



City of Bristol, Virginia

Year 2 MS4 Annual Report

Permit No. VAR040048

General VPDES (Virginia Pollutant Discharge Elimination System) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems

September, 2020



300 Lee Street
Bristol, VA 24201
276-645-7363


**General VPDES Permit for Small Municipal Separate
Storm Sewer Systems
Permit No. VAR040048**

Permit Year 2 Annual Report
July 1st, 2019 – June 30th, 2020
City of Bristol, Virginia

Submitted by:

Department of Public Works
300 Lee Street
Bristol, VA 24201

1.0 Background

Permit Condition	Compliance Activities
	A list of references can be found in the Appendix at the end of this report.
I D 2(a)	Name and Permit Number: City of Bristol; VAR040048 Original Permit Date: July 8 th , 2003
I D 2(b)	Reporting Period: Permit Year 2 -July 1 st , 2019 through June 30 th , 2020
I D 2(c)	<p>CERTIFICATION</p> <p>"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."</p> <p style="text-align: center;"> 10/4/2020 </p> <hr/> <p>City ManagerDate</p> <p>VAR040048City of Bristol, VA</p> <hr/> <p>Permit NumberMS4 Name</p>

New Outfalls

There were 11 new outfalls generated during the FY 2020. All are in TH21 hydrologic area. Ten were existing but not documented and one (BC-072.8) is from new construction. Outfalls are designated as “New” on the inspection list in Appendix D.

Special Conditions for Approved TMDLs

The City developed and implemented an initial TMDL action plan for Beaver Creek during the last permit cycle, which was subsequently updated in response to the revised TMDLs. The City’s “Revised TMDL Action Plan for Benthic and Bacteria Impairments” was submitted to VDEQ with the annual report covering the period of July 1, 2017 through June 30, 2018. Based on the MS4 permit, the TMDL action plan must be updated no later than 30 months after the permit effective date (April 1, 2021). The update must incorporate strategies from Table 5 of the MS4 permit for bacteria. The anticipated deadline for achieving sediment load reductions (currently at 0%) must be submitted to VDEQ by November 1, 2021

2.0 MCM 1: Public Education and Outreach

Permit Condition	Compliance Activities
I E 1(g)(1)(2)	<p data-bbox="412 1115 1105 1150">BMP 1.1 – General Education and Youth Outreach</p> <p data-bbox="412 1167 1417 1346">The purpose of this BMP is to help residents and visitors understand the link between individual actions and stormwater pollution and to provide them with information about how they can have a positive impact on local stream quality. The high-priority stormwater issues addressed this year included pet waste, litter and sediment.</p> <ol data-bbox="464 1367 1417 1890" style="list-style-type: none"> <li data-bbox="464 1367 1417 1692">1. Sugar Hollow Park is our main educational facility for reaching a varied group of people. Hundreds of children are educated on many aspects of stormwater and the environment through Conservation Camp. Many other groups and events are held there that directly relate to educating the individuals to the importance of protecting our water resources. Due to COVID 19 our park was closed for a good portion of the permit year. Camping in a self-contained RV is permitted at this time, however; no tent camping is allowed and the bathrooms have been closed. <li data-bbox="464 1713 1417 1890">2. Distribute the City’s “There’s No Place Like Home” pollution prevention awareness brochure at any public event, City Hall, Sugar Hollow Park campsite check-in station. The plan of distributing the brochure to individuals purchasing a dog license was not implemented. We will try to implement this measure in 2020. Our

	<p>dog licenses are issued from an office located in our courthouse building which “entry” was impacted by COVID 19. A copy of this brochure can be found in Appendix A.</p> <ol style="list-style-type: none"> 3. Maintain the educational signage describing the City’s stream restoration and TMDL programs and their benefits. These signs are located at various places throughout Sugar Hollow Park and other stream restoration sites within the city limits which hosts 1000’s of visitors each year. 4. A quarterly newsletter was posted in 2019 on our City’s website and was distributed via our Facebook account to approximately 2130 individuals to date. This is up from the 1700 Facebook accounts last year. The newsletter will focus on one of the high-priority stormwater issues and other related stormwater content. The 2020 1st and 2nd Quarter newsletter can be found on our website. https://www.bristolva.org/612/Quarterly-Newsletters 5. A City of Bristol Virginia Engineering Department employee met with the Bristol Virginia Public School Division Superintendent and his School Principals and a few other key Supervisors on October 30, 2019 to discuss ways to partnership, educate and involve our students concerning stormwater pollution identification and elimination. The intention is to create an interest and involve students developing ideas to high-light stormwater pollution prevention through tie disciplines of Art, English, Science and Math. 6. The City is still open and seeking speaking engagements for civic organizations. These efforts were hampered if not eliminated by the COVID 19 situation.
Effectiveness	Our outreach opportunities in the community and school system are still very much impacted by COVID 19 limitations. We will continue to promote a better dialog with our community with more advertisement of the Quarterly newsletter and reliance on the website.
	<p>BMP 1.2 – Bacteria from Pet Waste</p> <p>The purpose of this BMP is to educate dog owners on the proper disposal of pet waste. The city maintains pet waste collection stations in areas frequented by dog owners.</p>

Permit Condition	Compliance Activities
I E 1(g)(1)(2) Continued	1. The Dog Park at Sugar Hollow Park has been relocated to the northwest from the flat adjacent to Beaver Creek. This new

	<p>location effectively places an approximate 6 acre buffer between the dog park limits and Beaver Creek. Originally, approximately 1/3 of the park itself was located in Flood Zone AE. The new location is 100% out of any flood zone designation. The new Dog Park was officially opened on Tuesday, October 1, 2019 with the public and newspaper in attendance.</p> <ol style="list-style-type: none"> 2. Distribute the City’s “There’s No Place Like Home” pollution prevention awareness brochure at any public event, City Hall, Sugar Hollow Park campsite check-in station, and in 2020 begin distributing to individuals purchasing a dog license. 3. A quarterly newsletter was posted in 2019 on our City’s website and was distributed via our Facebook account to approximately 2130 individuals to date. This is up from the 1700 Facebook accounts last year. The newsletter will focus on one of the high-priority stormwater issues and other related stormwater content. The 2020 1st and 2nd Quarter newsletter can be found on our website. https://www.bristolva.org/612/Quarterly-Newsletters
Effectiveness	<p>The exact number of brochures cannot be tabulated for all outlet sources. Approximately 150 brochures were distributed during several city events such as Concert in the Park in July, Bark in the Park in August and the Halloween event in October. Our goal is to increase the environmental awareness of the citizens and visitors to our city. The brochures are made available at many locations throughout the city and we have added locations like Sugar Hollow Park Campground and at the issuance of dog licenses copy of the brochure “There’s No Place Like Home” can be viewed or downloaded on our webpage.</p>
	<p>BMP 1.3 – Sediment From Land Disturbing Activities</p> <p>The purpose of this BMP is to ensure that those engaging in land disturbing activities, especially those under an acre, are aware of their obligations to protect water quality and the penalties for non-compliance with the City’s erosion and sediment control regulations. The City also seeks to empower residents to assist with enforcement efforts by providing them with information to both identify and report potential violations.</p> <ol style="list-style-type: none"> 1. All persons undertaking land disturbance in the City limits of Bristol, VA is supplied with the brochure titled “Land Disturbance” which describes what constitutes land disturbance, what type land disturbance requires a permit, documents that must be provided to obtain a land disturbance permit, defines an agreement in lieu of plan, discusses the “RLD” Responsible Land Disturber and his/her responsibilities, defines the role of the permit applicant in naming an RLD and

	<p>discusses training opportunities. See reference in Appendix A.</p> <ol style="list-style-type: none"> 2. The following Contractors were contacted in Permit Year 2. Watson & Associates, Baker Construction and Excavating, MB Contractors, Rader Excavating, Taff and Frye and W-L Construction Co. 3. City personnel utilized pre-construction meetings to explain the land disturbance process and requirements for stormwater, erosion and sediment control, the Construction General Permit and SWPPP. 4. Several links on our website have been established to help the public recognize and report a violation of the City’s E&S control regulations or an illicit discharge. 5. The City’s website Main page has a button for Report a Concern. https://www.bristolva.org/270/Report-a-Concern---City-Helpdesk
Effectiveness	<p>All current contractors were supplied with the Land Disturbance brochure. Pre-application and pre-construction meetings are conducted land disturbers educating them on the proper procedures required by the E&S and VSMP requirements. The Land Disturbance brochure is available on the city’s webpage.</p>
	<p>BMP 1.4 – Litter Prevention</p> <p>The purpose of this BMP is to help educate the public about the impacts of litter on local waterways and to reduce the amount of litter that is introduced into the environment.</p> <ol style="list-style-type: none"> 1. Distribute the City’s “There’s No Place Like Home” pollution prevention awareness brochure at any public event, City Hall, Sugar Hollow Park campsite check-in station. 2. The storm drain stenciling program has not been implemented yet partly due to the late meeting with the school officials and early this year with the COVID 19 impact. All new manhole covers include the warning “Dump No Waste – Drains to Stream” or equivalent message. 3. A screen snapshot from our Facebook page concerning Household Hazardous Waste Collection Day can be found in Appendix A
Effectiveness	<p>No storm drains were stenciled in permit year 2. An inventory of the storm drains, is being performed in the high visibility, high volume areas of downtown. These will be incorporated into our public outreach program. The Household Hazardous Waste Collection day was a huge success. Over 220 vehicles delivered many different types of hazardous waste.</p>

	The City of Bristol used many different forms of outreach this year including flyers, newsletters, educational signage, newspaper, Facebook and speaking to School officials. Our strategies going forward will need to be adapted to the modified schedules due to the effects of COVID 19.

