TOWN OF Herndon VIRGINIA

Municipal Separate Storm Sewer System (MS4) Fiscal Year 2019 Annual Report

Permit No. VAR040060

In Compliance with the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems

Submittal to DEQ
September 30, 2019

Department of Public Works
Town of Herndon
777 Lynn Street
Herndon, Virginia 20170

General VPDES Permit for Small Municipal Separate Storm Sewer Systems Permit No. VAR040060

Fiscal Year 2019 Annual Report
July 1, 2018 – June 30, 2019

Town of Herndon, Virginia

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General VPDES Permit for Small Municipal Separate Storm Sewer Systems Permit No. VAR040060

Fiscal Year 2019 Annual Report
July 1, 2018 – June 30, 2019 Reporting Period
Town of Herndon, Virginia

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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."

[redacted]	Town Manager	30 Sep 2019
Name	Title	Date

1 Introduction

This Fiscal Year 2019 (FY19) MS4 General Permit Annual Report has been prepared by the Town of Herndon Department of Public Works (DPW) in accordance with General VPDES (Virginia Pollutant Discharge Elimination System) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (9VAC25-890-40 *et seq.*). The Town was originally issued General Permit VAR040060 on July 8, 2003. The Virginia Department of Environmental Quality (DEQ) issued the most recent five-year permit effective November 1, 2018.

Under the terms of the General Permit, the Town of Herndon has developed a Municipal Separate Storm Sewer System (MS4) Program Plan to implement six minimum control measures (MCMs) aimed at reducing the discharge of pollutants to the "maximum extent practicable." Minimum control measures are presented in Table 1.

Table 1 Six Minimum Control Measures

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

The MS4 Program Plan has been updated in accordance with the requirements of Part I C of the 2018 General Permit. The MS4 Program Plan is available on the Town's web site at http://herndon-va.gov/departments/stormwater-management.

The General Permit requires that the Town submit annual reports no later than October 1 covering the preceding July 1 through June 30 reporting period. This annual report covers the period of July 1, 2018 through June 30, 2019. Part I D of the General Permit outlines the requirements for the annual report. The following is a summary of the requirements and where the information is located in this annual report.

Table 2 MS4 Permit Annual Reporting Requirements

Permit	Requirement	Location
Part I D 2 a-b	2. The annual report shall include the following general information: a. The permittee, system name, and permit number; b. The reporting period for which the annual report is being submitted;	Section 2
Part I D 2 c	c. A signed certification as per Part III K;	Certification page
Part I D 2 d	d. Each annual reporting item as specified in an MCM in Part I E; and,	Section 3

Part I D 2 e	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.	Section 4
Part I D 3	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.	Not applicable
Part I D 4	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.	Section 5
Part I D 5	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 to the plan.	Section 5

2 Background Information

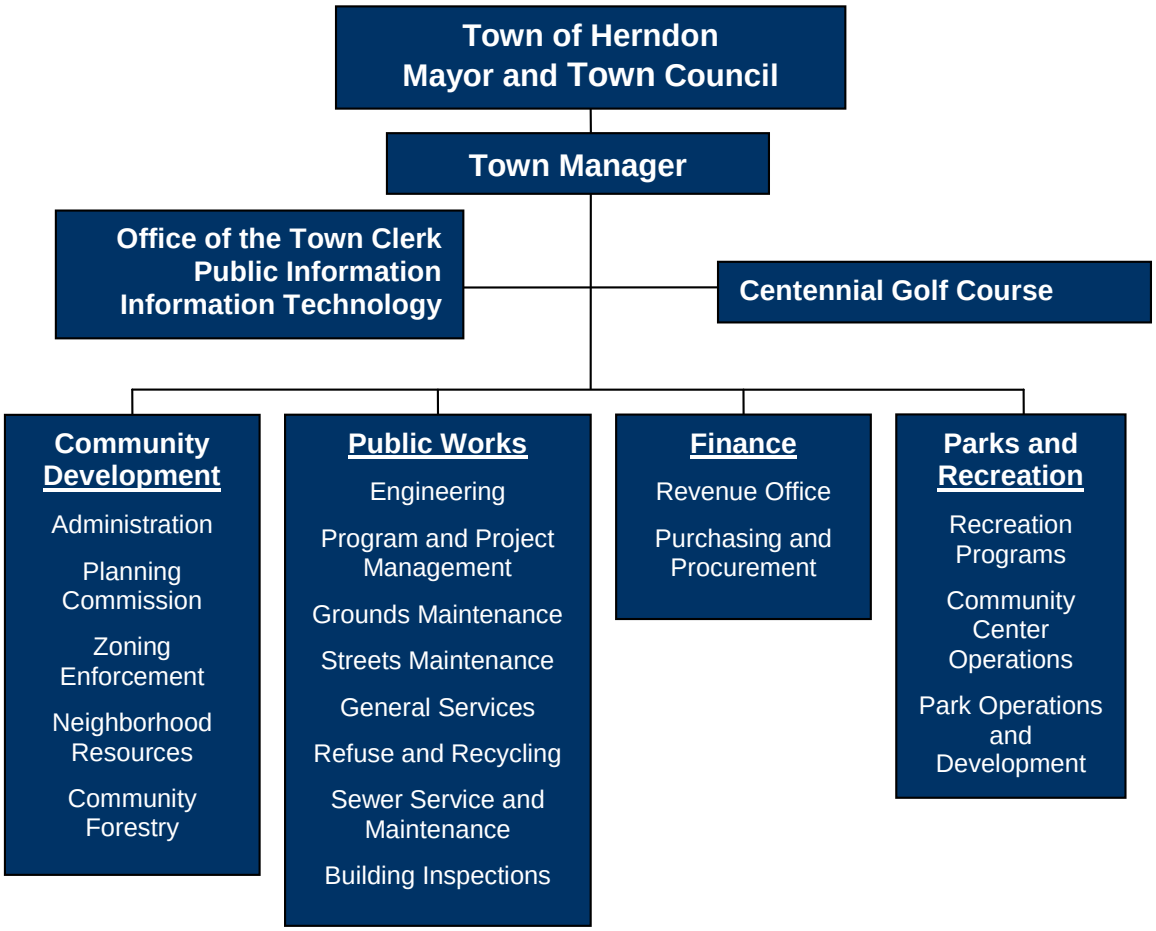
This section provides background information as required by Part I D 2 a-b of the General Permit.

Table 3 Required Background Information

Permittee:	Town of Herndon
System Name:	Town of Herndon MS4
Permit Number:	VAR040060
Reporting Period:	July 1, 2018 – June 30, 2019

The organizational chart below outlines Town departments with major stormwater management functions or responsibilities that are referenced in this annual report. The Department of Public Works is the primary lead on MS4 compliance activities.

Figure 1 Stormwater Management Organizational Chart



3 Status of Compliance with Fiscal Year 2019 Conditions

This section provides an overview of progress made toward meeting each MCM. Each MCM includes the specific annual reporting items as specified in Part I E of the General Permit followed by a more detailed description of each best management practice (BMP) contained in the MS4 Program Plan. Supporting materials are located in the appendices as referenced.

3.1 Public Education and Outreach (MCM #1)

In accordance with Part I E 1 g of the General Permit, the following information must be reported in the annual report:

	Annual Report Requirement	Documentation
✓	(1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program.	• Chesapeake Bay Nutrients • Bacteria from Pet Waste • Illicit Discharges and Illegal Dumping from Commercial Operations
✓	(2) A list of strategies used to communicate each high-priority stormwater issue.	See BMPs 3.1.A-3.1.C.

3.1.A Chesapeake Bay Nutrients

Nutrients from fertilizers is one of the Town's three high-priority stormwater issues. The objective of this BMP is to provide education and outreach to inform property owners on ways to reduce the impact of nutrients through proper use and application of fertilizers.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will provide in each annual report: (1) relevant information from "What's On in Herndon," the Mayor's quarterly newsletter, or the annual Water Quality Report; (2) a copy of the Town Calendar and Events Guide; and, (3) a snapshot of the social media post. The Town will also provide an estimate of the number of residents reached with a fertilizer-related education message."

BMPs from MS4 Program Plan	FY19 Activities
Include nutrient message in one of the following annually: electronic newsletter; Mayor's newsletter; or, Water Quality Report.	The Town included a message about the importance of proper use of fertilizers in the Mayor's quarterly newsletter (fourth quarter of FY19). The newsletter goes out to all Town residents. A message about the best time to fertilize and the importance of a soil test was also included in "What's On in Herndon" electronic newsletter (September 28, 2018). See Appendix A.
Include nutrient message in the annual Town Calendar and Events Guide.	A message about the best time to fertilize was included in the Town's 2019 Town Calendar (April). The calendar is sent to all Town residents. See Appendix A.
Post a nutrient message on social media.	The Town posted a lawn care message on Twitter on June 17, 2019. The Town had 1,684 followers as of September 2019. See Appendix A for a screenshot.

3.1.B Bacteria from Pet Waste Pollution Prevention

Bacteria from pest waste is one of the Town's three high-priority stormwater issues. The objective of this BMP is to reduce bacteria pollution by targeting pollution prevention materials to the Town's dog owners and to make it convenient for dog owners to properly dispose of waste.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will provide in each annual report: (1) the number of educational materials distributed at Dogtopia, Herndon Animal Medical Center, and Dominion Animal Hospital; (2) a copy of any materials distributed to residents holding a Fairfax County Dog License; (3) information on any new pet waste stations and an updated map; and, (4) a snapshot of the social media post. The Town will provide an estimate of the number of residents reached with a proper pet waste disposal message."

BMPs from MS4 Program Plan	FY19 Activities
Distribute "Scoop Your Poop" post cards.	50 post cards and 50 pet waste brochures were provided to each of the three veterinary offices in the Town on December 21, 2018. See Appendix A for the materials.
Distribute pet waste message to Dog License holders at least once during permit cycle.	390 pet waste messages were mailed to Dog License holders in June 2019. Additional batches of messages will be mailed each FY. See Appendix A for the list sent in FY19.
Install additional pet waste stations as needed and update the location map accordingly.	Stations are serviced twice a week, or more if necessary. No new stations were added in FY19.
Post a pet waste message on social media.	The Town posted a proper disposal of dog waste message on Twitter on June 19, 2019. The Town had 1,684 followers as of September 2019. See Appendix A for a screenshot.

3.1.C Illicit Discharges and Illegal Dumping from Commercial Operations

Illicit discharges and illegal dumping from commercial operations is one of the Town's three high-priority stormwater issues. The objective of this BMP is to educate commercial operators about proper handling and storage of materials and the legal ramifications of non-compliance with Town, state, and federal laws and regulations. The BMP also seeks to empower Town residents to recognize and report illicit discharges.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will provide in each annual report: (1) a copy of any information distributed to commercial operators; (2) a snapshot of the social media post; and, (3) relevant information from "What's On in Herndon," the Mayor's quarterly newsletter, or the annual Water Quality Report. The Town will also provide an estimate of the number of residents reached with an illicit discharge-related education message."

BMPs from MS4 Program Plan	FY19 Activities
Send illicit discharge dumping letters, and bi-lingual poster to commercial owners at least once during permit cycle.	This BMP is scheduled to be implemented between FY20 and FY23.
Post message on social media about how to report a suspected illicit discharge.	The Town posted a message about the importance of reporting illicit discharges on Twitter on June 18, 2019. The Town had 1,684 followers as of September 2019. See Appendix A for a screenshot.
Include illicit discharge reporting message in one of the following annually: electronic newsletter; Mayor's newsletter; or, Water Quality Report.	The Town included a message about where to report a potential illicit discharge in the Mayor's quarterly newsletter (fourth quarter of FY19). The message was combined with the message about the importance of proper use of fertilizers. The newsletter goes out to all Town residents. See Appendix A.

3.1.D General Stormwater Education

The General Permit requires the continuation of an outreach program to address the viewpoints and concerns of a diverse range of audiences.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will provide in each annual report a summary of activities, including the number of classroom visits, Herndon Community Television broadcasts, and educational materials distributed. In addition, the Town will provide a summary of Clean Water Partner activities, including the scope of the campaign and the results of the annual assessment survey. The goal is to document increasing awareness of water quality issues and changes in pollution-causing behavior over time."

BMPs from MS4 Program Plan	FY19 Activities
Participate in NVRC Clean Water Partners regional program.	A full report of FY19 activities is included in Appendix A. The 2019 campaign continued to focus on lawn care, do-it-yourselfers (power washing, auto care, etc.), and pet waste. The campaign aired on 20 targeted TV networks and five Spanish language networks for a total of 9,416 times (33,591,119 impressions). The campaign also had a digital component, which resulted in 769,300 online impressions. Each year, Clean Water Partners conducts a survey of 500 residents in Northern Virginia to measure beliefs, attitudes, and behaviors related to water pollution. The survey includes information about Herndon residents. However, it is statistically more valuable to compare the results of Fairfax County, which includes Herndon, to Northern Virginia as a whole. The survey is valuable for understanding behaviors and where additional effort

BMPs from MS4 Program Plan	FY19 Activities
	may be needed. The following is a summary of highlights: <u>General Education:</u> • 69% of Fairfax County residents correctly stated that stormwater does not flow to a wastewater treatment facility. The regional average is 68%. • 22% of Fairfax County residents reported receiving information about reducing water pollution in the past 12 months. The regional average is 22%. <u>Bacteria from Pets:</u> • 83% of pet owners regionally always clean up after their pets. This figure is slightly up from previous years. <u>Illicit Discharges and Illegal Dumping:</u> • 71% of Fairfax County residents successfully recognized a picture of an illicit discharge. This is lower than the regional average of 75%. • Only 38% of Fairfax County residents would "definitely" or "probably" report the illicit discharge. This is the same as the regional average. • 43% of Fairfax County residents were "confident" or "somewhat confident" about where to report an illicit discharge. The regional average is 42%. <u>Nutrients from Fertilizers</u> • 11% of those with lawns test before fertilizing or only fertilize once in the fall (recommended practices). An additional 25% don't fertilize. The results are generally positive with regard to understanding where stormwater goes, being able to identify an illicit discharge, and properly disposing of pet waste. Additional focus may be needed with regard to the application of fertilizers and ensuring that residents feel empowered to report an illicit discharge.
Earth Day/Arbor Day pollution prevention presentations.	Earth Day/Arbor Day events occurred at Bready Park and Harris Corporation. See Table 4 for additional information.
Make presentations upon request to school classes.	No presentations were requested by local schools.
Broadcast "Reining in the Storm" and "After the Storm" on HCTV.	The Town broadcast these presentations every Thursday and Saturday during FY19 for a total of 104 times. See Appendix A.
Distribute stormwater education brochures.	~475 brochures distributed at NatureFest (September 23, 2018) and Big Truck Days (May 2, 2019).

3.2 Public Involvement/Participation (MCM #2)

In accordance with Part I E 2 f of the General Permit, the following information must be reported in the annual report:

	Annual Report Requirement	Documentation
✓	(1) A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded.	No public input on the MS4 program was received during this reporting period.
✓	(2) A webpage address to the permittee's MS4 program and stormwater website.	The webpage address is http://herndon-va.gov/departments/stormwater-management. See BMP 3.2.A.
✓	(3) A description of the public involvement activities implemented by the permittee.	See BMP 3.2.D.
✓	(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.	See BMP 3.2.D.
✓	(5) The names of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.	The Town did not collaborate with other MS4 permittees on public involvement opportunities.

3.2.A Stormwater Webpage

The objective of the stormwater webpage is to ensure that residents and businesses have readily available access to all MS4 program documents and reporting mechanisms.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a snapshot of the stormwater webpage documenting all required elements."

BMPs from MS4 Program Plan	FY19 Activities
Host the stormwater webpage with the required permit information.	The Town's stormwater webpage includes the following information: • Effective MS4 permit and coverage letter • Most current MS4 Program Plan • Annual report within 30 days of submittal to DEQ • Links to reporting functions from BMPs 3.2.B and 3.2.C. See Appendix B for a snapshot of the webpage.

3.2.B Public Reporting of Potential Illicit Discharges

The objective of this BMP is to promote the ability of the public to report illicit discharges, illegal dumping, spills, complaints about land disturbing activities, and other stormwater pollution concerns.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a snapshot of the reporting functions on the stormwater webpage."

BMPs from MS4 Program Plan	FY19 Activities
Provide information on how to report a potential illicit discharge on the stormwater webpage.	See Appendix B for the reporting function on the Town's stormwater webpage.

3.2.C Public Input and Complaints

This objective of this BMP is to promote the ability of the public to provide input into the MS4 Program Plan and to receive public input or complaints.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report: (1) a snapshot of the public input and complaint reporting function; and, (2) a summary of any public complaints or input on the MS4 Program Plan and the Town's response to complaints or input."

BMPs from MS4 Program Plan	FY19 Activities
Provide information on how to register public input or complaints on the stormwater webpage.	See Appendix B for how to provide public input and/or complain on the Town's stormwater webpage.
Implement the Public Involvement and Participation SOP to document complaint tracking and response.	The Town implemented the SOP. No public input on the MS4 program or complaints were received by the Town during this reporting period.

3.2.D Public Involvement Opportunities

The objective of this BMP is to increase the public's awareness and participation in the Town's water quality and pollution prevention efforts.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a summary of the activities implemented and the metrics from the above table."

BMPs from MS4 Program Plan	FY19 Activities
Promote or implement four local watershed activities annually.	See Table 4 for a summary of public involvement activities implemented in FY19. Five activities were implemented, exceeding the required four.
Implement the Protocol for Sponsorship of Non-Governmental Volunteer Opportunities.	The protocol is promoted on the Town's stormwater webpage. See Appendix B.

Table 4 Summary of Public Involvement Activities

Description	Time Period	Metric
NatureFest at Runnymede	Scheduled for 9/23/2018 but cancelled due to inclement weather.	NA
Kid's Fishing Derby	3/30/2019	10 volunteers; 120 kids participated.
Stream and Park Clean-Up	4/6/2019	48 volunteers; 10 cubic yards of trash collected.
Storm Drain Marking Program	No additional stencils installed.	NA
Earth Day/Arbor Day - Bready Park	4/27/2019	32 volunteers.
Earth Day at Harris Corporation	4/22/2019	5 volunteers; 50 participants.
Volunteer Litter Clean Up	4/19/2019	23 volunteers; 2 cubic yards of trash collected.

3.2.E Town Council Updates

It is important for elected officials to have a thorough understanding of the MS4 Program Plan and to provide feedback on the effectiveness of the program.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in the FY22 or FY23 annual report any meeting materials and a summary of significant feedback, if any."

BMPs from MS4 Program Plan	FY19 Activities
Provide MS4 program update to Town Council.	This BMP is scheduled for FY22 or FY23.

3.3 Illicit Discharge Detection and Elimination (MCM #3)

In accordance with Part I E 3 e of the General Permit, the following information must be reported in the annual report:

	Annual Report Requirement	Documentation
✓	(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.	The Town confirms that the MS4 map and information table have been updated accordingly. See BMP 3.3.A for additional information about submittal to DEQ.
✓	(2) The total number of outfalls screened during the reporting period as part of the dry weather screening program.	See BMP 3.3.D.
✓	(3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows: • The source of illicit discharge • The dates that the discharge was observed, reported, or both • Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method • How the investigation was resolved • A description of any follow-up activities • The date the investigation was closed	See BMP 3.3.E.

3.3.A Storm Sewer Infrastructure Map

An accurate storm sewer map ensures that the Town has a full understanding of the system so that the Town can quickly track and correct illicit discharges. The General Permit requires specific information to be included in the map product.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will provide DEQ with the GIS-compatible shapefile by July 1, 2019. The Town will include in each annual report: (1) documentation of updates to the storm sewer system map and outfall table; and, (2) copies of notifications to downstream MS4s, if any."

BMPs from MS4 Program Plan	FY19 Activities
Update outfall table in accordance with Part I E 3 a of the General Permit.	The Town updated the outfall information table with all information required in Part I E 3 a of the General Permit. The update primarily involved the addition of the predominant land use of each outfall discharging to an impaired water. See Appendix C for the table.

BMPs from MS4 Program Plan	FY19 Activities
Submit GIS shape-file to DEQ.	The GIS shape-file, with all requested information, was submitted to DEQ on June 26, 2019.
Maintain map and outfall table annually, no later than October 1.	Information submitted to DEQ reflected the most recent update of the Town's map and outfall information table.
Identify any new physical interconnections and notify the connected MS4.	No new interconnections were identified during FY19.

3.3.B Prohibition on Illicit Discharges

The objective of this BMP is to ensure that the legal tools are in place to effectively prohibit illicit discharges to the storm sewer system and to conduct necessary enforcement in the case of an illicit discharge.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will annually assess whether any changes are necessary to the Town Code. The Town will document any changes in the appropriate annual report."

BMPs from MS4 Program Plan	FY19 Activities
Continue to implement prohibition on illicit discharges, annually assessing the need for changes to the Town Code.	The Town continued to enforce the provisions of Town Code Chapter 26. The Town has assessed its authority to prohibit and respond to illicit discharges and finds that they are sufficient to meet the General Permit.

3.3.C Written Procedures for Illicit Discharges and Illegal Dumping

The objective of this BMP is to ensure that written procedures are in place to detect, identify, and address unauthorized non-stormwater discharges and illegal dumping to the storm sewer system. These procedures provide an added level of consistency to effectively prohibit illicit discharges and illegal dumping to the storm sewer system, and to conduct enforcement actions as necessary.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will document any changes to the written procedures during the reporting period in the associated annual reports."

BMPs from MS4 Program Plan	FY19 Activities
Implement IDDE Plan and incorporate into training.	The Town updated its IDDE Plan as part of the MS4 Program Plan update process. The plan is included in the MS4 Program Plan as an appendix. The plan is used to respond to reports of illicit discharges and during dry weather outfall screening in BMP 3.3.D. Field staff are trained in accordance with BMP 3.6.D.

3.3.D Dry Weather Outfall Screening

The objective of this BMP is to identify and eliminate illicit discharges as soon as possible to minimize impacts to water quality. The Town's IDDE Plan includes a dry weather outfall inspection procedure, prioritization schedule, written inspection and investigation protocols, and remedies for discovered discharges.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a summary of all dry weather outfall monitoring activities including the total number of outfalls screened, the screening results, and detail of any follow up actions. Tracking will be reported as part of BMP 3.E."

BMPs from MS4 Program Plan	FY19 Activities
Perform annual dry weather screening of 50 outfalls.	The Town performed dry weather screening on 50 outfalls during May and June 2019. See Appendix C for dry weather outfall screening results.

3.3.E Illicit Discharge Tracking

The General Permit requires that the Town track and process complaints about potential illicit discharges and to coordinate an appropriate response. Potential illicit discharges are identified through public reporting in BMP 3.2.B, the dry weather outfall screening program in BMP 3.3.D, and staff reporting in MCM #6.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a summary of all potential and actual illicit discharges in the tracking database. For each case, the Town will provide: (1) the date the discharge was observed or reported; (2) follow up activities; (3) measures to resolve the investigation; and, (4) closure date."

BMPs from MS4 Program Plan	FY19 Activities
Maintain illicit discharge tracking database.	See Table 5 for a summary of potential and actual illicit discharges with follow up actions as required by the General Permit.

Table 5 Suspected Illicit Discharge Reporting

Observed/ Reported	Location	Investigation Notes & Follow Up	Resolution	Date Closed
2019-03-19	1201 Mosby Ct	Residential heating fuel discharged into yard. Discharge did not enter MS4.	No discharge. Home owner is working on cleanup.	2019-03-19
2019-03-27	264 Sunset Park Dr	Grease dumpster completely filled. Several full buckets set around dumpster. No spill	Buckets of grease	2019-04-01

		onsite just the potential for one.	removed from site.	
2019-03-28	257 Sunset Park Dr	Liquid contaminant in the dumpster area. This contaminant is being conveyed across the private parking and into a storm inlet that discharges into Sugarland Run. From staff's investigation, the contaminant was saturated spent grain used in the brewing process.	A secondary containment system was installed to prevent leaking/ overtopping bins from getting into storm system	2019-04-18
2019-06-07	760 Elden St	Contractor blasted old dry paint off side of building, which was landing in a concrete channel. Staff observed the channel to be dry (no storm flow). Instructed contractor to stop work, clean up pain chips, and not to start work again until staff approves a protection plan.	Paint chips were swept up, bagged, and deposed of as refuse.	2019-06-10

3.3.E Promote Household Hazardous Waste (HHW) Disposal Options

Household hazardous waste, including used oil, oil filters, and antifreeze, can be a potential source of illicit discharges to the storm sewer system. The objective of this BMP is to provide residents with an opportunity to properly dispose of hazardous household waste materials.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report documentation of the Town's efforts to publicize the Fairfax County HHW disposal program."

BMPs from MS4 Program Plan	FY19 Activities
Document efforts to promote Fairfax County HHW program.	See Appendix C for the Town's holiday trash schedule magnet with HHW information and a snapshot of HHW information on the Town's website.

3.4 Construction Site Stormwater Runoff Control (MCM #4)

In accordance with Part I E 4 d of the General Permit, the following information must be reported in the annual report:

	Annual Report Requirement	Documentation
✓	(1) If the permittee implements a construction site stormwater runoff program in accordance with Part I E 4 a (3): • A confirmation 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. • 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.	The Town confirms that all land disturbing activities during the reporting period were conducted in accordance with department approved standards and specifications for erosion and sediment control. See BMP 3.4.A for additional information.
✓	(2) Total number of inspections conducted.	See BMP 3.4.B.
✓	(3) The total number and type of enforcement actions implemented and the type of enforcement actions.	See BMP 3.4.B.

3.4.A Maintain Local Program Consistency

The objective of this BMP is to ensure that the Town has in place all legal authority and processes and procedures necessary to address discharges from regulated construction site stormwater runoff.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a summary of any changes in program consistency, if applicable."

BMPs from MS4 Program Plan	FY19 Activities
Continue implementing consistent construction site stormwater runoff control program.	The Town continued to maintain a consistent program in accordance with state law and regulations. No changes have been made to the Town's approval status.
Ensure training and certification of appropriate staff.	The following individuals maintained certification related to construction site stormwater runoff control during FY19:

BMPs from MS4 Program Plan	FY19 Activities
	Name: Scott Brodbeck Type: E&SC Inspector Certification #: ESIN0989 Expiration Date: 8/7/2021 See Appendix D for actual certifications.

3.4.B Land Disturbing Activities Tracking System

Tracking land-disturbing activities assists in the inspection of these activities, which is key in the process of ensuring that erosion and sediment control measures are properly installed and maintained. Land disturbing activities are tracked by the Department of Public Works through the plan review process.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report: (1) a confirmation statement that land disturbing activities have been conducted in accordance with all approved standards and specifications; (2) an explanation for any projects not conducted in accordance with all standards and specifications; (3) the total number of inspections conducted; and, (4) the number and type of enforcement actions taken during the reporting period."

BMPs from MS4 Program Plan	FY19 Activities
Track and report annually on land-disturbing activities.	The Town confirms the following: • All land disturbing activities were conducted in accordance with approved standards and specifications. • The Town did not grant any exceptions during FY19 per 9VAC25-870-126. The following information was tracked during FY19 in accordance with the General Permit: Total Regulated Activities: 11 Total Disturbed Acres: 12.19 Total Inspections: 271 Enforcement Actions: See Appendix D.

3.5 Post Construction Stormwater Management (MCM #5)

In accordance with Part I E 5 f of the General Permit, the following information must be reported in the annual report:

	Annual Report Requirement	Documentation
✓	(1) If the permittee implements a Virginia Stormwater Management Program in accordance with Part I E 5 a (1) and (2): • The number of privately owned stormwater facility inspections conducted. • 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.	See BMP 3.5.B.
✓	(2) The total number of inspections conducted on stormwater management facilities owned or operated by the permittee.	See BMP 3.5.B.
✓	(3) A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned and 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.	The Town only conducted routine maintenance activities during FY19.
✓	(4) A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction 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.	See BMP 3.5.C.
✓	(5) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in	See BMP 3.5.C.

	Annual Report Requirement	Documentation
	accordance with Part I E 5 g and the date on which the information was submitted.	

3.5.A Maintain Local Program Consistency

The objective of this BMP is to ensure that the Town maintains consistency with all legal requirements and procedures to effective address post-construction stormwater quality and quantity in accordance with VSMP regulations (9VAC25-870 et. seq.).

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a summary of any changes in program consistency, if applicable."

<table>
<tr><th>BMPs from MS4 Program Plan</th><th>FY19 Activities</th></tr>
<tr><td>Continue implementing consistent post-construction stormwater management program.</td><td>The Town continued to maintain a consistent program in accordance with state law and regulations. No changes have been made to the Town's approval status.</td></tr>
<tr><td>Ensure training and certification of appropriate staff.</td><td>The following individuals maintained certification related to post-construction site stormwater runoff control during FY19:
<table>
<tr><td>Name:</td><td>John Jay Sergent</td></tr>
<tr><td>Type:</td><td>Dual Combined Admin</td></tr>
<tr><td>Certification #:</td><td>DCA0290</td></tr>
<tr><td>Expiration Date:</td><td>10/28/2022</td></tr>
</table>
<table>
<tr><td>Name:</td><td>Scott Brodbeck</td></tr>
<tr><td>Type:</td><td>SWM Inspector</td></tr>
<tr><td>Certification #:</td><td>SWIN1428</td></tr>
<tr><td>Expiration Date:</td><td>8/30/2021</td></tr>
</table>
See Appendix E for actual certifications.</td></tr>
</table>

3.5.B Long Term Operation and Maintenance of BMP Facilities

The objective of this BMP is to ensure that public and private stormwater management facilities continue to provide their intended water quality benefits.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report: The Town will include in each annual report: (1) the number of private facilities inspected each year; (2)the number and type of enforcement actions taken against private facilities, if applicable; (3) the number of public facilities inspected each year; (4) a description of significant maintenance, repair, or retrofit activities performed on public facilities; and, (5) confirmation that new facilities were reported either through the DEQ Construction Stormwater Database or the DEQ BMP Warehouse."

BMPs from MS4 Program Plan	FY19 Activities
Require all private stormwater management facilities to execute a Maintenance Agreement recorded in the Town land records.	All new private facilities are required to enter into a Maintenance Agreement in accordance with Town Code Chapter 26, Article VIII "Stormwater Management."
Inspect private stormwater management facilities at least once every five years.	Private facilities are inspected at least once every five years. The Town uses the authority in 9VAC25-870-114 that allows a third party licensed as a professional engineer, architect, landscape architect, or land surveyor to conduct the inspection and submit it to the Town. As documented in the last annual report, all private facilities were inspected in FY18. As a result, the next inspection cycle will start in FY23.
Inspect public stormwater management facilities annually or in accordance with an adopted alternative schedule.	The Town inspected all 28 public facilities in FY19. See Appendix E for inspection results.

3.5.C Stormwater BMP Tracking Database

The Town maintains a stormwater management facility tracking system to ensure that all public and private facilities are being properly maintained in accordance with permit requirements. The system also maintains an inspection schedule and records public and private stormwater management facility inspections.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will submit an electronic database or spreadsheet of all facilities brought online during the reporting period with the appropriate annual report. The data will include: the type of facility, location, acres treated (total acres with a breakdown of impervious and pervious acres), date brought online, sixth order Hydrologic Unit Code (HUC), the name of the impaired stream segment the facility is discharging into, whether public or private, existence of maintenance agreement, date of the most recent inspection, and when applicable, the number of enforcement actions."

BMPs from MS4 Program Plan	FY19 Activities
Update the stormwater facility tracking system in accordance with Part I E 5 of the General Permit.	The Town's stormwater facility tracking system includes all of the information required in Part I E 5 of the General Permit.
Update the tracking system no later than 30 days after each new stormwater facility is brought on-line.	New facilities are added to the Town's BMP tracking system no later than 30 days after the facility comes on-line. Nine facilities were added to the tracking system in FY19. All nine facilities are private and were submitted through the DEQ BMP Warehouse (see Appendix E). No new facilities were required to be submitted through the DEQ Construction Stormwater Database. With the

BMPs from MS4 Program Plan	FY19 Activities
	addition of the new facilities in FY19, the Town has a total of 170 facilities (142 private and 28 public).
Track information on all enforcement activities.	The tracking system is updated throughout the year to record inspections and enforcement actions.
Use the DEQ Construction Stormwater Database to report new facilities requiring a construction general permit.	The Town confirms that it uses the BMP Construction Stormwater Database to submit required information. No new facilities were required to be reported in FY19.
Use the DEQ BMP Warehouse to report all other new facilities no later than October 1.	The Town confirms that it uses the DEQ BMP Warehouse to submit the required information. Facility data was submitted on September 19, 2019. See Appendix E for confirmation email.

3.6 Pollution Prevention/Good Housekeeping for Municipal Operations (MCM #6)

In accordance with Part I E 6 q of the General Permit, the following information must be reported in the annual report:

	Annual Report Requirement	Documentation
✓	(1) A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period.	See BMP 3.6.A.
✓	(2) A summary of any new SWPPPs developed in accordance with Part I E 6 c during the reporting period.	See BMP 3.6.B.
✓	(3) A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities de-listed in accordance with Part 1 E 6 h during the reporting period.	See BMP 3.6.B.
✓	(4) A summary of any new turf and landscape nutrient management plans developed that includes: • Location and total acreage of each land area. • The date of the approved nutrient management plan.	See BMP 3.6.C.
✓	(5) A list of training events conducted in accordance with Part I E 6 m, including the following information: • The date of the training event. • The number of employees who attended the training event. • The objective of the training event.	See BMP 3.6.D.

