.

6.3 Virginia Stormwater Management Act and Attendant Regulations

Appropriate employees in DGS and B&D have been certified as program administrators, inspectors, plan reviewers or combined administrators as required under the Virginia Stormwater Management Act and its attendant regulations.



7.0 Training Documentation and Reporting

The SWM Division is responsible for notifying departments/personnel of training requirements, scheduling of training events (except Excal Visual as it is done on an individual basis), and tracking training events held throughout each PY. The SWM Division is also responsible for maintaining documentation of training. For live training events, the County has developed individual training attendance sign-in sheets (included with individual training programs) that are completed during each training event and includes the date of the training session, the trainer, the topics covered and the names of the employees who attend the training. For online training, Excal Visual maintains documentation of individuals that have completed the online training and that information is accessible to the SWM Division for tracking and reporting purposes.

The SWM Division is also responsible for the development of a list of training events conducted in each PY and for providing the following information in each MS4 Annual Report:

1. The date of each training event;
2. The number of employees who attended the training event; and
3. The objective of the training event.

8.0 Evaluation of Training Plan Effectiveness

The SWM Division will annually evaluate the County's training program. The evaluation will consist of a review to ensure that training is conducted in accordance with the schedule provided in this plan, that documentation is maintained for each training event in accordance with Section 4.0 of this document, and that training is provided to appropriate County departments and staff.

Loudoun County Department of General Services (DGS)
 Permit 4/Year 1 Stormwater Management Facility (SWM)/Best Management Practice (BMP) Inspection Training (P2/GH) Training
 November 8, 2018

<u>Name</u>	<u>Organization</u>	<u>Phone Number</u>	<u>E-mail Address</u>
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4. <u>Everson Morgan</u>	<u>P.W.</u>		
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16.			
17.			
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