3.0 MCM 2: Public Involvement and Participation

Permit Condition	Compliance Activities
I E 2	Engaging residents and businesses is critical to the success of the City's stormwater pollution prevention efforts.
I E 2(f)(1)	The City did not receive any public input on the MS4 program. The City received approximately 43 Stormwater (Drainage) reports during the permit year. We upgraded the database software used to log these type of problems in September, 2019. Not all output reporting is currently available. The majority of the complaints concern stormwater runoff from the streets flowing onto private property due to curb damage, debris blockage, flooding due to heavy rainfalls or intense rainfall. Some problems reported are a private property issue and not addressed by the City. Each complaint is evaluated and appropriate measures are put into place to, where applicable, to resolve the issue.
I E 2(f)(2)	The City's stormwater web address is https://www.bristolva.org/441/Stormwater-Management Pollution reporting Mechanisms <ul style="list-style-type: none"> • City Engineer Phone: 276-821-6293 • City Help Desk on-line - https://www.bristolva.org/270/Report-a-Concern---City-Helpdesk • Emergency - 911

Permit Condition	Compliance Activities
I E 2(f)(3)	BMP 2.3 – Public Involvement Opportunities The City will implement a minimum of four local activities or events annually in accordance with Table 2 Part I E 2(c) of the MS4 General

	<p>permit. The purpose of these activities is to increase the public’s awareness of pollution issues and to provide them with a meaningful way to protect and improve local water quality. Planned activities are listed in Table 5. Actual activities may vary from year to year.</p> <ol style="list-style-type: none"> 1. Sugar Hollow Conservation Camp – September 2019, Several Elementary third and fourth graders attended Conservation Camp at Sugar Hollow Park. This is an annual event sponsored by Keep Bristol Beautiful and the Bristol Chamber of Commerce. Students participated in activities such as river, soil and water conservation, conservation Jeopardy, the effects of littering, runoff pollution, food chains, life cycles, and more. 2. Household Hazardous Waste / Great American Cleanup day on May 30, 2020. This event was advertised utilizing the City’s Facebook page, newspaper and the Bristol VA/TN Chamber of Commerce. A manifest of items collected and quantities is included in Appendix B. 3. America Recycles Day-November, 2019 Sponsored by Keep Bristol Beautiful and the Bristol Chamber of Commerce. The event is held at Malcom Stadium/DeVault Field in Bristol, VA. 4. Storm Drain Stenciling Program – Will begin in Permit Year 3 and will be part of the Bristol Virginia Public School involvement partnership depending on schedule due to COVID 19. 5. The 27th Annual South Holston Lake and River Cleanup on August 24^h, 2019. Although not in the City limits this event highlights the detrimental effects of littering in our cities and rural communities. Many civic groups, churches, organizations, youth groups, schools, clubs, and businesses participate. Hundreds of tires and trash bags full of bottles, plastic and Styrofoam were common items collected. 6. Bark in the Park held in August, 2019 where flyers were distributed.
Effectiveness	All events are considered to be a great success. The HHW day collection was greatly above the expectations of all involved. We will strive to find new avenues to promote the environment.
I E 2(f)(4)	Each metric outlined above has an impact on increasing the environmental awareness of the public and decreasing the amount of debris, contaminants, float material and hazardous chemicals that otherwise might make it into our surface waters.
I E 2(f)(5)	No partnerships with other MS4 permittees however many citizens

	from both Bristol, TN and Bristol, VA participate in all of these endeavors. Other organizations include the Keep Bristol Beautiful and The Bristol Chamber of Commerce.
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4.0 MCM 3: Illicit Discharge Detection and Elimination

Permit Condition	Compliance Activities
I E 3	The City's Illicit Discharge Detention and Elimination Program has been developed in accordance with Part I E 3 of the MS4 permit and is designed to identify and eliminate illicit discharges and illegal dumping.
I E 3(e)(1)	<p>BMP 3.1 – Stormwater Map and Information Table</p> <p>The purpose of this BMP is to ensure that the City understands the location of the storm drainage system to respond to illicit discharge issues. It also facilitates the City's effort conduct outfall reconnaissance.</p> <ol style="list-style-type: none"> 1. The stormwater map and information table has been updated to reflect any changes or modifications. Available upon request.
I E 3(e)(2)	<p>BMP 3.4- Dry Weather Outfall Screening</p> <p>The purpose of this BMP is to detect and eliminate illicit discharges from MS4 outfalls that may be present in dry weather flow.</p> <p>A total of 51 outfalls were inspected this permit year. A schedule will be assembled for the next permit year's inspection program to confirm that no more than 50% are screened in the previous 12- month period.</p>
I E 3(e)(3)(a-f)	<p>BMP 3.3 – Illicit Discharge Program SOP and Tracking</p> <p>The purpose of this BMP is to establish procedures to detect, identify, and address unauthorized non-stormwater discharges and illegal dumping into the storm drain system. The City uses its tracking database to record potential illicit discharges identified during dry weather outfall screening, complaint investigations and emergency response to spills.</p> <ol style="list-style-type: none"> 1. No illicit discharges were found for the 51 inspected outfalls. 2. The City's response team responded to 10 incidents during permit year 2 that involved cleanup of spilled or leaked fluids.. The report in included in Appendix C. 3. On April 22nd, 2020 the city received a call concerning a fish kill in the stream near Pittstown Road. E-2 crew responded and

	<p>confirmed a small number of small fish dead in Little Creek. At that time Engine 2 contacted VDEM and in turn they contacted The Department of Environmental Quality (DEQ). Engine 2 was cleared of the scene by VDEM after DEQ officials arrived. Any additional information can be requested by contacting Mr. Mark Kidd with DEQ at the following e-mail address. mark.kidd@deg.virginia.gov.</p>
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5.0 MCM 4: Construction Site Stormwater Runoff Control

Permit Condition	Compliance Activities
I E 4	<p>The City's Construction Site Stormwater Runoff Control Program has been developed in accordance with Part I E 4 of the MS4 permit. The program is integrated into the BMPs for MCM #4 and seeks to address discharges entering the MS4 from construction site stormwater runoff.</p>
I E 4(d)(1)	<p>BMP-4.1- Maintain Local Consistency</p> <p>The purpose of this BMP is to ensure that construction activities minimize impacts to water quality and meet all applicable local, state, and federal requirements.</p> <ol style="list-style-type: none"> 1. This BMP is implemented through Bristol, Virginia Code of Ordinances, Chapter 50, Article IV and the following supporting documents: Land Disturbance Permit Application; Erosion and Sediment Control Plan Review Checklist; Erosion and Sediment Control Inspection Checklist; and, VESCP Inspector Certification. All construction has been conducted in accordance with approved standards.
I E 4(d)(2)	<p>BMP 4.2 – Land Disturbing Activities Tracking</p> <p>The purpose of this BMP is to ensure that all required land disturbing activity data needed to be reported to VDEQ is adequately and accurately tracked.</p> <ol style="list-style-type: none"> 1. A monthly land disturbance report was submitted to DEQ. A total of 2.97 disturbed acres were reported for this permit term 2. A total of 142 E&S inspections and 2 VSMP inspections were performed during the permit year. 1 by DEQ and 1 Follow-up by the City of Bristol
I E 4(d)(3)	<ol style="list-style-type: none"> 1. 13 E&S inspections resulted in issuance of violation with corrective

	<p>action and re-inspection date.</p> <p>2. 1 VSMP inspection resulted in issuance of violation with corrective action and re-inspection date.</p>
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6.0 MCM 5: Post-construction stormwater management for new development and development on prior developed land

Permit Condition	Compliance Activities
I E 5	The City seeks to ensure that post-construction controls minimize the long-term impacts to water quality caused by development and redevelopment and that the City meets all applicable local, state, and federal requirements.
I E 5(i)(1)	<p>BMP 5.1 – Maintain Local Program Consistency</p> <p>The purpose of this BMP is to ensure post-construction development minimizes impacts to water quality and meets all applicable local, state, and federal requirements.</p> <p>1. Implemented through Bristol, Virginia Code of Ordinances, Chapter 50, Article IV.</p>
Effectiveness	No changes are necessary for program consistency.
I E 5(i)(1)(a)(b)	<p>BMP 5.2 – Stormwater Facility Maintenance, Inspection and Enforcement</p> <p>The purpose of this BMP is to ensure that stormwater management facilities continue to provide their intended water quality benefits. The MS4 permit provides for specific maintenance, inspection, and enforcement requirements. A list of structures with relevant information for each is included in Appendix E.</p> <p>1. 31 Privately owned facilities. BMP-010 sinkhole was repaired this permit year.</p>
I E 5(i)(2)	2. 11 City owned facilities exist and inspections were conducted on 11 of the facilities.
I E 5(i)(3)	3. BMP-045 was repaired this permit year. Three (3) public BMP(s) are under review /evaluation for needed repairs.
I E 5(i)(4)	<p>BMP 5.3 – Stormwater Facility Tracking Database</p> <p>The purpose of this BMP is to ensure that all City maintenance,</p>

	<p>inspection, and enforcement activities are properly tracked in accordance with the MS4 permit.</p> <p>4. The City of Bristol, Virginia submitted stormwater management information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage for the General VPDES permit.</p>
I E 5(i)(5)	5. No BMP data was reported through the DEQ BMP Warehouse.