3.6.A Operation and Maintenance Pollution Prevention SOPs

The objective of this BMP is to implement pollution prevention procedures for operation and maintenance activities as required in Part I E 6 a of the General Permit.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a confirmation that the SOPs have been reviewed and any necessary changes have been made."

BMPs from MS4 Program Plan	FY19 Activities
Implement Operation and Maintenance Pollution Prevention SOPs.	The Town continued to implement its SOPs.

BMPs from MS4 Program Plan	FY19 Activities
Prohibit the application of deicing agents containing urea or other forms of nutrients.	The Town's Snow Operations SOP was updated March 27, 2019 to prohibit these materials.
Annually review SOPs and update if necessary.	The Town reviewed and updated all SOPs during FY19. These are included in Appendix F.
Incorporate SOPs into training in BMP 6.D.	The SOPs are scheduled to be the focus of training in FY20 and FY22.

3.6.B Stormwater Pollution Prevention Plans for High-Risk Facilities

The objective of this BMP is to reduce and prevent the discharge of pollutants from high-priority facilities through SWPPPs and other pollution prevention measures.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report: (1) confirmation that the SWPPPs are being implemented, including a sample completed site inspection checklist; (2) confirmation of the review of high-priority sites; and, (3) a description of any new SWPPPs or changes to SWPPPs."

BMPs from MS4 Program Plan	FY19 Activities
Implement SWPPPs.	The Town continued to implement SWPPPs for the Public Works Complex and the Centennial Golf Course. See Appendix F for completed quarterly checklists.
Review, and update as necessary, the Public Works Complex SWPPP.	This BMP is scheduled for FY21.
Review, and update as necessary, the Golf Course SWPPP.	This BMP is scheduled for FY22.
Review high-priority sites and develop new SWPPPs, if necessary.	No new SWPPPs were required to be developed in FY19.
Review high-priority sites after incidents and update SWPPPs, if necessary.	One small diesel fuel spill occurred at the Golf Course on August 2, 2018. The spill was contained, cleaned-up, and documented in accordance with the SWPPP. After review, no changes are needed to the SWPPP.

3.6.C Turf and Landscape Nutrient Management Plans

The objective of this BMP is to reduce the potential for nutrients applied to turf and landscape areas to impact water quality through the implementation of NMPs.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report confirmation that the NMP is being implemented and a summary of any changes."

BMPs from MS4 Program Plan	FY19 Activities
Implement Golf Course NMP.	The Town implemented the Golf Course NMP during FY19.
Update the Golf Course NMP.	The Golf Course NMP was updated and recertified in accordance with state law. The new expiration date is June 7, 2024. See Appendix F for the approval letter.
Prepare NMPs for other properties as required.	The Town does not apply nutrients to areas greater than one contiguous acre except at the Golf Course. As a result, no additional NMPs are required at this time.

3.6.D Training Plan

The purpose of this BMP is to implement a training plan in accordance with Part I E 6 m-o of the General Permit.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report: (1) the date of each training event; (2) the number of employees attending each training event; and, (3) the objective of each training event. The Town will also provide information on each staff member certified in accordance with the Virginia Pest Control Act, the Virginia Erosion and Sediment Control Law, and the Virginia Stormwater Management Act. Certifications will be kept on file and be available on request."

BMPs from MS4 Program Plan	FY19 Activities
Provide biennial IDDE training for field personnel.	Training was provided on June 18, 2019 to all field personnel on IDDE recognition and reporting. See Appendix F for the presentation and sign-in sheets.
Provide biennial pollution prevention training to road, street, and parking lot maintenance personnel.	This training is scheduled for FY20 and FY22.
Provide biennial pollution prevention training to maintenance, public works, and recreational facility personnel.	This training is scheduled for FY20 and FY22.
Maintain certifications for all employees handling fertilizer and pesticides.	See Table 6 for a summary of all active certifications.
Maintain certifications for all employees engaged in erosion and sediment control and stormwater review.	See BMPs 3.4.A and 3.5.A.
Provide refresher training to emergency spill response personnel.	This training is scheduled for FY23.

Table 6 Summary of Pesticide and Herbicide Certifications

Name	Type	Cert #/Expiration	Category
John L. Dudzinsky	Commercial	#47545-G/Exp. 6/30/2023 Fertilizer: #CFA-23327-34467	3-A and 3-B
Jimmy D. Linton	Commercial	# 98385-T/Exp. 6/30/2020	3-A and 3-B
Mike Mueller	Commercial	#78726-G/Exp. 6/30/2020 Fertilizer: #13129	3-A and 3-B
Larry D. Hogan	Registered App	# 61606-T/Exp. 6/30/2020	N/A
James C. Lowe	Registered App	#92102-T/Exp. 6/30/2021	N/A
Andrew H. Crawford	Registered Appl	#123141-T/Exp. 6/30/2020	N/A
Marianne O'Shea	Registered Tech	#63527-T/Exp. 6/30/2021	N/A
David Higgins	Registered Tech	#92103-T/Exp. 6/30/2021	N/A
Bruce Corum	Registered Tech	#92107-T/Exp. 6/30/2021	N/A

3.6.E Contractor Oversight Procedures

The objective of this BMP is to ensure that contractors performing work on behalf of the Town use the appropriate procedures and control measures to protect water quality.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report verification that the Town is implementing the mechanism selected to ensure contractor adherence to local, state, and federal requirements and the Town's SOPs."

BMPs from MS4 Program Plan	FY19 Activities
Require through contract language that contractors will abide by all certifications and SOPs.	The Town continued to include language requiring that all contractors abide by the Town's pollution prevention SOPs and applicable local, state, and federal stormwater management requirements.

3.6.F Street Sweeping

The objective of this BMP is to prevent trash and particulates from entering the storm system.

The MS4 Program Plan establishes the following measurable goals and evaluation criteria: "The Town will include in each annual report a summary of street sweeping activities, including an estimate of the total lane miles swept and/or an estimate of the amount of debris removed."

BMPs from MS4 Program Plan	FY19 Activities
Continue to operate a street sweeping program.	The Town swept 130 lane miles and collected 103 tons of debris.

4 MS4 Program Plan Assessment

The MS4 Program Plan was updated in May 2019 to address the requirements of the current General Permit. The Department of Public Works continues to be responsible for overall stormwater planning, operations, and the administration of the Town's General Permit.

In accordance with the General Permit, the Town has evaluated the MS4 Program Plan, including a review of each MCM. The Town finds that the BMPs established to implement the MCMs are effective and that no changes are required at this time.

5 Special Conditions Associated with TMDLs

The General Permit requires the Town to develop action plans to address TMDLs where a wasteload allocation (WLA) has been assigned to the MS4.

The following provides an update on the status of the Town's Chesapeake Bay TMDL compliance activities based on the approved Chesapeake Bay TMDL Action Plan. Sugarland Run has been identified as impaired for E. coli by DEQ and a TMDL was approved by the State Water Control Board on April 4, 2014 that assigns a WLA to the Town. The Sugarland Run Bacteria TMDL Action Plan will be developed no later than April 1, 2021. Implementation status of that plan will be included in subsequent annual reports.

5.1 Chesapeake Bay TMDL Action Plan Status Report

The Town submitted a draft Phase II Chesapeake Bay TMDL Action Plan to DEQ with its Registration Statement. The following summarizes progress made by the Town toward implementation of that draft plan through June 30, 2019. Documentation of completed reductions is contained in Appendix G. The Town will submit the final Phase II Chesapeake Bay TMDL Action Plan no later than November 1, 2019.

Table 7 Chesapeake Bay TMDP Action Plan – Status of Means and Methods

		Draft Phase II Action Plan			Total Reductions Achieved Through FY19		
Means and Methods	**Status Narrative**	**TN (lbs/yr)**	**TP (lbs/yr)**	**TSS (lbs/yr)**	**TN (lbs/yr)**	**TP (lbs/yr)**	**TSS (lbs/yr)**
Redevelopment	The Town calculates pollutant reductions achieved as a result of redevelopment on an annual basis. Three redevelopment projects were completed in FY19. Reductions achieved in FY19 are documented in Appendix G.	41.62	5.27	3,194.91	47.38	6.74	3,826.33
Shared Credit Projects	Under the MOU with Fairfax County, the Town receives 4.2% credit of any project funded by the County's Stormwater Service District Fee. This is regardless of the project's location in Herndon, Vienna, or Fairfax County. Shared credit projects include Structural Retrofits, Stream Restoration, and In-Lake Forebay Retrofits. The figures in this table reflect the County's cumulative reductions from their initial Chesapeake Bay TMDL Action Plan plus subsequent annual reports multiplied by 0.042. Reductions	1,170.21	249.62	98,940.33	1,902.80	436.83	162,458.34

		Draft Phase II Action Plan			Total Reductions Achieved Through FY19		
Means and Methods	**Status Narrative**	**TN (lbs/yr)**	**TP (lbs/yr)**	**TSS (lbs/yr)**	**TN (lbs/yr)**	**TP (lbs/yr)**	**TSS (lbs/yr)**
	achieved in FY19 are documented in Appendix G.						
Street Sweeping	The Town estimated that it would collect, on average, 300,000 pounds of debris annually. In FY19, the Town collected 206,000 pounds. This variation is expected and does not affect overall compliance status. The Town recognizes that DEQ is changing the methodology used for street sweeping credit. The new methodology will be reflected in the final Phase II Chesapeake Bay TMDL Action Plan.	525.00	210.00	63,000.00	360.50	144.20	43,260.00
Purchased Off-Site Nutrient Credits	The Town reserves the right to purchase off-site nutrient credits. No credits have been purchased by the Town to-date.	0.00	0.00	0.00	0.00	0.00	0.00
Stormwater Facilities Between January 2006 and July 2009	The Town took one-time credit for pollutant reductions achieved by stormwater management facilities installed from January 1, 2006 through June 30, 2009. The Town submitted its list of these facilities with the initial Chesapeake Bay TMDL Action Plan and provided the actual credits in the FY16 annual report.	472.74	84.70	48,785.23	472.74	84.70	48,785.23
More Stringent Single Family	The Town calculates pollutant reductions achieved as a result of more stringent regulation of single family residential development on	22.60	2.98	1,146.47	38.70	15.99	2,126.49

		Draft Phase II Action Plan			Total Reductions Achieved Through FY19		
Means and Methods	**Status Narrative**	**TN (lbs/yr)**	**TP (lbs/yr)**	**TSS (lbs/yr)**	**TN (lbs/yr)**	**TP (lbs/yr)**	**TSS (lbs/yr)**
Residential Development	an annual basis. Reductions achieved this reporting cycle are documented in Appendix G.						
Additional Means and Methods	The Town reserves the right to take credit from additional means and methods authorized in the DEQ guidance document. No additional means and methods have been implemented by the Town to-date.	0.00	0.00	0.00	0.00	0.00	0.00
Total		**2,232.17**	**552.57**	**215,066.94**	**2,822.12**	**688.46**	**260,456.39**

The following is a summary of required reductions from the Chesapeake Bay TMDL Action Plan as well as the reductions already achieved and documented by the Town. The Town has already exceeded the reductions required in the current General Permit cycle. Excess reductions will be carried over to the next permit cycle.

Table 8 Chesapeake Bay TMDP Action Plan – Compliance Summary

Required Reductions	Credits	TN (lbs/yr)	TP (lbs/yr)	TSS (lbs/yr)
Required Reductions from Existing Sources (40%)		958.01	125.69	107,666.87
Required New Source Offsets		55.12	7.99	3,748.31
Required Grandfathered Offsets		0.00	0.00	0.00
Total Required Reductions and Offsets		1,013.13	133.68	111,415.18
	Reductions Achieved	2,822.12	688.46	260,456.39
Remaining Required Reductions		-1,808.99	-554.78	-149,041.21
	Documented Credit to Next Permit Cycle	1,808.99	554.78	149,041.21

APPENDIX A

Mayor's Quarterly Newsletter – Fertilizers and Illicit Discharge Reporting

Town Calendar – Best Time to Fertilize

What's On in Herndon Newsletter – Proper Lawn Care

Social Media Posts:

- Law Care
- Pest Waste Disposal
- Illicit Discharge Reporting

Pet Waste Post Card and Brochure

Pet Owner Mailing List for FY19

Clean Water Partners FY2019 Annual Summary

Broadcast Statistics for "Reining in the Storm" and "After the Storm"

A QUARTERLY MESSAGE FROM THE MAYOR

Dear Citizens,

Summer is typically a slower, more relaxed season for many of us. Your town government, however, is hard at work on many fronts, including forward momentum on the downtown redevelopment project, continued planning for Metrorail arrival, post-assessment of the Herndon Festival's new location and much more. You can get information on your government's programs, initiatives and activities at our website, Herndon-va.gov.

In this issue of It's ON I want to flag two key initiatives: passage of the town's FY 2020 Budget, which details how your tax dollars are being spent over the coming year; and the changes under way in the town's trash and recycling collection schedules. As always, your Town Councilmembers welcome your feedback on these or any other issues impacting the quality of life in our wonderful town. We may be reached directly at town.clerk@herndon-va.gov or 703-435-6804.

Warmly,

Lisa C. Merkel, Mayor

TOWN OF Herndon VIRGINIA

T (703) 435-6805
mayor.lisa@herndon-va.gov
herndon-va.gov

777 Lynn Street
Herndon, VA 20170-4602

HERNDON TOWN COUNCIL

Lisa C. Merkel, Mayor
Sheila Olem, Vice Mayor
Cesar del Aguila
Jennifer Baker
Pradip Dhakal
Signe Friedrichs
Bill McKenna

IT'S ON

NEWS AND NOTES FROM THE TOWN OF HERNDON

INSIDE:
FY 2020 BUDGET &
TRASH/RECYCLING UPDATE

TOWN OF Herndon VIRGINIA

TOWN COUNCIL ADOPTS FY 2020 BUDGET

Following two public hearings and after receiving input from citizens online and in person, the Herndon Town Council has adopted a FY 2020 Budget of $53,932,691, a 10.4 percent decrease from the adopted FY 2019 Budget. The town's FY 2020 begins July 1, 2019 and extends to June 30, 2020.

FY 2020 ADOPTED BUDGET AT-A-GLANCE

TOTAL BUDGET EXPENDITURES
$53,932,691 for all funds (General Fund, Water and Sewer Fund, Golf Course Fund, Chestnut Grove Cemetery Fund, Downtown Parking Enterprise Fund and the Capital Projects Funds). The total reflects a decrease of 10.4 percent from the FY 2019 budget of $60,222,260.

GENERAL FUND RECURRING BUDGET EXPENDITURES
FY 2020 General Fund recurring expenditures are $36,336,252, an increase of $1,145,021, or 3.3 percent, over the FY 2019 recurring General Fund expenditures of $35,191,231. This includes personnel, operations and maintenance, debt service and minor capital (excludes transfers).

GENERAL FUND EXPENDITURES
FY 2020 General Fund expenditures are $37,266,252, which reflects an increase of $1,050,021 or 2.9 percent more than the FY 2019 adopted budget.

REAL ESTATE TAX
Remains at $0.2650 per $100 of assessed value.

ONE PENNY ON THE REAL ESTATE TAX RATE
Equivalent to approximately $465,333 in tax revenues (includes assessed value of public service corporations and real property assessments).

AVERAGE RESIDENTIAL PROPERTY VALUE
Projected at $401,314.

AVERAGE RESIDENTIAL REAL ESTATE TAX BILL
$1,063.48 based on $0.2650 per $100 assessed value.

PERSONAL PROPERTY TAX RATE
Remains at $0.00 per $100 assessed value.

MEALS TAX
Increase by one and one-quarter percentage point from 2.5 percent to 3.75 percent.

CIGARETTE TAX
Remains at 75 cents per pack.

BUSINESS PROFESSIONAL AND OCCUPATIONAL LICENSE TAX
All classifications and thresholds remain at the current amounts.

MOTOR VEHICLE LICENSE FEE
Remains at $25 for private passenger and other vehicles weighing less than 4,000 lbs., and $32 for vehicles weighing in excess of 4,000 lbs.

CONSUMER UTILITY TAX
Tax based on the purchase of utility services within the corporate limits of the town. The amount of the tax for residential consumers contains a monthly cap of $3 per utility.

SEWER SERVICE RATE
Increased from $5.78 in FY 2019 to $6.19 per 1,000 gallons of water consumption in FY 2020.

SEWER AVAILABILITY FEE
Remains at $10,800 in FY 2020 for new, single-family homes.

SEWER LATERAL REPAIR AND REPLACEMENT PROGRAM
Remains at $2 per year ($0.50 per quarter).

WATER SERVICE RATE
Increased from $3.06 in FY 2019 to $3.16 per 1,000 gallons of water consumption in FY 2020. Peak rate increased from $5.23 in FY 2019 to $5.38 in FY 2020. Service charge increased from $8.84 to $8.97.

WATER AVAILABILITY FEE
Remains at $7,800 in FY 2020 for new, single-family homes.

RECYCLING FEE
Increase from $16 per year ($4 per quarter) to $32 per year ($8 per quarter).

PERSONNEL
costs for all funds total $28,062,880, an increase of $805,359 when compared to FY 2019.

The complete budget is available online at www.herndon-va.gov/Budget.

HERNDON-VA.GOV/MYTRASHDAYS

Beginning the week of August 5-9, many trash days throughout the town, and all recycling days, are changing. Please bookmark the town's website at Herndon-va.gov/mytrashdays for additional information. Commonly-asked questions and answers:

When does the change start?
Week of August 5-9, 2019

Is there a change to the level of service offered by the town?
No, there will be no change to the level of service currently provided as a part of the town's curbside collection program. This includes:

- Weekly trash, recycling, and yard waste collection
- Special (bulk) collection upon request. This is a paid service; please see application for procedures and restrictions.
- Seasonal loose-leaf collection program (alternating north and south of W&OD Trail)
- Seasonal Christmas tree removal.
- Large quantities of cardboard, such as moving boxes. Contact us at publicworks@herndon-va.gov.

Will my collection day(s) change?
Everyone's recycling day will change, to either Monday or Tuesday. Only a portion of the trash collection days are impacted; trash collection days will be Wednesday, Thursday or Friday.

When are my trash, recycling and yard waste collection days?
The town has been divided into three collection areas for trash and two areas for recycling. You can determine your trash and recycling collection days by viewing the interactive street map, at Herndon-va.gov/MyTrashDays. Yard waste is collected on your trash day.

When can I set my container(s) out for service?
All containers must be at the curb no later than 6 a.m. on your scheduled collection day. Containers should be removed from the curb after collection.

DID YOU KNOW?

Using too much fertilizer or other lawn care product can cause water pollution. Fertilizers, herbicides, pesticides, and yard waste can pollute the local waterbodies including the Chesapeake Bay when they are blown, dumped, or washed into the stormwater system. Additionally, pet waste is a significant source of pollution, when not properly disposed of.

If you are aware of improper dumping of materials or other potential pollutants, please report immediately to the town via ON the Go, the town's mobile app, or via email at publicworks@herndon-va.gov.

Is my street located within the automated collection program?
Due to the mechanical equipment used by the automated trucks, which require additional room to maneuver, not all streets can be included in the automated collection program. Please visit Herndon-va.gov/MyTrashDays for more information.

Are containers provided by the town?
Through efficiency savings, only automated customers are provided collection containers. Residents not in the automated program must provide their own containers. Please read guidelines before purchasing as restrictions do apply. Note that automated containers are assigned to the property and shall remain with the property if ownership changes. Resident are responsible for regular maintenance (cleaning).

Who can I contact for more information?
Department of Public works; publicworks@herndon-va.gov or 703- 435-6856. Please allow 24 hours for a reply during normal business hours.

cover photo by Mike Madigan

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 April Fools Day	2 Town Council Work Session, 7pm	3 HPRB/ARB Work Session, 7pm/7:30pm Recycling Collected	4	5	6 Stream & Park Clean-up, Meet at Runnymede Park, 8am – noon
7 Mayor's Volunteer Appreciation Reception, Community Center, 4pm	8 Planning Commission Work Session, 7pm	9 Town Council Public Hearing, 7pm	10 Recycling Collected	11	12	13 Aqua Egg Hunt, Community Center, 1:30pm
14 Palm Sunday	15 Federal Income Taxes Due	16 Town Council Work Session, 7pm	17 HPRB/ARB Public Hearing, 7pm/7:30pm Recycling Collected	18 Opening Day of the Farmers' Market, 8am – 12:30pm	19 Good Friday Passover Begins	20 Easter Egg Hunt, Town Green, 9:30am
21 Easter Sunday Community Center open 10am – 6pm	22 Earth Day Planning Commission Public Hearing, 7pm	23 Town Council Public Hearing, 7pm	24 Resident registration opens for summer recreation classes and camps, 10am Recycling Collected	25 Farmers' Market, 8am – 12:30pm Board of Zoning Appeals, 7pm	26	27 Arbor Day
28	29	30 Non-resident registration opens for summer recreation classes and camps, 10am				

Spring Clean-up (On Your Trash Day Only)

National Volunteer Week

Spring Break Junior Golf Camp 9am – 1:30pm

MARCH

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April 2019

Wait until autumn to fertilize your lawn. Spring is the best time to apply lime.

HERNDON-VA.GOV

TOWN OF Herndon

WHAT'S on

NEWS YOU CAN USE

Townwide Fall Clean-Up - October 1-5

The annual fall clean-up takes place throughout the town during the week of October 1-5, on your trash day only. Fall clean-up provides an opportunity for residents to place large or bulky items curbside for free collection. Click here to see list of items that WILL and WILL NOT be collected. Questions? Contact Public Works.

FY 2018 Annual Report

How many patrons used the Herndon Community Center last year? How many tons of trash were picked up by Public Works crews? Town Manager Bill Ashton has delivered to the Town Council a FY 2018 Annual Report, detailing town accomplishments and programs during the just-completed fiscal year. A report summary is in the mail to all residences and businesses in the town; click here to see the full report.

Monroe Street Closure - Oct 1-2

Monroe Street between Pine and Elden streets will be closed to through traffic Monday and Tuesday, October 1-2, due to utility work. Detours will be marked - please plan accordingly!

Fall Lawn Care

The Town of Herndon's Department of Public Works advises homeowners who fertilize their lawns that NOW is the best time to

fertilize, when the roots that will sustain plants next summer are actively growing. A soil test report will provide recommendations on how much fertilizer to apply; soil test kits may be obtained from all Fairfax County public libraries or from the Virginia Cooperative Extension office in the Fairfax County Government Center. There is a small fee for soil analysis.

Visit our website

Contact Us

Town of Herndon FY19 Social Media Posts

HerndonVA @TownOfHerndon · Jun 19

Pet waste is a significant source of harmful bacteria such as E. Coli and fecal coliform. If not properly disposed these bacteria can wash into nearby streams and storm drains which lead directly into our local waterways and the Chesapeake Bay.

1 3

HerndonVA @TownOfHerndon · Jun 18

An Illicit discharge is any discharge to the storm drainage system that is not composed entirely of stormwater (rain). If you see something that could potentially be an illicit discharge like yard refuse, gasoline, grease or oil spills, please report it immediately to the town.

1 2

HerndonVA @TownOfHerndon · Jun 17

Using too much fertilizer or other lawn care products can cause water pollution thru runoff in local waterbodies and the Chesapeake Bay. Perform a soil test to determine proper fertilizer application rates. Use non-toxic products, slow release, or organic fertilizers.

1 1

Know what's yuckier than picking up dog poop?

Stepping in it! Know what's even more disgusting than that? Swimming in, fishing from or treating our drinking water from sources that have dog poop in them! Please pick up after your pooch.

PLEASE PICK UP MY POOP.

Cleaning up pet waste is good for your health and the environment! Seriously. Pet waste left on the ground, especially near streets and sidewalks, gets washed into storms drains and drainage ditches which flow to your local waterway...without being treated! Bacteria, parasites, and viruses found in pet waste can be harmful to water quality and human health. Not only is picking up after your pooch the neighborly thing to do, it's the healthy thing to do... for you and the environment!

TOWN OF
Herndon
DEPARTMENT OF PUBLIC WORKS

ONLY RAIN
NO CONTAMINENT
DOWN THE STORM DRAIN

Remember, Only Rain Down the Storm Drain!

www.herndon-va.gov
703-435-6853

IT'S UP TO YOU TO PREVENT WATER POLLUTION!

Follow these simple tips:

- Dispose of used motor oil and household hazardous waste through your local Household HazMat program;
- Wash your car at a commercial carwash, or in a location where the soapy water will not run into the storm drain;
- Sweep up dirt, grass clippings, other yard waste instead of washing them down the driveway and into the gutter.
- Avoid excess fertilizer or pesticide use;
- Always pick up pet waste from your yard or public area;

Pet waste is a significant source of harmful bacteria such as E. Coli and fecal coliform. A single gram of pet waste contains an average of 23 million fecal coliform, and when not properly disposed of, can wash into nearby streams or be carried by run-off into storm drains. These storm drains do not connect to water treatment facilities. Instead, they drain directly into our streams, the Potomac River, and the Chesapeake Bay.

Pet owners must collect their animal's waste so it does not wash into drains or streams

5 green things you can do to reduce pet waste pollution

1. Always clean up after your pet
2. Never dispose of pet waste in a storm drain
3. Pick up and bag waste, place it in the trash
4. Flush pet waste down the toilet (but not kitty litter or debris)
5. Encourage other pet owners to be responsible

Town of Herndon
Public Works Department
777 Lynn Street
Herndon, VA 20170
Ph: 703-435-6856
Fax: 703-318-8492
http://www.herndon-va.gov/

When Nature Calls, Please Pick Up... After Your Pet! It's Your Doodie!

Town of Herndon Stormwater Management Program

Pet Waste Disposal, Water Quality and Your Health

Are You Risking Your Health?

When pet waste is left on the ground or disposed of improperly, water quality suffers and your health may be at risk also.

Children playing outside are at the highest risk of infection from bacteria and parasites found in pet waste. Flies may also spread diseases found in pet waste. Some of these bacteria and parasites include:

Campylobacteriosis – a bacterial infection carried by dogs and cats that frequently causes diarrhea in humans.

Salmonellosis – the most common bacterial infection transmitted to humans by other animals. Symptoms include fever, muscle aches, headache, vomiting, and diarrhea.

Toxocariasis – roundworms usually transmitted from dogs to humans, often without noticeable symptoms, but may cause vision loss, a rash, fever, or cough.

Toxoplasmosis – a parasite carried by cats that can cause birth defects if a woman becomes infected during pregnancy that can also be a problem for people with depressed immune systems.

Are you polluting our waters?

Did you know that Sugarland Run, Herndon's primary stream is impaired and exceeds Virginia's water quality standards for fecal coliform and/or E. coli bacteria?

Escherichia coli (E. coli) bacteria is present in the intestinal tracts of all warm-blooded animals and is an indicator that other pathogens may be present. For recreational waters, fecal coliform was the primary bacteria indicator until relatively recently, when EPA began recommending *E. coli* and enterococci as better indicators of health risk from water contact. Virginia has incorporated *E. coli* in the state water quality standards and monitors accordingly.

The nutrients and organic matter in pet waste can also cause significant water quality degradation. Excess nutrients can cause algae blooms that block sunlight and kill underwater vegetation. Decaying pet waste uses up dissolved oxygen in the water that fish, vegetation and other aquatic species rely on to live.

All streams in Herndon drain to the Potomac River and Chesapeake Bay. By picking up after our pets, the town can make a real contribution to improving our local water quality and the health of the Chesapeake Bay.

Simple Ways to Love Your Pet and the Environment!

Always clean up after your pet. Failure to do so on public property or the property of another is subject to a $250 fine (County Code §41.1-2-6).

Proper ways to dispose of pet waste include:

Bagging and placing pet waste in the trash

Flushing pet waste down the toilet (but not kitty litter or debris)

Never dispose of pet waste in a storm drain. These drains lead directly to local waterways.

Encourage other pet owners to be responsible. It is an important part of the responsibility of owning a pet. We all suffer the consequences of ignoring irresponsible pet owners.

The town has a **dog exercise area at Chandon Park**. Please contact our Department of Parks and Recreation at (703) 435-6868 or visit http://www.herndon-va.gov

Herndon Pet Owner
906 1ST PL
Herndon, VA 20170

Herndon Pet Owner
908 1ST PL
Herndon, VA 20170

Herndon Pet Owner
852 2ND ST
Herndon, VA 20170

Herndon Pet Owner
604 3RD ST
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1205 BICKSLER CT
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936 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
815 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
936 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
919 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
916 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
915 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
810 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
927 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
895 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
909 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
905 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
701 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
700 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
709 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
815 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
1002 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
908 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
916 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
912 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
909 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
896 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
706 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
711 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
710 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
815 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
963 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
917 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
918 BRANCH DR
Herndon, VA 20170

Herndon Pet Owner
897 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
903 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
910 BROAD OAKS
Herndon, VA 20170

Herndon Pet Owner
708 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
709 BRUCE CT
Herndon, VA 20170

Herndon Pet Owner
13416 BRYCE CT
Herndon, VA 20170

Herndon Pet Owner
1102 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1109 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1117 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1060 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1103 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1112 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1054 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1059 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1057 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1058 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
1050 BURWICK DR
Herndon, VA 20170

Herndon Pet Owner
654 CALHOUN CT
Herndon, VA 20170

Herndon Pet Owner
654 CALHOUN CT
Herndon, VA 20170

Herndon Pet Owner
725 CAMPBELL WAY
Herndon, VA 20170

Herndon Pet Owner
755 CAMPBELL WY
Herndon, VA 20170

Herndon Pet Owner
721 CAMPBELL WAY
Herndon, VA 20170

Herndon Pet Owner
735 CAMPBELL WAY
Herndon, VA 20170

Herndon Pet Owner
727 CAMPBELL WAY
Herndon, VA 20170

Herndon Pet Owner
719 CAMPBELL WY
Herndon, VA 20170

Herndon Pet Owner
753 CAMPBELL WAY
Herndon, VA 20170

Herndon Pet Owner
747 CAMPBELL WAY
Herndon, VA 20170

Herndon Pet Owner
0 CASPER DR
Herndon, VA 20170

Herndon Pet Owner
1108 CASPER DR
Herndon, VA 20170

Herndon Pet Owner
1130 CASPER DR
Herndon, VA 20170

Herndon Pet Owner
1104 CASPER DR
Herndon, VA 20170

Herndon Pet Owner
413 CAVENDISH ST
Herndon, VA 20170

Herndon Pet Owner
400 CAVENDISH ST
Herndon, VA 20170

Herndon Pet Owner
416 CAVENDISH ST
Herndon, VA 20170

Herndon Pet Owner
406 CAVENDISH ST
Herndon, VA 20170

Herndon Pet Owner
11599 CEDAR CHASE
Herndon, VA 20170

Herndon Pet Owner
632 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
623 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
611 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
617 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
617 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
603 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
625 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
611 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
725 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
609 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
613 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
642 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
624 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
636 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
625 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
611 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
741 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
621 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
625 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
611 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
749 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
609 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
630 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
751 CENTER ST
Herndon, VA 20170

Herndon Pet Owner
1029 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1031 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1014 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1013 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1018 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1020 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1030 CHARLES ST
Herndon, VA 20170

Herndon Pet Owner
1017 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1002 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1005 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1016 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1010 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1004 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1003 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
1016 CHARLTON PL
Herndon, VA 20170

Herndon Pet Owner
311 CHERRY CT
Herndon, VA 20170

Herndon Pet Owner
313 CHERRY CT
Herndon, VA 20170

Herndon Pet Owner
306 CHERRY CT
Herndon, VA 20170

Herndon Pet Owner
309 CHERRY CT
Herndon, VA 20170

Herndon Pet Owner
1109 CLARKE ST
Herndon, VA 20170

Herndon Pet Owner
1106 CLARKE ST
Herndon, VA 20170

Herndon Pet Owner
635 CLEARWATER CT
Herndon, VA 20170

Herndon Pet Owner
609 CLEARWATER CT
Herndon, VA 20170

Herndon Pet Owner
632 CLEARWATER CT
Herndon, VA 20170

Herndon Pet Owner
616 CLEARWATER CT
Herndon, VA 20170

Herndon Pet Owner
903 CRESTVIEW DR
Herndon, VA 20170

Herndon Pet Owner
1013 CRESTVIEW DR
Herndon, VA 20170

Herndon Pet Owner
995 CRESTVIEW DR
Herndon, VA 20170

Herndon Pet Owner
834 CRESTVIEW DR
Herndon, VA 20170

Herndon Pet Owner
999 CRESTVIEW DR
Herndon, VA 20170

Herndon Pet Owner
1114 CRITON ST
Herndon, VA 20170

Herndon Pet Owner
1104 CRITON ST
Herndon, VA 20170

Herndon Pet Owner
1116 CRITON ST
Herndon, VA 20170

Herndon Pet Owner
1108 CRITON ST
Herndon, VA 20170

Herndon Pet Owner
1103 CRITON ST
Herndon, VA 20170

Herndon Pet Owner
1106 CRITON ST
Herndon, VA 20170

Herndon Pet Owner
1301 CROSSTITCH DR
Herndon, VA 20170

Herndon Pet Owner
1416 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1422 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1418 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1412 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1406 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1400 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1409 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1424 CUTTERMILL CT
Herndon, VA 20170

Herndon Pet Owner
1206 CUZCO CT
Herndon, VA 20170

Herndon Pet Owner
1166 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1101 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1139 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1125 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1118 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1114 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1100 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1160 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1207 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1103 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1139 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
1125 CYPRESS TREE
Herndon, VA 20170

Herndon Pet Owner
505 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
508 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
510 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
517 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
531 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
509 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
525 DAKOTA DR
Herndon, VA 20170

Herndon Pet Owner
1103 DEVON ST
Herndon, VA 20170

Northern Virginia Regional Commission

2019 Annual Recap:

Presented By:
Heidi Feutchwanger – Account Executive
Amy Wood - Local Sales Manager

A Year In Review
AGENDA

- 2019 Annual Campaign Recap (July 2018 – June 2019)
- Branding & Targeting Discussion
- Reporting
- Results

COMCAST SPOTLIGHT

"ONLY RAIN CAMPAIGN"

Marketing Objectives

- Northern Virginia Clean Water partners see to increase brand awareness across Northern Virginia in support of the Only Rain Campaign
- Reach Hispanic residents in Northern Virginia
- Reach Northern Virginia residents across **3** Audience Segments:

Homeowners – Lawn Care
(Fertilizers)

Do-It-Yourselfers
(power washing, gutter cleaning, auto care, etc.)

Dog Owners
(Pet Waste)

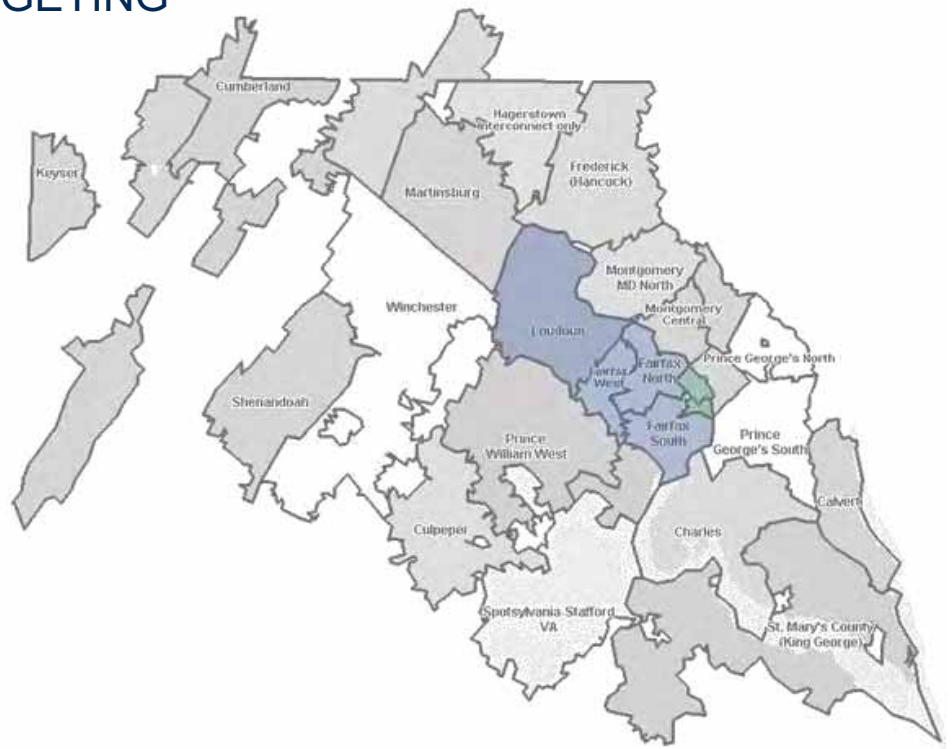
COMCAST SPOTLIGHT

BRINGING YOUR BRAND AND THE RIGHT AUDIENCES TOGETHER

THE POWER OF GEOGRAPHIC TARGETING

7 GEOGRAPHIC ZONES:

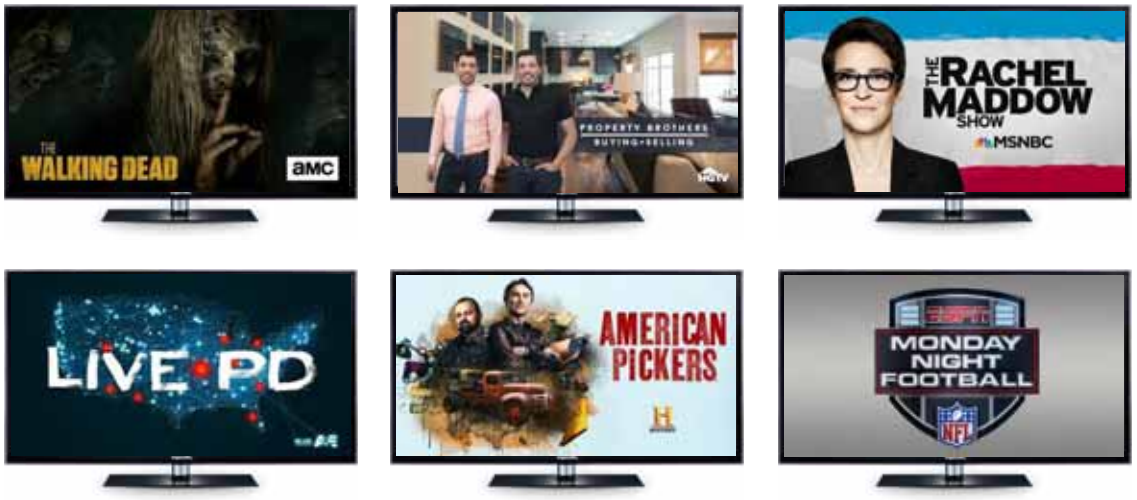
- Alexandria
- Arlington
- Fairfax North
- Fairfax South
- Fairfax West
- Loudoun County
- Potomac*



* Zone not pictured.

YOUR TARGET AUDIENCES WERE WATCHING

WHEN YOUR COMMERCIALS AIRED IN HOT PROGRAMMING



+ EVEN MORE PROGRAMS ACROSS ADDITIONAL NETWORKS!

*Not indicative of all networks and programs aired on

COMCAST SPOTLIGHT

BRINGING YOUR BRAND AND THE RIGHT AUDIENCES TOGETHER

THE POWER OF DIGITAL ADVERTISING

PREMIUM DIGITAL TV (June 25, 2018 – June 30, 2019)				
IMPRESSIONS GOAL	**IMPRESSIONS DELIVERED**	**% TO GOAL**	**COMPLETED VIEWS**	**VIEWED MINS**
333,420	335,121	100.21%	321,708	162,612.51
PREMIUM DIGITAL VIDEO (June 25, 2019 – June 30, 2019) Target: Pet Owners, Homeowners, Automobile Owners				
IMPRESSIONS GOAL	**IMPRESSIONS DELIVERED**	**% TO GOAL**	**COMPLETED VIEWS**	**VIEWED MINS**
164,500	168,232	102.27%	158,036	64,127.60
BANNERS (June 25, 2018 – June 30, 2019) Various Targeting Across Multiple Products*				
IMPRESSIONS GOAL	**IMPRESSIONS DELIVERED**	**% TO GOAL**	**COMPLETED VIEWS**	**VIEWED MINS**
257,411	265,947	103.32%	23,057	15,193.37

Source: iVerify Reporting Generated 7/3/2019. The ratings and impressions estimates (Data) provided herein are based on data provided by a 3rd party and are for informational purposes only. Comcast specifically disclaims and makes no warranties, express or implied regarding the Data in this Report. This Report is preliminary and not for invoicing or billing purposes. Use of this Report is at Agency/Clients own risk. Advertising spot and clearance information is based on preliminary data and may vary from affidavits. Customer will be billed and will be required to pay based on final affidavits. The Data provided in this Report is confidential and may only be used by Agency/Client for its internal analysis and not for any other purpose without the prior written consent of Comcast.

COMCAST SPOTLIGHT

Interactive Reporting

Sign-In Roadblock Recap

THE **POWER** OF **DIGITAL**

Tuesday, May 7, 2019

Impressions Delivered

- 54,110 Impressions Delivered
- 119.37 Viewed Minutes

Tuesday, May 14, 2019

Impressions Delivered

- 55,801 Impressions Delivered
- 116.68 Viewed Minutes

Source: iVerify Reporting Generated 7/3/2019. The ratings and impressions estimates (Data) provided herein are based on data provided by a 3rd party and are for informational purposes only. Comcast specifically disclaims and makes no warranties, express or implied regarding the Data in this Report. This Report is preliminary and not for invoicing or billing purposes. Use of this Report is at Agency/Clients own risk. Advertising spot and clearance information is based on preliminary data and may vary from affidavits. Customer will be billed and will be required to pay based on final affidavits. The Data provided in this Report is confidential and may only be used by Agency/Client for its internal analysis and not for any other purpose without the prior written consent of Comcast.

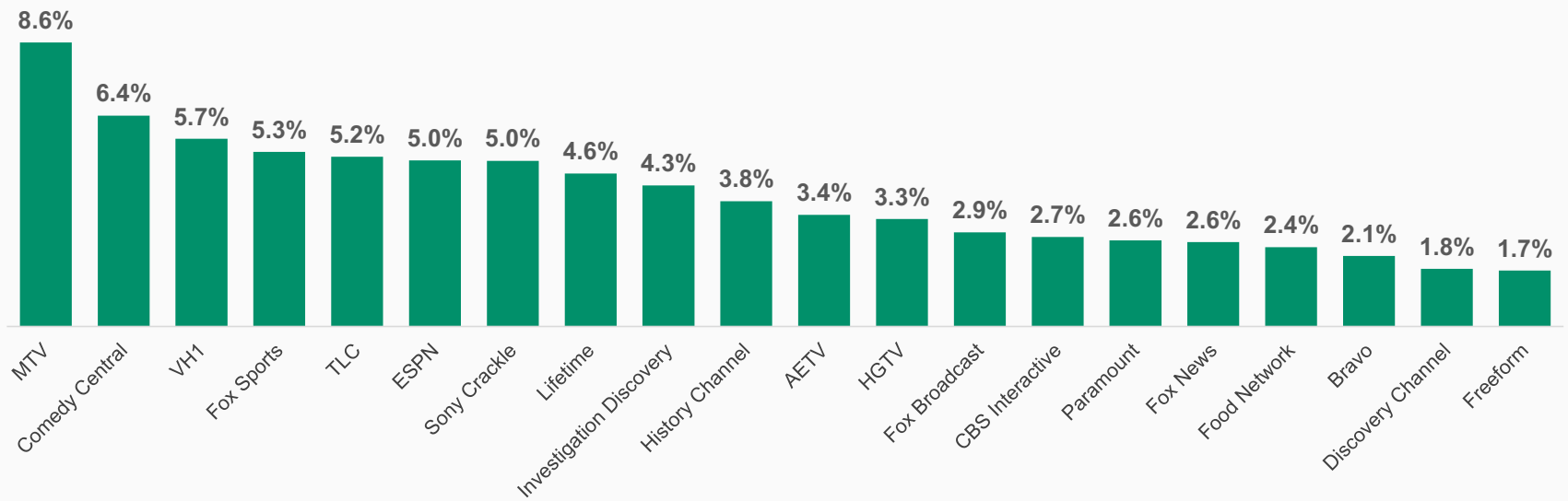
COMCAST SPOTLIGHT

DELIVERY BY BRAND OR CONTENT

PREMIUM DIGITAL TV

We know the how, now the **where your targeted impressions** are being delivered across premium content and web browser enabled devices.

% OF TOTAL IMPRESSIONS DELIVERED BY BRAND/CONTENT JUNE 25, 2018 – JUNE 30, 2019



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DELIVERY BY PLATFORM

PREMIUM DIGITAL TV

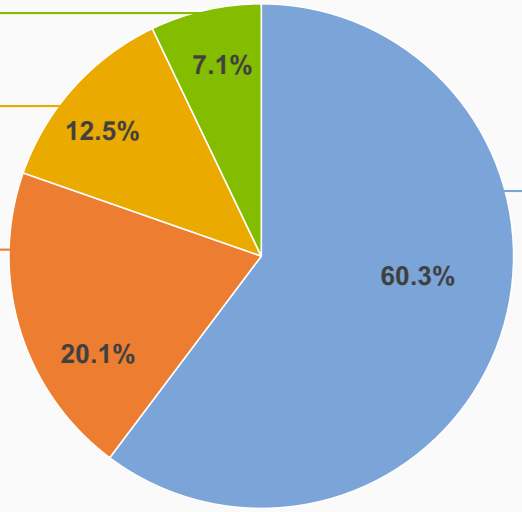
We know the how, now the **where your targeted impressions** are being delivered across premium content and web browser enabled devices.

% OF TOTAL IMPRESSIONS DELIVERED BY PLATFORM JUNE 25, 2018 – JUNE 30, 2019

XFINITY SET TOP BOX
Device used in the home to watch on-demand content via a subscription service.

WEB BROWSER
An internet enabled device used to watch video content through a web browser

MOBILE
Video watched through a mobile in-app experience.



CONNECTED TV
An internet enabled device used to watch content on television screen.

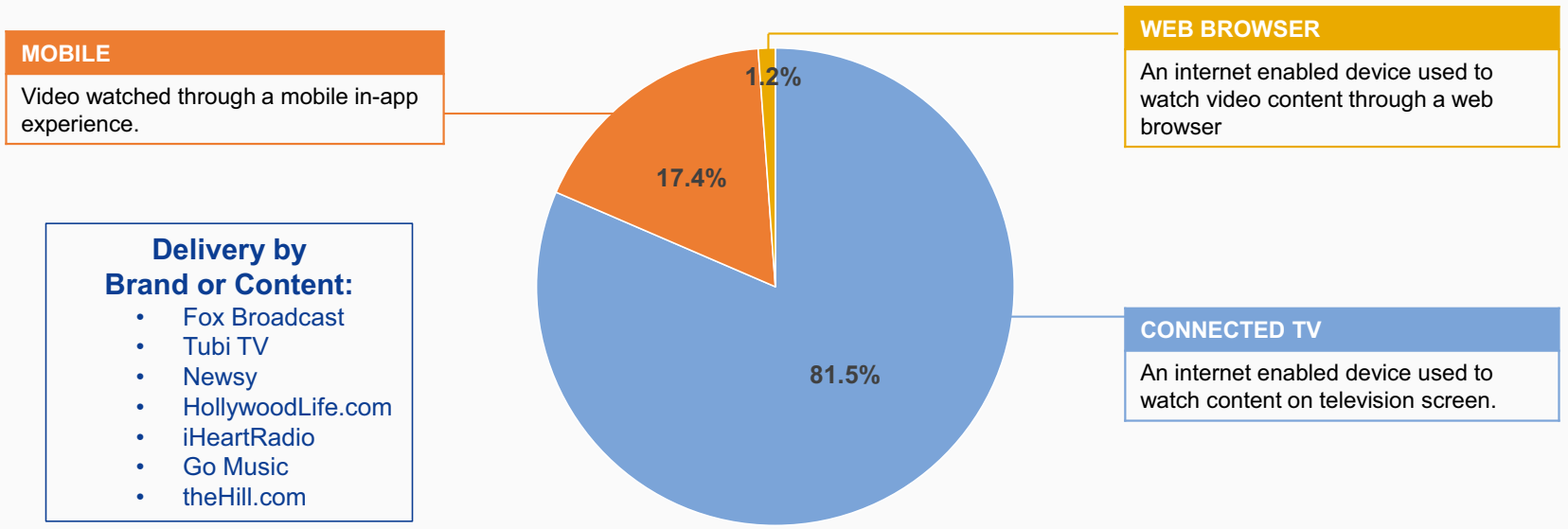
Source: iVerify reporting generated 7/3/19. The ratings and impressions estimates (Data) provided herein are based on data provided by a 3rd party and are for informational purposes only. Comcast specifically disclaims and makes no warranties, express or implied regarding the Data in this Report. This Report is preliminary and not for invoicing or billing purposes. Use of this Report is at Agency/Clients own risk. Advertising spot and clearance information is based on preliminary data and may vary from affidavits. Customer will be billed and will be required to pay based on final affidavits. The Data provided in this Report is confidential and may only be used by Agency/Client for its internal analysis and not for any other purpose without the prior written consent of Comcast.

DELIVERY BY PLATFORM

PREMIUM DIGITAL VIDEO

We know the how, now the **where your targeted impressions** are being delivered across premium content and web browser enabled devices.

% OF TOTAL IMPRESSIONS DELIVERED BY PLATFORM JUNE 25, 2018 – JUNE 30, 2019



Source: iVerify reporting generated 7/3/19. The ratings and impressions estimates (Data) provided herein are based on data provided by a 3rd party and are for informational purposes only. Comcast specifically disclaims and makes no warranties, express or implied regarding the Data in this Report. This Report is preliminary and not for invoicing or billing purposes. Use of this Report is at Agency/Clients own risk. Advertising spot and clearance information is based on preliminary data and may vary from affidavits. Customer will be billed and will be required to pay based on final affidavits. The Data provided in this Report is confidential and may only be used by Agency/Client for its internal analysis and not for any other purpose without the prior written consent of Comcast.

2019 MULTI-SCREEN CAMPAIGN RESULTS

(July 2, 2018 – June 30, 2019)

Multiscreen Campaign Summary	Total Units	Total Impressions
7 Geographic TV Ad Zones + Geo-Targeted Digital Ad Impressions to Specific Northern VA Territories		
20 Targeted TV Networks	8,589	33,309,385
5 Spanish Language Networks	827	281,734
Online Impressions	n/a	769,300
TOTALS	**9,416**	34,360,419

Source: The television household impressions are taken from Nielsen's sample estimates for the Washington DC DMA. Since the estimates are derived from a sample, Spanish language networks did not have enough coverage areas from which audience estimates could be provided. Therefore this analysis is limited to the English language networks for each zone as well as for internet banner advertisements. Source: iVerify reporting generated 7/3/2019. The ratings and impressions estimates (Data) provided herein are based on data provided by a 3rd party and are for informational purposes only. Comcast specifically disclaims and makes no warranties, express or implied regarding the Data in this Report. This Report is preliminary and not for invoicing or billing purposes. Use of this Report is at Agency/Clients own risk. Advertising spot and clearance information is based on preliminary data and may vary from affidavits. Customer will be billed and will be required to pay based on final affidavits. The Data provided in this Report is confidential and may only be used by Agency/Client for its internal analysis and not for any other purpose without the prior written consent of Comcast.

COMCAST SPOTLIGHT

Broadcast Times for "Reigning in the Storm" and "Only Rain Down the Drain"

Schedule: Every Thursday and Saturday

Month/Year	# Broadcasts
July 2018	8
Aug 2018	9
Sept 2018	9
Oct 2018	8
Nov 2018	9
Dec 2018	9
Jan 2019	9
Feb 2019	8
March 2019	9
April 2019	8
May 2019	9
June 2019	9

APPENDIX B

Screen Shot of Town Stormwater Webpage with Required Information:

- MS4 Permit and Coverage Letter
- Most Current MS4 Program Plan
- Most Recent Annual Report
- Illicit Discharge Reporting Function
- Information About Public Input and Complaints
- Town Sponsorship Protocol

Stormwater Management

The Department of Public Works is responsible for the maintenance and repair of the stormwater drainage system within the town. The town's storm drainage systems goes directly into our streams and drains into the Potomac River. The Potomac River is an important drinking water supply and drains into the Chesapeake Bay.

What is Stormwater?

Stormwater is caused by rain or snow melt. Excess stormwater that cannot infiltrate into the soil or be absorbed by vegetation washes pollutants like soil, litter, fertilizers, automotive fluids, detergents, and bacteria into our creeks, rivers, lakes and oceans. In heavy storms, stormwater can cause flooding and drainage problems. Stormwater runoff is a leading source of water pollution.

FEMA Flood Risk Study

Herndon's MS4 Plan to Reduce Stormwater Pollution

When rain falls on impervious areas such as rooftops, parking lots, roads, and driveways it picks up sediment, fertilizers, pesticides, bacteria, motor oil, and other pollutants generated by various land uses and human activities. When left uncontrolled, this pollution can harm aquatic habitats and make the water unsafe for human contact. Eventually, this pollution reaches the Potomac River and the Chesapeake Bay.

Under the Virginia Stormwater Management Program (VSMP) permit regulations, the Town is required to control pollution to the maximum extent practical and to develop a pollution prevention plan. This plan is known as a Municipal Separate Storm Sewer System Program Plan - or MS4 Plan for short. The Town's initial plan was developed in 2003.

State regulations require the Town to update the MS4 Program Plan. Linked below is the Town’s current MS4 Program Plan. We encourage Town property owners and residents as well as the Town's business community to review and provide comments and concerns at the following contact information:

Department of Public Works
Town of Herndon
777 Lynn Street
Herndon, VA 20170
(703) 435-6853

You may also email us at: publicworks@herndon-va.gov

- Chesapeake Bay TMDL Action Plan
- MS4 Program Plan
- MS4 Annual Report
- MS4 Permit

Report an illicit discharge (Pollution into Storm Drain or Streams)
An Illicit Discharge is any discharge to the storm drainage system that is not composed entirely of stormwater (Rain).

Land Disturbing Activities

- Checklist - Stormwater Management Plan Completeness
- Herndon and Fairfax Ordinance Comparison
- Site Plan Cover Sheet
- Termination Notice
- VSMP Permit Fees & Procedures
- VSMP Registration Statement

Requirements for Contractors

- Outdoor Material Storage
- Pesticides, Herbicides and Fertilizers
- Road, Street Parking Lot and Sidewalk Maintenance
- Snow and Deicing Operations
- Utility Construction and Maintenance
- Vehicle Equipment Maintenance & Cleaning

Tips for Businesses

Commercial properties can be a source of pollution due to solid waste containment issues, grease contamination, and wash water problems. By law, any discharge to the storm sewer system that is not composed entirely of stormwater runoff is considered illicit discharge. Owners of commercial establishments must provide solid waste containers with lids and shall maintain containers so that waste does not accumulate and is not carried by rainfall into storm drains or streams. Dispose of wash water inside and in utility sinks or floor drains and never outside where it can enter storm drains. Cooking grease and oil are required to be contained and recycled. Remember, ONLY RAIN DOWN THE DRAIN! For more information, please visit http://www.onlyrain.org/

- Automotive Shop Pollution Prevention
- Restaurant Pollution Prevention

Tips for Homeowners

When is the best time to Fertilize?

Hold on to your fertilizer! Contrary to popular practice, spring is not the time to fertilize your lawn. If you fertilize in early spring, the blades will grow at the expense of the roots developing. This can lead to disease and insect problems later in the season. In addition, you will have to mow the lawn more frequently. Proper springtime lawn care can help protect our waterways from pollutants and contribute to a healthy environment.

Fall is the best time to fertilize, when the roots that will sustain the plants through the following summer are actively growing. Even if you missed fall fertilization, you should limit spring fertilization to a light feeding (0.5 lbs. of 10-10-10 per 1000 sq. ft.) after the initial flush of growth has subsided in May or early June.

Lime, on the other hand, should be applied in early spring if soil tests show it is necessary. Soil testing kits can be obtained from all Fairfax County public libraries or from the Virginia Cooperative Extension office in the Government Center (Pennino building, 10th Floor) - there is a small fee for the soil analysis. Most lawn grasses grow best at a soil pH of 6.0 to 7.0. Your soil test report will provide recommendations on how much lime to apply. Also use the results of your soils test to determine how much fertilizer to apply in the fall. Applying too much fertilizer or spillage on sidewalks or driveways can cause stream pollution. For more information please visit http://www.onlyrain.org/

Household Hazardous and E-Waste

The town does not collect hazardous waste and electronics. Motor oil and other hazardous waste as well as E-Waste can be taken to Fairfax County's West Ox Road Transfer Station at no charge to Fairfax County residents (please click link for directions and hours).

Additional information:

Your lawn and clean water

Preventing stormwater pollution

Tips for Pet Owners

Did you know pet waste is a significant source of harmful bacteria such as E. Coli and fecal coliform? Local Pooper Scooper laws require owners to clean up pet excrement on public property or the property of another. Dispose of by bagging and placing in the trash, or by flushing down the toilet (no bags or kitty litter). Please take advantage of the many pet waste pickup stations found throughout the town and at Chandon Park's dog exercise area. Never dispose of pet waste in a storm drain or stream. Click here to view "When Nature Calls" brochure. For more information, please visit http://www.onlyrain.org/

Volunteer Opportunities

Protocol for Sponsorship of Non-governmental Volunteer Opportunities

The Town of Herndon welcomes volunteer participation via "Volunteer Fairfax", a non-profit agency that consolidates volunteer opportunities for the Fairfax County region. The Town of Herndon's Parks and Recreation Department is the lead agency and coordinates with Volunteer Fairfax. The Parks Department also coordinates directly with corporate and other groups to find opportunities for volunteer participation in the town, including stream clean-ups. The Town's Urban Forester also coordinates directly with groups, including the Boy Scouts, to accomplish volunteer projects such as storm drain marking.

Non-governmental agencies contact either "Volunteer Fairfax" or the town directly and are then referred to the Parks Department for coordination with the appropriate volunteer opportunity. Please click here to be directed to the Parks and Recreation volunteer page for specific projects and a volunteer application.

APPENDIX C

Updated MS4 Outfall Information Table

Dry Weather Outfall Screening Results

Trash Collection Schedule Magnet

HHW Web Page

Updated Outfall Information Table for FY19

UniqueID	Latitude	Longitude	MS4_Outfal	Stream	NHD_CODE	WQ_CATEGOR	IMP_CAUSE	TMDL	Acres	Dominant_Land_Use
Sufl0006.OF02	38.980134	-77.390576	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.54	RESIDENTIAL
Sufl0006.OF07	38.97877	-77.390987	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	3.38	RESIDENTIAL
Sufl0006.OF09	38.976691	-77.391006	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	11.48	RESIDENTIAL
Sufl0008.OF26	38.97048	-77.38622	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	5.18	COMMERCIAL
Sufl0007.OF08	38.97058	-77.3948	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	23.39	RESIDENTIAL
Sufl0007.OF10	38.97073	-77.39716	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	58.37	RESIDENTIAL
Sufl0007.OF02	38.977605	-77.394456	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	6.13	PLANNED UNITS
Sufl0007.OF01	38.977928	-77.393764	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	3.60	PLANNED UNITS
Sufl0006.OF15	38.98043	-77.39838	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	38.01	RESIDENTIAL
Sufl0007.OF16	38.97951	-77.39868	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	40.14	RESIDENTIAL
Sufl0007.OF06	38.9732	-77.39884	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	8.23	RESIDENTIAL
Sufl0007.OF05	38.97546	-77.3997	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	15.01	RESIDENTIAL
Sufl0007.OF04	38.97646	-77.39943	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	8.81	RESIDENTIAL
Sufl0008.OF17	38.972032	-77.386995	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	18.97	RESIDENTIAL
Sufl0008.OF12	38.97477	-77.38652	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	5.73	RESIDENTIAL
Sufl0008.OF11	38.975819	-77.386817	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	12.35	RESIDENTIAL
Sufl0008.OF10	38.976135	-77.387514	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	19.56	RESIDENTIAL
Sufl0008.OF07	38.977405	-77.387334	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	2.60	RESIDENTIAL
Sufl0008.OF04	38.979324	-77.387456	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	52.58	RESIDENTIAL
Sufl0008.OF03	38.979331	-77.38767	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	3.84	PLANNED UNITS
Sufl0009.OF02	38.96781	-77.38814	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	58.60	RESIDENTIAL
Sufl0009.OF03	38.9676	-77.38791	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	59.98	RESIDENTIAL
Susu0034.OF02	38.982235	-77.370644	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	5.94	RESIDENTIAL
Susu0034.OF05	38.982367	-77.373345	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	3.12	RESIDENTIAL
Sufl0004.OF01	38.988504	-77.383947	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.89	RESIDENTIAL
Sufl0004.OF02	38.987481	-77.384211	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	22.67	RESIDENTIAL
Sufl0004.OF03	38.986	-77.38464	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	26.49	RESIDENTIAL
Sufl0004.OF04	38.98509	-77.38615	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.92	RESIDENTIAL
Susu0034.OF06	38.982674	-77.373594	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	12.94	RESIDENTIAL
Susu0034.OF08	38.982513	-77.37504	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	69.42	RESIDENTIAL
Susu0038.OF01	38.97995	-77.368596	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	5.25	PLANNED UNITS
Susu0039.OF02	38.976415	-77.370413	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	36.05	RESIDENTIAL
Susu0039.OF04	38.974599	-77.370492	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	155.30	RESIDENTIAL
Susu0040.OF06	38.968256	-77.367717	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	5.69	RESIDENTIAL
Susu0040.OF08	38.967573	-77.368341	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.06	COMMERCIAL
Susu0040.OF09	38.968221	-77.369242	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.74	RESIDENTIAL
Susu0040.OF10	38.967883	-77.369668	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	11.70	RESIDENTIAL
Susu0043.OF02	38.958773	-77.372546	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	56.81	INDUSTRIAL
Susu0044.OF01	38.960078	-77.369762	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.64	INDUSTRIAL
Susu0041.OF22	38.963296	-77.36922	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	8.90	INDUSTRIAL
Susu0041.OF25	38.962304	-77.369213	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.98	INDUSTRIAL
Susu0041.OF21	38.964054	-77.369473	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.16	INDUSTRIAL
Susu0041.OF20	38.964182	-77.369733	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.10	INDUSTRIAL
Susu0041.OF15	38.965563	-77.370796	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.45	INDUSTRIAL
Susu0043.OF07	38.956661	-77.373493	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	9.16	PLANNED UNITS
Susu0043.OF11	38.955761	-77.378468	Y	Sugarland Run	2.07001E+12	3A	Not Assessed	Not Assessed	87.45	RESIDENTIAL

Updated Outfall Information Table for FY19

Susu0043.OF13	38.95502	-77.379024	Y	Sugarland Run	2.07001E+12	3A	Not Assessed	Not Assessed	83.68	PLANNED UNITS
Susu0041.OF14	38.963548	-77.375818	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	42.99	PLANNED UNITS
HCHC0020.OF01	38.964931	-77.404873	Y	Horsepen Run	2.07001E+12	3A	Not Assessed	Not Assessed	8.41	PLANNED UNITS
HCHC0020.OF03	38.964972	-77.404747	Y	Horsepen Run	2.07001E+12	3A	Not Assessed	Not Assessed	63.22	PLANNED UNITS
HCHC0020.OF02	38.964843	-77.404738	Y	Horsepen Run	2.07001E+12	3A	Not Assessed	Not Assessed	28.93	COMMERCIAL
Sufl0007.OF15	38.977859	-77.396498	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.06	RESIDENTIAL
Sufl0007.OF14	38.978	-77.395971	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.26	RESIDENTIAL
Sufl0007.OF13	38.97797	-77.395629	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	10.12	RESIDENTIAL
Sufl0007.OF12	38.978169	-77.395415	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.82	RESIDENTIAL
Sufl0007.OF11	38.978231	-77.394889	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.46	RESIDENTIAL
Sufl0006.OF14	38.978598	-77.393938	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.35	RESIDENTIAL
Sufl0006.OF12	38.978892	-77.393487	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	3.32	RESIDENTIAL
Sufl0006.OF11	38.979815	-77.393145	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.17	RESIDENTIAL
Sufl0006.OF13	38.97856	-77.39309	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.13	RESIDENTIAL
Sufl0006.OF10	38.980384	-77.391518	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.41	RESIDENTIAL
Sufl0006.OF06	38.979031	-77.390628	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	7.76	RESIDENTIAL
Sufl0006.OF04	38.979337	-77.390245	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.93	RESIDENTIAL
Sufl0006.OF05	38.979318	-77.390285	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.76	RESIDENTIAL
Sufl0006.OF03	38.980342	-77.390276	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.33	RESIDENTIAL
Sufl0006.OF01	38.980973	-77.389235	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.75	RESIDENTIAL
Sufl0008.OF01	38.981565	-77.387813	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.31	RESIDENTIAL
Sufl0008.OF02	38.981468	-77.387868	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	4.37	RESIDENTIAL
Sufl0004.OF06	38.982458	-77.38772	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	39.67	RESIDENTIAL
Sufl0004.OF05	38.984361	-77.386474	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	2.87	RESIDENTIAL
Sufl0008.OF05	38.978256	-77.388155	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	2.48	RESIDENTIAL
Sufl0008.OF06	38.97743	-77.388034	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.86	RESIDENTIAL
Susu0038.OF02	38.978849	-77.368638	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	37.33	PLANNED UNITS
Susu0038.OF03	38.978444	-77.368292	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.79	PLANNED UNITS
Susu0033.OF01	38.9814	-77.367504	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	6.03	RESIDENTIAL
Susu0034.OF07	38.982506	-77.374951	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	14.07	RESIDENTIAL
Susu0034.OF04	38.98216	-77.372546	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.39	RESIDENTIAL
Susu0034.OF03	38.981622	-77.371107	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	20.64	PLANNED UNITS
Susu0034.OF01	38.982092	-77.369539	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.10	RESIDENTIAL
Susu0039.OF01	38.976928	-77.36961	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.06	PLANNED UNITS
Susu0039.OF03	38.974634	-77.370509	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.14	RESIDENTIAL
Susu0040.OF01	38.97143	-77.369461	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	10.37	RESIDENTIAL
Susu0040.OF04	38.969236	-77.368439	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	3.54	RESIDENTIAL
Susu0040.OF02	38.970098	-77.368425	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.84	RESIDENTIAL
Susu0040.OF03	38.96962	-77.367011	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	4.64	RESIDENTIAL
Susu0040.OF05	38.968642	-77.367149	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.41	RESIDENTIAL
Susu0040.OF07	38.967553	-77.367897	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	10.15	COMMERCIAL
Susu0040.OF12	38.966939	-77.370965	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	3.95	COMMERCIAL
Susu0040.OF11	38.966912	-77.370856	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	3.34	COMMERCIAL
Susu0040.OF13	38.966474	-77.370444	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	14.49	INDUSTRIAL
Susu0040.OF14	38.966429	-77.370546	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.11	INDUSTRIAL
Susu0041.OF01	38.965733	-77.371983	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.76	INDUSTRIAL
Susu0041.OF16	38.96517	-77.371816	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	3.46	INDUSTRIAL