7.0 MCM 6: Pollution Prevention and Good Housekeeping

Permit Condition	Compliance Activities
I E 6	<p><u>Good Housekeeping SOPs</u> – City employees engage in a variety of daily activities that have the potential to influence water quality. To minimize the impacts of these activities, the City has developed SOPs for each of the following activities: road, street and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides and fertilizers</p> <p><u>Stormwater Pollution Prevention Plans</u> – The City identified five high-priority municipal facilities where SWPPPs are required to be developed and implemented in accordance with Part I E 6 c of the permit. High-priority facilities may include any of the following: composting; equipment storage and maintenance; recycling, solid waste handling and transfer; salt storage; pesticide storage; public works yards; and, vehicle storage and maintenance yards. SWPPPs were developed and implemented in the previous permit cycle.</p> <p>The City Landfill operates under VPDES Permit No. VAR050053. Therefore, this facility is not required to develop a separate SWPPP under the MS4 permit.</p> <p><u>Nutrient Management Plans</u> – The City assessed all of its owned and operated properties and identified seven areas where nutrients are applied to a contiguous area of one acre or greater. As required in the MS4 permit, the City developed nutrient management plans (NMPs) for these facilities during the last permit cycle. NMPs were developed by a</p>

	<p>certified nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia.</p> <p><u>Contractors</u> – Part I E 6 I of the MS4 permit requires the City to ensure that all contractors providing services to the City are in full compliance with applicable licensing and certification requirements as well as the City’s pollution prevention SOPs. Though the City does not contract with commercial entities for turf or landscape management (application of pesticides and herbicides), from time to time contracted services may be procured for minor building maintenance and/or construction. In the event these services are procured, the contractor is notified of their obligation to obtain the necessary certifications, and/or use appropriate control measures and procedures for stormwater discharges to the MS4. Contractors must follow applicable laws and regulations and secure appropriate permits. In addition to meeting appropriate state and federal requirements, contractor must, at a minimum, adhere to the City’s Good Housekeeping SOPs.</p> <p><u>Training</u> – The City has developed a training program in accordance with the permit requirements. The training schedule is contained in BMP 6.4. The Bristol, Virginia Fire Department maintains one of eight state-sponsored Hazardous Materials Response Teams. The team is under the direction of the Virginia Department of Emergency Management and can respond to spill emergencies within our designated response area or across the Commonwealth if assets are needed.</p> <p>Firefighters are certified in hazardous materials response and all personnel attend OSHA-required refresher training each quarter. In addition to this 24 hours of refresher training. Personnel receive training from Virginia Department of Fire Programs and Department of Emergency Management instructors. Other drills and training are presented by industry and equipment experts.</p>
I E 6(q)(1)	<p>BMP – 6.1 Good Housekeeping Standard Operating Procedures</p> <ol style="list-style-type: none"> 1. The City previously developed SOP(s) for employee task and assignments. The SOP(s) may be found in the MS4 Program Plan. No operational procedures have been modified or developed.
I E 6(q)(2)(3)	<p>BMP – 6.2 Stormwater Pollution Prevention Plans for High Priority Facilities</p> <ol style="list-style-type: none"> 1. No new sites were identified requiring the development of a

	<p>SWPPP.</p> <ol style="list-style-type: none"> 2. SWPPPs for 5 high-priority sites were developed in year 5 of the previous permit term. The sites are: 1) Public Works Maintenance Facility 2) Fire Station #2 3) Randolph Field 4) Sugar Hollow Park 5) Clear Creek Golf Club. 3. No modifications were made to any SWPPP during the reporting period. 4. No high-priority sites were de-listed this permit term.
<p>I E 6(q)(4)</p>	<p>BMP – 6.3 Turf and Landscape Nutrient Management Plans</p> <p>The purpose 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 by a certified nutrient management planner.</p> <ol style="list-style-type: none"> 1. NMPs for (7) seven areas were prepared and submitted. Please see the Municipal Separate Storm Sewer System (MS4) Program Plan located on the City of Bristol Virginia's stormwater webpage. 2. No new areas were identified requiring a NMP be developed.
<p>I E 6(q)(5)</p>	<p>BMP – 6.4 Staff Training</p> <p>The purpose of this BMP is to implement a training plan in accordance with Part I E 6 of the MS4 permit. All City employees should be aware of pollution prevention goals and be properly certified in accordance with state and federal laws and regulations. In addition, field personnel serve as the City's "eyes and ears" in helping to spot potential illicit discharges and reporting them to the appropriate City staff for further investigation.</p> <ol style="list-style-type: none"> 1. On January 8th, 2020 training was provided for the Solid Waste / Collections staff. 14 people attended. On January 21st training was provide for the Public Works / Street Crews. 21 people attended. The topics covered many aspects of stormwater pollution prevention such as Good housekeeping, outdoor materials storage, spill response, vehicle & equipment fueling and repair, waste management, what is a stormwater management plan and how to identify an illicit discharge. The employees are throughout the city limits every day. A copy of the sign in sheet can be found in Appendix F. 2. The Bristol, Virginia Fire Department maintains one of eight state-sponsored Hazardous Materials Response Teams. The team is under the direction of the Virginia Department of

	<p>Emergency Management and can respond to spill emergencies within our designated response area or across the Commonwealth if assets are needed.</p> <p>Firefighters are certified in hazardous materials response and all personnel attend OSHA-required refresher training each quarter. In addition to this 24 hours of refresher training. Personnel receive training from Virginia Department of Fire Programs and Department of Emergency Management instructors. Other drills and training are presented by industry and equipment experts.</p>
	<p>BMP – 6.5 Street Sweeping and System Cleaning Program</p> <p>Street sweeping and cleaning inlets and catch basins play a significant role in pollution prevention by keeping trash, particulates, and organic matter from entering and being discharged from the storm drain system.</p> <ol style="list-style-type: none"> 1. During the permit year 2 period a total of 377 tons of material was picked up by street sweeping. Also, 913 tons of leaves, grass and yard waste was removed from the curbs or near curbs. Another 701 tons of brush was collected.
Effectiveness	<p>Many tons of debris were collected, preventing them from being washed into our storm drain system. The 377 Tons of debris will be added to the “Estimated TSS Removal from Street Sweeping” table when the TMDL Action plan is updated.</p>

- A Flyers / Facebook - Webpage Stormwater Snippets and Newsletters**
- B Household Hazardous Waste List**
- C Illicit Discharge Report**
- D SWO Inspections**
- E Bmp Structures**
- F Training Sign-in Sheets**

APPENDIX A

**Flyers / Facebook - Webpage Stormwater Snippets and
Newsletters**

WHY IT MATTERS

Our Special Place

We are fortunate to live in a beautiful part of the Commonwealth. Our creeks, rivers and lakes play a role in sustaining life, including ours. Keeping our water resources healthy keeps us healthy. Some of our creeks have been found to have high levels of bacteria, nitrates, and sediment. While this is not uncommon for creeks near urban areas, it is critical to address the pollution and take steps to

Begin at Home

We can protect our creeks by starting good habits in our yards and neighborhoods. There are approximately 9,000 households in Bristol. If families could do small things, such as picking up after their pet or washing cars in the grass, the positive impacts would be significant. On the other hand, if families do not make small changes to their behaviors at home, the negative impacts can be detrimental. Forming healthy habits is a solution for problems in our creeks.

Be a Leader

Help your neighbors remember healthy habits by showing them how simple it is. Flaunt the fact that you brought or used a bag on walks with pets, and put the waste in the proper place. Talk to them about pesticides and fertilizer. Be an advocate for healthy streams and the health of your community. It is very important to report leaks or suspicious activity. Do your part and others will follow your lead.

Questions about Stormwater? Call the
Public Works Department

(276)645-7360

Things To Remember

1. Pick up after your pet every time.
2. Don't put anything down the storm drain.
3. Report dumping or illegal activity.
4. Keep outside work areas clean and free of debris.
5. Store and use chemicals responsibly.
6. Take advantage of Hazardous Waste collection/disposal events in May and October.



Beaver Creek

Photo Courtesy of : Bud Phillips, Special to the Herald Courier , www.27trifles.com

CITY OF BRISTOL, VIRGINIA

PUBLIC WORKS DEPARTMENT

ENGINEERING DIVISION

300 LEE STREET

BRISTOL, VA 24201

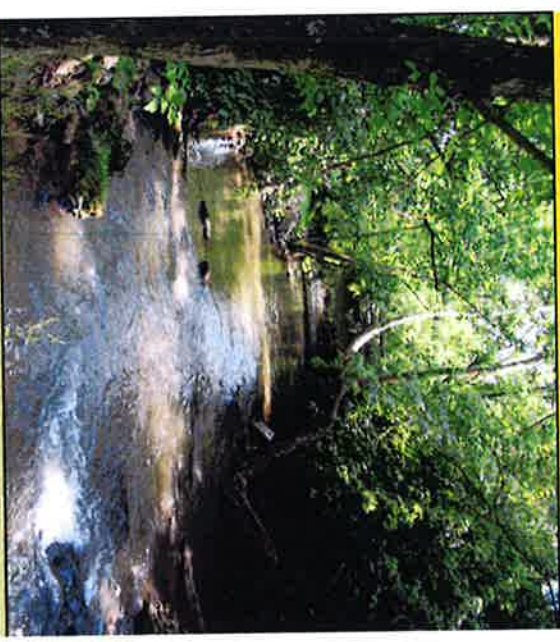
Phone: (276) 645-7360

Fax: (276) 821-6099

Website: www.bristolva.org/Stormwater



THERE'S NO PLACE LIKE HOME



A GUIDE FOR CITIZENS

- PET WASTE
- LITTER, ILLEGAL DISCHARGE AND ILLEGAL DUMPING
- CORRECT STORAGE, USE AND DISPOSAL



PET WASTE

Why pick up after your pet?

Myth: My pet is supposed to go outside, it's just one animal, let nature take it's course.

Fact: The number of pets in a concentrated area during their business day after day really adds up. It disrupts the natural processes for managing waste and threatens the health of humans and other animals. If not picked up, waste is often washed into local waterways during rain events. Both Beaver Creek and Little Creek are vulnerable to bacteria pollution.

It starts with you

- Pet Waste Stations are located in parks adjacent to creeks such as Mumpower Park and Sugar Hollow Park.
- Use a bag that is provided or bring your own and always dispose properly.
- Be a proud pet owner and encourage your fellow pet lovers to do the same.



Pet Waste Station at Cumberland Square Park

LITTER, ILLEGAL DUMPING, AND ILLICIT DISCHARGES

True or False? When water enters the storm drain, it goes to a treatment plant before being released back into a stream or lake.