Updated Outfall Information Table for FY19

Susu0041.OF17	38.965294	-77.370696	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.51	INDUSTRIAL
Susu0043.OF03	38.959296	-77.371659	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.60	INDUSTRIAL
Susu0043.OF01	38.959757	-77.371655	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	14.52	INDUSTRIAL
Susu0041.OF26	38.961315	-77.36921	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.22	INDUSTRIAL
Susu0041.OF23	38.962007	-77.370583	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	6.30	INDUSTRIAL
Susu0041.OF24	38.96192	-77.370735	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	8.61	INDUSTRIAL
Susu0041.OF18	38.963989	-77.371431	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	2.60	INDUSTRIAL
Susu0041.OF19	38.96372	-77.370838	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.58	INDUSTRIAL
Sufl0008.OF09	38.976636	-77.386381	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	5.21	RESIDENTIAL
Sufl0008.OF08	38.976458	-77.387827	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	4.52	RESIDENTIAL
Sufl0006.OF08	38.977436	-77.390944	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.58	RESIDENTIAL
Sufl0008.OF13	38.974309	-77.386534	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.04	RESIDENTIAL
Sufl0008.OF14	38.974194	-77.386544	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	13.61	RESIDENTIAL
Sufl0008.OF15	38.972515	-77.384906	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	19.79	RESIDENTIAL
Sufl0009.OF04	38.967081	-77.386911	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	19.17	RESIDENTIAL
Sufl0008.OF16	38.972178	-77.386571	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.14	COMMERCIAL
Sufl0008.OF18	38.971994	-77.386594	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	5.95	COMMERCIAL
Sufl0008.OF20	38.971801	-77.38661	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.16	PLANNED UNITS
Sufl0008.OF19	38.971818	-77.386725	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.45	PLANNED UNITS
Sufl0008.OF21	38.971653	-77.386623	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.63	PLANNED UNITS
Sufl0008.OF23	38.971609	-77.386624	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.01	PLANNED UNITS
Sufl0008.OF22	38.971631	-77.386754	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.01	PLANNED UNITS
Sufl0008.OF25	38.970758	-77.386642	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	0.51	PLANNED UNITS
Sufl0008.OF24	38.970916	-77.386836	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.28	PLANNED UNITS
Sufl0008.OF27	38.969657	-77.386962	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	10.31	RESIDENTIAL
Sufl0008.OF28	38.969512	-77.38718	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	19.39	RESIDENTIAL
Sufl0009.OF01	38.968696	-77.387433	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	5.11	RESIDENTIAL
Sufl0007.OF03	38.975324	-77.393034	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	49.96	RESIDENTIAL
Sufl0007.OF09	38.971678	-77.397258	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	1.67	RESIDENTIAL
Sufl0007.OF07	38.972541	-77.398182	Y	Folly Lick Branch	2.07001E+12	3A	Not Assessed	Not Assessed	67.64	RESIDENTIAL
HCHC0017.OF01	38.974765	-77.41039	Y	Horsepen Run	2.07001E+12	3A	Not Assessed	Not Assessed	21.07	RESIDENTIAL
Susu0041.OF13	38.964737	-77.374842	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	12.85	INDUSTRIAL
Susu0041.OF12	38.964838	-77.375172	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	12.35	INDUSTRIAL
Susu0041.OF11	38.965097	-77.37484	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.23	INDUSTRIAL
Susu0041.OF10	38.965192	-77.374246	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	3.02	INDUSTRIAL
Susu0041.OF08	38.966143	-77.374218	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	166.78	RESIDENTIAL
Susu0041.OF09	38.966156	-77.374178	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	35.25	PLANNED UNITS
Susu0041.OF07	38.966065	-77.373705	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.55	COMMERCIAL
Susu0041.OF06	38.966061	-77.373542	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.89	COMMERCIAL
Susu0041.OF05	38.96606	-77.373101	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.21	COMMERCIAL
Susu0041.OF04	38.966018	-77.373017	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.92	COMMERCIAL
Susu0041.OF02	38.966002	-77.372367	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	1.00	COMMERCIAL
Susu0041.OF03	38.965959	-77.37236	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.52	COMMERCIAL
Susu0043.OF04	38.957839	-77.371549	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.76	INDUSTRIAL
Susu0043.OF05	38.957479	-77.371994	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	4.17	PLANNED UNITS
Susu0043.OF06	38.95747	-77.371952	Y	Sugarland Run	2.07001E+12	5A	Benthic-Macroinvertebrate Bioassessments	In Development for 2024	0.72	INDUSTRIAL
Susu0043.OF08	38.955561	-77.374573	Y	Sugarland Run	2.07001E+12	3A	Not Assessed	Not Assessed	7.47	INDUSTRIAL

Updated Outfall Information Table for FY19

Susu0043.OF10	38.955575	-77.378001	Y	Sugarland Run	2.07001E+12	3A	Not Assessed	Not Assessed	1.34	INDUSTRIAL
Susu0043.OF09	38.954841	-77.377129	Y	Sugarland Run	2.07001E+12	3A	Not Assessed	Not Assessed	1.78	INDUSTRIAL
Susu0043.OF12	38.953501	-77.377927	Y	Sugarland Run	2.07001E+12	3A	Not Assessed	Not Assessed	13.24	PLANNED UNITS

2019 Dry Weather Screening Summary

Summary

Wood personnel conducted dry weather screening for the Town of Herndon from June 4 through June 27, 2019. Dry weather flow was noted at seven of the 50 MS4 outfalls selected for screening. The full list can be found in the appendix. Personnel followed testing procedures outlined within the Town's Illicit Discharge Detection and Elimination Standard Operating Procedure (SOP). **One outfall was found to have an exceedance for detergents/surfactants, and will require additional follow-up by the Town.**

Noted flows and characterizations

Flows were characterized with approximate volume, chemical constituents, and overall likelihood of illicit discharge. Two of the seven flowing outfalls were characterized as having 'Potential' for illicit discharges, while one of the flowing outfalls was characterized as 'Suspect.' The suspect outfall was found to have an elevated level for detergents/surfactants, and requires additional follow-up by the Town. The outfall discharges to a piped stream below Elden Street. Wood personnel noted a mechanical noise approximately 30 seconds before a substantial increase in flow volume from the pipe. Samples were collected during this increase in flow - with levels reading 0.51 mg/L for detergents/surfactants, a noted exceedance. Chlorine measured at 0 mg/L and pH measured at 7.3. Follow-up testing was completed the next day, with levels only reading 0.09 mg/L for detergents/surfactants. Levels of Chlorine and pH remained the same. The non-detectable Chlorine level and neutral pH may indicate a non-potable water discharge. Staff recommend Town follow-up, and subsequent documentation of track down results to be included in their MS4 annual report to DEQ.

Piped streams

Several of the remaining outfalls with flow appear to be the headwaters of small streams. Testing did not produce any reportable levels of pollutants. These outfalls will likely have persistent flow year-round. This fact may make the following outfalls less of a priority for future dry weather screening:

- Susu0043.OF02
- Susu0034.OF08
- Sufl0009.OF03

Updates to infrastructure layer in GIS

Wood personnel were tasked with verifying the location of outfalls and updating the Town's GIS accordingly. The most common issue requiring updates to the Town's geospatial data were in the cases of outfalls placed within passthrough culverts, where assumptions were made during desktop assessments of infrastructure network patterns. Additionally, some outfalls will be moved down stream as a result of confirmation in the field of connections that could not be verified through desktop analysis.

Confined space concerns

There were two distinct clusters that would require outfall access via manhole or spillway of a large culvert. Wood staff are trained in confined space entry awareness, and only entered confined spaces where OSHA permits were *not* required. A number of outfalls should be screened less frequently as a result of logistical requirements due to confined space. Outfalls recommended for decreased screening frequency are:

- Susu0041.OF06
- Susu0041.OF05
- Susu0041.OF04
- Susu0041.OF08
- Susu0041.OF09
- Sufl0008.OF19
- Sufl0008.OF21

Federal Government buildings

A cluster of three outfalls were located on apparent Federal Government properties located at 399 & 499 Grove Street. While two outfalls were accessible from Grove Street, any track down would require accessing stormwater management facilities located on the fenced-off government property. Upon reaching the security gate, security personnel requested that staff return on a different day after making an appointment. Prior coordination should be taken into consideration for the following outfalls:

- Susu0041.OF12
- Susu0041.OF13
- Susu0041.OF14

Appendix

Herndon Dry Weather Screening
2019 Results

Outfall ID	Stream Name	Date	Latitude	Longitude	Overall Outfall Characterization	Any Maintenance Issues or Other Concerns?
HCHC0017.OF01	Horsepen Run	6/27/2019	38.974611	-77.410538	Unlikely	None
HCHC0020.OF01	Horsepen Run	6/27/2019	38.964984	-77.404873	Unlikely	None.
HCHC0020.OF02	Horsepen Run	6/27/2019	38.964942	-77.404783	Unlikely	Trash, may need to restrict public access with additional fencing.
Sufl0008.OF15	Folly Lick Branch	6/26/2019	38.972672	-77.386746	Unlikely	GIS location updated needed
Sufl0008.OF16	Folly Lick Branch	6/26/2019	38.972395	-77.386714	Unlikely	In culvert
Sufl0008.OF17	Folly Lick Branch	6/26/2019	38.972259	-77.386701	Unlikely	In culvert
Sufl0008.OF18	Folly Lick Branch	6/26/2019			Unlikely	In culvert
Sufl0008.OF20	Folly Lick Branch	6/26/2019			Unlikely	In culvert
Sufl0008.OF22	Folly Lick Branch	6/26/2019			Potential (presence of 2 or more indicators)	Deep in culvert
Sufl0008.OF24	Folly Lick Branch	6/26/2019	38.970968	-77.386855	Unlikely	None.
Sufl0008.OF25	Folly Lick Branch	6/26/2019	38.970831	-77.386705	Unlikely	Inside structure
Sufl0008.OF26	Folly Lick Branch	6/26/2019	38.970481	-77.386205	Unlikely	Trash
Sufl0008.OF27	Folly Lick Branch	6/26/2019	38.969598	-77.386826	Suspect (one or more indicators with a severity of 3)	Elevated detergent levels. Follow up did not produce exceedance, but flow still detected. Trackdown necessary.
Sufl0008.OF28	Folly Lick Branch	6/26/2019	38.969609	-77.38681	Unlikely	Sediment accumulation in bottom of pipe.
Sufl0009.OF01	Folly Lick Branch	6/26/2019	38.968535	-77.387441	Unlikely	In culvert
Sufl0009.OF02	Folly Lick Branch	6/26/2019	38.967751	-77.38825	Unlikely	None.
Sufl0009.OF03	Folly Lick Branch	6/26/2019	38.967555	-77.387861	Potential (presence of 2 or more indicators)	Large outfall and possible piped stream. Adjacent yard could be large source of fertilizer.
Sufl0009.OF04	Folly Lick Branch	6/26/2019	38.967666	-77.387283	Unlikely	Outfall placement in GIS needs revision
Susu0033.OF01	Sugarland Run	6/4/2019	38.98132	-77.367602	Unlikely	None, but some minor damage to apron
Susu0034.OF01	Sugarland Run	6/4/2019	38.982154	-77.369536	Unlikely	Maintenance needed to clear out pipe. Trash accumulation downstream.
Susu0034.OF02	Sugarland Run	6/4/2019	38.982256	-77.370619	Unlikely	None
Susu0034.OF03	Sugarland Run	6/4/2019	38.981892	-77.37117	Unlikely	None.
Susu0034.OF04	Sugarland Run	6/4/2019	38.982235	-77.372605	Unlikely	None
Susu0034.OF05	Sugarland Run	6/4/2019	38.982342	-77.37334	Unlikely	None.
Susu0034.OF06	Sugarland Run	6/4/2019	38.982738	-77.373686	Unlikely	None.
Susu0034.OF07	Sugarland Run	6/4/2019	38.982492	-77.375005	Unlikely	None.
Susu0034.OF08	Sugarland Run	6/4/2019	38.982593	-77.374865	Unlikely	Slight sheen noticed downstream, potentially from washout from roads, but uncertain origin. Flow was clear and odorless. Apparent stream flow. Elevated levels of detergent, but no exceedance.
Susu0038.OF01	Sugarland Run	6/4/2019	38.979899	-77.368518	Unlikely	None
Susu0038.OF02	Sugarland Run	6/4/2019	38.978738	-77.368734	Unlikely	None
Susu0038.OF03	Sugarland Run	6/4/2019	38.978436	-77.368274	Unlikely	Some sediment and trash accumulation.
Susu0039.OF01	Sugarland Run	6/26/2019	38.976912	-77.369567	Unlikely	None.
Susu0039.OF02	Sugarland Run	6/26/2019	38.976435	-77.370318	Unlikely	Some trash accumulation.
Susu0039.OF03	Sugarland Run	6/26/2019	38.974652	-77.370367	Unlikely	None.
Susu0039.OF04	Sugarland Run	6/26/2019	38.974752	-77.370353	Unlikely	None
Susu0041.OF01	Sugarland Run	6/27/2019	38.965659	-77.372092	Unlikely	None
Susu0041.OF02	Sugarland Run	6/27/2019	38.965962	-77.372414	Unlikely	Graffiti
Susu0041.OF03	Sugarland Run	6/27/2019	38.966309	-77.372322	Unlikely	Graffiti.
Susu0041.OF07	Sugarland Run	6/27/2019	38.96599	-77.373825	Unlikely	None
Susu0041.OF10	Sugarland Run	6/27/2019	38.965287	-77.37437	Unlikely	Consider moving upstream to Pond inlet.
Susu0041.OF11	Sugarland Run	6/27/2019	38.965846	-77.373981	Unlikely	None
Susu0041.OF13	Sugarland Run	6/27/2019	38.964748	-77.374823	Unlikely	None
Susu0041.OF14	Sugarland Run	6/27/2019	38.963322	-77.37597	Unlikely	Overgrown, difficult access. Current placement does not have access.
Susu0043.OF01	Sugarland Run	6/27/2019	38.959785	-77.371644	Unlikely	None
Susu0043.OF02	Sugarland Run	6/27/2019	38.958861	-77.372626	Unlikely	Consider removal from future monitoring.
Susu0043.OF03	Sugarland Run	6/27/2019	38.959448	-77.371982	Unlikely	Some trash accumulation. Found a discarded intake valve in the pond.
Susu0043.OF04	Sugarland Run	6/27/2019	38.958074	-77.372705	Unlikely	None
Susu0043.OF05	Sugarland Run	6/27/2019	38.957344	-77.372079	Unlikely	None.
Susu0043.OF06	Sugarland Run	6/27/2019	38.957959	-77.371459	Unlikely	Add second outfall
Susu0043.OF07	Sugarland Run	6/27/2019	38.956651	-77.373584	Unlikely	Trash from open dumpsters.
Susu0043.OF08	Sugarland Run	6/27/2019	38.95555	-77.374611	Unlikely	None.

Figure 1: "Suspect" outfall (Sufl0008.OF27) outlined in red.

Figure 2: Federal Government outfall cluster.

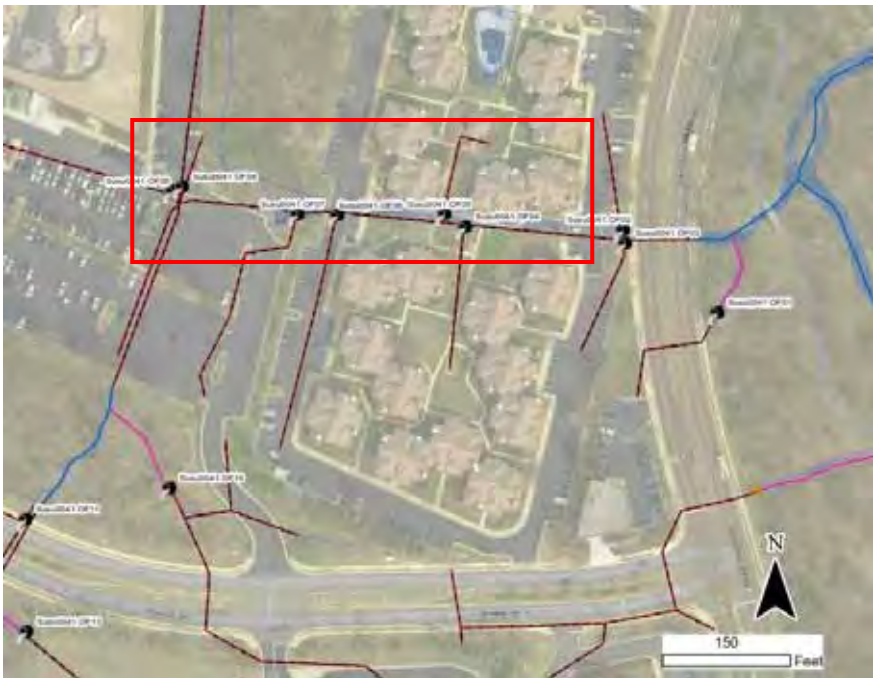


Figure 3: Inaccessible outfalls underneath Residence Inn complex. Outfalls outlined in red.

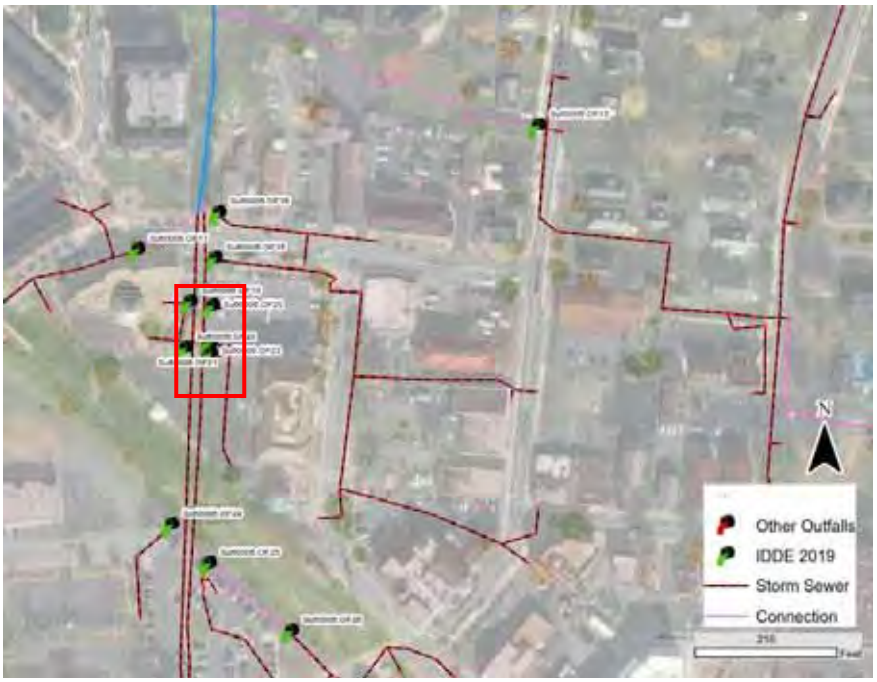


Figure 4: Inaccessible outfalls underneath Center Street/Herndon Fortnightly Library. Outfalls outlined in red.

Figure 5: Outfall 09.OF03 was determined to convey piped stream flow. Outfall OF02 will be adjusted to reflect drainage from curb inlet.

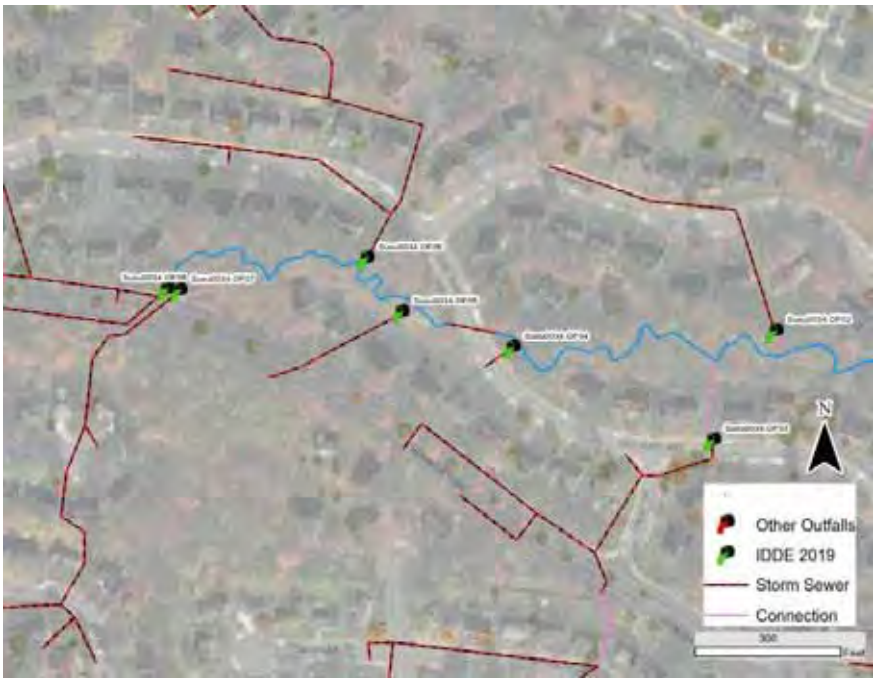
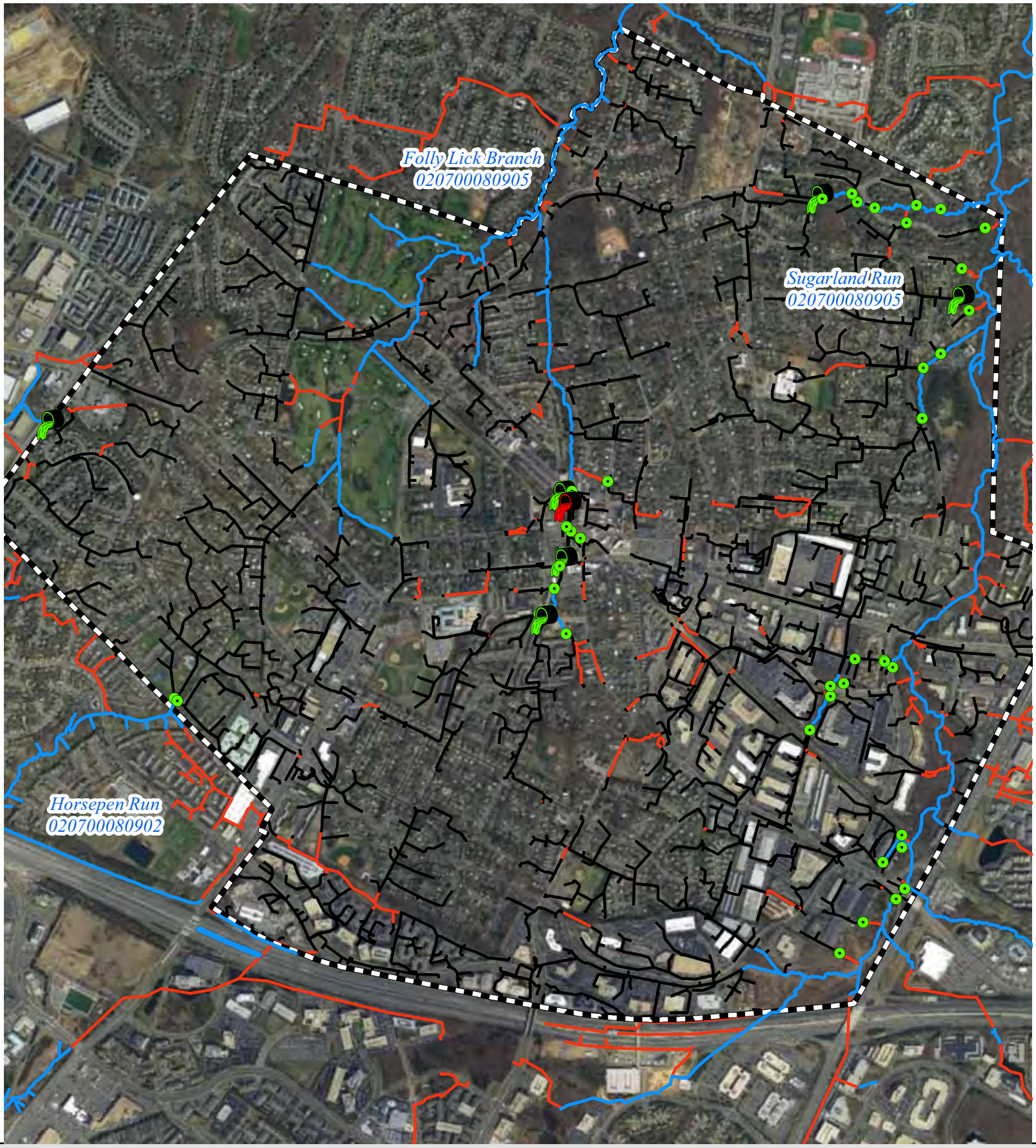


Figure 6: Outfalls 34.OF08 and 34.OF03 convey piped stream flow.

Field maps included in following pages



Herdon IDDE Screening 2019

Screened Outfall, No Flow

Screened Outfall, Flow Detected

Screened Outfall, Exceedance

Town of Herndon

Streams

Hydrologic Connections

Storm Sewer

N

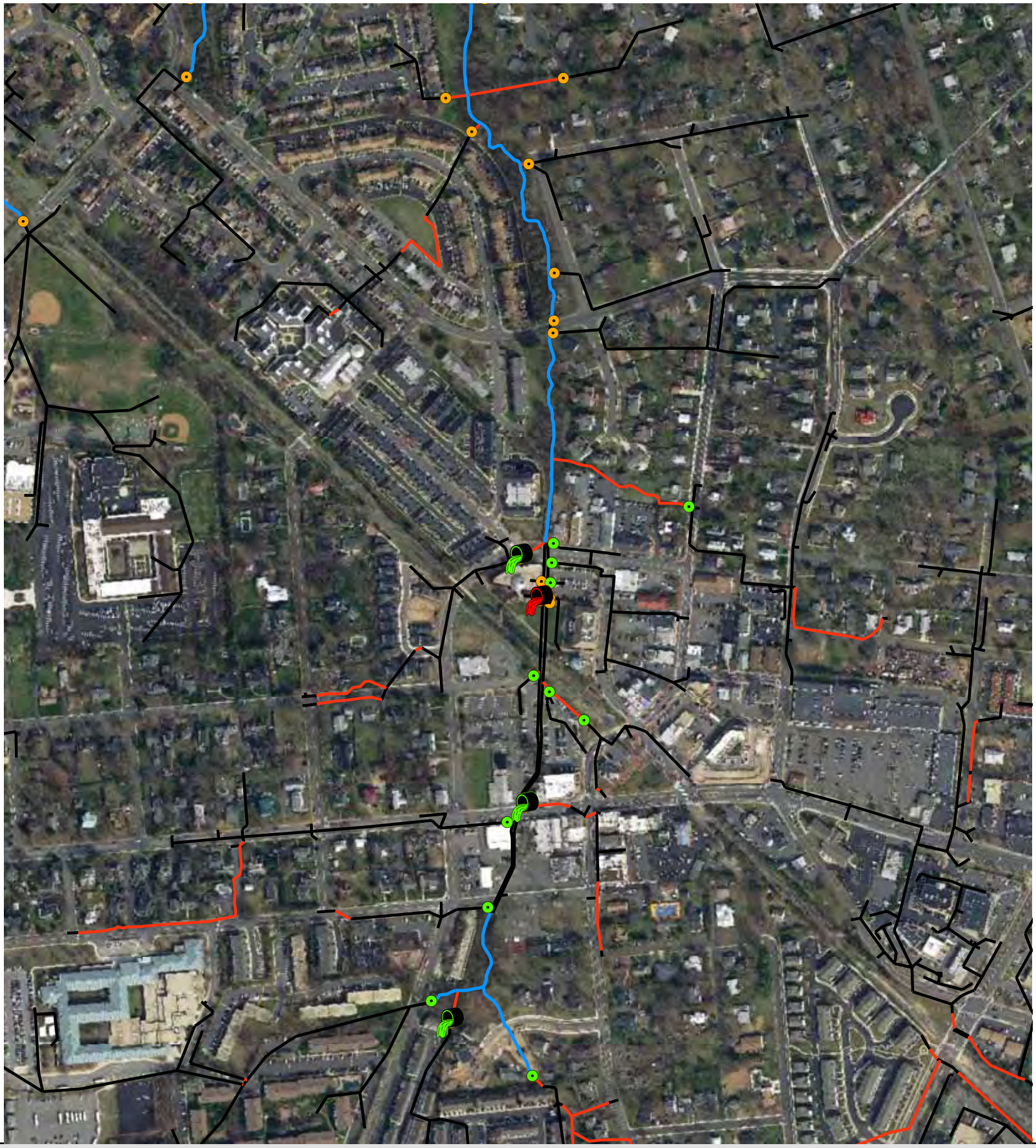
W E

S

0.5

Miles

wood.



Herdon IDDE Screening: Folly Lick Branch 2019

Screened Outfall, No Flow

Screened Outfall, Flow Detected

Screened Outfall, Exceedance

MS4 Outfall (Not Screened in 2019)

Streams

Town of Herndon

Hydrologic Connections

Storm Sewer

N

W E

S

0.1

Miles

wood.

Herdon IDDE Screening: Horsepen Run 2019

Screened Outfall, No Flow

Screened Outfall, Flow Detected

Screened Outfall, Exceedance

MS4 Outfall (Not Screened in 2019)

Town of Herndon

Streams

Hydrologic Connections

Storm Sewer

N

W E

S

0.2

Miles

wood.

Screened Outfall, No Flow

Screened Outfall, Flow Detected

Screened Outfall, Exceedance

MS4 Outfall (Not Screened in 2019)

Town of Herndon

Streams

Hydrologic Connections

Storm Sewer

N

W E

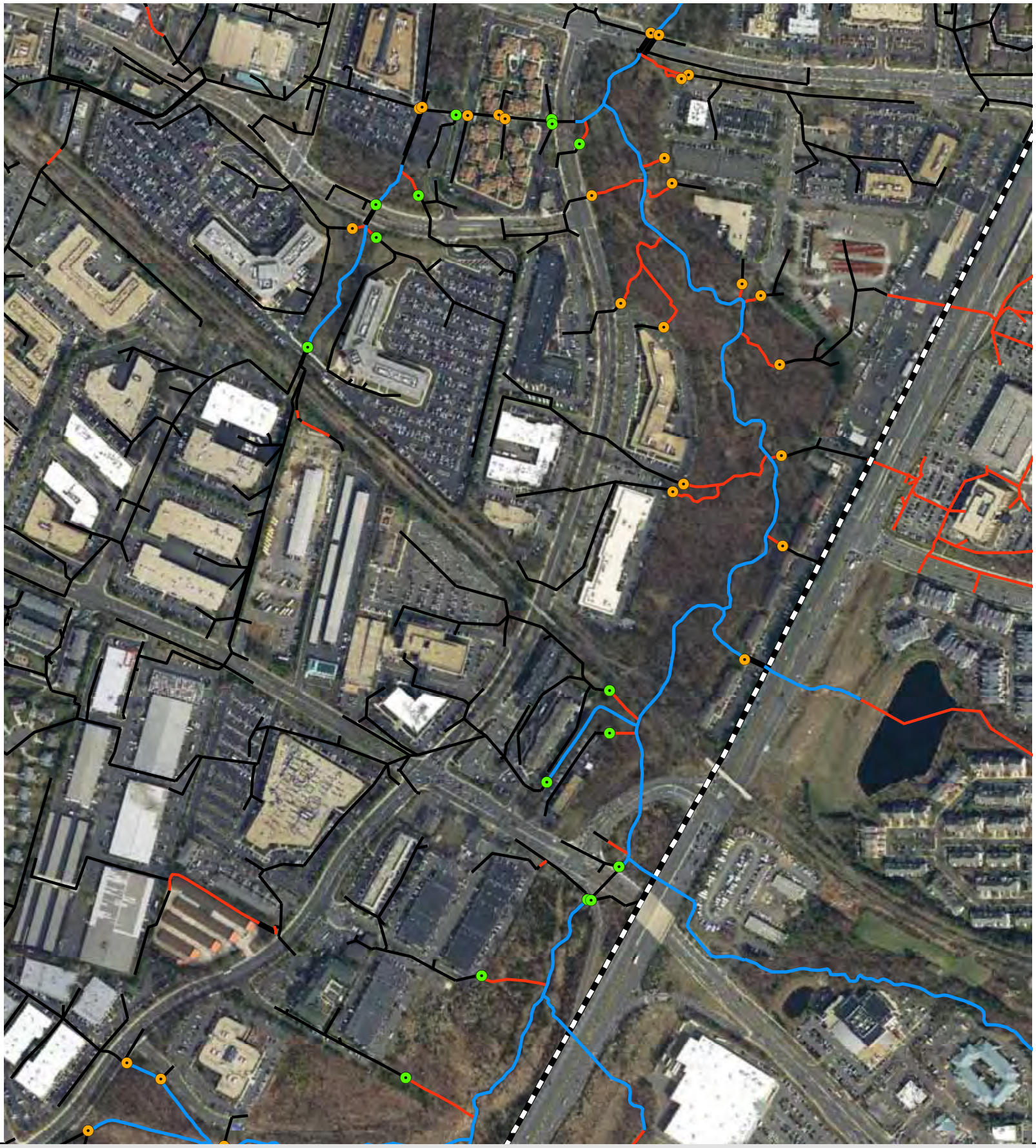
S

0.1

Miles

Herdon IDDE Screening: Sugarland Run North 2019

wood.



Screened Outfall, No Flow

Screened Outfall, Flow Detected

Screened Outfall, Exceedance

MS4 Outfall (Not Screened in 2019)

Town of Herndon

Streams

Hydrologic Connections

Storm Sewer

N

W E

S

0.15

Miles

Herdon IDDE Screening: Sugarland Run South 2019

wood.

TOWN OF
Herndon
On SCHEDULE

2018 COLLECTIONS

HOLIDAYS	REFUSE PICK-UP
New Year's Day Observance – Mon., Jan. 1	Tues., Jan. 2
Martin L. King, Jr. Day – Mon., Jan. 15	Tues., Jan. 16
President's Day – Mon., Feb. 19	Tues., Feb. 20
Memorial Day – Mon., May 28	Tues., May 29
Independence Day – Wed., July 4	Thurs., July 5
Labor Day – Mon., Sept. 3	Tues., Sept. 4
Columbus Day – Mon., Oct. 8	Tues., Oct. 9
Veterans Day Observance – Mon., Nov. 12	Tues., Nov. 13
Thanksgiving Day – Thurs., Nov. 22	Fri., Nov. 23
Christmas Day – Tues., Dec. 25	Thurs., Dec. 27

CHRISTMAS TREE COLLECTION
Pick-up on your trash day: Jan. 2 – Jan. 5

SEASONAL CLEAN-UP
SPRING: Apr. 9 – Apr. 13 ● FALL: Oct. 1 – Oct. 5

LEAF COLLECTION
Oct. 8 – Dec. 14 ● See Town Calendar for Collection Schedule

RECYCLABLES
Collected every Wednesday except July 4
(Recyclables collected Thursday, July 5)

HOUSEHOLD HAZARDOUS WASTE
I-66 Transfer Station Complex, 4618 West Ox Road, Fairfax
fairfaxcounty.gov/dpwes/trash/disphhw.htm

703-435-6853
public.works@herndon-va.gov
herndon-va.gov/RefuseandRecycling

Trash and Recycling

Collection of trash and yard waste is provided once a week by the town. Please use the trash collection map to determining your collection days.

Automated Residential Curbside Collection Program

Containers

Fall Clean-up

Hazardous Waste & E-Waste

The town does not collect hazardous waste and electronics. Motor oil and other hazardous waste as well as E-Waste can be taken to Fairfax County's West Ox Road Transfer Station at no charge to Fairfax County residents (please click link for directions and hours).

Recycling

Solid Waste Ordinance, Chapter 63

Special Collections

Trash Collection

Trash Collection Schedule

Yard Waste & Leaf Collection

EVENTS

Trash Collected
09/18/2019 - 09/20/2019

Recycling Collected
09/23/2019 - 09/24/2019

Trash Collected
09/25/2019 - 09/26/2019

CONTACT

DPW Operations
(703) 435-6860

APPENDIX D

Erosion and Sediment Control Certifications

Summary of Land Disturbing Inspection and Enforcement Activities

COMMONWEALTH OF VIRGINIA

State Water Control Board

629 East Main Street, Richmond, Virginia 23219

EROSION AND SEDIMENT CONTROL

Inspector

Scott Aulton Brodbeck

CERTIFICATE NUMBER

ESIN0989

EXPIRATION DATE

8/7/2021

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

This certificate is for your records and should be kept in a safe location. Please detach the above certificate and the two wallet size cards below. It is your responsibility to ensure that your certification is kept current and that you meet the requirements for re-certification before the expiration date.

COMMONWEALTH OF VIRGINIA
State Water Control Board
629 East Main Street, Richmond, Virginia 23219

EROSION AND SEDIMENT CONTROL
Inspector
Scott Aulton Brodbeck

Certificate Number
ESIN0989

Expiration Date
8/7/2021

COMMONWEALTH OF VIRGINIA
State Water Control Board
629 East Main Street, Richmond, Virginia 23219

EROSION AND SEDIMENT CONTROL
Inspector
Scott Aulton Brodbeck

Certificate Number
ESIN0989

Expiration Date
8/7/2021

Town of Herndon Stormwater Management Program

Land Disturbing Activities (Inspections)

July 1, 2018 to June 30, 2019

BMP 4B

Site Plan	Total Disturbed Acres	Number of Inspections	Type of Enforcement Actions
Dominion Ridge Lot 34	0.39	17	Notice to Comply
Elden Corner Center	0.98	45	Notice to Comply
Van Vlecks Subd. Lot 5A1A	0.33	36	Notice To Comply
Van Vlecks Subd. Lot 5A1B	0.27	35	Notice To Comply
Van Vlecks Subd. Lot 1A2 Blk 8	0.45	22	Notice To Comply
Van Vlecks Subd. Lot 7A2	0.35	13	Notice To Comply; Stop Work Order
Herndon Centre	1.26	14	Notice To Comply
Junction Square	1.27	13	None
Metro Square	4.19	32	Notice To Comply
Residences at The Station	1.66	20	None
Virginia Tire & Auto	1.04	24	Notice To Comply; Notice of Violation
Total	**12.19**	**271**	

APPENDIX E

Stormwater Management Certifications

Summary of Public BMP Inspections

New Stormwater Facilities Added in FY2019

DEQ BMP Warehouse Submittal Confirmation

COMMONWEALTH OF VIRGINIA

State Water Control Board

1111 East Main Street, Richmond, Virginia 23219

DUAL

Combined Administrator

John Jay Sergent

CERTIFICATE NUMBER

DCA0290

EXPIRATION DATE

10/28/2022

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

This certificate is for your records and should be kept in a safe location. Please detach the above certificate and the two wallet size cards below. It is your responsibility to ensure that your certification is kept current and that you meet the requirements for re-certification before the expiration date.

COMMONWEALTH OF VIRGINIA
State Water Control Board
1111 East Main Street, Richmond, Virginia 23219

DUAL
Combined Administrator
John Jay Sergent

Certificate Number
DCA0290

Expiration Date
10/28/2022

COMMONWEALTH OF VIRGINIA
State Water Control Board
1111 East Main Street, Richmond, Virginia 23219

DUAL
Combined Administrator
John Jay Sergent

Certificate Number
DCA0290

Expiration Date
10/28/2022

COMMONWEALTH OF VIRGINIA

State Water Control Board

629 East Main Street, Richmond, Virginia 23219

STORMWATER MANAGEMENT

Inspector

Scott Aulton Brodbeck

CERTIFICATE NUMBER

SWIN1428

EXPIRATION DATE

8/30/2021

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

This certificate is for your records and should be kept in a safe location. Please detach the above certificate and the two wallet size cards below. It is your responsibility to ensure that your certification is kept current and that you meet the requirements for re-certification before the expiration date.

COMMONWEALTH OF VIRGINIA
State Water Control Board
629 East Main Street, Richmond, Virginia 23219

STORMWATER MANAGEMENT
Inspector
Scott Aulton Brodbeck

Certificate Number
SWIN1428

Expiration Date
8/30/2021

COMMONWEALTH OF VIRGINIA
State Water Control Board
629 East Main Street, Richmond, Virginia 23219

STORMWATER MANAGEMENT
Inspector
Scott Aulton Brodbeck

Certificate Number
SWIN1428

Expiration Date
8/30/2021

Town of Herndon Stormwater Management Program

Public BMP Inspections/Results

July 1, 2018 to June 30, 2019

Site Plan	BMP Type	Inspection Result	Maintenance Required
Addition to Herndon Station	Infilitration Trench	Passed	None
Chestnut Grove Cemetary	ED Pond w/Sand Filter	Passed	None
Dominion Ridge Pond 1	ED Pond	Maintenance Required	channel erosion; separated end sections; broken outfall pipe
Dominion Ridge Pond 2	ED Pond	Maintenance Required	sedimentation; standing water at outfall
Four Seasons	ED Pond	Maintenance Required	buried rip rap; rill erosion; end section separation
Hammond Property	Infilitration Trench	Passed	None
Hawthorne Suites Hotel	Stormceptor	Maintenance Required	sediment depth; trash/debris
Herndon Community Center Addition PH 4	ED Pond	Maintenance Required	sedimentation of rip rap; rill erosion; access; tree; exposed conduit; positive drainage beyond outfall
Holly Creek	Infilitration Trench	Maintenance Required	clogged manhole; sediment filled rip rap
Longhill Proper Sub	Vegetated Swale	Passed	None
Madison Ridge West	Bioretention	Passed	None
Monroe Place	Infilitration Trench	Passed	None
Parkway Plaza	Sand Filter	Maintenance Required	general maintenance
Presidents Court	ED Pond	Passed	None
Royal Elm Estates	ED Pond	Maintenance Required	sedimentation of rip rap; trees and shrubs removal
Runnymeade Manor	ED Pond	Passed	None
Sadie Square	Infilitration Trench	Passed	None
Spring Glen	ED Pond	Passed	None
Stanton Park Overlook	Infilitration Trench	Passed	None
Town Shop Pond	ED Pond	Passed	None
Trailside Park Skate Park	Bioretention	Maintenance Required	overgrown & invasive vegetation; sedimentation of pond floor; add mulch; find inflow pipe
Trinity Church	ED Pond	Passed	None
Van Buren Estates	ED Pond	Passed	None
VDOT Herndon Pkwy @ Holly Creek	ED Pond	Maintenance Required	separated pipe joints; dredge pond floor; trash/debris; gully erosion
VDOT Herndon Pkwy @ OD Trail	ED Pond	Passed	None

*Note that the Golf Course pond and bioretention facilities were also inspected as part of the SWPPP inpsection process for a total of 28 total public BMP inspections.

BMP Warehouse Submittal for FY2019

Tracking ID	BMP ID	Date Installed	Clearinghouse BMP	BMP Name	Measurement Name	Measurement Unit	BMP Extent	*Impervious Acres Treated*	*Locality*	*Locality FIPS*	*ToLocality*	*HUC12*	*VAHU6*	*Latitude*	*Longitude*	MS4 Service Area	*Ownership Type*	*Maintenance Agreement*	*Action Plan*
TOHER-2019-00236204		5/12/2019	BB1	Bioretention	Area Treated, underdrai	ACRE	0.12	0.12	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	39.996471	-77.381689	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236205		3/30/2019	BI2	Infiltration Practices	Area Treated	ACRE	0.11	0.07	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	39.981105	-77.384048	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236206		7/1/2018	BI2	Infiltration Practices	Area Treated	ACRE	0.16	0.1	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.981234	-77.384089	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236207		3/19/2019	BI2	Infiltration Practices	Area Treated	ACRE	0.14	0.09	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.980271	-77.384049	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236208		3/19/2019	BI2	Infiltration Practices	Area Treated	ACRE	0.14	0.09	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.980289	-77.383801	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236209		3/14/2019	BB2	Bioretention	Area Treated	ACRE	0.23	0.11	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.978613	-77.384063	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236210		3/29/2019	BI2	Infiltration Practices	Area Treated	ACRE	0.2	0.13	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.981128	-77.384919	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236211		3/29/2019	BI2	Infiltration Practices	Area Treated	ACRE	0.07	0.02	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.981201	-77.385032	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan
TOHER-2019-00236212		10/1/2018	BB1	Bioretention	Area Treated	ACRE	0.42	0.12	Herndon (Fairfax Coun	51620	Herndon (Fairfax Cou	020700080905	PL21	38.979757	-77.378775	Inside MS4 service area	Private	Yes	Chesapeake Bay Action Plan

From: BMPDataSubmission@deq.virginia.gov
Sent: Thursday, September 19, 2019 2:01 PM
To: Sergent, John Jay
Subject: DEQ BMP Approval
Attachments: DEQApprovedBMPSubmission_20190919.xlsx

Dear John Sergent,

The Department of Environmental Quality (DEQ) has received your BMP submission. Attached you will find a Microsoft Excel document with the data you uploaded with DEQ Tracking Ids assigned to each record. Please keep this file as the Tracking Ids will be needed if you need to update the data at a later date. Thank you.

Sincerely,
DEQ Division of Water Planning

APPENDIX F

Updated Operation and Maintenance Pollution Prevention SOPs

Public Works Complex Materials:

- Completely Quarterly Checklists

Golf Course Materials

- Nutrient Management Plan Certification
- Completed Quarterly Checklist
- Small Spill Report

Biennial Training – Focus on IDDE for Field Personnel

Training Sign-In Sheet

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Vehicle and Equipment Maintenance and Cleaning	
Date:	July 31, 2015; Updated September 6, 2017; Updated March 27, 2019
Purpose of SOP:	To establish standard, consistent stormwater pollution prevention procedures for vehicle and equipment maintenance and washing activities to prevent the discharge of pollutants related to these activities.
MS4 Permit Reference	Part I E 6 a
Responsible Parties	John Irish, Deputy Director of Public Works Richard Smith, Senior Civil Engineer Gene Flemming, Director of Golf

Vehicles and equipment can become sources of pollution as a result of leaks and spills during operation and maintenance if proper measures are not implemented. Further, vehicle and equipment wash water is prohibited from being discharged into the MS4 without adequate treatment or authorization under a separate VPDES permit.

Pollutants may include, but are not limited to, petroleum products, antifreeze, solvents, battery acid, detergents, and heavy metals. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1) Responsible Parties

a) Public Works Staff. Vehicle and equipment maintenance is performed by the General Services Activity Center of the Department of Public Works. Minor repair and response to spills also affects Grounds Maintenance and Street Maintenance.

b) Golf Course Staff. Golf course vehicles (primarily golf carts) and equipment are maintained by Centennial Golf Course personnel at the Maintenance Facility.

c) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with vehicle and equipment maintenance and cleaning. The requirements of this SOP will be discussed with contractors in project contract discussions or other appropriate venues to ensure a complete understanding of the details of this SOP.

2) Equipment and Vehicle Maintenance

a) Cover from Precipitation. To the extent possible, all maintenance activities should be conducted indoors or under cover.

b) Designated Waiting Area. A designated area will be established for equipment awaiting maintenance.
   i. The designated area should be located away from storm drain inlets or other stormwater conveyances.
   ii. Drip pans or other secondary containment should be placed under leaking, or leak-prone equipment.
   iii. Additional drip pans should be located in an area that is easily accessible to the designated waiting area.
   iv. Periodic, and preferably daily, visual inspections of the designated area should be conducted to identify any issues that could affect surface waters.

c) Fluid Storage. Fluids such as fuel, antifreeze, hydraulic fluid, motor oils, solvents, and similar materials will be properly managed to prevent discharge to surface waters.
   i. Fluids should be stored under cover and within a secondary containment structure, such as a concrete secondary containment structure, spill pad, or similar structure.
   ii. Keep waste oil, antifreeze, and other fluids properly covered and contained in tight fitting containers with proper labeling.
   iii. Keep fluids as far away as possible from bay doors or other places where a leak or spill could reach an outside area.

d) Spills and Leaks. Spills and leaks will be cleaned up immediately.
   i. Spill kits with absorbent materials, drain covers or plugs (if applicable), and instructions must be located within 50 feet of designated maintenance areas.
   ii. Dry clean-up methods shall be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
   iii. Waste sorbent material shall be drained of free flowing material and disposed of as solid waste in accordance with local regulations.
   iv. Water should never be used to clean up spilled material.
   v. Wash down of pavement should not occur until all spills and leaks have been cleaned up. If a buildup of waste materials is present on the pavement, the resulting wash water must be contained and disposed of in a sanitary sewer.

e) Work Space.
   i. Sweep the maintenance area as needed to prevent a buildup of pollutants.
   ii. A trash receptacle must be provided in/near the maintenance area.
   iii. Areas shall be maintained in an orderly manner to minimize the chance for spills and leaks.

f) Inspections. Inspect equipment for damaged hoses and leaky gaskets routinely and repair or replace immediately.

g) Parts Washing.

i. Only wash parts in a designated area (e.g., parts washer) and verify that no wash water is discharged during the process.
ii. Dispose of parts wash water in an approved manner.

3) Washing Activities

a) Washing Generally. Washing of vehicles and equipment will only be conducted inside the Town Shop facility in the bay designed for that purpose. Wash water from that facility enters the sanitary sewer system.

b) Washing at the Golf Course Maintenance Facility. Washing grass clippings from mowers and similar equipment may be conducted at the Maintenance Facility provided that the wash water is directed toward the StormFilter system and that quarterly monitoring confirms that the system is effective at preventing the discharge of clippings and other materials into the storm sewer system.

c) Exceptions. If access to the designated wash area is not an option, the following alternatives must be used:
   i. Use a commercial washing contractor that provides mobile washing services. All wash water must be contained and removed by the washing contractor. Town staff must oversee the activities to ensure proper containment and removal of the wash water.
   ii. Use a commercial washing facility.
   iii. If the washing is limited to removal of vegetative matter or soil particles, and can be done without the use of detergents, it can be conducted on a flat, grassy area away from storm drains, stormwater conveyances, or natural water ways. This practice will not be used to clean vehicles or equipment for salt, fuels, oil, fertilizers, chemicals, etc.

4) Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve vehicle and equipment maintenance and cleaning. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Pesticides, Herbicides, and Fertilizers	
Date:	July 31, 2015; Updated September 6, 2017; Updated March 27, 2019
Purpose of SOP:	To establish standard, consistent stormwater pollution prevention procedures for the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers to prevent the discharge of pollutants related to these activities.
MS4 Permit Reference	Part I E 6 a
Responsible Parties	John Irish, Deputy Director of Public Works Richard Smith, Senior Civil Engineer Gene Flemming, Director of Golf

Pesticides, herbicides, and fertilizers can become sources of pollution if improperly applied, stored, transported, or disposed. Fertilizers contribute to nutrient pollution. The Town of Herndon is subject to the Chesapeake Bay Total Maximum Daily Load (TMDL), which means that the Town must achieve specific nutrient reductions in accordance with its municipal separate storm sewer system (MS4) permit. Pesticides and herbicides can be toxic to aquatic life in local streams and waterways. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1) Responsible Parties

a) Public Works Staff. Grounds Maintenance within the Department of Public Works is responsible for most activities involving pesticides, herbicides, and fertilizers on Town property.

b) Golf Course Staff. Centennial Golf Course staff are responsible for activities involving pesticides, herbicides, and fertilizers on golf course property.

c) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with pesticide, herbicide, and fertilizer application, storage, transport, or disposal. The requirements of this SOP will be discussed with contractors in project contract discussions or other appropriate venues to ensure a complete understanding of the details of this SOP.

2) Pesticides and Herbicides

a) Application and Training. All staff who apply pesticides or herbicides to Town-owned property will receive proper training/certification in accordance with the Virginia Pest Control Act (§3.2-3900 *et seq* of the Code of Virginia). Training/certification will be documented at least annually in the Town's MS4 Program Plan annual report to the Virginia Department of Environmental Quality (DEQ).

b) Contractors. All contract applicators who apply pesticides or herbicides to Town-owned property will likewise agree through contract language or otherwise provide written certification that proper training and certification in accordance with the Virginia Pest Control Act has been obtained. Contractors will provide documentation on request.

c) Safety Data Sheets: Safety Data Sheets (SDSs) will be maintained for all relevant materials stored or used on-site. SDSs will be readily available for all personnel on-site to review.

d) Use Minimization and Targeting.
   i. Use manual and/or mechanical methods for weed and pest control or vegetation removal wherever possible rather than chemical methods.
   ii. When chemicals are required, use the least toxic method to control animal or plant pests. This may include, but is not limited to, pheromone-based traps and sticky paper.
   iii. When chemicals are used, use the most biodegradable product that will accomplish the desired goal.
   iv. When possible, limit the application to the problem area and spot spray on infested areas only.
   v. Designate a no-spray zone, preferably 50 feet or more, around water features.
   vi. Contact the Fairfax County office of the Virginia Cooperative Extension for more information on Integrated Pest Management at http://offices.ext.vt.edu/fairfax/ or (703) 324-5369.

3) Fertilizers

a) Application and Training. Fertilizers at Centennial Golf Course will only be applied in accordance with the approved nutrient management plan (NMP). This applies to golf course staff and all contractors. If the Town determines that nutrients are applied to a contiguous area of one acre or greater, a NMP must be developed for the site.

4) General Practices

a) Manufacturer's Recommendations. Follow all manufacturer's recommendations for mixing, applying, and handling pesticides, herbicides, and fertilizers.

b) Storage. All materials, whether liquid or dry, should be properly stored under cover when not in use.
   i. Materials should be stored in an adequately ventilated and secured building to prevent unauthorized use or access.

ii. Materials must be stored under cover and, where possible, within a secondary containment structure, such as a concrete secondary containment structure, spill pad, or similar structure.
iii. Keep materials properly covered and contained in tight fitting containers.
iv. Properly label all materials.
v. Keep materials as far away as possible from bay doors or other places where a spill could reach an area outside area.

b) Mixing.
   i. Provide adequate containment when mixing materials. This includes an area with impervious surface and adequate perimeter control to prevent the discharge of pollutants in the event of a spill.
   ii. All mixed material containers shall be labeled with the specific contents.
   iii. Mix the minimum amount of material needed for the immediate job.

c) Application.
   i. Time the application of materials to coincide with the manufacturer's recommendation for best results.
   ii. Do not apply pesticides or herbicides during precipitation or if precipitation is expected. Do not apply before an irrigation cycle.
   iii. Do not apply fertilizers when heavy rain that could cause significant runoff is anticipated.
   iv. Do not apply when wind conditions could result in spray drift to waterbodies or areas not targeted for application.
   v. If possible, limit the application of pesticides or herbicides to a specific problem area.
   vi. Avoid applying materials in or near any drainage ditch, creek, pond, or seasonal streambed.

d) Spills and Leaks. Spills and leaks should be cleaned up immediately.
   i. Dry clean-up methods should be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
   ii. Waste sorbent material must be disposed of properly.
   iii. Water should never be used to clean up spilled material.
   iv. Wash down of pavement should not occur until all spills and leaks have been cleaned up.

e) Clean-Up.
   i. Sweep pavement and sidewalks where fertilizers or other solid chemicals have fallen, sweep them onto grassy areas or collect and dispose of properly.
   ii. Make sure all containers are properly labeled.
   iii. Dispose of excess or left over chemicals according to instructions on the label and local waste regulations.
   iv. Triple rinse all pesticide and herbicide containers prior to disposal.

v. Never rinse pesticides in an area where it has the potential to enter the storm drain or be washed into a local water body.
vi. Application equipment must be washed in a fully contained area that drains to a holding tank or a sanitary sewer.

5) Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve the application, storage, transport, or disposal of pesticides, herbicides, and fertilizers. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Outdoor Material Storage	
Date:	July 31, 2015; Updated September 6, 2017; Updated March 27, 2019
Purpose of SOP:	To minimize or prevent pollutant discharge from the outdoor storage of materials.
MS4 Permit Reference	Part I E 6 a
Responsible Parties	John Irish, Deputy Director of Public Works Richard Smith, Senior Civil Engineer Gene Flemming, Director of Golf

Outdoor storage of material can become a source of pollution as a result of leaks, spills, or accidents, or through the corrosion or leaching of materials into stormwater. Bulk materials such as sand, dirt, gravel, and mulch can also wash into the storm drain system when left exposed to precipitation. This SOP is designed to minimize the potential for outdoor storage of material to negatively affect stormwater quality.

1. Responsible Parties

a) Public Works Staff. Public Works engages in multiple activities that involve the outdoor storage of materials.

b) Golf Course Staff. The Centennial Golf Course has a materials storage facility where sand, mulch, and organic compost are stored in concrete bays.

c) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with outdoor storage of materials. This includes, but is not limited to liquid bulk storage as well as dry storage such as sand, gravel, mulch, and dirt.

d) Other SOPs and Documents. In addition to this SOP, the following documents are incorporated by reference and must be consulted:
   i. The Snow and Deicing Operations SOP for storage of salt and deicing materials.
   ii. Spill Prevention, Control, and Countermeasure (SPCC) Plans for the Town Shop and Centennial Golf Course.

iii. Stormwater Pollution Prevention Plans (SWPPPs) for the Town Shop and Centennial Golf Course.

2. Outdoor Storage Areas

a) Indoor Storage. All chemical and material containers should be stored indoors whenever possible. If they must be stored outdoors, place them under a roof or secured tarp.

b) Secondary Containment.
   i. All containers and dry materials should have secondary containment.
   ii. Place all containers and dry materials on a plastic pallet or other device that elevates them off the ground or pavement and provides containment.
   iii. Never release accumulated stormwater from a secondary containment structure unless it has been verified that there is no contamination present. If contamination is present, it must be properly mitigated prior to discharge, discharged to a sanitary sewer, or otherwise handled in accordance with the contaminate present.

c) Placement. Place containers on paved or impervious surfaces and as far from (or at a lower elevation than) storm drain inlets and drainage ditches as possible.

d) Traffic Control. Materials should be stored away from vehicle and equipment traffic. Bollards should be placed around materials where vehicles and equipment may come into close proximity.

e) Spill Response.
   i. Provide a spill kit near all storage areas.
   ii. Clean up any spills, leaks, or discharges promptly.
   iii. If a container is found to be leaking, either empty the contents into a leak-tight container or place the entire container inside of a larger leak-tight container.

f) Inspections. Inspect all containers stored outdoors regularly.

3. Sand, Dirt, or Gravel Stockpiles

a) Stockpiles should be stored inside a storage building or under a roof whenever possible.

b) If a permanent overhead structure is not available, cover stockpiles with a properly secured tarp.

c) Contain stormwater run-off from stockpiles by using barriers or berms.

d) Sweep areas surrounding the stockpile frequently to prevent materials from mingling with stormwater.

e) Whenever possible, order only the amount of the material to be stockpiled that is needed for the specific job and schedule delivery to minimize the amount of outdoor storage time.

f) Locate stockpiles away from storm drain inlets. Provide protection for the inlet if necessary to prevent the discharge of materials.

4. Bulk Liquid Materials Storage

a) Ensure that the content of a bulk liquid storage vessel is clearly marked in plain language.

b) Provide impervious secondary containment for all above ground storage tanks (ASTs).

c) To the extent possible, provide adequate containment for all material loading/unloading areas.

d) Refer to the SPCC Plans for the Town Shop and Centennial Golf Course and the SWPPPs for the Town Shop and Centennial Golf Course for facility-specific requirements and best practices.

e) Where provided, keep drain valves in secondary containment locked in the closed position at all times.

f) Never release accumulated stormwater in a secondary containment structure unless it has been verified that there is no contamination present. If contamination is present, it must be properly cleaned prior to discharge.

g) Provide locks for all access points to bulk liquid storage tanks.

h) Make sure that an adequate spill kit with sufficient equipment and supplies is located near storage areas where spills are possible. Clean up any spills, leaks, or discharges immediately.

5. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve the outdoor storage of materials. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Road, Street, Parking Lot, and Sidewalk Maintenance	
Date:	July 31, 2015; Updated March 27, 2019
Purpose of SOP:	To minimize or prevent pollutant discharge from daily operations associated with road, street, parking lot, and sidewalk maintenance.
MS4 Permit Reference	Part I E 6 a
Responsible Party	John Irish, Deputy Director of Public Works Richard Smith, Senior Civil Engineer

Roads, streets, parking lots, and sidewalks can become a source of pollution during maintenance and construction activities if proper pollution prevention measures are not implemented. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1. Responsible Parties

a) Town Staff. The Street Maintenance and Construction Activity Center of the Department of Public Works is responsible for the maintenance and repair of approximately 128 lane miles of the road system within the Town. Work is completed in accordance with Virginia Department of Transportation (VDOT) and Town of Herndon standards. Street Maintenance and Construction is also responsible for filling potholes and fixing damaged asphalt, sidewalks, or curbs.

b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with road, street, parking lot, and sidewalk maintenance and construction. The requirements of this SOP will be discussed with contractors in project contract discussions, pre-construction meetings, or other appropriate venues to ensure a complete understanding of the details of this SOP.

2. General Procedures

a) Spill Response. Ensure spill response material/equipment is readily available when work activity requires the use of paints, chemicals, or other materials that could harm human health or the environment and any time that equipment is used that involves hydraulic fluids or other fluids that may leak.

b) Storm Inlet Protection. Provide for storm drain inlet protection when working in close proximity and there is a potential for a discharge as the result of a spill or a precipitation event.

c) Safety Data Sheets. Ensure that safety data sheets (SDSs) are available for all materials used during surface repair and maintenance activities. SDS should be readily available and accessible to all Town and contractor personnel handling chemicals or other potentially harmful materials.

d) Weather Conditions. To the extent possible, construction and maintenance activities should only be scheduled and conducted during dry weather. All possible precautions should be used to avoid conducting potential pollution generating construction and maintenance activities immediately before or during times when precipitation is likely to occur.

e) Routine Inspections. During periods of construction and/or maintenance, the work area should be routinely inspected for signs of spills, leaks, trash accumulation, illicit discharges from the site, buildup of sediment, or other conditions that may result in the discharge of pollutants from the site to the storm drainage system.

f) Clean Surfaces. To the extent possible, broom sweep or vacuum all surfaces periodically to keep the work area clean and free from pollutants. Hosing down surfaces should be avoided unless the area is completely contained so that all drainage is directed to the sanitary sewer. Water may also be directed to grass surfaces where it can infiltration into the ground.

3. Asphalt Surface Repair and Maintenance

a) Store mixed asphalt under cover and protected from precipitation and extreme temperatures.

b) Reduce the amount of asphalt materials stored onsite. When possible, purchase only the amount of materials necessary to complete a project.

c) If bulk material storage is necessary, locate storage area outside of the drainage conveyances and away from storm drain inlets. Ensure a tarp is available in case the materials need to be protected from precipitation.

d) Minimize the amount of water used when conducting asphalt cutting, grinding, or milling. Water should only be used in amounts necessary to control dust and provide lubrication, and should never be used in amounts that would result in a flow that could discharge to the drainage system.

e) All sediment and debris resulting from cutting, grinding, milling, or other repair and maintenance shall be contained, swept up, and disposed of properly.

f) The use of tar-based products is strongly discouraged since they contain higher levels of polycyclic aromatic hydrocarbons (PAHs) that harm fish and other aquatic organisms.

g) Apply sealants or other liquid surface treatments with care, avoiding misapplication to a storm drain or other non-asphalt surface. When conditions require application adjacent to a storm drain inlet, consider the use of an impervious inlet cover to prevent unintended spray into the storm drain.

4. Surface Painting/Striping

a) When removing old paint, contain the removed paint to the extent possible and dispose of as appropriate. If there is a potential to encounter lead-based paint, additional precautions not outlined in this SOP may be required.

b) When using high pressure water to remove old paint, protect nearby inlets to prevent the discharge of waste paint, sediment, or other pollutants into the storm drainage system. Use perimeter control around the work area to collect removed paint and dispose of as appropriate.

c) When surface grinding or sand blasting to remove paint, sweep up the paint debris immediately. If water is used for grinding, minimize the amount of water used and provide proper containment to prevent any discharge to the drainage system.

d) When possible, use thermoplastic markings instead of paint for all surface striping.

e) All paint should be stored inside and protected from precipitation.

f) To the extent practical, handle paint in a contained area, under cover from precipitation. If secondary containment is not available, use temporary structural best management practices to protect storm drain inlets and prevent the discharge of paints in the event of a spill.

g) Apply paint at an appropriate rate to prevent excess paint from running off the site.

h) In the event of a spill, containment materials should be deployed to contain the spill and prevent paint from entering the storm drain.

i) Dispose of all waste material in an appropriate manner.

    i. Excess latex and water based paint that is not able to be used elsewhere can be allowed to dry, under cover from precipitation, and disposed of as solid waste. Refer to product information for specific requirements for disposal.

    ii. Leftover oil based paints and solvents must be disposed of as household hazardous waste according to federal and state environmental regulations.

j) Paint equipment should be washed after use in a designated wash area that is plumbed to a sanitary sewer, or approved containment structure.