False. Storm drains are designed to drain water away from our homes and streets. Unfortunately, they can sometimes become receptacles for litter and illegally dumped items. Much of the litter and poorly stored items end up in local creeks.



Beaver Creek Clean Up
Photo Courtesy of www.2.truffles.com

Illicit discharges include dumping, straight pipes to a ditch or creek, and irresponsible handling of materials. These activities are illegal and should be reported to the City Engineer.



<http://www.flickr.com/photos/colenama/4096090>

- Pick up or mulch grass clippings
- Wash vehicles in the grass or at a wash facility
- Report sanitary sewer leaks or overflows
- Report dumping and illicit discharges

Report leaks, non-emergency spills, or suspicious activity to the Public Works Dept.

(276)645-7360

PROPER STORAGE, APPLICATION AND DISPOSAL

Handle chemicals with care.

Poorly stored pesticides, cleaners, automotive fluids, and other products have a high probability of running off our yards and driveways and they eventually wind up in a creek.

Manufacturers provide specific instructions to protect health and safety. Follow the recommendations to safely apply the chemicals.



Safe Homes and Yards = Safer Creeks

- Store chemicals securely and indoors if possible.
- Buy small quantities.
- Read labels and follow manufacturer instructions.
- Clean spills immediately with absorbent material and dispose of the material properly.
- Always dispose of chemicals properly.

Waste Collection Events are held in

May and October.

For More Information, contact:

(276)645-3791



Is there training?

Yes. The Virginia Department of Environmental Quality (DEQ), offers training and certification courses for those involved in the various aspects of erosion and sediment control (E&SC) compliance or regulation.

Training and certification is available for Plan Reviewers, Inspectors, Program Administrators, and Combined Administrators.

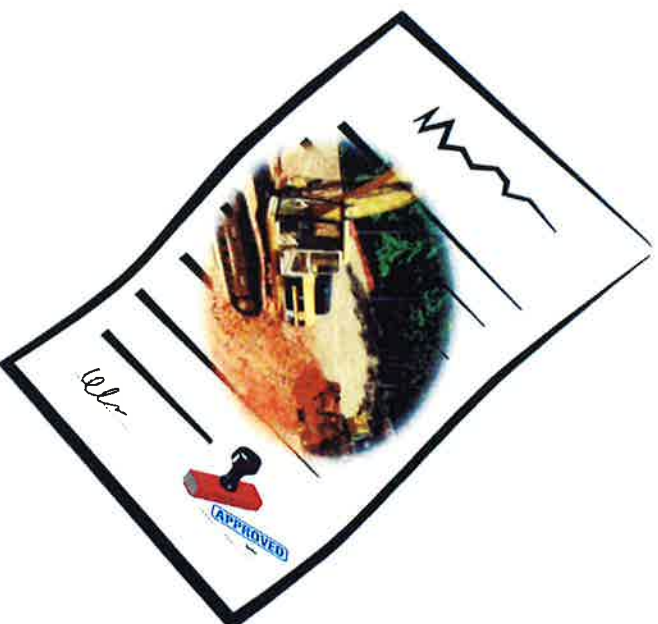
Additionally, the agency offers course work and certification to become a Responsible Land Disturber (RLD).

The courses are based on the Virginia Erosion and Sediment Control law and regulations and the "Virginia Erosion and Sediment Control Handbook".

To obtain more information or to purchase / download a handbook please go to the link below:

www.deq.virginia.gov/Programs/Water/StormwaterManagement/Publications/ESCHandbook.aspx

Compliance!



City of Bristol, Virginia

Public Works Department

Engineering Division

300 Lee Street

Bristol, Virginia 24201

Phone: 276-645-7360



www.bristolva.org

Land Disturbance

Am I missing something?



What more do I need to know?

Construction Sites and Stormwater Runoff

Construction sites are common sources of storm water runoff pollution. Soil and wastes blown, tracked or washed into a street, gutter or storm drain flow directly to our local streams or ground water. Sediment is the most common pollutant washed from construction sites, creating multiple problems once it enters the storm system. As a builder, contractor, owner or operator of a site, you are responsible for impacts to the storm system, right-of-way and damage caused by pollutants from your work site.

What is a land disturbance

A land-disturbing activity is “any land change on private or public land that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.”

What type of land disturbances require a permit?

Land-disturbing activities equal to or exceeding 10,000 square feet in area require a land disturbance permit approved by the Bristol, Virginia City Engineer.

If you are unclear whether your project requires a land disturbance permit, please consult the Bristol Virginia Engineering Division at 276-645-7360 prior to the commencement of work.

What must I provide to obtain a land disturbance permit?

The following information should be submitted for a land disturbance permit:

- A completed Land Disturbance Application signed and dated by the applicant and the owner.
- An erosion sediment control plan
- The application fee in accordance with Bristol Virginia's fee schedule.
- The bond amount for the project, if required, as established by the Engineering Division.

What is an agreement in lieu of a plan?

When a land disturbance results in the construction of a single-family residence, the property owner may obtain an “agreement in lieu of a plan” instead of a land disturbance permit. The agreement is a contract between the City of Bristol, Virginia and the property owner that specifies that certain erosion and sediment control measures will be implemented in the construction of a single-family residence. This contract is an expedited process that establishes that a formal erosion and sediment control plan will not be submitted by the property owner.

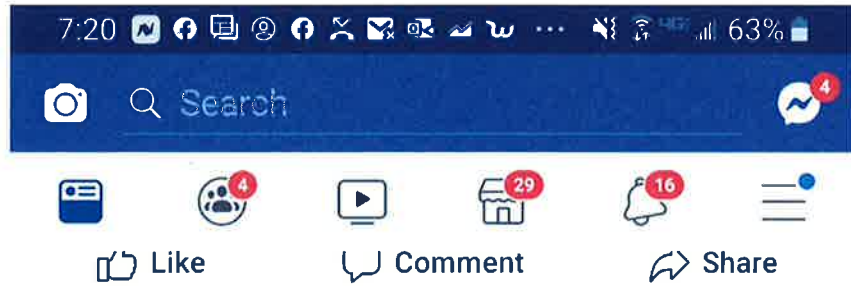
Who is a “Responsible Land Disturber” and what does he/she do?

The Responsible Land Disturber (RLD) can be anyone holding a valid Responsible Land Disturber Certificate who will be in charge of and responsible for carrying out the land disturbing activity for the project.

Must permit applicants name a Responsible Land Disturber?

Yes. The applicant must provide to City of Bristol, Virginia the name of an individual holding a valid Responsible Land Disturber Certificate who will be responsible for the land disturbing activity as a condition of approval for all erosion and sediment control plans, agreements in lieu of a plan or land disturbing permits. Please note that although a RLD must be designated for the project, the property owner is still ultimately responsible for all land disturbing activities on a project.

Sugar Hollow Dog Park – Facebook



The City of Bristol, Virginia

7 hrs • 🌐

We hope that you (and Fido, or Sparky!) can join us at the grand opening of the dog park at Sugar Hollow Park on Tuesday, October 1st at 3:30pm. The n... [See More](#)



Carla Garletts Olson and 16 others

7 Shares

Like

Comment

Share

Suggested for You



Seinfeld's Rest Rite

Sugar Hollow Dog Park – WCYB



Sugar Hollow dog park features upgraded equipment and space, thanks to a \$10,000 grant



A new dog park is now open and available for the public and their pups. The space designed for small and large dogs features new equipment, a dog walk and drop-off stations. The new amenities are all thanks to a \$10,000 grant from the PetSafe Bank for Your Park program.



Bristow, Va. was one of ten communities chosen for the grant among a national wide pool. City leaders were there to kick off the park's grand opening.

Great American Clean-Up Day / Household Hazardous Waste

Great American Cleanup

- Date and Time**
Saturday May 30, 2020
9:00 AM - 12:00 PM EDT

Saturday, May 30th
9 A.M. - Noon
- Location**
Malcolm Stadium/Devault Field Parking Lot
1501 Euclid Ave
Bristol, VA
- Website**
<https://www.bristolchamber.com/keep-bristol-beautiful>

Great American Cleanup

[Set a Reminder](#)

Description



The Great American Cleanup (GAC) is a nationwide event to clean up our communities. The event will offer electronic waste recycling (no TVs or computer monitors), secure paper shredding and recycling, household hazardous waste disposal and tire recycling (limit 4 tires with valid ID).

South Holston Lake and River Cleanup – Facebook

8:30 45%

4

3 18

important part of our community.

27TH ANNUAL
SOHO LAKE & RIVER
CLEANUP

KEEP BRISTOL BEAUTIFUL

SATURDAY,
AUGUST 24, 2019

REGISTRATION BEGINS
AT 8 A.M.

CLEANUP CELEBRATION PARTY • 12-3 p.m.
Observation Knob Pavilion

T-SHIRTS, GREAT FOOD,
OVER \$5,000 IN DOOR PRIZES & LIVE MUSIC

3 2 Shares



Quarterly Newsletters



- Stormwater Management
- Engineering Documents
- Roadway Construction
- Roundabouts
- Quarterly Newsletters

[Home](#) > [Departments](#) > [Public Works](#) > [Engineering](#) > Quarterly Newsletters

Quarterly Newsletters

Beaver Creek News

- [Beaver Creek News 12 2019](#)
- [Beaver Creek News April 2020](#)
- [Beaver Creek News August 2020](#)



Meetings & Agendas
Follow city board meetings



BTV
Watch our programs live



GIS
Geographic Information
Optimized for Google Chrome



City HelpDesk
Report a Concern



Online Payments
Easily pay your bills online



Election Information
Voting in the City of Bristol

Public Service Message - Facebook



Reminder: it is against city ordinance to feed waterfowl within the City of Bristol, including public parks and recreation fields.



BEAVER CREEK NEWS



CITY OF BRISTOL, VIRGINIA DECEMBER, 2019 QUARTERLY NEWSLETTER COMING NEXT YEAR!

What is an MS4 and Why Does It Matter?