5. Concrete Surface Repair and Maintenance

a) Store dry concrete material inside, under cover from precipitation.

b) Minimize the amount of concrete material stored onsite. If possible purchase only the amount of concrete material needed for a particular job.

c) Locate storm drain inlets in the vicinity of the work site. Storm drain inlets should be protected with a barrier if the work is in close proximity to the inlets and there is a reasonable chance for material to discharge to the inlet as the result of a spill or precipitation event.

d) To control dust, "wet" cutting methods should be used when practicable. Minimize the amount of water used when conducting cutting to prevent a discharge to the storm drain system. Saw cut slurry shall be contained and properly disposed. Using a vacuum to contain slurry in the saw cutting process is an effective way to ensure that pollutants are not allowed to enter storm drains or other stormwater infrastructure.

e) Remove demolished concrete or related debris and dispose of at a solid waste facility that accepts construction and demolition debris. Dry clean-up methods (broom and shovel) should be used to manage concrete debris to the extent practicable.

f) A concrete washout shall be clearly established and identified at any location where concrete is to be mixed or poured. The concrete washout shall be constructed with an impervious material and in a manner that would prevent washout material from discharging to the storm system. Guidance can be found at www.epa.gov/npdes/pubs/concretewashout.pdf.

g) Excess material that cannot be used at another location or project can be discharged into the designated concrete washout facility, if adequate capacity exists, where it should be allowed to dry and then be disposed as construction waste.

6. Porous Concrete, Porous Pavers, and Similar Structures

a) Prior to conducting any construction or maintenance work, locate and identify any stormwater management facilities within the project area, including but not limited to pervious or porous pavement, rain gardens, etc.

b) Clearly delineate porous pavement, pervious pavers, and similar structures that are not easily distinguishable from traditional surfaces, to increase awareness of their existence.

c) Surface vacuuming should be performed on a routine basis and in the event of a spill of any material that may clog pore spaces. Sweeping is not the preferred method since it can lead to clogging of pores with sediment and other granular material.

d) Do not locate staging areas, equipment or material storage areas on top of porous pavement.

7. Vegetation Management

a) During routine mowing operations, minimize the amount of clippings with the potential to enter the storm drain by directing clippings away from impervious surfaces whenever possible.

b) Do not purposefully sweep, blow, or dump clippings or any vegetated waste into storm inlets. Either blow clippings into grassy areas or collect the clippings or vegetated waste for composting.

8. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve road, street, parking lot, and sidewalk maintenance. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Snow and Deicing Operations	
Date:	July 31, 2015; Updated March 27, 2019
Purpose of SOP:	To minimize or prevent pollutant discharge from operations associated with snow removal and deicing.
MS4 Permit Reference	Part I E 6 a
Responsible Party	John Irish, Deputy Director of Public Works Richard Smith, Senior Civil Engineer

This SOP is designed to minimize, to the extent practical, the impacts of snow removal and deicing operations on local water quality while still ensuring public safety. This includes the storage and application of sand, salt, and other deicing chemicals.

1. Responsible Parties

a) Town Staff. The Street Maintenance and Construction Activity Center of the Department of Public Works is responsible for snow removal and deicing operations in the Town's road right-of-way and on Town property. Other staff members may engage in minor treatment of sidewalks and building entrances using bagged or boxed deicing materials.

b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with snow removal or deicing operations within the Town's road right-of-way or on Town property.

2. Use of Deicing Agents Containing Urea or Other Nutrients

The Town, including contractors, will not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, sidewalks, or other paved surfaces.

3. Salt and Deicer Storage

a) Cover from Precipitation. Salt and other chemical deicers will be stored in a covered structure or container at all times, unless active loading or spreading is occurring. Containment structures should be permanent in their construction and made of materials that are not subject to salt corrosion. Temporary storage of salt and other chemical deicers is not recommended; however, if materials must be stored outside of a

permanent structure, the storage must be on a temporary basis only. Temporary storage piles must be covered with a tarp and adequately secured at all times when not being actively worked.

b) Impervious Bottom. Salt and other chemical deicers will only be stored on an impervious surface such as a concrete slab or an asphalt parking lot. The use of a tarp or other material as an impervious bottom is not adequate, unless specifically designed and certified by a professional engineer.

c) Management of Run-on and Run-off. Salt, sand, and other deicer materials must be stored away from storm drain inlets and other conveyance structures. Storage structures must provide adequate barriers to prevent run-on into the storage pile, and minimize erosion from the pile. All run-off from salt and other chemical deicer piles must be eliminated at all times. Any run-off containing salt material must be captured and either returned to the storage pile, managed as salt brine, or discharged to a sanitary sewer system.

4. Sand and Deicer Use

a) Deicing Material. Prior to each winter season, the Town will assess deicing materials, and to the extent practical, will select the materials and mix that has the least impact on water quality while still effectively meeting the Town's public safety needs.

b) Anti-icing. Liquid anti-icing materials may be applied prior to storm events to prevent the bond between winter precipitation and the road surface. This can effectively reduce the amount of deicing material necessary for a storm event. Anti-icing applications should be conducted per manufacturer's recommendations.

c) Equipment Calibration. All equipment will be calibrated in accordance with the manufacturer's instructions and the specified applications rates for the material being applied. Calibration will include plowing speed and applicable spreader settings. The manufacturer's instructions will be kept at the Town Shop and referenced prior to each winter storm event.

d) Application Rate. The Town will use the lowest application rate that will effectively treat surfaces to meet safety needs.

e) Loading. When loading salt, sand, or other deicers, care will be taken to not overfill the truck or tank.

5. Sand and Deicer Clean Up

a) Clean-Up. Loading areas will be swept frequently to prevent salt or sand build-up and run-off. At a minimum, loading areas should be inspected and swept following each storm event or other period when handling occurs.

b) Street Sweeping. The Town conducts routine street sweeping beginning in spring to clean up debris and other materials that collect during winter months, including salt, sand, and other deicers.

c) Small Applications. To the extent practical, small amounts of salt, sand, and deicing materials applied to sidewalks or building entrances by Town staff will be swept up and disposed of properly when weather conditions allow.

d) Vehicle Washing. Spreading and other equipment used during deicing operations will only be washed inside the Town Shop facility in the bay designed for that purpose. Wash water from that facility enters the sanitary sewer system.

6. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve snow and deicing operations. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Utility Construction and Maintenance	
Date:	July 31, 2015; Updated March 27, 2019
Purpose of SOP:	To establish standard, consistent stormwater pollution prevention procedures for utility construction and maintenance activities to prevent the discharge of pollutants related to these activities.
MS4 Permit Reference	Part I E 6 a
Responsible Party	John Irish, Deputy Director of Public Works Richard Smith, Senior Civil Engineer

Utility construction and maintenance activities may become sources of pollution if proper measures are not implemented. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1) Responsible Parties

a) Town Staff. Routine construction and maintenance of utilities is conducted by Street Maintenance and Water and Sewer personnel in the Department of Public Works.

b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with utility construction and maintenance. The requirements of this SOP will be discussed with contractors in project contract discussions, pre-construction meetings, or other appropriate venues to ensure a complete understanding of the details of this SOP.

2) Utility Construction and Maintenance Controls

a) Project Planning.
   i. To the extent possible, all maintenance and construction activities should be conducted during periods of dry weather.
   ii. The extent of areas excavated at one time should be minimized where possible to limit the active construction area.

b) Excavation and Material Management. Installing new, or uncovering existing underground utilities must be done with care to avoid the discharge of pollutants to the drainage system.
   i. Locate storm drain inlets prior to any excavation, and provide controls for inlets in close proximity to the work area.

ii. Existing vegetation in and around areas being excavated should be preserved to provide natural erosion control.
iii. The extent of the excavation should be minimized to the extent practicable.
iv. Material excavated during trenching activities should be neatly stockpiled. In the event that the stockpiles must remain overnight, proper covering (secured tarps) and perimeter controls (sediment logs, straw bales, etc.) must be used.
v. Materials temporarily stockpiled in a roadway or other impervious surface that conveys directly to the MS4 should be removed by the end of the work day or prior to any precipitation, whichever comes first.
vi. If excavated material will not be used as backfill, the material should be removed from the site as soon as possible.
vii. If trench or pipe dewatering is necessary, provide appropriate sediment controls, such as dewatering bags or other sediment traps at the point of discharge. Additional permitting or authorization may be required to discharge to the drainage system.
viii. Dispose of all waste materials generated in the construction and maintenance process accordingly.

c) Fluid Storage and Handling.
   i. Fluids should be stored in a general secondary containment structure (storage bin, truck bed, etc.) when not being actively used.
   ii. All materials should be kept in tight fitting containers that are compatible with the material, and with proper labeling provided.
   iii. To the extent possible, fluids should be added to equipment in a location that is adequate distance from a storm drain inlet. This is typically 25 feet or more.

d) Spills and Leaks.
   i. Spill kits with absorbent materials should be onsite during all construction and maintenance activities.
   ii. Dry clean-up methods shall be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
   iii. Waste sorbent material shall be drained of free flowing material and disposed of as solid waste in accordance with local regulations.
   iv. Water should never be used to clean up spilled material.
   v. Wash down of pavement should not occur until all spills and leaks have been cleaned up. If a buildup of waste materials is present on the pavement, the resulting wash water should be contained and disposed of in a sanitary sewer.

e) Other Town SOPs.
   i. Refer to the Road, Street, Parking Lot, and Sidewalk Maintenance SOP for additional procedures for maintenance activities that involve asphalt and concrete surface repair and maintenance.
   ii. Refer to the Outdoor Material Storage SOP for additional procedures for material storage.

3) Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve utility construction and maintenance. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

FY19 - Q1

FORM 2

TOWN OF Herndon VIRGINIA **Quarterly Inspection Checklist**

Date: 9/13/18 | Facility: Town Shop | Inspector: Bill Smith + Chris Mason

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☒	☐	☐	
Are brooms, dust pans, and mops easily on hand for easy access?	☒	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☒	☐	☐	
Are containment areas in good condition, with valves closed?	☒	☐	☐	
Are dumpsters closed?	☐	☒	☐	Install covers
Is the site free of litter and debris?	☐	☒	☐	Remove litter/debris
Are catch basins and other inlets to the storm drain system free from trash?	☒	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☒	☐	☐	
Have proper security measures been taken for storage areas?	☒	☐	☐	
Are all containers labeled with contents on the appropriate label?	☒	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☒	☐	☐	
Are all containers that are not in use closed?	☒	☐	☐	
Are containers stored indoors and away from entrances whenever practical?	☒	☐	☐	

FORM 2

TOWN OF Herndon VIRGINIA Quarterly Inspection Checklist

Date: 1/4/19 | Facility: Town Shop | Inspector: Bill + Chris

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☑	☐	☐	
Are brooms, dust pans, and mops easily on hand for easy access?	☑	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☑	☐	☐	
Are containment areas in good condition, with valves closed?	☑	☐	☐	
Are dumpsters closed?	☐	☑	☐	Covers not in place - Jobsite
Is the site free of litter and debris?	☐	☒	☐	wood / Brush Pile
Are catch basins and other inlets to the storm drain system free from trash?	☑	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☑	☐	☐	
Have proper security measures been taken for storage areas?	☑	☐	☐	
Are all containers labeled with contents on the appropriate label?	☑	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☑	☐	☐	
Are all containers that are not in use closed?	☐	☒	☐	Barrels - one has open funnel
Are containers stored indoors and away from entrances whenever practical?	☑	☐	☐	

FORM 2

Are maintenance activities conducted indoors whenever practical?	☑	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☑	☐	☐	
Are containers protected from vehicular traffic?	☑	☐	☐	
Have all containers been inspected and are they generally in good condition?	☑	☐	☐	
Do all containers have secondary containment?	☑	☐	☐	All containers with liquid
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☐	☒	☐	Materials Bins
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☑	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☑	☐	☐	
4. Pump Inspection	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☑	☐	☐	
Have oil pumps been inspected?	☒	☐	☐	Visual
Have other pumps been inspected?	☑	☐	☐	Visual
Has mobile equipment been inspected for potential leaking fluids?	☒	☐	☐	
5. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the pond been inspected?	☒	☐	☐	Clean Truck
Have the oil water separators been inspected?	☒	☐	☐	
Has the vehicle wash catch basin been inspected for sediment build-up?	☒	☐	☐	weekly

FORM 2

6. Scrap Metal Storage	Yes	No	N/A	Observations/Required Actions
Have scrap parts and empty drums no longer in use been removed from the property?	☒	☐	☐	
7. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☒	☐	☐	
8. Salt Storage Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the salt storage area protected from run-on of stormwater?	☒	☐	☐	
Is the area around the salt storage area swept after each use and free of material that could mingle with stormwater?	☒	☐	☐	
9. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the spill kit fully stocked at the fuel station and accessible for use?	☒	☐	☐	
Is all signage in good, readable condition?	☒	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☒	☐	☐	
Has the shut-off valve been tested?	☒	☐	☐	
10. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☒	☐	☐	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☒	☐	☐	
Are maintenance activities performed indoors when practical?	☒	☐	☐	
Are washing activities confined to the wash bay?	☒	☐	☐	

FORM 2

Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☐	☒	☐	Repaving
11. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☒	☐	☐	
12. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on pollution prevention and the Town's good housekeeping SOPs at least annually?	☒	☐	☐	
Are employees trained on proper spill prevention and response for the materials that they handle?	☒	☐	☐	

FORM 2

Are maintenance activities conducted indoors whenever practical?	☒	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☒	☐	☐	
Are containers protected from vehicular traffic?	☒	☐	☐	
Have all containers been inspected and are they generally in good condition?	☒	☐	☐	
Do all containers have secondary containment?	☒	☐	☐	All over 5 gallons
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☐	☒	☐	Sweep Materials Bins
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☒	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☒	☐	☐	
4. Pump Inspection	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☒	☐	☐	
Have oil pumps been inspected?	☒	☐	☐	
Have other pumps been inspected?	☒	☐	☐	
Has mobile equipment been inspected for potential leaking fluids?	☒	☐	☐	
5. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the pond been inspected?	☒	☐	☐	
Have the oil water separators been inspected?	☒	☐	☐	
Has the vehicle wash catch basin been inspected for sediment build-up?	☒	☐	☐	

FORM 2

6. Scrap Metal Storage	Yes	No	N/A	Observations/Required Actions
Have scrap parts and empty drums no longer in use been removed from the property?	☒	☐	☐	
7. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☒	☐	☐	
8. Salt Storage Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the salt storage area protected from run-on of stormwater?	☒	☐	☐	
Is the area around the salt storage area swept after each use and free of material that could mingle with stormwater?	☒	☐	☐	
9. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the spill kit fully stocked at the fuel station and accessible for use?	☒	☐	☐	
Is all signage in good, readable condition?	☒	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☒	☐	☐	
Has the shut-off valve been tested?	☒	☐	☐	
10. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☒	☐	☐	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☒	☐	☐	
Are maintenance activities performed indoors when practical?	☒	☐	☐	
Are washing activities confined to the wash bay?	☒	☐	☐	

FORM 2

Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☒	☐	☐	Good Area 25+ year old lot
11. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☒	☐	☐	
12. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on pollution prevention and the Town's good housekeeping SOPs at least annually?	☒	☐	☐	
Are employees trained on proper spill prevention and response for the materials that they handle?	☒	☐	☐	

FY19-Q1

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Date: 9/13/18 Evaluator(s): Chris Mason + Bill Smith

	No Action Required	Action Required	Not Applicable
1. Accuracy of Site Map			
Identification and location of outfalls	☒	☐	☐
Watershed boundaries	☒	☐	☐
Direction of runoff flow	☒	☐	☐
Buildings and impervious areas	☒	☐	☐
Exposed material storage areas	☒	☐	☐
2. Accuracy of SWPPP and Related Records			
Pollution Prevention Team Members	☐	☒	☐
Outfall characteristics	☒	☐	☐
Quarterly inspection checklists	☒	☐	☐
Structural control maintenance records	☒	☐	☐
Chemical inventory (Appendix A)	☒	☐	☐
Employee training records	☒	☐	☐
3. Accuracy of Potential Pollutant Sources			
Chemical storage	☒	☐	☐
Vehicle maintenance	☒	☐	☐
Vehicle wash	☒	☐	☐
Fueling island	☒	☐	☐
Storage building	☒	☐	☐
Salt and liquid deicer storage	☒	☐	☐
Waste containers	☒	☐	☐
Material stockpiles	☒	☐	☐
Equipment and vehicle parking	☒	☐	☐
Equipment and material storage	☒	☐	☐

Required Action: _____

_____

_____

Required Action: _____

_____

_____

Required Action: _____

_____

_____

_____

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION, CONT.

	No Action Required	Action Required	Not Applicable
4. Effectiveness of Stormwater Management Controls			
Good housekeeping practices	☒	☐	☐
Preventive maintenance program	☒	☐	☐
Spill prevention and response	☒	☐	☐
Routine observations	☒	☐	☐
High risk activity exposure	☒	☐	☐
Scrap material storage and salvage	☒	☐	☐
Sediment and erosion control	☒	☐	☐
Management of stormwater runoff	☒	☐	☐
Vehicle maintenance	☒	☐	☐
Vehicle wash	☒	☐	☐
Fueling operations	☒	☐	☐
Salt storage controls	☒	☐	☐
Equipment and material storage controls	☒	☐	☐
Waste containers and solid waste controls	☒	☐	☐
5. Overall Evaluation Effectiveness of SWPPP	☒	☐	☐

Required Action: _____

_____

_____

Required Action: _____

_____

_____

Signature: _____

Title: GSA

Date: 9/13/18

09/10/18 SWPPP Observations

Concrete Pad Area

Orange concrete container not covered

Crushed corrugated rusted pipe – remove

Small Recycling bin – remove/cover/move

Bricks/blocks – cover

Open post box - cover

Loose hay/rocks – Sweep up

Loose tarp – remove/put away

Wood beams stacked – cover

Open cardboard boxes - remove/cover

Wood pile (cut trees) – cover/remove

Brush Bin - cover

Bulk Material Storage Bins

Material bins - Sand/gravel/dirt/rocks/etc. – sweep, cover

Rocks (in front of salt) - remove

Pallets?

Millings – remove

Rock/trash pile – remove

Recycling bin – cover

"Pump" in open bin – remove

Extra rocks - remove

Top of Hill

Playground equipment & surrounding trash– remove

Dumpsters – cover

Tire signs?

General Yard

Trash truck parking area – remove trash

Pallet by bus stop area – remove

Pallett by snow plows - remove

1481

Light Poles – remove

FORM 2

TOWN OF Herndon VIRGINIA **Quarterly Inspection Checklist**

Date: 4/4/19 | Facility: Town Shop | Inspector: Bill Smith + Chris Mason

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☒	☐	☐	
Are brooms, dust pans, and mops easily on hand for easy access?	☒	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☒	☐	☐	
Are containment areas in good condition, with valves closed?	☒	☐	☐	
Are dumpsters closed?	☐	☒	☐	Need covers
Is the site free of litter and debris?	☒	☐	☐	
Are catch basins and other inlets to the storm drain system free from trash?	☒	☐	☐	Need witches hats
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☒	☐	☐	
Have proper security measures been taken for storage areas?	☒	☐	☐	
Are all containers labeled with contents on the appropriate label?	☒	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☒	☐	☐	
Are all containers that are not in use closed?	☒	☐	☐	
Are containers stored indoors and away from entrances whenever practical?	☒	☐	☐	

FORM 2

Are maintenance activities conducted indoors whenever practical?	☒	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☒	☐	☐	
Are containers protected from vehicular traffic?	☒	☐	☐	
Have all containers been inspected and are they generally in good condition?	☒	☐	☐	
Do all containers have secondary containment?	☒	☐	☐	
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☐	☒	☐	Cover + Sweep
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☒	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☒	☐	☐	
4. Pump Inspection	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☒	☐	☐	
Have oil pumps been inspected?	☒	☐	☐	
Have other pumps been inspected?	☒	☐	☐	
Has mobile equipment been inspected for potential leaking fluids?	☒	☐	☐	
5. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the pond been inspected?	☒	☐	☐	
Have the oil water separators been inspected?	☒	☐	☐	
Has the vehicle wash catch basin been inspected for sediment build-up?	☒	☐	☐	

FORM 2

6. Scrap Metal Storage	Yes	No	N/A	Observations/Required Actions
Have scrap parts and empty drums no longer in use been removed from the property?	☒	☐	☐	
7. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☒	☐	☐	
8. Salt Storage Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the salt storage area protected from run-on of stormwater?	☒	☐	☐	
Is the area around the salt storage area swept after each use and free of material that could mingle with stormwater?	☒	☐	☐	
9. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the spill kit fully stocked at the fuel station and accessible for use?	☒	☐	☐	
Is all signage in good, readable condition?	☒	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☒	☐	☐	
Has the shut-off valve been tested?	☒	☐	☐	
10. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☒	☐	☐	E93 Leak + Lubing operation of spreader chains
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☒	☐	☐	
Are maintenance activities performed indoors when practical?	☒	☐	☐	
Are washing activities confined to the wash bay?	☒	☐	☐	

FORM 2

Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☐	☒	☐	Repave
11. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☒	☐	☐	
12. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on pollution prevention and the Town's good housekeeping SOPs at least annually?	☒	☐	☐	
Are employees trained on proper spill prevention and response for the materials that they handle?	☒	☐	☐	

FORM 2

TOWN OF Herndon VIRGINIA **Quarterly Inspection Checklist**

Town Shop

Date: 6/12/19 | Facility: 1479/1481 | Inspector: Bill Smith + Chris Mesa

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☑	☐	☐	
Are brooms, dust pans, and mops easily on hand for easy access?	☑	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☑	☐	☐	
Are containment areas in good condition, with valves closed?	☑	☐	☐	
Are dumpsters closed?	☐	☑	☐	Roll off containers
Is the site free of litter and debris?	☐	☒	☐	Mostly
Are catch basins and other inlets to the storm drain system free from trash?	☒	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☒	☐	☐	
Have proper security measures been taken for storage areas?	☐	☒	☐	Some locked - some NOT - Security protocols in progress
Are all containers labeled with contents on the appropriate label?	☐	☒	☐	Mostly
Are Safety Data Sheets available for all chemical substances?	☒	☐	☐	
Are all containers that are not in use closed?	☐	☒	☐	Mechanics
Are containers stored indoors and away from entrances whenever practical?	☒	☐	☐	

FORM 2

Are maintenance activities conducted indoors whenever practical?	☒	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☒	☐	☐	
Are containers protected from vehicular traffic?	☒	☐	☐	
Have all containers been inspected and are they generally in good condition?	☒	☐	☐	
Do all containers have secondary containment?	☐	☒	☐	large containers in secondary containment - small 1-2 gallon containers not
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☐	☒	☐	
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☒	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☒	☐	☐	
4. Pump Inspection	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☒	☐	☐	outside Agency
Have oil pumps been inspected?	☒	☐	☐	visual
Have other pumps been inspected?	☒	☐	☐	visual
Has mobile equipment been inspected for potential leaking fluids?	☒	☐	☐	visual
5. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the pond been inspected?	☒	☐	☐	
Have the oil water separators been inspected?	☒	☐	☐	cleaned & Inspected in May
Has the vehicle wash catch basin been inspected for sediment build-up?	☒	☐	☐	

FORM 2

6. Scrap Metal Storage	Yes	No	N/A	Observations/Required Actions
Have scrap parts and empty drums no longer in use been removed from the property?	☒	☐	☐	
7. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☒	☐	☐	
8. Salt Storage Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the salt storage area protected from run-on of stormwater?	☒	☐	☐	
Is the area around the salt storage area swept after each use and free of material that could mingle with stormwater?	☒	☐	☐	
9. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the spill kit fully stocked at the fuel station and accessible for use?	☒	☐	☐	
Is all signage in good, readable condition?	☒	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☒	☐	☐	
Has the shut-off valve been tested?	☒	☐	☐	
10. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☒	☐	☐	893 leaking
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☒	☐	☐	
Are maintenance activities performed indoors when practical?	☐	☐	☐	
Are washing activities confined to the wash bay?	☒	☐	☐	

FORM 2

Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☒	☐	☐	
11. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☐	☒	☐	Lot from 1993 overtime build up.
12. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on pollution prevention and the Town's good housekeeping SOPs at least annually?	☒	☐	☐	
Are employees trained on proper spill prevention and response for the materials that they handle?	☒	☐	☐	

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Date: 6/12/19 Evaluator(s): Bill Smith + Chris Mason

	No Action Required	Action Required	Not Applicable
1. Accuracy of Site Map			
Identification and location of outfalls	☒	☐	☐
Watershed boundaries	☒	☐	☐
Direction of runoff flow	☒	☐	☐
Buildings and impervious areas	☒	☐	☐
Exposed material storage areas	☒	☐	☐

Required Action: _____

2. Accuracy of SWPPP and Related Records

Pollution Prevention Team Members	☐	☒	☐
Outfall characteristics	☒	☐	☐
Quarterly inspection checklists	☒	☐	☐
Structural control maintenance records	☒	☐	☐
Chemical inventory (Appendix A)	☐	☐	☐
Employee training records	☒	☐	☐

Required Action: Pollution Prevention Team member

3. Accuracy of Potential Pollutant Sources

Chemical storage	☒	☐	☐
Vehicle maintenance	☒	☐	☐
Vehicle wash	☒	☐	☐
Fueling island	☒	☐	☐
Storage building	☒	☐	☐
Salt and liquid deicer storage	☒	☐	☐
Waste containers	☐	☒	☐
Material stockpiles	☐	☒	☐
Equipment and vehicle parking	☐	☒	☐
Equipment and material storage	☒	☐	☐

Required Action: Recycle dumpster needs replaced. Materials need swept + mixed. B93 needs replaced

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION, CONT.

	No Action Required	Action Required	Not Applicable
4. Effectiveness of Stormwater Management Controls			
Good housekeeping practices	☒	☐	☐
Preventive maintenance program	☒	☐	☐
Spill prevention and response	☒	☐	☐
Routine observations	☒	☐	☐
High risk activity exposure	☒	☐	☐
Scrap material storage and salvage	☒	☐	☐
Sediment and erosion control	☒	☐	☐
Management of stormwater runoff	☒	☐	☐
Vehicle maintenance	☒	☐	☐
Vehicle wash	☒	☐	☐
Fueling operations	☒	☐	☐
Salt storage controls	☒	☐	☐
Equipment and material storage controls	☒	☐	☐
Waste containers and solid waste controls	☐	☒	☐

Required Action: Work containers need covered

5. Overall Evaluation Effectiveness of SWPPP ☒ ☐ ☐

Required Action: _____

Signature: _____

Title: GSA

Date: 6/12/19

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

Mike Mueller
909 Ferndale Ave
Herndon, VA 20170

06/17/2019

Subject: Herndon Centennial Nutrient Management Plan Approval

The following nutrient management plan has been reviewed by Abby Baxter and approved by the Virginia Department of Conservation & Recreation as compliant with the provisions of the Code of Virginia 10.1-104.5. Please note that this plan has not been reviewed for compliance with more restrictive requirements from other specific legislative, regulatory or incentive programs.

Plan Name	Planner	Acres	Start Date	Expiration Date
Herndon Centennial	Jeff Michel	100.74	06/07/2019	06/07/2024

A copy of this letter should be kept with your nutrient management plan. Initiation of plan revision is recommended by the Department to occur at least six months prior to the expiration date. If you have any questions concerning this letter or approvals, please contact me via phone or email.

Sincerely,

Abby Baxter
Urban Nutrient Management Specialist
Department of Conservation and Recreation
600 East Main St., 24th Floor
Richmond, Virginia 23219
(804) 217 - 2010
abby.baxter@dcr.virginia.gov

FORM 2

TOWN OF Herndon VIRGINIA

Quarterly Inspection Checklist

Date: 6-26-19	Facility: Golf Course Maint Facility	Inspector: Mueller / Hall

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☑	☐	☐	
Are brooms, dust pans, and mops on hand for easy access?	☑	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☑	☐	☐	
Are containment areas in good condition, with valves closed?	☑	☐	☐	
Are dumpsters closed?	☑	☐	☐	
Are activity areas free of litter and debris?	☑	☐	☐	
Are catch basins and other inlets to the storm drain system free from trash?	☑	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☑	☐	☐	
Have proper security measures been taken for storage areas?	☑	☐	☐	
Are all containers labeled with contents on the appropriate label?	☑	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☑	☐	☐	

Are all containers that are not in use closed?	☑	☐	☐	
Are containers stored indoors and away from entrances whenever practical?	☑	☐	☐	
Are maintenance activities conducted indoors whenever practical?	☑	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☑	☐	☐	
Are containers protected from vehicular traffic?	☑	☐	☐	
Have all containers been inspected and are they generally in good condition?	☑	☐	☐	
Do all containers have secondary containment?	☑	☐	☐	
Are all chemicals mixed indoors or under cover?	☑	☐	☐	
Are temporary booms deployed when chemicals are transferred between the storage area and equipment?	☑	☐	☐	
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☑	☐	☐	
Have soil and other material stockpile areas exposed for more than 24 hours been covered with tarps?	☑	☐	☐	
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☑	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☑	☐	☐	
Are fuel pumps locked when the fuel station is not in use?	☑	☐	☐	
Is the Maintenance Facility perimeter fencing in good condition?	☑	☐	☐	

FORM 2

Has mobile equipment been inspected for potential leaking fluids?	☑	☐	☐	
4. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the StormFilter been inspected?	☑	☐	☐	
Has the oil water separator been inspected?	☑	☐	☐	AAA Stormwater Mgmt. Cleaned on 5-7-19
5. Scrap Metal Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have scrap parts and empty drums no longer in use been removed from the property?	☑	☐	☐	
6. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☑	☐	☐	
7. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☑	☐	☐	
Is the spill kit fully stocked at the fuel station and accessible for use?	☑	☐	☐	
Is all signage in good, readable condition?	☑	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☑	☐	☐	
Has the shut-off valve been tested?	☑	☐	☐	
8. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☑	☐	☐	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☑	☐	☐	

FORM 2

Are maintenance activities performed indoors when practical?	☑	☐	☐	
Are washing activities confined to specified, approved wash areas?	☑	☐	☐	
Are washing activities conducted without the use of detergents?	☑	☐	☐	
Are sprayers and spreaders rinsed indoors where wash water discharges to the sanitary sewer system?	☑	☐	☐	
Based on a visual inspection of SDO #1, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering the storm drain system? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	
Based on a visual inspection of the Equipment Washing Pad, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering surface waters? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	Filtration Sock is used to prevent clippings entering surface waters.
Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☑	☐	☐	
9. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the Maintenance Facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☑	☐	☐	
10. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on the SWPPP at least biennially?	☑	☐	☐	6-18-19 attended tow Training by Wood Consulting
Are employees trained on proper spill prevention and response for the materials that they handle?	☑	☐	☐	11 11

FORM 2

TOWN OF Herndon VIRGINIA

Quarterly Inspection Checklist

Date: 2/23/19	Facility: Golf course Maintenance	Inspector: Will Tarrant

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☑	☐	☐	
Are brooms, dust pans, and mops on hand for easy access?	☑	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☑	☐	☐	
Are containment areas in good condition, with valves closed?	☑	☐	☐	
Are dumpsters closed?	☑	☐	☐	
Are activity areas free of litter and debris?	☑	☐	☐	
Are catch basins and other inlets to the storm drain system free from trash?	☑	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☑	☐	☐	
Have proper security measures been taken for storage areas?	☑	☐	☐	
Are all containers labeled with contents on the appropriate label?	☑	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☑	☐	☐	

Are all containers that are not in use closed?	☑	☐	☐	
Are containers stored indoors and away from entrances whenever practical?	☑	☐	☐	
Are maintenance activities conducted indoors whenever practical?	☑	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☑	☐	☐	
Are containers protected from vehicular traffic?	☑	☐	☐	
Have all containers been inspected and are they generally in good condition?	☑	☐	☐	
Do all containers have secondary containment?	☑	☐	☐	
Are all chemicals mixed indoors or under cover?	☑	☐	☐	chemical building for mixing & loading
Are temporary booms deployed when chemicals are transferred between the storage area and equipment?	☑	☐	☐	Filtration sock is used
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☑	☐	☐	
Have soil and other material stockpile areas exposed for more than 24 hours been covered with tarps?	☑	☐	☐	Bays w/material are tarped. Need (2) new tarps for millings piles at bulk storage
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☑	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☐	☐	☑	No spills
Are fuel pumps locked when the fuel station is not in use?	☑	☐	☐	
Is the Maintenance Facility perimeter fencing in good condition?	☑	☐	☐	