Let's begin 2020 with our first edition of the quarterly newsletter and a general explanation of why the City of Bristol is considered a Municipal Separate Storm Sewer System or MS4.

An MS4 is defined as a conveyance or system of conveyances that is owned by state, city, town, village, or other public entity that discharges to water of the U.S and designed or used to collect or convey stormwater (e.g., storm drains, curbs and gutters, pipes and ditches). The term MS4 does not solely refer to municipally-owned storm sewer systems but rather is a term with a much broader application that can include state departments of transportation, universities, local sewer districts, hospitals, military bases and prisons.

[The identification of communities as MS4s is to help reduce water pollution in our nation's waterways.](#)

For more information on Bristol's Stormwater Management program please follow the link to our stormwater webpage;

<https://www.bristolva.org/441/Stormwater-Management>

Three high-priority water quality issues for the City of Bristol are;

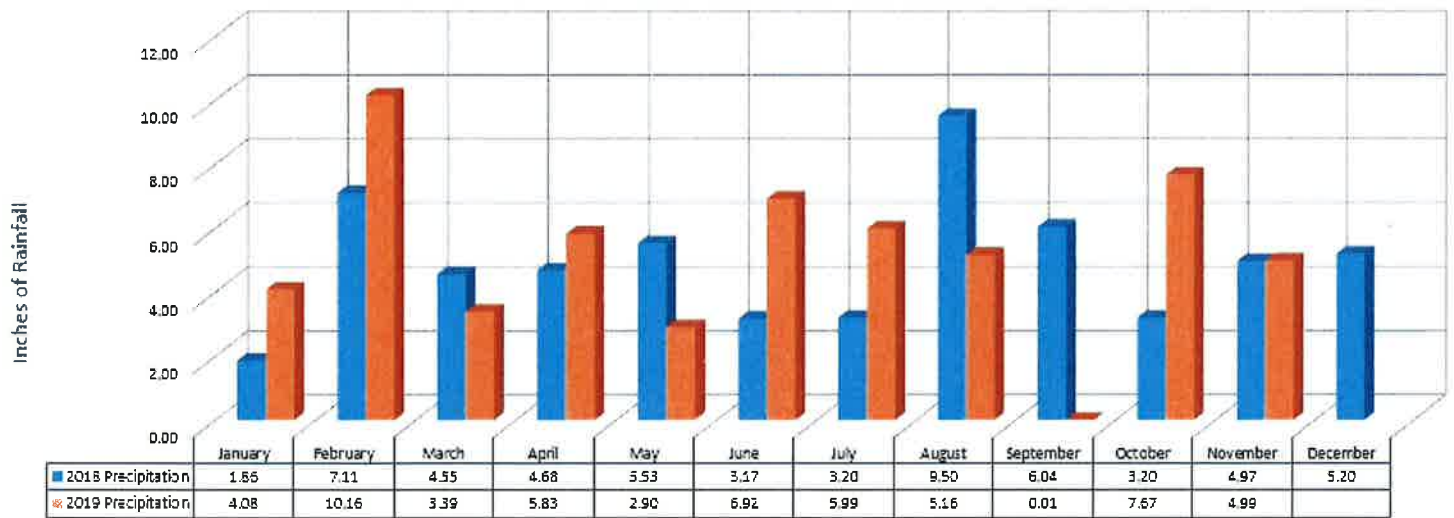
- 1) Bacteria from pet waste
- 2) Sediment from land disturbing activities
- 3) Litter

Each newsletter will focus on information concerning stormwater rainfall, runoff, quantity and quality. One of the high-priority water quality issues previously listed will be explained.

“The way I see it, if you want the rainbow, you gotta put up with the rain.”

Dolly Parton

Rainfall for 2018 thru November 2019



Monthly Totals

Total Precipitation for 2018 = 59.01”

Total Precipitation for 2019 = ?????”

We received 57.10” of precipitation thru November, 2019. Will we beat last years total?

Please share the newsletter on Facebook and feel free to e-mail to family and friends.



If you see an “illicit discharge” (anything other than rain going down the storm drain) please report it by calling or e-mailing the contact below.

BEAVER CREEK NEWS

CITY OF BRISTOL, VIRGINIA

APRIL, 2020 – First Quarter



So why does Bristol have a Municipal Separate Storm Sewer System (MS4)?

The General Virginia Pollution Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Systems (aka MS4 permit) is required for a public entity to discharge stormwater to waters of the State. This permit coverage allows the City of Bristol to establish outfall locations or specific points to release stormwater into a stream. In the case of Bristol, stormwater is predominantly discharged to Beaver Creek and Little Creek. This means that any debris or pollutants that get collected by runoff via conveyances such as curb and gutters, pipe systems, and ditches will eventually show up in a stream. Limiting these pollutants to the maximum extent practicable (MEP) from entering streams and reducing the impacts on aquatic resources is the main purpose of the MS4.

How does the City of Bristol reduce pollutants in stormwater?

The MS4 permit requires the City to develop and implement a program plan every five years. The permit was originally issued in 2003 and has since been reissued in 2008, 2013, and 2018. Each program plan is required to address six minimum control measures (MCM):

- 1) Public Education and Outreach
- 2) Public Involvement and Participation
- 3) Illegal Discharge Detection and Elimination
- 4) Construction Site Stormwater Runoff Control
- 5) Post-Construction Stormwater Management
- 6) Pollution Prevention and Good House keeping For Municipal Operations



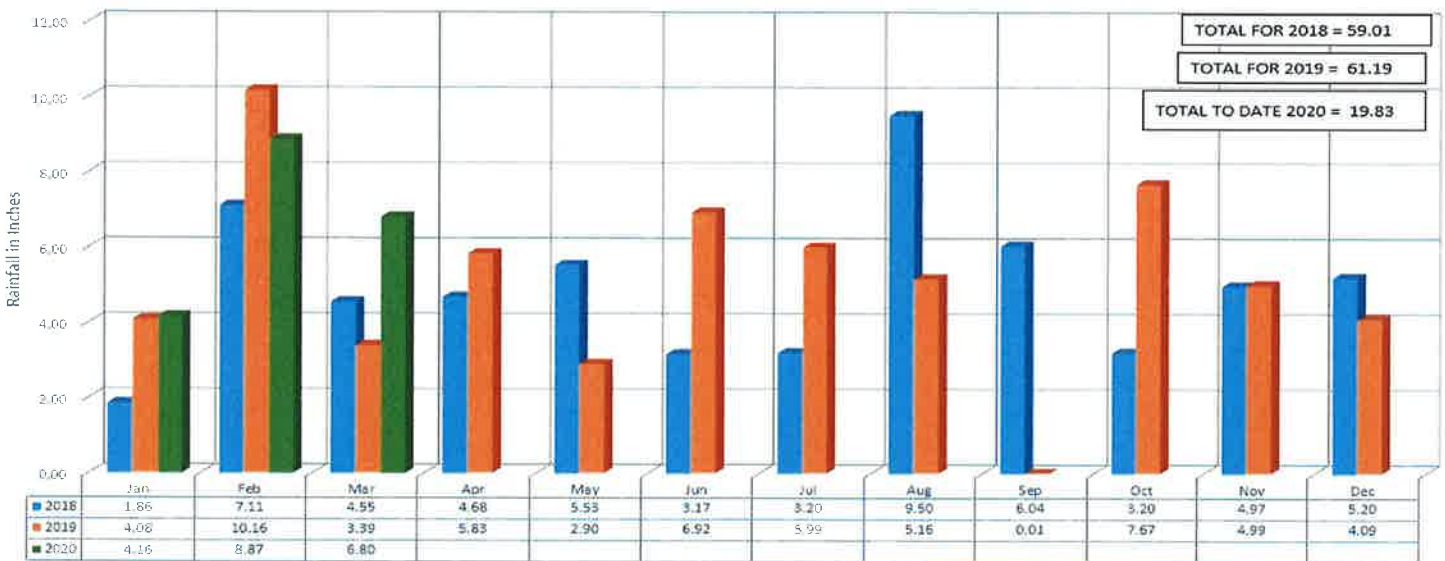
Each MCM has a Best Management Practice (BMP) or strategy associated with it. These strategies usually consist of implementing standard operating procedures (SOPs) or policies within the City. Annually these strategies are reviewed and evaluated to determine if the goal of each BMP is being maintained.

In addition to these MCMs, the MS4 permit requires action plans for addressing wasteload allocations (WLAs) assigned to the City as a result of Total Maximum Daily Loads (TMDLs) adopted by the State Water Control Board. The City has developed and implemented a TMDL action plan for Beaver Creek to address E. coli bacteria and sediment pollution.

Stormwater Facts!

1. Stormwater comes from precipitation.
2. Stormwater that does not soak into the ground becomes surface runoff.
3. Runoff becomes polluted as it runs along roads, parking lots, roofs, lawns and farms.
4. Runoff contains pollutants such as automotive fluids, fertilizers and pesticides, bacteria, sediments, litter, and pet waste.
5. Surface runoff flows into a storm sewer that eventually flows into waterways (rivers, streams, lakes, oceans).

Monthly Rainfall Totals for 2018 thru March 2020



<https://www.bristolva.org/441/Stormwater-Management>

| 276-645-7386 | jpuckett@bristolva.org

Next quarter the newsletter will focus on the water quality issue resulting from bacteria in pet waste reaching our streams

BEAVER CREEK NEWS

CITY OF BRISTOL, VIRGINIA

July, 2020 – Second Quarter "Pet Waste"



What's the big deal about Poo-llution?

Pet waste left on the street or lawn does not just go away or fertilize the grass. Rain washes pet waste down storm drains and into waterways like rivers, bays, and beaches. This can make people sick from salmonella, E. coli, and other infections.

Pet waste is very toxic:

Dog waste is an environmental pollutant. In 1991, it was labeled a non-point source pollutant by the Environmental Protection Agency (EPA), placing it in the same category as herbicides and insecticides; oil, grease and toxic chemicals; and acid drainage from abandoned mines.

Pet waste doesn't just decompose.

It adds harmful bacteria and nutrients to local soils and waters, when it's not disposed of properly. It might not seem like a stormwater problem, but animal waste is one of the many seemingly small sources of pollution that can add up to big problems for water quality, and even human health.

What's the scoop on poop?

Have you ever heard, *you are what you eat*? This classic saying is a great way to help explain why cow manure works as a fertilizer, but dog poop does not. A cow's diet is plant-based: grain, hay, soy meal, cottonseed, corn silage, and more. So, their poop mainly consists of undigested plant fibers. These fibers can add a boost of nutrients to the soil in your garden, helping your plants grow.

Dog poop as fertilizer is a much different story. Since dogs have high-protein diets their poop is much more acidic. As it breaks down, the nutrients are not compatible with the needs of the plants.

What about Compoosting pet waste?

Dog waste in compost can carry a number of unhealthy parasites that can affect humans and other animals. Roundworms are one of the most common pests that afflict our dogs. Roundworms and their cousins, ascarids, may persist in compost made with dog waste. These can be ingested and their eggs can hatch in the human intestine. Unfortunately, our pet wastes contain parasites which may not be killed in household compost piles.

Fun / Fact References:

Copyright © 2020 Pet Poo Skiddoo



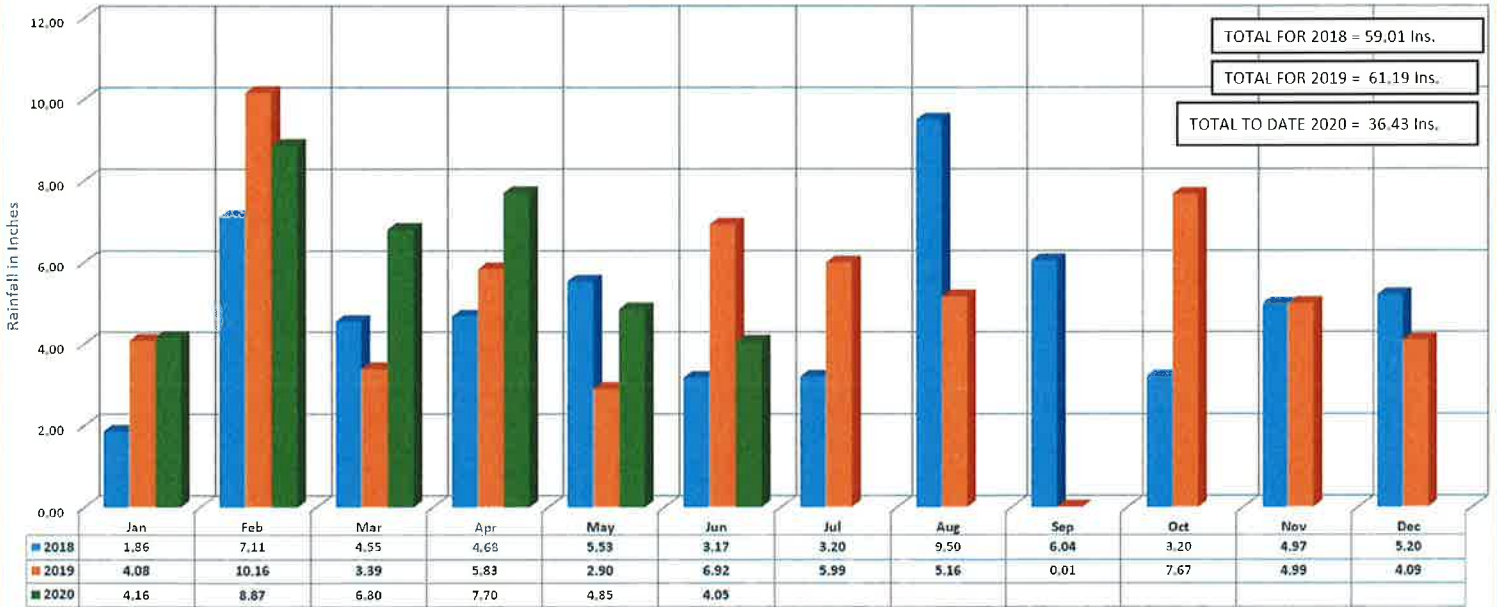
Pet waste decays, using up dissolved oxygen and releasing compounds that are harmful to fish and other animals that rely on water. Pet waste contains harmful bacteria such as E. Coli and fecal coliform. Waters that contain a high amount of bacteria are unfit for human contact. A single gram of pet waste contains an average of 23 million fecal coliform bacteria, some of which can cause disease in humans.

Composting dog waste effectively and safely hinges on the constant high temperatures to kill dangerous parasites. A constant temperature of 165 degrees Fahrenheit (73 C.) has to be maintained for at least 5 days for this to occur. This is difficult to achieve in home composting situations. If you are sure you have done this and have a safe product, you can add it to your garden as an amendment. However, because there is no guarantee that the parasites are certifiably dead, it is best to confine use to areas around ornamental plantings only, such as shrubs and trees. **Do not use the result of pet poop composting around edible plants.** Mix it with vegetative compost for best results.

Protecting our watersheds... "Do your part: Scoop the Poop!"

- 1) **BRING IT** – Always bring a plastic bag when you walk your dog.
- 2) **BAG IT**– Use the bag as a glove to pick up pet waste. Scoop up the waste and turn the bag inside out around the waste.
- 3) **DISPOSE IT** – Properly dispose of pet waste by placing it in a trash can, flushing it (un-bagged) down the toilet, or burying it!

Monthly Rainfall Totals for 2018 thru June 2020



<https://www.bristolva.org/441/Stormwater-Management>

276-645-7386 / jpuckett@bristolva.org

Next quarter the newsletter will focus on the water quality issue resulting from litter reaching our streams.

Remember: If you see an "Illicit Discharge" (anything other than rain going down the storm drain) please report it by using the contact information to the left.

APPENDIX B

Household Hazardous Waste List

Household Hazardous Waste Disposal - May 30th, 2020

**Location: Parking Lot of 1501 Euclid Ave / Gene Malcom Football Stadium
and Devault Baseball Stadium/Boyce Cox Field**

Time: 9:00 am to Noon

HHW Preliminary Totals

221 Vehicles

	Number	Units
Flammable Liquids (Mineral Spirits, Gasoline)	1	55 Gal. Drum
Paint Related Material	7	Cu. Yd. Boxes
Flammable Solids (Petroleum Dist. Naphthlene)	1	5 Gal. Bucket
Organic Peroxide Type D, Liquid (MEK Peroxide)	1	5 Gal. Bucket
Pesticides Solids (2,4 Pyrethrins)	2	55 Gal. Drum
Pesticides Liquid (2,4D Glyphosate)	4	55 Gal. Drum
Waste Corrosive Liquid, Acid (Muriatic, Sulfuric Acid)	2	55 Gal. Drum
Corrosive Liquid Basic (Sodium Hydroxide)	3	55 Gal. Drum
Corrosive Solid Basic (Sodium Hydroxide, Lime)	1	55 Gal. Drum
Batteries, Dry, Sealed (Alkaline)	1	55 Gal. Drum
Batteries, Dry (Ni-Cad)	1	5 Gal. Bucket
Lithium Ion Batteries	1	5 Gal. Bucket
Used AntiFreeze	1	55 Gal. Drum
Used Motor Oil	2	55 Gal. Drum
Automotive Batteries	1	Full Pallet
Latex Paint	18	Cu. Yd. Boxes & 2 Pallets of 5 Gal. Buckets Double Stacked
CFL Light Bulbs	200	Various Sizes
Fluorescent Light Bulbs	6	Boxes
Oxidizing Liquid (Hydrogen Peroxide)	1	5 Gal. Bucket
Aerosol Containers	4	Cu. Yd. Boxes
Small Propane Cylinders	1	Cu. Yd. Box
Large Propane Containers	1	Pallet
Fire Extinguishers	1	
Oxidizing Solid (Calcium Hypochloride)	1	55 Gal. Drum
Various Large Cylinders	1	Cu. Yd. Box
Mercury Containing Manufactured Products	1	5 Gal. Bucket

APPENDIX C

Illicit Discharge Report

***Incident Summary of Illicit Discharge Responses within the City of Bristol, VA
7/1/19-6/30/20***

(400) – Hazardous condition, other – 2 incidents

Incident Number 19003411

11/14/19

NFIRS Number 0003262

28 Timberbrook Dr.

All units responded to the area of 28 Timber Brook Drive to the scene of a gas leak Atmos Energy was working. Battalion 1 arrived on scene first and established command and Engine 3 arrived second due. Around 04:30 it was reported to BVU there was a water leak in front of 28 Timber Brook Drive and BVU responded to the leak. The company that was locating the water lines mis-marked the lines and BVU accidentally struck the gas line, rupturing it. Upon our arrival they had the water service shut down and were in the process of shutting down the gas. We monitored for gas in the area and the area was clear. We remained on scene until the gas was shut down and then cleared and returned to service.

Incident Number 19002069

7/17/19

NFIRS Number 0001994

2107 Shakesville Rd

E-2 was dispatched to city bus garage for report of oil and diesel spill upon arrival E-2 created two catches to stop fluids from entering in the water. 6 booms were used and 4 bags of oil dry information was passed onto department heads.

(411) – Gasoline or other flammable liquid spill – 3 incidents

Incident Number 20001704

5/31/20

NFIRS Number 0001611

524 Commonwealth Ave.

All units were dispatched to the above location for a gas spill. Battalion 1 upon arrival at the scene cancelled all units except E-2.

Upon arrival of E-2 a complete bag of oil dry was applied to the spill which controlled and contained the gasoline. Scene was stabilized and E-2 clear call.