FORM 2

Has mobile equipment been inspected for potential leaking fluids?	☑	☐	☐	
4. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the StormFilter been inspected?	☑	☐	☐	Stormwater Mgmt. FRG INC. last cleaned 4-23-18
Has the oil water separator been inspected?	☑	☐	☐	Stormwater Mgmt. FRG INC. Separator last inspected 4-23-18
5. Scrap Metal Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have scrap parts and empty drums no longer in use been removed from the property?	☑	☐	☐	
6. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☑	☐	☐	
7. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☑	☐	☐	
Is the spill kit fully stocked at the fuel station and accessible for use?	☑	☐	☐	
Is all signage in good, readable condition?	☑	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☑	☐	☐	
Has the shut-off valve been tested?	☑	☐	☐	
8. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☑	☐	☐	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☑	☐	☐	

Are maintenance activities performed indoors when practical?	☑	☐	☐	
Are washing activities confined to specified, approved wash areas?	☑	☐	☐	
Are washing activities conducted without the use of detergents?	☑	☐	☐	
Are sprayers and spreaders rinsed indoors where wash water discharges to the sanitary sewer system?	☑	☐	☐	
Based on a visual inspection of SDO #1, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering the storm drain system? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	Implemented a designated area to park mowers and blow off clippings with backpack blower to reduce amount of clippings when washing the machine
Based on a visual inspection of the Equipment Washing Pad, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering surface waters? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	Implemented a designated area to park mowers and blow off clippings with a blower to reduce the amount of clippings when washing the machines. A new filtration sock is installed to catch clippings from entering water.
Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☑	☐	☐	
9. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the Maintenance Facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☑	☐	☐	Attended Good Housekeeping & Pollution Prevention training on 6-21-18
10. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on the SWPPP at least biennially?	☑	☐	☐	Attended Good Housekeeping & Pollution Prevention training on 6-21-18
Are employees trained on proper spill prevention and response for the materials that they handle?	☑	☐	☐	

FORM 2

TOWN OF Herndon VIRGINIA

Quarterly Inspection Checklist

Date: 10/15/18	Facility: Golf course Maintenance	Inspector: Will Tarrant

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☑	☐	☐	Floors clean, but some areas are wet due to rain/snow. Will be dry once it passes
Are brooms, dust pans, and mops on hand for easy access?	☑	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☑	☐	☐	No visible leaks
Are containment areas in good condition, with valves closed?	☑	☐	☐	
Are dumpsters closed?	☑	☐	☐	
Are activity areas free of litter and debris?	☐	☐	☐	Sweep all leaves out from shop
Are catch basins and other inlets to the storm drain system free from trash?	☑	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☐	☐	☐	All areas/rooms are organized except for one room. Need to clear floor and organize shelves
Have proper security measures been taken for storage areas?	☑	☐	☐	
Are all containers labeled with contents on the appropriate label?	☑	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☐	☐	☐	SDS's available online for all chemicals

FORM 2

Are all containers that are not in use closed?	☑	☐	☐	
Are containers stored indoors and away from entrances whenever practical?	☑	☐	☐	
Are maintenance activities conducted indoors whenever practical?	☑	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☑	☐	☐	
Are containers protected from vehicular traffic?	☑	☐	☐	
Have all containers been inspected and are they generally in good condition?	☑	☐	☐	
Do all containers have secondary containment?	☑	☐	☐	
Are all chemicals mixed indoors or under cover?	☑	☐	☐	
Are temporary booms deployed when chemicals are transferred between the storage area and equipment?	☑	☐	☐	New boom sock to be used at mixing/loading station
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☐	☑	☐	Mulch and sand pile in bulk storage need to be swept
Have soil and other material stockpile areas exposed for more than 24 hours been covered with tarps?	☐	☑	☐	Mulch and milling piles need to be tarped. Sand pile is tarped
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☑	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☐	☐	☑	No spills
Are fuel pumps locked when the fuel station is not in use?	☑	☐	☐	
Is the Maintenance Facility perimeter fencing in good condition?	☑	☐	☐	

FORM 2

Has mobile equipment been inspected for potential leaking fluids?	☑	☐	☐	
4. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the StormFilter been inspected?	☐	☑	☐	Needs inspection
Has the oil water separator been inspected?	☐	☑	☐	Needs inspection
5. Scrap Metal Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have scrap parts and empty drums no longer in use been removed from the property?	☑	☐	☐	
6. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☑	☐	☐	
7. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☑	☐	☐	Fuel pumps are working properly
Is the spill kit fully stocked at the fuel station and accessible for use?	☑	☐	☐	
Is all signage in good, readable condition?	☑	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☑	☐	☐	Accessible, but have not been tested
Has the shut-off valve been tested?	☑	☐	☐	
8. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☑	☐	☐	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☑	☐	☐	

FORM 2

Are maintenance activities performed indoors when practical?	☑	☐	☐	
Are washing activities confined to specified, approved wash areas?	☑	☐	☐	
Are washing activities conducted without the use of detergents?	☑	☐	☐	
Are sprayers and spreaders rinsed indoors where wash water discharges to the sanitary sewer system?	☑	☐	☐	
Based on a visual inspection of SDO #1, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering the storm drain system? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	
Based on a visual inspection of the Equipment Washing Pad, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering surface waters? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	[redacted] Very little active mowing this time of year. Clippings are to be blown off mowers before rinsing, and new boom sock will be used when active mowing occurs
Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☑	☐	☐	Maintenance vehicles to be de-greased where needed w/ de-greasing product.
9. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the Maintenance Facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☑	☐	☐	
10. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on the SWPPP at least biennially?	☑	☐	☐	
Are employees trained on proper spill prevention and response for the materials that they handle?	☑	☐	☐	

FORM 2

TOWN OF Herndon VIRGINIA

Quarterly Inspection Checklist

Date: 6-29-18	Facility: Golf Maint.	Inspector: Mike Mueller

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	☑	☐	☐	
Are brooms, dust pans, and mops on hand for easy access?	☑	☐	☐	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	☑	☐	☐	
Are containment areas in good condition, with valves closed?	☑	☐	☐	
Are dumpsters closed?	☑	☐	☐	
Are activity areas free of litter and debris?	☑	☐	☐	
Are catch basins and other inlets to the storm drain system free from trash?	☑	☐	☐	
2. Materials Handling and Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	☑	☐	☐	
Have proper security measures been taken for storage areas?	☑	☐	☐	
Are all containers labeled with contents on the appropriate label?	☑	☐	☐	
Are Safety Data Sheets available for all chemical substances?	☑	☐	☐	

Are all containers that are not in use closed?	☑	☐	☐	
Are containers stored indoors and away from entrances whenever practical?	☑	☐	☐	
Are maintenance activities conducted indoors whenever practical?	☑	☐	☐	
If outdoors, are containers protected from precipitation and runoff whenever practical?	☑	☐	☐	
Are containers protected from vehicular traffic?	☑	☐	☐	
Have all containers been inspected and are they generally in good condition?	☑	☐	☐	
Do all containers have secondary containment?	☑	☐	☐	
Are all chemicals mixed indoors or under cover?	☑	☐	☐	
Are temporary booms deployed when chemicals are transferred between the storage area and equipment?	☑	☐	☐	
Have soil and other material stockpile areas been swept to prevent runoff of materials?	☑	☐	☐	
Have soil and other material stockpile areas exposed for more than 24 hours been covered with tarps?	☐	☑	☐	Tarped asphalt millings piles.
3. Spill Prevention and Response	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	☑	☐	☐	
Have all spills been properly cleaned up and disposed of properly?	☑	☐	☐	
Are fuel pumps locked when the fuel station is not in use?	☑	☐	☐	
Is the Maintenance Facility perimeter fencing in good condition?	☑	☐	☐	

FORM 2

Has mobile equipment been inspected for potential leaking fluids?	☑	☐	☐	
4. Structural Control Devices	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Has the StormFilter been inspected?	☑	☐	☐	Stormwater mgmt. FRG, Inc. Cleaned Storm Filter - 4-23-18
Has the oil water separator been inspected?	☑	☐	☐	Stormwater mgmt. FRG, Inc. Inspected Seperator 4-23-18
5. Scrap Metal Storage	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have scrap parts and empty drums no longer in use been removed from the property?	☑	☐	☐	
6. Erosion and Sediment Controls	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the facility free of bare areas that could result in soil erosion?	☑	☐	☐	
7. Fueling Operations	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Have fuel pumps been inspected?	☑	☐	☐	
Is the spill kit fully stocked at the fuel station and accessible for use?	☑	☐	☐	
Is all signage in good, readable condition?	☑	☐	☐	
Have fire extinguishers been tested and are they accessible for use?	☑	☐	☐	
Has the shut-off valve been tested?	☑	☐	☐	
8. Vehicles and Equipment Maintenance and Washing	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Are vehicles and equipment checked for leaking fluids?	☑	☐	☐	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?	☑	☐	☐	

FORM 2

Are maintenance activities performed indoors when practical?	☑	☐	☐	
Are washing activities confined to specified, approved wash areas?	☑	☐	☐	
Are washing activities conducted without the use of detergents?	☑	☐	☐	
Are sprayers and spreaders rinsed indoors where wash water discharges to the sanitary sewer system?	☑	☐	☐	
Based on a visual inspection of SDO #1, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering the storm drain system? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	
Based on a visual inspection of the Equipment Washing Pad, are controls adequate to prevent grass clippings and other materials as a result of equipment washing from entering surface waters? This inspection is required during quarters where there is active mowing and turf maintenance.	☑	☐	☐	New Filtration Sock was installed to prevent clippings entering surface waters.
Are vehicle and equipment parking and storage areas free of built up pollutants (grease, dirt, etc.). If not, what is the plan for removing these materials?	☑	☐	☐	
9. Other Indicators of Illicit Discharges	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is the Maintenance Facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	☑	☐	☐	
10. Personnel Training and Record Keeping	**Yes**	**No**	**N/A**	**Observations/Required Actions**
Is a program in place to train employees on the SWPPP at least biennially?	☑	☐	☐	Attended Good Housekeeping & Pollution Prevention Training on 6-21-18
Are employees trained on proper spill prevention and response for the materials that they handle?	☑	☐	☐	

SMALL SPILL REPORT

Complete this form for each spill incident that is not considered a significant spill.

Incident Number IR #2019-N-0465 (Alan Lacy DEQ)

Mike Mueller	HEPACO - William Dodd 540-645-8709 703-583-3861
Reporting Individual	Individual Responsible for Clean-Up

8-2-18	Diesel Fuel	48 gallons
Date of Spill	Material Spilled	Approximate Amount of Spill

Location of Spill : Elden Street in vacant lot between Homewood Suites and AVIS car rental.

Cause of Spill : Truck driver was turning around in vacant lot and fuel tank hit curb causing fuel leak.

Action Taken : Police were called with Hazmat team from FFCO. Fire dept. then HEPACO was contacted to clean up spill. They installed absorbant mat's & snakes. DEQ was contacted.

Reporting Individual	Individual Responsible for Clean-Up

Date of Spill	Material Spilled	Approximate Amount of Spill

Location of Spill

Cause of Spill

Action Taken

Town of Herndon
Stormwater Pollution Prevention Training

June 18, 2019

wood.

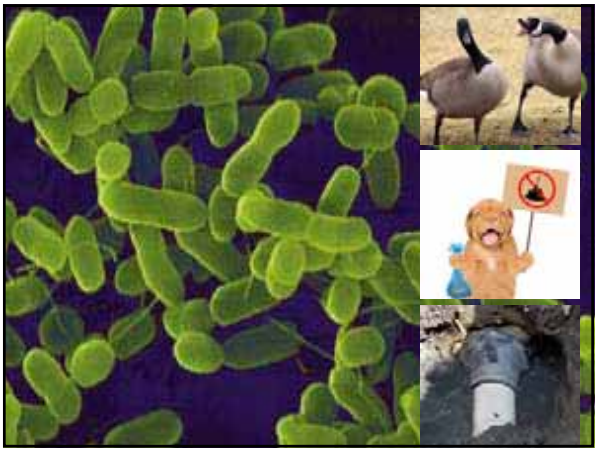
Welcome to Today's Workshop

Three BIG focus areas:

- Overview of the Town's pollution prevention requirements.
- Understanding your roles and responsibilities.
- How to detect and report an illicit discharge.

Stormwater Jeopardy

- Stormwater is defined as water flowing over the land during and immediately after a rain storm or snow event.
  TRUE
- Stormwater from the Public Works complex is treated at a state-of-the-art wastewater treatment facility.
  FALSE
- Water from the Town eventually flows to the Susquehanna River.
  FALSE
- Sugarland Run, which drains the majority of the Town, is polluted with fecal coliform bacteria.
  TRUE



Stormwater Jeopardy

- Salt is considered a pollutant and must be stored under cover.
  TRUE
- Pollution costs our region $500 million in lost economic activity and clean up each year.
  FALSE
- The Town is subject to a U.S. Environmental Protection Agency permit to discharge stormwater from its storm pipes.
  TRUE
- The most effective way to keep our streams clean is to capture the pollution and treat it before it is discharged from a storm drain.
  FALSE

Stormwater Jeopardy

- Today's training is going to be awesome, but it is not one of the requirements under the Town's permit.
  FALSE
- 7:00 a.m. is too early for any type of training, no matter how important.

Town Pollution Prevention Requirements

Town Stormwater Permit

- The Town has operated under a Municipal Separate Storm Sewer System (MS4) permit since 2003.
- Requirement of both the federal Clean Water Act and the State Water Control Law.
- Regulates anything that is discharged from a Town stormwater outfall.
- Updated and re-issued in 2018.

MS4 Permit Basics

- Prohibits all non-stormwater discharges unless explicitly authorized.
- Requires the Town to develop an MS4 Program Plan.
- Establishes specific reporting requirements.
- Fine of up to $32,500 per violation, per day!

What's in the MS4 Program Plan?

Six Minimum Control Measures

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

Public Education and Involvement

- Focus on three pollutants of concern:
  - nutrients from fertilizers
  - pet waste
  - illicit discharges from commercial operations
- Distribute pollution prevention messages.
- Make it easy for residents to report a problem.
- Host at least four public involvement opportunities annually.

Illicit Discharge Detection

- Prohibit illicit discharges through the Town's ordinance.
- Maintain an accurate storm sewer and outfall map.
- Screen at least 50 outfalls annually.

Construction and Post-Construction

- Implement erosion and sediment controls during development.
- Require stormwater controls for after development.
- Inspect stormwater management structures.

Good Housekeeping

- Standard Operating Procedures (SOPs) for potential pollution-causing Town operations.
- Stormwater Pollution Prevention Plans (SWPPPs) for high priority facilities:
  - Public Works Complex
  - Centennial Golf Course
- Nutrient management plans (NMPs) for fertilizer application.
- Annual training.

Training Requirements

	2019	2020	2021	2022	2023
Recognition and Reporting of Illicit Discharges	✓		✓		✓
Pollution Prevention SOPs		✓		✓	
Spill Response for Emergency Responders					✓

Your Roles and Responsibilities General Good Housekeeping

Reduce the chance for contamination.

- Conduct maintenance indoors.
- Store materials under cover when at all possible.
- Keep liquid materials away from bay doors.
- Provide secondary containment for all containers.
- Ensure that caps and lids fit tight.
- Use drip pans for leaks and when changing fluids.

Be prepared for a possible leak or spill.

- Clear access to storage drums and other containers.
- Know where your spill kit and safety equipment are located.
- If in the field, bring a spill kit with you!
- Label all hazardous substance containers in plain English.

Take ownership of the situation.

- Clean up spills and drips promptly.
- Sweep up used dry absorb daily and dispose of properly.
- **Any spill requires attention. There is no minimum amount.**

Know when to call HAZMAT.

Photo Credit: Fairfax County Fire & Hazardous Materials Investigative Services

Check your surroundings daily.

- Observe tanks and drums for leaks and corrosion.
- Inspect equipment for signs of wear, excessive noise, vibration, etc.
- Look for unusual staining.
- Investigate and report unusual odors.
- Make sure all valves are in proper position.
- Check for torn bags or bags exposed to rainwater.
- Ensure all used absorbents are cleaned up.
- Check and replenish spill kits as needed.
- Pick up trash and debris.

Know your SOPs!

- Vehicle and Equipment Maintenance and Cleaning
- Pesticides, Herbicides, and Fertilizers
- Outdoor Material Storage
- Road, Street, Parking Lot, and Sidewalk Maintenance
- Utility Construction and Maintenance
- Snow and Deicing Operations

Recognition and Reporting of Illicit Discharges

Blue Plains Advanced Wastewater Treatment Facility – Washington, DC

Sugarland Run – Herndon, VA

What is an illicit discharge?

- An illicit discharge is the discharge of anything other than stormwater unless allowed by permit.
- This includes Town property and private property.

Why is it important to report illicit discharges?

- An illicit discharge is prohibited by Town Code.

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- It is also punishable by jail and large fines by the Virginia Department of Environmental Quality and U.S. EPA.

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Why is it important to report illicit discharges?

- An illicit discharge is prohibited by Town Code.
- It is also punishable by jail and large fines by the Virginia Department of Environmental Quality and U.S. EPA.
- The Town is responsible for anything that comes from its storm drain system – but generally won't be penalized if it reports discharges and spills in a timely manner.
- Illicit discharges contaminate our water resources.

What is allowed?

- Uncontaminated stormwater
- Water line flushing
- Landscape irrigation
- Discharges of potable water
- Foundation and footing drains
- Air conditioning condensation
- Water from crawl space pumps
- Individual residential car washing
- Dechlorinated swimming pool discharges
- Street wash water (provided efforts have been made to clean up residuals)

What is not allowed?

Everything else, including non-residential wash water.

Signs of an Illicit Discharge

Some illicit discharges are obvious – but not always!

- The key is to be observant.
- Is the water discolored, sudsy, or oily?
- Is there an unusual odor?
  - Petroleum?
  - Rotten Eggs?
  - Sewage?
  - Rancid/sour?
  - Chlorine?
- Are there deposits or stains visible?

Signs of an Illicit Discharge




Outfall with Multiple Signs of Illicit Discharges

Dry Weather Discharge from Non-Standard Pipe

Sometimes its Natural – Natural Foam

Sometimes its Natural – Iron Fixing Bacteria

Sometimes its Natural – Pollen

Examples of Illicit Discharges

Construction Site Runoff

Construction Site Runoff

Restaurant Grease

Residential Contractor

Private Dumpsters

Private Washing or Other Outdoor Activities

Carpet and Other Cleaning Service Wash Water

Blowing Yard Waste into the Storm Drain

What if I find a potential illicit discharge?

- Observe where the potential discharge is coming from.
- Take photos and capture a sample (if safe).
- Report the discharge immediately to the Town DPW.
- All illicit discharges must be logged and annually reported to DEQ.

Town Contact for Illicit Discharges

John Jay Sergent
(703) 435-6800 x2072

What has been discovered in Herndon?

Suspected/actual illicit discharges found over the last few years:

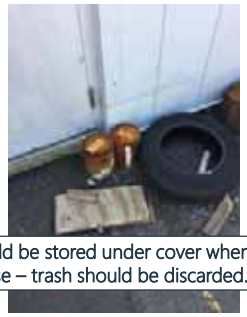
- Restaurant grease
- Diesel
- Car wash
- Paint
- Sediment from construction
- Leaky/overfilled dumpsters
- Beer wort

Bringing It Home – Mock Audit, May 2018

Outdoor Storage

Storage containers should be in good condition and the contents protected from precipitation.

Outdoor Storage



Containers should be stored under cover when not actively in use – trash should be discarded.

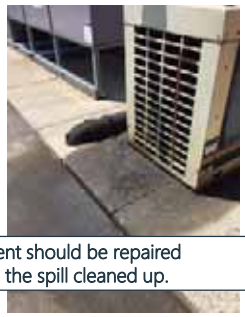
Outdoor Storage

Used containers should be disposed of properly and in a timely manner.

Storage Drums

All drums should have secondary containment – leaks should be identified and dealt with through frequent inspections.

Outdoor Equipment



Leaking equipment should be repaired immediately and the spill cleaned up.

Dumpsters

All dumpsters should be protected by rain with a lid or tarp.

Dumpsters

Dumpsters

Vehicles and Equipment

Leaking vehicles and equipment should be repaired – drip pans should be used to capture leakage.

Vehicles and Equipment

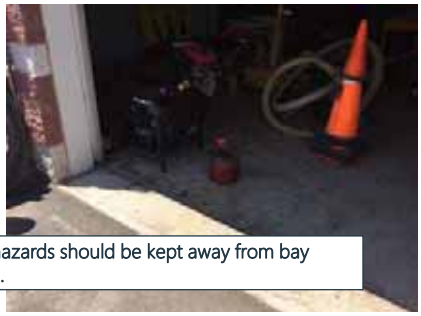
Stockpiles

Stockpiles should be covered with a tarp when not actively in use. Use berms to contain the material if at all possible.

Litter and Debris

Storm drains should be kept free of litter and debris.

Indoor Storage



Spill hazards should be kept away from bay doors.

Key take-aways!

1. If it isn't uncontaminated stormwater, and not explicitly allowed in the Town's permit, it is an illicit discharge.
2. Preventing pollution is the most effective control measure.
3. You have a personal responsibility to act – when in doubt, report an issue.

Thanks! Questions?

Presented By: John Jay Sargent **Safety Training Town Shop (DPW)** **Date: 18-Jun-19**

Subject: MS4

Administration

Vacant	
Tammy Chastain	TC
Vacant	
Mike Farr	
Bob Etris	BE

Buildings

Ray McCarter	RM
Kirk Anzengruber	KA
Bobby Bowers	BB
John Johnson	JJ
Vacant	
Kenny Clark	
Ronnie Mitchell	RM

Grounds

Jimmy Linton	JL
Ollie Bertrand	OB
Chris Cannady	CC
Chris Conroy	CC
Andrew Crawford	AC
Elmer Cuadra	EC
Larry Hogan	LH
Manuel Junco	MJ
Andrew Taylor	AJ
Brandon Anderson	
Manuel Cruz	MC
Ira Via	IV

Row Inspections

Randy Croson	RC
Jeff Breidenstein	JB
Joe Fauble	JF

Names Not On The List

John Jay Sergent
Richard Smith
Ben Greve

Streets

David Higgins	DH
Bruce Corum	BC
Eric Romero	ER
Joe Spence	JS
Jason Smith	JS
Charlie Wilburn	CW
Jared Elliott	JE
Patrick Dillon	PD
David Crawford	DC
Vacant	

Refuse

Scott Keebaugh	SK
Donnie Brown	DB
Vincent Farabaugh	VF
Kevin Green	KG
Isaih Harris	IH
Carl Lowe	CL
Kevin Price	KP
Denis Quintanilla	DQ
Howard Spriggs	
Mat Lesiv	ML
Vacant	
Steven Trent	ST
Cordale Simmons	
Donte Taylor	
Dakota Dalton	DD

Names Not On The List

Scott Brodbeck
Ryan Shorty
John Emrich

GSA

Vacant	
John Craft	JC
Sue Killian	
Bill Smith	
Paul Wilcox	PW
Joe Palma	JP
Justin Grande	JL
Chris Mason	CM
Richelle Lamarr	RL

Water

Lenny Lawson	LL
John Barogh	JB
Gregory Croson	GC
Gerson Galicia	GG
Don Madden	DM

Sewer

Brian Keebaugh	BK
Jose Bonilla	JB
Vacant	
Vacant	
Harry Middleton	HM
Brayan Belteton	BB

Traffic

Cliff Hoffman	CH
Kyle Fary	KF
Drew Mason	D.M

Names Not On The List

Jeff Johnwiels JJS
Mike Mueller

APPENDIX G

Redevelopment Calculations

Street Sweeping Calculations

More Stringent Single Family Development Calculations

Spreadsheets Showing Shared Credit Reductions with Fairfax County for Projects Implemented During FY19

Overall Means and Measures – Summary of Progress Through FY19

	Cumulative Reductions from Worksheets						
	FY17 Actual	FY18	FY19	FY20	FY21	FY22	FY23
Redevelopment							
TN	41.62	41.62	47.38	47.38	47.38	47.38	47.38
TP	5.27	5.27	6.74	6.74	6.74	6.74	6.74
TSS	3,194.91	3,194.91	3,826.33	3,826.33	3,826.33	3,826.33	3,826.33
Shared Credit Projects							
TN	1,170.21	1,679.46	1,902.80	1,902.80	1,902.80	1,902.80	1,902.80
TP	249.62	377.27	436.83	436.83	436.83	436.83	436.83
TSS	98,940.33	140,928.12	162,458.34	162,458.34	162,458.34	162,458.34	162,458.34
Street Sweeping							
TN	728.21	612.50	360.50	525.00	525.00	525.00	525.00
TP	291.28	245.00	144.20	210.00	210.00	210.00	210.00
TSS	87,385.20	73,500.00	43,260.00	63,000.00	63,000.00	63,000.00	63,000.00
Purchased Nutrient Credits							
TN	-	-	-	-	-	-	-
TP	-	-	-	-	-	-	-
TSS	-	-	-	-	-	-	-
2006-2009 Facilities							
TN	472.74	472.74	472.74	472.74	472.74	472.74	472.74
TP	84.70	84.70	84.70	84.70	84.70	84.70	84.70
TSS	48,785.23	48,785.23	48,785.23	48,785.23	48,785.23	48,785.23	48,785.23
More Stringent Development							
TN	22.60	23.91	38.70	38.70	38.70	38.70	38.70
TP	2.98	13.94	15.99	15.99	15.99	15.99	15.99
TSS	1,146.47	1,146.47	2,126.49	2,126.49	2,126.49	2,126.49	2,126.49
Additional Means and Methods							
TN	-	-	-	-	-	-	-
TP	-	-	-	-	-	-	-
TSS	-	-	-	-	-	-	-
Total Reductions							
TN	2,435.38	2,830.23	2,822.12	2,986.62	2,986.62	2,986.62	2,986.62
TP	633.85	726.19	688.47	754.27	754.27	754.27	754.27
TSS	239,452.14	267,554.73	260,456.39	280,196.39	280,196.39	280,196.39	280,196.39

Redevelopment Calculations – New Credit for FY19

Virginia Tire and Auto		
Information	**Input**	**As Developed**
Date of Final Calculation	2019	
Rainfall		
Site Area (SF)	45302.4	
Site Area (AC)		1.04
Watershed I %		
Pre-I Area (SF)	29620.8	
Pre-I Area (AC)		0.68
Pre-I Area (%)		
Pre C Value		
Pre-TP Load (VRRM)		**1.68**
Post-I Area (SF)	36154.8	
Post-I Area (AC)		0.83
Post-I Area (%)		
Post C Value		
Post-TP Load (VRRM)		**1.92**
Increase/Decrease		0.24
Stormwater Controls		
BMP 1	BaySaver Barracuda + Isolator Row	
Efficiency	0.5	
I Area (AC)	0.32	
TP Removed		0.37
BMP 2	Filterra	
Efficiency	0.5	
I Area (AC)	0.24	
TP Removed		0.28
BMP 3	NA	
Efficiency	0	
I Area (AC)	0	
TP Removed		0.00
Total BMP TP Removed		**0.65**
Purchased Off-Site Credit		0.00
Net Change in TP		**(0.41)**

Creditable Reductions for TP, TN, and TSS Per Guidance Appendix V.E			
TP Decrease for Impervious Reduction			-
TP Decrease for BMPs (Proportion of BMP Applied to TMDL Reduction)			
	0.63		(0.41)
On-Site Creditable TP Decrease			(0.41)
Purchased Off-Site TP Credits			-
Total Creditable TP Decrease			**(0.41)**

Total Associated TN Loac	6.9		13.25
TN Decrease from Impervious Reduction			-
TN Decrease for BMPs	Efficiency	Proportion IA Treated by BMP	
BMP 1	0.261	0.385542169	(1.33)
BMP 2	0.261	0.289156627	(1.00)
BMP 3	0.00	0	-
TN Decrease for BMPs (Decrease * Prop. Applied to TMDL)			(1.47)
On-Site Creditable TN Decrease (Imp. Reduction + BMPs)			(1.47)
Purchased Off-Site TN Credits			-
Total Creditable TN Decrease			**(1.47)**

Total Associated TSS Loa	469.2		900.86
TSS Decrease from Impervious Reduction			-
TSS Decrease for BMPs	Efficiency	Proportion IA Treated by BMP	
BMP 1	0.523	0.385542169	(181.65)
BMP 2	0.523	0.289156627	(136.24)
BMP 3	0.00	0	-
TSS Decrease for BMPs (Decrease * Prop. Applied to TMDL)			(200.10)
Total Creditable TSS Decrease (Imp. Reduction + BMPs)			**(200.10)**

BMP Efficiency Methodology Description:

Pre-TP Load and Post-TP Load taken from Virginia Runoff Reduction Method Redevelopment Worksheet. Methodology confirmed by email from Kelsey Brooks at DEQ received 5/18/2016. BMP 1 and BMP 2 TP efficiencies from the Virginia Stormwater BMP Clearinghouse website. TN and TSS efficiencies calculated using Chesapeake Bay Program Retrofit Equations based on Runoff Treatment Depth of 0.5 per email from Kelsey Brooks received 8/7/2015.

Residences at The Station		
Information	**Input**	**As Developed**
Date of Final Calculation	2019	
Rainfall		
Site Area (SF)	72309.6	
Site Area (AC)		1.66
Watershed I %		
Pre-I Area (SF)	47916	
Pre-I Area (AC)		1.10
Pre-I Area (%)		
Pre C Value		
Pre-TP Load (VRRM)		**2.70**
Post-I Area (SF)	47916	
Post-I Area (AC)		1.10
Post-I Area (%)		
Post C Value		
Post-TP Load (VRRM)		**2.70**
Increase/Decrease		-
Stormwater Controls		
BMP 1	Permeable Pavers #1	
Efficiency	0.59	
I Area (AC)	0.09	
TP Removed		0.13
BMP 2	Permeable Pavers #1	
Efficiency	0.59	
I Area (AC)	0.12	
TP Removed		0.17
BMP 3	NA	
Efficiency	0	
I Area (AC)	0	
TP Removed		0.00
Total BMP TP Removed		**0.30**
Purchased Off-Site Credit		0.27
Net Change in TP		**(0.57)**

Creditable Reductions for TP, TN, and TSS Per Guidance Appendix V.E			
TP Decrease for Impervious Reduction			-
TP Decrease for BMPs (Proportion of BMP Applied to TMDL Reduction)			
	1.00		(0.30)
On-Site Creditable TP Decrease			(0.30)
Purchased Off-Site TP Credits			(0.27)
Total Creditable TP Decrease			**(0.57)**
Total Associated TN Load	6.9		18.63
TN Decrease from Impervious Reduction			-
TN Decrease for BMPs	Efficiency	Proportion IA Treated by BMP	
BMP 1	0.59	0.081818182	(0.90)
BMP 2	0.590	0.109090909	(1.20)
BMP 3	0.00	0	-
TN Decrease for BMPs (Decrease * Prop. Applied to TMDL)			(2.10)
On-Site Creditable TN Decrease (Imp. Reduction + BMPs)			(2.10)
Purchased Off-Site TN Credits			-
Total Creditable TN Decrease			**(2.10)**
Total Associated TSS Load	469.2		1,266.84
TSS Decrease from Impervious Reduction			-
TSS Decrease for BMPs	Efficiency	Proportion IA Treated by BMP	
BMP 1	0.55	0.081818182	(57.01)
BMP 2	0.550	0.109090909	(76.01)
BMP 3	0.00	0	-
TSS Decrease for BMPs (Decrease * Prop. Applied to TMDL)			(133.02)
Total Creditable TSS Decrease (Imp. Reduction + BMPs)			**(133.02)**

BMP Efficiency Methodology Description:

Pre-TP Load and Post-TP Load taken from Virginia Runoff Reduction Method Redevelopment Worksheet. Methodology confirmed by email from Kelsey Brooks at DEQ received 5/18/2016. Permeable Paver efficiencies for TP and TN from the Virginia Stormwater BMP Clearinghouse. TSS efficiencies calculated using Chesapeake Bay Program Established Efficiencies for C/D soils and underdrain.

Herndon Centre		
Information	**Input**	**As Developed**
Date of Final Calculation	2019	
Rainfall		
Site Area (SF)	54885.6	
Site Area (AC)		1.26
Watershed I %		
Pre-I Area (SF)	48787.2	
Pre-I Area (AC)		1.12
Pre-I Area (%)		
Pre C Value		
Pre-TP Load (VRRM)		**2.51**
Post-I Area (SF)	56628	
Post-I Area (AC)		1.30
Post-I Area (%)		
Post C Value		
Post-TP Load (VRRM)		**2.52**
Increase/Decrease		0.01
Stormwater Controls		
BMP 1	MTD - Filtering (StormTech)	
Efficiency	0.4	
I Area (AC)	0.64	
TP Removed		0.50
BMP 2	NA	
Efficiency	0	
I Area (AC)	0	
TP Removed		0.00
BMP 3	NA	
Efficiency	0	
I Area (AC)	0	
TP Removed		0.00
Total BMP TP Removed		**0.50**
Purchased Off-Site Credit		0.00
Net Change in TP		**(0.49)**

Creditable Reductions for TP, TN, and TSS Per Guidance Appendix V.E			
TP Decrease for Impervious Reduction			-
TP Decrease for BMPs (Proportion of BMP Applied to TMDL Reduction)			
	0.98		(0.49)
On-Site Creditable TP Decrease			(0.49)
Purchased Off-Site TP Credits			-
Total Creditable TP Decrease			**(0.49)**

Total Associated TN Load	6.9		17.39
TN Decrease from Impervious Reduction			-
TN Decrease for BMPs	Efficiency	Proportion IA Treated by BMP	
BMP 1	0.261	0.492307692	(2.23)
BMP 2	0.000	0	-
BMP 3	0.00	0	-
TN Decrease for BMPs (Decrease * Prop. Applied to TMDL)			(2.19)
On-Site Creditable TN Decrease (Imp. Reduction + BMPs)			(2.19)
Purchased Off-Site TN Credits			-
Total Creditable TN Decrease			**(2.19)**

Total Associated TSS Load	469.2		1,182.38
TSS Decrease from Impervious Reduction			-
TSS Decrease for BMPs	Efficiency	Proportion IA Treated by BMP	
BMP 1	0.523	0.492307692	(304.44)
BMP 2	0.000	0	-
BMP 3	0.00	0	-
TSS Decrease for BMPs (Decrease * Prop. Applied to TMDL)			(298.30)
Total Creditable TSS Decrease (Imp. Reduction + BMPs)			**(298.30)**

BMP Efficiency Methodology Description:
Pre-TP Load and Post-TP Load taken from Virginia Runoff Reduction Method Redevelopment Worksheet. Methodology confirmed by email from Kelsey Brooks at DEQ received 5/18/2016. TN and TSS efficiencies calculated using Chesapeake Bay Program Retrofit Equations based on Runoff Treatment Depth of 0.5 per email from Kelsey Brooks received 8/7/2015.

Street Sweeping Calculations for FY19

Notes:	Actual from FY17, FY18, and FY19. Anticipate a minimum of 300,000 lbs/yr for planning purposes.						
Dry Weight Factor	0.7	Entered by user as decimal.					
TN Efficiency	0.0025	Entered by user as decimal.					
TP Efficiency	0.001	Entered by user as decimal.					
TSS Efficiency	0.3	Entered by user as decimal.					
Town Wide Reductions							
Pollutant	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Collected (lbs)	416120	350000	206000	300000	300000	300000	300000
TN	728.21	612.50	360.50	525.00	525.00	525.00	525.00
TP	291.28	245.00	144.20	210.00	210.00	210.00	210.00
TSS	87385.20	73500.00	43260.00	63000.00	63000.00	63000.00	63000.00

More Stringent Single Family Development Calculations – New Credit for FY19

More Stringent Single Family Residential Development

The following table demonstrates pollutant reductions achieved as a result of more stringent regulation of single family residential development under one acre as required by the Town's Stormwater Management Ordinance. Per DEQ guidance, the Town may take credit for all reductions not required under the Virginia Stormwater Management Program regulations. Runoff Storage is from actual facility designs.

				TP Load Reduction Required (lbs)				BMP Reduction Achieved		Credit Purchased		Total TP & TN Reduction		Sediment Reduction Calculations								
Street Address	**Unit Number**	**Date**	**Area**	**Redevelopment**	**New Impervious**	**Total**	**Methodology**	**Phosphorus (lbs)**	**Nitrogen (lbs)**	**Phosphorus (lbs)**	**Nitrogen (lbs)**	**Phosphorus (lbs)**	**Nitrogen (lbs)**	**Post TP from VRMM (lbs)**	**Associated TSS Load (469.2 lbs)**	**Total Site IA (ac)**	**IA Treated (ac)**	**% Total IA Treated**	**BMP**	**Runoff Storage (ft^3)**	**Runoff Depth Treated (in)**	**Curve Efficiency**	**Sediment Reduction (lbs)**
FY16																						
Mississippi Drive	657	30-Jul-15	0.25	0.02	0.07	0.09	VRRM	0.1	0.79	0	0	0.1	0.79	0.32	150.144	0.11	0.08	0.73	Bioretention #1	506	1.74	0.831	91.08
Monroe	763	31-Mar-15	0.29	0	0.25	0.25	VRRM	0.17	2.18	0	0	0.17	2.18	0.37	173.604	0.13	0.11	0.85	Bioretention #1	420	1.05	0.769	113.48
Third Street	854	15-Dec-15	0.25	0.01	0.12	0.13	VRRM	0.19	1.32	0	0	0.19	1.32	0.3	140.76	0.1	0.08	0.8	Infiltration #2	350	1.21	0.784	88.28
Van Buren	1103	2-Jun-16	0.38	0	0.24	0.24	VRRM	0.23	1.66	0	0	0.23	1.66	0.39	182.988	0.11	0.08	0.73	Infiltration #2	439	1.51	0.816	109
Elwardstone Sub	Lot 4	16-Mar-16	0.28	0.02	0.13	0.15	VRRM	0.15	1.27	0	0	0.15	1.27	0.34	159.528	0.12	0.11	0.92	Bioretention #1	442	1.11	0.769	112.86
Dominion Ridge	Lot 34	16-Jul-15	0.39	0	0.25	0.25	VRRM	0.23	1.86	0	0	0.23	1.86										
Van Vleck Sub	Lot 2A	19-Jun-15	0.88	0.06	0.28	0.34	VRRM	0.38	2.63	0	0	0.38	2.63										
							FY16 Subtotal	**1.45**	**11.71**	**0**	**0**	**1.45**	**11.71**										**514.7**
FY17																						
Spring Street**	624	9-Jun-16	0.41	0.25	0.02	0.26	VRRM	0	0	0.26	1.93	0.26	1.93						NA				
Van Buren	843	22-Jul-16	0.34	0.02	0.14	0.16	VRRM	0.17	1.23	0	0	0.17	1.23	0.4	187.68	0.13	0.06	0.46	Bioretention #2	373	1.71	0.829	71.57
Third Street	850	18-Apr-17	0.29	0	0.21	0.21	VRRM	0.21	1.46	0	0	0.21	1.46	0.33	154.836	0.1	0.09	0.9	Infiltration #2	391	1.2	0.783	109.11
Third Street	852	4-Oct-16	0.27	0	0.2	0.2	VRRM	0.21	1.46	0	0	0.21	1.46	0.31	145.452	0.1	0.09	0.9	Infiltration #2	379	1.16	0.777	101.71
Monroe	1104	25-Jul-16	0.31	0.03	0.05	0.08	VRRM	0.09	0.62	0	0	0.09	0.62	0.3	140.76	0.1	0.07	0.7	Infiltration #1	241	0.95	0.738	72.72
Van Vleck	Lot 6A1A	16-Mar-17	0.27	0	0.23	0.23	VRRM	0.23	1.63	0	0	0.23	1.63	0.34	159.528	0.12	0.1	0.83	Infiltration #2	439	1.21	0.784	103.81
Van Vleck	Lot 6A1B	24-Mar-17	0.28	0	0.18	0.18	VRRM	0.2	1.42	0	0	0.2	1.42	0.3	140.76	0.1	0.09	0.9	Infiltration #2	373	1.14	0.775	98.18
Van Vleck*	Lot 7A	2-Aug-16	0.28	0	0.24	0.24	VRRM	0.16	1.14	0	0	0.16	1.14	0.35	164.22	0.12	0.07	0.58	Infiltration #2	307	1.21	0.784	74.67
*Nutrient credit purchase associated with this project will be reported with the next annual report.																							
**Total TP reduction required is from VRRM spreadsheet and is less than redevelopment and new impervious due to rounding.							**FY17 Subtotal**	**1.27**	**8.96**	**0.26**	**1.93**	**1.53**	**10.89**										**631.77**
FY18																						
Elden	934	30-Jan-18	0.13	0.01	0.05	0.06	VRRM	0.08	0.65	0	0	0.08	0.65	0.19	89.148	0.07	0.06	0.86	Bioretention #1	**			0
Main Drive	704	30-Oct-17	0.31	0.02	0.12	0.14	VRRM	0	0	0.15	2.37	0.15	2.37						NA	**			0
Dranesville*	715	23-May-17	0.43	0.02	0.19	0.21	VRRM	0.22	1.79	0	0	0.22	1.79	0.44	206.448	0.12	0.11	0.92	Bioretention #1	**			0
Dranesville*	715	23-May-17	0.43	0.02	0.19	0.21	VRRM							0.44	206.448	0.12	0.01	0.08	hannel with Com	**			0
Van Vleck	Lot 7A	2-Aug-16	0.28	0	0.24	0.24	VRRM			0.09	0.67	0.09	0.67						NA	**			0
Van Vleck	Lot 5A1A	25-Apr-18	0.33	0	0.3	0.3	VRMM	0.3	2.1	0	0	0.3	2.1	0.43	201.756	0.16	0.13	0.81	Infiltration #1	**			0
Van Vleck	Lot 5A	20-Feb-18	0.27	0	0.18	0.18	VRMM	0.19	1.33	0	0	0.19	1.33	0.29	136.068	0.1	0.02	0.2	Infiltration #2	**			0
Van Vleck	Rust Sub	26-May-17	0.46	0	0.28	0.28	VRMM	0.28	2.05	0	0	0.28	2.05	0.47	220.524	0.13	0.11	0.85	Bioretention #2	**			0
*Sediment reduction broken out by two BMP facilities.																							
**Sediment for these facilities will be reported in a future report (need to obtain runoff storage volume).							**FY18 Subtotal**	**1.07**	**7.92**	**0.24**	**3.04**	**1.31**	**10.96**										**0**
FY19																						
1108C Monroe	Lot 6A1A	1-Jul-18	0.27	0	0.23	0.23	VRRM	0.23	1.63	0	0	0.23	1.63	0.34	159.528	0.12	0.1	0.83	nfiltration Trench	356	0.98	0.745	98.64
719 Dranesville Rd	Lot 7A2	1-Oct-18	0.43	0.02	0.19	0.21	VRRM	0.22	1.79	0	0	0.22	1.79	0.44	206.448	0.12	0.12	1	Bioretention	241	0.55	0.592	122.22
1106A Monroe St	Lot 7A	1-Jan-19	0.28	0	0.25	0.25	VRRM	0.16	1.14	0.09	0	0.25	1.14	0.37	173.604	0.13	0.07	0.54	nfiltration Trench	250	0.98	0.746	69.93
1018 Monroe St	Lot 1A2 Blk 8	15-Mar-19	0.45	0	0.28	0.28	VRRM	0.28	2.02	0	0	0.28	2.02	0.46	215.832	0.13	0.11	0.85	nfiltration Trench	391	0.98	0.745	136.68
850 Third St	Lot 9A	20-Mar-19	0.29	0	0.21	0.21	VRRM	0.21	1.46	0	0	0.21	1.46	0.33	154.836	0.1	0.09	0.9	nfiltration Trench	320	0.98	0.745	103.82
852 Third St	Lot 10A	20-Mar-19	0.27	0	0.2	0.2	VRMM	0.21	1.46	0	0	0.21	1.46	0.31	145.452	0.1	0.09	0.9	nfiltration Trench	499	1.53	0.817	106.95
1108 Monroe St	Lot 5A1A	30-Mar-19	0.33	0	0.3	0.3	VRMM	0.3	2.1	0	0	0.3	2.1	0.43	201.756	0.16	0.13	0.81	nfiltration Trench	459	0.97	0.743	121.42
1112 Monroe St	Lot 5A1B	30-Mar-19	0.27	0	0.18	0.18	VRMM	0.19	1.33	0	0	0.19	1.33	0.29	136.068	0.1	0.09	0.9	nfiltration Trench	293	0.9	0.725	88.78
Dominion Ridge	Lot 34	13-May-19	0.39	0	0.25	0.25	VRMM	0.25	1.86	0	0	0.25	1.86	0.41	192.372	0.12	0.12	1	Bioretention	331	0.76	0.684	131.58
							FY19 Subtotal	**2.05**	**14.79**	**0.09**	**0**	**2.14**	**14.79**										**980.02**
							Total	**5.84**	**43.38**	**0.59**	**4.97**	**6.43**	**48.35**										**2126.49**

Shared Credit Reductions with Fairfax County for Projects Implemented in FY19

Structural Retrofits

All Action Plan Projects were completed by June 30, 2017 as reported in the 2017 Annual Report

Corrections to 2018 Reporting: Credit for the Public Safety Headquarters Building stormwater enhancements were reevaluated.

#	Project Name	Substantial Completion	Long.	Lat.	Type of Project or BMP	Treated (Ac)	Impervious Treated (Ac)	Pervious Treated (Ac)	Estimated Cost ($)	Estimated Amount of Total			Pollutant Reduction Calculation Method	% Treated Area Outside Regulated	Baseline Reduction Provided for			Total Credit Received (lb/yr)		
										TN	TP	TSS			TN	TP	TSS	TN	TP	TSS
88	Public Safety Headquarters Building Stormwater Enhancements - Corrected pollutant removal	8/30/2017	-77.362589	38.857386	Dry Swale	3.10	2.54	0.56	$264,636	33.92	3.26	2,458.08	CBP Established Efficiency, Bioswale	0%	-	-	-	33.92	3.26	2,458.08
					Dry Swale	0.26	0.20	0.06	$22,195	2.77	0.26	194.26	CBP Established Efficiency, Bioswale	0%	-	-	-	2.77	0.26	194.26
					Permeable Pavement	0.24	0.24	-	$91,300	2.42	0.27	210.59	CBP Retrofits Expert Panel RR, 1.0 inches of runoff treated	0%	-	-	-	2.42	0.27	210.59
					Vegetated Roof	0.53	0.53	-	$315,147	5.34	0.60	465.05	CBP Retrofits Expert Panel, RR, 1.0 inches of runoff treated	0%	-	-	-	5.34	0.60	465.05
					Rainwater Harvesting	0.61	0.61	-	$366,143	6.69	0.75	582.95	CBP Retrofits Expert Panel, RR, 1.51 inches of runoff treated	0%	-	-	-	6.69	0.75	582.95
					Biofilter # 1	0.09	0.02	0.07	$50,503	0.36	0.03	25.01	CBP Retrofits Expert Panel, ST, 1.0 inches of runoff treated	0%	-	-	-	0.36	0.03	25.01
					Biofilter # 2	0.26	0.15	0.11	$145,897	1.27	0.16	136.36	CBP Retrofits Expert Panel, ST, 1.0 inches of runoff treated	0%	-	-	-	1.27	0.16	136.36
																	Total	52.77	5.33	4,072.30
																	Previously Reported Credit	43.65	4.30	3,229.54
																	Adjustment to 2018 Credit	9.12	1.03	842.76
																	Fairfax 2018 Credit Adjustment (92.3%)	8.42	0.95	777.87

FCPS Projects (Previously Credited in FCPS TMDL Action Plan)

#	Project Name	Substantial Completion	Long.	Lat.	Type of Project or BMP	Treated (Ac)	Impervious Treated (Ac)	Pervious Treated (Ac)	Estimated Cost ($)	Estimated Amount of Total			Pollutant Reduction Calculation Method	% Treated Area Outside Regulated	Baseline Reduction Provided for			Total Credit Received (lb/yr)		
										TN	TP	TSS			TN	TP	TSS	TN	TP	TSS
3	Franklin Middle School	9/14/2009	-77.422277	38.907540	Constructed Wetland	54.40	10.10	44.30	$556,479	179.34	15.78	11,415.78	CBP Retrofits Expert Panel, ST, 0.62 inches of runoff treated	0%	-	-	-	179.34	15.78	11,415.78
			-77.422277	38.907540	Bioretention	1.41	1.09	0.32	$72,000	12.44	1.34	1,010.02	CBP Retrofits Expert Panel, RR, 1.05 inches of runoff treated	0%	-	-	-	12.44	1.34	1,010.02
23	Shrevewood Parking Lot Retrofit	8/18/2011	-77.205410	38.889235	Permeable Pavement	0.72	0.53	0.19	$325,000	6.12	0.65	485.46	CBP Retrofits Expert Panel, RR, 0.97 inches of runoff treated	0%	-	-	-	6.12	0.65	485.46
31	Waples Mill ES Phase II	8/8/2012	-77.345172	38.875711	Permeable Pavement	0.82	0.71	0.11	$250,000	8.28	0.93	708.85	CBP Retrofits Expert Panel, RR, 1.92 inches of runoff treated	0%	-	-	-	8.28	0.93	708.85
67	Terraset ES	12/15/2015	-77.343127	38.937057	Permeable Pavement	1.28	0.84	0.44	$461,857	12.05	1.23	905.27	CBP Retrofits Expert Panel RR, 2.5 inches of runoff treated	100%	1.54	0.23	203.55	10.51	1.00	701.72
			-77.343622	38.935493	Permeable Pavement	0.69	0.35	0.34		6.05	0.56	400.69	CBP Retrofits Expert Panel RR, 2.5 inches of runoff treated	100%	0.73	0.10	85.03	5.32	0.46	315.66
																	Total	222.01	20.16	14,637.49
																	Fairfax FCPS Credit Adjustment (92.3%)	204.91	18.61	13,510.41

Projects in Addition to Those Reported in the Chesapeake Bay TMDL Action Plan Completed July 1, 2018 to June 30, 2019 (or previously unreported)

#	Project Name	Substantial Completion	Long.	Lat.	Type of Project or BMP	Treated (Ac)	Impervious Treated (Ac)	Pervious Treated (Ac)	Estimated Cost ($)	Estimated Amount of Total			Pollutant Reduction Calculation Method	% Treated Area Outside Regulated	Baseline Reduction Provided for			Total Credit Received (lb/yr)		
										TN	TP	TSS			TN	TP	TSS	TN	TP	TSS
	Construction Complete																			
	Evermay	7/11/2018	-77.153344	38.944220	Manufactured Treatment Device (MTD)	6.47	3.12	3.34	$465,679	22.56	2.57	2,219.29	CBP Retrofits Expert Panel RR, 0.5 inches of runoff treated	0%	-	-	-	22.56	2.57	2,219.29
	Herrity Pond Retrofit	8/8/2018	-77.361313	38.857138	Wet Pond	33.90	17.43	16.47	$820,000	3.95	0.49	412.29	CBP Retrofits Expert Panel RR, 0.48 inches of runoff treated	0%	-	-	-	3.95	0.49	412.29
90	Waynewood ES (LH9812)	12/19/2018	-77.055978	38.725330	Bioretention	0.56	0.47	0.09	$61,000	2.21	0.36	311.49	CBPEE Bioretention C/D Soils, Underdrain	0%	-	-	-	2.21	0.36	311.49
91	Centreville Greene Pond 1 (LR81-0001)	2/4/2019	-77.413883	38.83876	Constructed Wetland	57.52	24.22	33.29	$384,937	46.56	5.21	4,289.40	CBP Retrofits Expert Panel, ST, 0.09 inches of runoff treated	0%	0.15	0.02	13.42	46.42	5.19	4,275.97
	Centreville Greene Pond 2 (LR81-0002)	2/4/2019	-77.416088	38.836768	Constructed Wetland	27.96	16.43	11.53	$361,107	42.25	5.29	4,574.42	CBP Retrofits Expert Panel ST, 0.15 inches of runoff treated	1%	0.33	0.04	30.34	41.91	5.26	4,544.08
	Meadow Run (0273DP) Pond Improvement	2/25/2019	-77.222468	38.953880	Extended Detention Pond	20.48	5.51	14.97	$355,117	36.54	1.51	4,540.93	CBP Established Efficiency, Dry Extended Detention Ponds	3%	0.62	0.05	65.99	35.92	1.46	4,474.95
89	Cherry Run ES (9517)	3/18/2019	-77.283126	38.767929	Bioretention	0.53	0.17	0.36	$48,393	1.62	0.19	144.33	CBEE, Bioretention C/D Soils, Underdrain	100%	0.48	0.05	45.36	1.14	0.14	98.97
					Grass Channel 1	1.44	0.05	1.39	$65,423	1.48	0.07	151.46	CBEE Vegetated Channel C/D soils no underdrain	0%	-	-	-	1.48	0.07	151.46
			-77.285253	38.768214	Grass Channel 2	0.59	0.48	0.11	$27,171	0.92	0.08	290.70	CBEE Vegetated Channel C/D soils no underdrain	0%	-	-	-	0.92	0.08	290.70
	Browns Chapel Pond & Outfall Improvement	4/20/2019	-77.308138	38.970711	Extended Detention Pond	81.66	20.07	61.59	$262,518	75.16	7.12	2,693.90	CBP Retrofits Expert Panel, ST curve (wet ponds) for forebay only, 0.14 inches of runoff treated	27%	15.54	1.22	876.98	59.62	5.90	1,816.92
					Subtotal:	**231.11**	**87.97**	**143.14**	**$2,851,344**	**233.24**	**22.89**	**19,628.22**			**17.12**	**1.37**	**1,032.09**	**216.13**	**21.52**	**18,596.12**
																	Fairfax Credit	**92.3%**	**199.49**	**19.86**	**17,164.22**
																	Herndon Credit	4.2%	9.08	0.90	781.04
																	Vienna Credit	3.5%	7.56	0.75	650.86

Stream Restoration

Corrections to 2018 reporting: spreadsheet error corrected for two projects

#	Project Name	Substantial Completion	Longitude	Latitude	Type of Project or BMP	Acres Treated (Ac)	Impervious Acres Treated (Ac)	Pervious Acres Treated (Ac)	Estimated Cost ($)	Restored Length (LF)	Estimated Amount of Total Pollutant Reduction (lbs/yr)			Pollutant Reduction Calculation Method	% Treated Area Outside Regulated Area	Baseline Reduction Provided for Unregulated Areas (lb/yr)			Total Credit Received (lb/yr)		
											TN	TP	TSS			TN	TP	TSS	TN	TP	TSS
56	Robinson, PCL 19 @ 0723DP (DF82-03)	5/22/2018	-77.293272	38.9708	Outfall Restoration	34.33	5.08	29.25	$395,000	260.0	7.91	3.64	1,256.50	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 260 LF, Average Stream Bank Height: 1.0 ft, Sediment Delivery Ratio: 0.181	93.6%	7.41	1.90	1,176.13	0.51	1.74	80.37
57	McLean Hunt Estates 0271DP	5/25/2018	-77.222678	38.945389	Outfall Restoration	7.40	1.86	5.54	$66,000	138.0	13.00	5.99	2,064.53	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 120 LF, Average Stream Bank Height: 3.56 ft, Sediment Delivery Ratio: 0.181	14.9%	1.67	0.29	257.65	11.33	5.70	1,806.88
																		Total	11.84	7.45	1,887.25
																		Previously Reported Credit	496.04	232.26	79,284.27
																		Adjustment to 2018 Credit	(484.20)	(224.81)	(77,397.02)
																		Fairfax 2018 Credit Adjustment (92.3%)	(446.92)	(207.50)	(71,437.45)

Action Plan Projects Completed July 1, 2018 to June 30, 2019 (or previously unreported)

#	Project Name	Substantial Completion	Longitude	Latitude	Type of Project or BMP	Acres Treated (Ac)	Impervious Acres Treated	Pervious Acres Treated	Estimated Cost ($)	Restored Length (LF)	Estimated Amount of Total Pollutant Reduction			Pollutant Reduction Calculation Method	% Treated Area Outside	Baseline Reduction Provided for			Total Credit Received (lb/yr)		
											TN	TP	TSS			TN	TP	TSS	TN	TP	TSS
62	Wolftrap Creek Phase 2	10/18/2017	-77.246262	38.90577	Urban Stream Restoration	693.74	268.15	425.59	$890,000	1020.0	76.50	69.36	45,777.60	CBP Urban Stream Restoration Interim Approved Removal Rates	12.0%	9.18	5.69	4,293.60	67.32	63.67	41,484.00
																		Fairfax Credit	**92.3%**	**62.14**	**58.77**	**38,289.73**
																		Herndon Credit	4.2%	2.83	2.67	1,742.33
																		Vienna Credit	3.5%	2.36	2.23	1,451.94

Projects in Addition to Those Reported in the Chesapeake Bay TMDL Action Plan Completed July 1, 2018 to June 30, 2019 (or previously unreported)

#	Project Name	Substantial Completion	Longitude	Latitude	Type of Project or BMP	Acres Treated (Ac)	Impervious Acres Treated (Ac)	Pervious Acres Treated (Ac)	Estimated Cost ($)	Restored Length (LF)	Estimated Amount of Total Pollutant Reduction (lbs/yr)			Pollutant Reduction Calculation Method	% Treated Area Outside Regulated Area	Baseline Reduction Provided for Unregulated Areas (lb/yr)			Total Credit Received (lb/yr)		
											TN	TP	TSS			TN	TP	TSS	TN	TP	TSS
	Construction Complete																				
58	Shetland Court Outfall Restoration	9/7/2018	-77.230357	38.960351	Outfall Restoration	4.30	1.03	3.27	$259,156	188.0	34.88	16.06	5,538.27	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 191 LF, Average Stream Bank Height: 6 ft, Sediment Delivery Ratio: 0.181	63.0%	2.01	0.17	131.06	32.87	15.89	5,407.22
59	Lake Martin Tributaries	10/23/2018	-77.341165	38.88487	Outfall Restoration	29.48	5.24	24.24	$1,747,968	1363	317.11	99.47	36,268.39	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 175 tons/yr, Sediment Delivery Ratio: 0.181, Protocol 4 - a RSC with 6,534 cf of runoff treated	10.6%	2.17	0.17	117.21	314.94	99.31	36,151.18
60	Long Branch at Long Branch Falls Park	11/20/2018	-77.259204	38.815669	Urban Stream Restoration	79.94	27.44	52.50	$1,098,636	533	206.62	63.28	21,815.93	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 120.53 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 4.46 ft	0.1%	0.09	0.01	7.50	220.19	69.56	23,976.81
										227	13.66	6.29	2,168.38	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 11.98 tons/yr, Sediment Delivery Ratio: 0.181							
61	Pohick Creek at Queen Victoria	12/7/2018	-77.260975	38.798807	Urban Stream Restoration	211.21	83.28	127.93	$3,071,089	1654	431.36	103.50	35,684.15	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 197.15 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 3.3 ft	32.38%	62.58	7.38	6,147.20	1,098.61	334.15	111,600.54
										858	471.83	171.27	59,047.63	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 326.23 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 2.4 ft							
										510	162.93	43.27	14,918.02	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 82.42 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 4.4 ft							
										110	15.19	1.43	492.32	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 2.72 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 1.7 ft							
										85	16.80	3.58	1,234.42	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 6.82 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 1.3 ft							
										110	21.18	4.33	1,493.25	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 8.25 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 1.4 ft							
										135	19.14	5.33	1,837.15	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 10.15 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 0.4 ft							
										37	22.77	8.82	3,040.80	CBP Urban Stream Restoration Expert Panel: Protocol 1 - BANCS Sediment Load Estimate , Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 0.4 ft							
62	Innisvale Drive Outfall Restoration	12/7/2018	-77.354019	38.803831	Outfall Restoration	17.18	3.13	14.05	$495,616	475	50.18	23.11	7,966.71	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 471 LF, Average Stream Bank Height: 3.5 ft, Sediment Delivery Ratio: 0.181	36.3%	4.42	0.35	251.92	45.76	22.76	7,714.78
63	Glenbrook Road Outfall Restoration	12/11/2018	-77.25341	38.851399	Outfall Restoration	15.84	3.24	12.60	$273,180	274	33.48	15.42	5,315.97	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 275 LF, Average Stream Bank Height: 4.0 ft, Sediment Delivery Ratio: 0.181	0.7%	0.08	0.01	6.27	33.40	15.41	5,309.70
64	Pohick Tributary at Green Tree Village	3/15/2019	-77.252042	38.773445	Urban Stream Restoration	208.14	67.20	140.94	$2,844,186	425	224.41	68.62	23,658.51	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 131 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 4.3 ft	13.8%	19.77	1.46	1,016.65	2,258.07	817.82	281,439.28
										1137	586.19	175.11	60,370.74	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 334 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 4.6 ft							
										622	331.31	99.62	34,346.56	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 190 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 4.9 ft							
										733	1,135.93	475.92	164,080.12	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 907 tons/yr, Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 2.8 ft							
65	Dead Run Segments 2 and 3	3/22/2019	-77.18349	38.944932	Urban Stream Restoration	717.53	303.45	414.08	$3,575,517	2105	1,575.62	403.58	139,138.32	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 712.15 tons/yr, Protocol 2 - Average Stream Bank Width: 12 ft, Sediment Delivery Ratio: 0.181	18.23% Note 1	57.25	5.70	4,516.29	1,518.37	397.88	134,622.03
					Urban Stream Restoration					98				CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 41.9 tons/yr, Sediment Delivery Ratio: 0.181							
					Urban Stream Restoration					319				CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 8.9 tons/yr, Protocol 2 - Average Stream Bank Width: 6.6 ft, Sediment Delivery Ratio: 0.181							
					Urban Stream Restoration					310				CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 5.8 tons/yr, Protocol 2 - Average Stream Bank Width: 10.1 ft, Sediment Delivery Ratio: 0.181							
					Urban Stream Restoration					111				No credits claimed as it is newly constructed channel (not the improvemnet or stabilization of existing channel)							
66	Browns Chapel Pond & Outfall Improvement	4/20/2019	-77.307614	38.96985	Outfall Restoration	91.58	22.42	69.16	$262,518	145	32.33	14.89	5,132.33	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 180 LF, Average Stream Bank Height: 5.9 ft, Sediment Delivery Ratio: 0.181	26.1%	8.45	1.37	999.10	23.88	13.51	4,133.22
67	Ulysses Court Outfall Restoration	4/26/2019	-77.272383	38.804836	Outfall Restoration	93.73	30.78	62.95	$268,289	367	63.69	29.33	10,112.42	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 465 LF, Average Stream Bank Height: 4.5 ft, Sediment Delivery Ratio: 0.181	9.2%	5.87	0.54	400.06	57.82	28.79	9,712.36
68	Woodgate Lane Outfall Restoration	6/3/2019	-77.187574	38.91369	Outfall Restoration	87.90	31.48	56.42	$478,843	480	88.42	40.72	14,038.99	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 581 LF, Average Stream Bank Height: 5.0 ft, Sediment Delivery Ratio: 0.181	79.3%	59.47	6.44	5,243.98	28.96	34.28	8,795.02
70	Scotts Run Tributary at Windy Hill Road Stream Restoration	6/10/2019	-77.203435	38.936572	Urban Stream Restoration	31.79	9.37	22.42	$470,000	665	260.76	49.40	17,032.85	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 665 LF, Average Stream Bank Height: 5.3 ft , Sediment Delivery Ratio: 0.181; Protocol 2 - Average Stream Bank Width: 9.29 ft	87.8%	23.00	2.37	1,900.43	237.76	47.03	15,132.42
60	Bullneck at Springhill Rec Center	6/11/2019	-77.223049	38.948493	Urban Stream Restoration	102.27	30.58	71.69	$2,422,198	1455	634.21	156.13	53,827.05	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 297.4 tons/yr, , Average Stream Bank Height: 3.47 ft , Protocol 2 - Average Stream Bank Width: 6.78 ft,Sediment Delivery Ratio: 0.181	38.5%	27.65	2.08	1,464.05	813.94	209.22	71,381.95
					Urban Stream Restoration					340	67.70	3.16	1,089.26	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 6.02 tons/yr, , Average Stream Bank Height: 2.35 ft , Protocol 2 - Average Stream Bank Width: 4.8 ft, Sediment Delivery Ratio: 0.181							
					Urban Stream Restoration					158	94.84	31.36	10,811.87	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 59.73 tons/yr, Average Stream Bank Height: 7 ft , Protocol 2 - Average Stream Bank Width: 4 ft, Sediment Delivery Ratio: 0.181							
					Urban Stream Restoration					121	44.83	20.65	7,117.83	CBP Urban Stream Restoration Expert Panel: Protocol 1 -BANCS Sediment Load Estimate: 59.33 tons/yr, Average Stream Bank Height: 8 ft , Sediment Delivery Ratio: 0.181							
69	Robey Avenue Outfall Restoration	6/12/2019	-77.231483	38.846742	Outfall Restoration	24.68	6.61	18.07	$130,197	163.0	15.61	7.19	2,479.18	CBP Urban Stream Restoration Expert Panel: Protocol 1 -Existing Length: 171 LF, Average Stream Bank Height: 3.0 ft, Sediment Delivery Ratio: 0.181	2.0%	0.32	0.04	27.39	15.30	7.16	2,451.79
					Subtotal:	**1,715.57**	**625.25**	**1,090.33**	**$17,397,392**	**16313**	**6,972.98**	**2,140.85**	**740,057.42**			**273.11**	**28.08**	**22,229.11**	**6,699.87**	**2,112.77**	**717,828.30**
																		Fairfax Credit	**92.3%**	**6,183.98**	**1,950.09**	**662,555.52**
																		Herndon Credit	4.2%	281.39	88.74	30,148.79
																		Vienna Credit	3.5%	234.50	73.95	25,123.99

Note 1: Some or all of the total Baseline for unregulated areas accounted for by another project with an overlapping drainage area.