1 to block traffic at the southbound lane of Commonwealth Ave. E-2 positioned at Keys St. The construction company replacing sewer lines at the property had ruptured a 3/4" gas line with a track hoe. L-1 personnel monitored the area with a 5 gas meter. Zero percent LEL was detected. L-1 continued to monitor the area and waited on the gas company to arrive. The construction company had already notified Atmos energy prior to the arrival of the FD. E-2 cleared the scene and returned to service. E-3 was cancelled prior to arrival. B-1, M-1, and L-1 remained on scene until Atmos energy arrived and shut the gas off. Atmos applied a clamp to the gas main and shut off the leak. B-1 terminated command and all remaining units cleared the scene.

Incident Number 20001438

05/05/20

NFIRS Number 0001357

200 Lee St.

Medic 1 and Ladder 1 were dispatched and immediately responded to a reported gas leak in Cumberland Square Park. Upon arrival, units found that the eternal flame had gone out. The flame was reignited and all units cleared.

Incident Number 20000926

03/16/20

NFIRS Number 0000881

232 Johnson St.

Engine 2 was dispatched by 911 center and immediately responded to 232 Johnson Street for an odor of natural gas. Upon arrival, Engine 2 met the homeowner outside who stated that while sitting on the front porch, he began to smell a strong odor of natural gas. He denied hearing any sounds of a leak, but stated that he had previous issues with gas leaks at the home. He further stated that he never smelled any gas odors inside the home. Engine 2 checked the area with a 5 gas meter and all readings were normal around the house. At no time did Engine 2 notice any gas odors. The homeowner did not want Engine 2 to check the inside of the home and Engine 2 cleared the scene.

Incident Number 20000789

03/05/20

NFIRS Number 0000750

100 Beacon Rd.

All units were dispatched by 911 center and immediately responded to 100 Beacon Rd for a reported gas leak. Upon arrival, Atmos Energy was already on scene. Atmos representative Hamblin was on scene and advised that he was conducting a 5 year survey when he found a reading of 10% gas around a meter located in the rear of the building. He also stated that it is a new Atmos policy to have the fire department stand by when a leak is detected and during repair. The building was monitored by both Engine 2 and Atmos personnel with no gas readings present within the building. The gas meter was cut off by Atmos personnel and Ladder 1, Medic 1 and Engine 3 were cleared and returned to service.

Incident Number 20000332

01/27/20

NFIRS Number 0000311

1000 New Hampshire Ave.

Central Dispatch alerted Station 1 to respond to 1000 New Hampshire Avenue for a possible gas leak. Ladder 1 responded emergency traffic. Upon arrival crews deployed to the upstairs level of the residence, where a five gas meter was deployed to check for a possible leak, the meter showed nothing. Investigation then moved to the basement, it was determined the basement was locked and no key was able to be found. The resident advised we could gain entry by forcing/removing the lock. Evaluation of the basement revealed nothing and the monitors were clear. The basement was secured by closing the door. A smoke detector was also installed in the residence and the appropriate paperwork was filled out. All units cleared the call.

Incident Number 20000116

01/10/20

NFIRS Number 0000111

873 Bonham Rd.

E3 was dispatched to above listed address for reported smell of gas in the main office area of UPS. E3, E2 and Battalion 1 responded to the location and located a smell of natural gas in the office area. The odor was traced back outside to the main gas utility valves, the HVAC intake was also directly beside of the gas main valves. It was determined after checking the interior with a 5 gas meter that there was no viable threat. The gas was shut off outside so that UPS could contact their gas company to come inspect for a leak. E3, E2 and Battalion 1 cleared the call.

Exposure: E3 and E2 crews were exposed to natural gas fumes in a confined area.

Incident Number 19003438

11/16/19

NFIRS Number 0003286

40 Hillside Ave.

Bristol Virginia Fire Department was dispatched to the address above for a gas leak on the outside of a residence. Medic 1, Ladder 1, and Battalion 1 responded to the scene to arrive without incident or delay. The home owner stated that he hit the pipe coming out of the ground last week and smelled the gas when he walked by and called us. approaching the line no gas was detected once at the pipe the pipe was checked for leaks. No leaks were present using soapy water at the joints. The gas meter did not detect any natural gas as well. Atmos was contacted at that time Due to the slight smell of natural gas. The residence was cleared along with the one beside. Battalion 1 stayed on scene to wait on the gas company. Ladder 1 and Medic 1 cleared the scene and returned back into service.

advised to call back if the smell was still present and we would return and investigate more. All units cleared and returned to service. Home owners William & Mary Doss

(422) – Chemical spill or leak – 2 incidents

Incident Number 20001596

5/21/20

NFIRS Number 0001507

422 Clinton Ave.

Fire units were dispatched to the noted location for a report of a paint spill, unable to ascertain initially what the exact chemical was. Units responded to the scene. Upon arrival on the scene, we were met by the complainant whom states someone had dumped about a gallon of paint in her driveway. Research was done on the material, it was determined it was a non hazardous, water soluble paint. The resident was advised that we were not able to wash the paint off her driveway due to runoff. The decision was then made that we would apply oil dry to the spill. The police department was also on scene to file a vandalism report. Once the situation was mitigated and Ladder 1 cleared the call.

Incident Number 20001307

04/22/20

NFIRS Number 0001228

1745 Pittstown Rd.

Engine 2 received a call from dispatch advising that we needed to respond to 1745 Pittstown road for fish kill in creek behind the house.

Engine 2 arrived on scene and made contact with the occupants in the address we were sent too. Engine 2 personnel along with Battalion 1 investigated the creek location and did find several small fish dead in the creek.

VDEM Scotty Sproles was contacted and advised that he was en-route to the location.

Engine 2 personnel made contact with VDEM personnel and assisted with the investigation of the incident.

VDEM contacted DEQ and that department was en-route to the location.

Engine 2 was cleared of scene by VDEM after DEQ arrived on scene.

(423) – Refrigeration Leak – 0 incidents

(424) – Carbon monoxide incident – 0 incidents

Incident Number 19003693

12/10/19

NFIRS Number 003519

856 Old Abingdon Hwy

E-3 responded to above area for a MVC. Upon arrival vehicle was out of roadway no assistance was needed. E-3 returned to service.

APPENDIX D

SWO Inspections

MS4 OUTFALL INSPECTION PERMIT YEAR 2

	INSPECTION DATE	SWO_ID	
1	4/22/2020	BC-003	
2	4/22/2020	BC-003.2	
3	4/22/2020	BC-003A	
4	4/22/2020	BC-006A	
5	4/22/2020	BC-007	
6	4/22/2020	BC-011	
7	4/22/2020	BC-011.1	
8	4/22/2020	BC-016	
9	4/22/2020	BC-017	
10	4/22/2020	BC-018	
11	4/22/2020	BC-018	
12	4/22/2020	BC-018.1	
13	4/22/2020	BC-020.2	
14	4/22/2020	BC-032	
15	4/22/2020	BC-033	
16	4/22/2020	BC-034	
17	4/22/2020	BC-037.5	NEW
18	4/22/2020	BC-041.8	NEW
19	4/22/2020	BC-041.8	
20	4/22/2020	BC-042.1	
21	4/22/2020	BC-048.2	NEW
22	4/22/2020	BC-051	
23	4/22/2020	BC-15.2	
24	4/22/2020	BC-15.4	
25	4/22/2020	BC-29.3	
26	5/1/2020	BC-072.8	NEW
27	4/22/2020	S-001-05	
28	4/22/2020	SB-007	
29	4/22/2020	SB-008	
30	4/22/2020	SB-009	
31	4/22/2020	SB-009.7	NEW
32	4/22/2020	SB-011	
33	4/22/2020	SB-019	
34	4/22/2020	SB-020.2	NEW
35	4/22/2020	SB-021.2	
36	4/22/2020	SB-022	
37	4/22/2020	SB-024	
38	4/22/2020	SB-025.3	NEW
39	4/22/2020	SB-025.4	NEW
40	4/22/2020	SB-025.8	
41	4/22/2020	SB-025.9	NEW
42	4/22/2020	SB-026	
43	4/22/2020	SB-026.1	NEW

44	4/22/2020	SB-029	
45	4/22/2020	SB-029.5	
46	4/22/2020	SB-030	
47	4/22/2020	SB-031	
48	4/22/2020	SB-031.1	NEW
49	4/22/2020	SC-001-03	
50	4/22/2020	SC-001-03.8	
51	4/22/2020	SC-001-05	

APPENDIX E

Bmp Structures

City of Bristol, Virginia Post 2006 BMP's

Date: 06/30/20

By: JFP

Facility ID	Use/Description	Location	HUC-6	Maintenance Responsibility	Acres Treated			Impaired Waters 2010 305(d)/303(d) Integrated Report	BMP Type	Maintenance Agreement? Y/N	Install Date	Date of Last Inspection
					IMPERV	PEREV	TOTAL					
BMP-002	Highland Grove S/D	Lavinia St	TH-21	Private	1.00	1.60	2.60	Beaver Creek / Mumpower Branch	Detention Pond	Yes	05/24/07	02/15/18
BMP-010	Walmart/Old Dominion Center (Repair)	3280 Lee Hwy	TH-21	Private	58.90	12.00	70.40	Beaver Creek	Detention Pond		06/01/94	04/21/17
BMP-022	Ridgecrest Townhouses	Heritage Dr	TH-21	Private	3.10	2.20	5.30	Beaver Creek / Mumpower Branch	Detention Pond	Yes	01/05/08	02/16/18
BMP-037	Mellow Mushroom	3518 Lee Hwy	TH-21	Private	1.00	0.20	1.20	Beaver Creek	Manufactured BMP	Yes NS	12/08/11	02/15/18
BMP-038	Food City	1320 Euclid Avenue	TH-21	Private	6.30	0.80	7.10	Little Creek	Detention Pond	Yes	02/06/12	02/16/18
BMP-039	Cheddar's	1003 Old Airport Road	TH-21	Private	2.70	0.50	3.20	Beaver Creek	Detention Pond	Yes	07/17/12	02/15/18
BMP-040	Olive Garden	3102 Lee Hwy	TH-21	Private	1.80	0.40	2.20	Beaver Creek	Manufactured BMP	Yes	05/14/12	10/24/17
BMP-041	Bristol City School Central Office	220 Lee Street	TH-21	Private	0.80	0.10	0.90	Beaver Creek	Manufactured BMP		05/21/12	03/14/19
BMP-042	Tri-Cities Orthodontics	Linden Square Drive	TH-21	Private	0.40	0.10	0.50	Beaver Creek	Detention Pond	Yes_R	02/10/12	02/16/18
BMP-046	Hilton Garden Inn	117 Village Circle	TH-21	Private	1.70	0.10	1.80	Beaver Creek	Bio-Retention	Yes	03/13/15	02/15/18
BMP-047	Virginia Premier	105 Village Circle	TH-21	Private	0.50	0.10	0.60	Beaver Creek	UG Detention	Yes	06/02/14	05/30/18
BMP-048	Landfill Gas Energy	Landfill	TH-20	Private	1.10	9.90	11.00	Beldleman Creek	Rainwater Harvest			04/05/19
BMP-049	Bristol Infusion Center	349 Island Rd	TH-22	Private	1.30	1.00	2.30	Stoffer Creek	Bio-Retention	Yes_R	01/07/15	02/16/18
BMP-050	Morrison School	200 North Pinecrest	TH-21	Private	1.10	0.60	1.70	Little Creek	Detention Pond	Yes	06/12/15	02/16/18
BMP-051	Dollar General	1401 Euclid Ave	TH-21	Private	0.24	0.06	0.30	Susong Branch	Dry Swale	Yes	09/25/15	02/16/18
BMP-052	Stollings Collision Center	3528 Lee Highway	TH-21	Private	0.60	0.25	0.85	Beaver Creek	Grass Channel	Yes_R	01/04/16	02/15/18
BMP-053	Oakmont at Gordon Park - 1	410 Gordon Ave.	TH-21	Private	1.78	0.80	2.58	Little Creek	Bio-Retention	Yes_R	04/20/16	02/16/18
BMP-054	Oakmont at Gordon Park - 2	410 Gordon Ave.	TH-21	Private	0.48	0.46	0.94	Little Creek	Bio-Retention	Yes_R	04/20/16	02/16/18
BMP-056	Dollar General	1055 East Valley Dr	TH-21	Private	0.75	0.39	1.14	Mumpower Branch	Bio-Retention	Yes_R	06/24/16	02/15/18
BMP-057	Dollar General	1055 East Valley Dr	TH-21	Private	0.00	0.00	0.00	Mumpower Branch	Detention Pond	Yes_R	06/24/16	02/15/18
BMP-058	Village at Oakview	401 Oakview Ave	TH-21	Private	1.85	2.58	4.43	Beaver Creek	Manufactured BMP	Yes_R	04/17/18	04/17/18
BMP-059	Bristol Skilled Nursing RG-1	109 Village Circle	TH-21	Private	0.72	1.41	2.13	Beaver Creek	Bio-Retention	Pending	01/11/19	01/11/19
BMP-060	Bristol Skilled Nursing RG-2	109 Village Circle	TH-21	Private	0.51	0.58	1.09	Beaver Creek	Bio-Retention	Pending	01/11/19	01/11/19
BMP-061	Bristol Skilled Nursing RG-3	109 Village Circle	TH-21	Private	1.26	0.39	1.65	Beaver Creek	Bio-Retention	Pending	01/11/19	01/11/19
BMP-063	O'Reilly Auto Parts Pond 1	1980 Lee Hwy	TH-21	Private	0.29	0.08	0.37	Beaver Creek	Bio-Retention	Yes_R	06/29/17	02/16/18
BMP-064	O'Reilly Auto Parts Pond 2	1981 Lee Hwy	TH-21	Private	0.37	0.08	0.45	Beaver Creek	Bio-Retention	Yes_R	06/29/17	02/16/18
BMP-066	Oakmont at Gordon Park Expansion	449 Gordon Ave	TH-21	Private	0.64	2.03	2.67	Little Creek	Manufactured BMP	Yes_R	Pending	

City of Bristol, Virginia Post 2006 BMP's

Date: 06/30/20

By: JFP

Facility ID	Use/Description	Location	HUC-6	Maintenance Responsibility	IMPERV	PEREV	TOTAL	Impaired Waters 2010 305(b)/303(d) Integrated Report	BMP Type	Maintenance Agreement? Y/N	Install Date	Date of Last Inspection
BMP-067	Oakmont at Gordon Park Expansion	450 Gordon Ave	TH-21	Private	0.17	2.2	2.37	Little Creek	Dry Swale	Yes_R	Pending	
BMP-068	Oakmont at Gordon Park Expansion	451 Gordon Ave	TH-21	Private	0.34	1.9	2.24	Little Creek	Grass Channel	Yes_R	Pending	
BMP-071	Euclid Avenue Center	1309 Euclid Ave	TH-21	Private	0.72	0.1	0.82	Little Creek	Grass Channel	Yes_R_PC	03/04/19	03/04/19
BMP-072	Tunnel Car Wash	Linden Square Drive	TH-21	Private	0.74	0.52	1.26	Beaver Creek	Detention Pond	Yes_R_PC	05/29/19	05/29/19
BMP-001	Whitten Hill S/D	Kingsmill Pike/Whitten Way	TH-21	Public	2.8	15.7	18.5	Beaver Creek / Mumpower Branch	Detention Pond	CityOwned -1/2	05/19/06	03/05/20
BMP-005	Commonwealth of Virginia	Airport Rd/Sonic Restaurant	TH-21	Public	60	170	230	Beaver Creek	Detention Pond	CityOwned	06/15/96	03/05/20
BMP-008	Valley Drive Stormwater Facility	1124 E Valley Dr	TH-21	Public	0.00	0.00	0.00	Beaver Creek / Mumpower Branch	Detention Pond	CityOwned	07/10/07	03/05/20
BMP-032	City of Bristol	Resting Tree Drive	TH-21	Public	6.40	39.00	45.40	Beaver Creek	Retention Pond	CityOwned	05/07/10	03/05/20
BMP-043	The Falls Dev - Pond 1	Smoky Min Blvd	TH-21	Public	0.90	4.10	5.00	Beaver Creek	Detention Pond	CityOwned	03/02/15	03/05/20
BMP-044	The Falls Dev - Pond 2	Cabela Drive	TH-21	Public	23.80	5.40	29.20	Beaver Creek	Detention Pond	CityOwned	03/02/15	03/05/20
BMP-045	The Falls Dev - Pond 3	Cabela Drive	TH-21	Public	42.30	13.50	55.80	Beaver Creek	Detention Pond	CityOwned	03/02/15	03/05/20
BMP-062	Lee Hwy Widening Exit# 3	Lee Highway	TH-21	Public	3.24	1.58	4.82	Beaver Creek	EnhancedExtended Detention	CityOwned	07/08/16	03/05/20
BMP-065	Lee Hwy Widening Exit# 2	Lee Highway	TH-22	Public	1.44	1.17	2.61	Beaver Creek	Extended Detention	CityOwned	07/08/16	03/05/20
BMP-069	Lee Hwy Widening Ph II East	Lee Highway	TH-21	Public	1.68	0.99	2.67	Beaver Creek	Bio-Retention	CityOwned	Pending	03/05/20
BMP-070	Lee Hwy Widening Ph II West	Lee Highway	TH-21	Public	2.80	2.20	5.00	Beaver Creek	Bio-Retention	CityOwned	Pending	03/05/20
Constructed After 2006 or Modified/Repaired												
					Private							
					Public							
					31							
					11							
TOTAL												
					42							

APPENDIX F

Training Sign-in Sheets

Safety Meeting Attendance

Division: SOLID WASTE / COLLECTIONS

Date: 1/8/20

Subject: SWPP





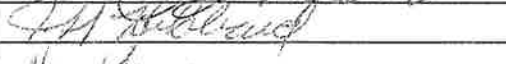
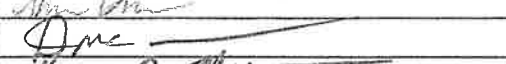
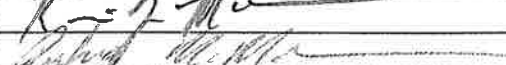
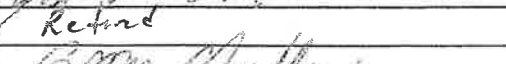


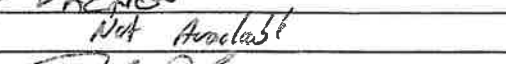
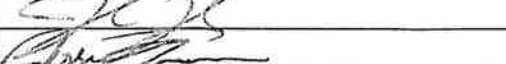
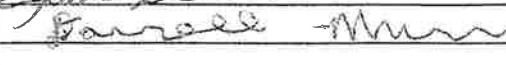
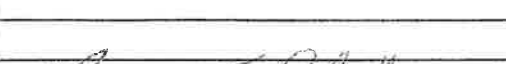





	Print Name	Signature
1.	MARK CAMPBELL	Mark Campbell
2.	David Cochran	David Cochran
3.	Thomas Cook	Thomas Cook
4.	Brad Malachuk	Brad Malachuk
5.	Scott Shifflett	Scott Shifflett
6.	Lee Small	Lee Small
7.	ERIC JACOBS	Eric Jacobs
8.	Mike Martin	Mike Martin
9.	Cody Pash	Cody Pash
10.	Kevin Milkard	Kevin Milkard
11.	Samuel Hess	Samuel Hess
12.	Robert Nixon	Robert Nixon
13.	Justin Grubb	Justin Grubb
14.	Jeffrey MITCHELL	Jeffrey Mitchell
15.	RON PARIS	Ron Paris
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		

SAFETY MEETING ATTENDANCE SHEET

DIVISION: Streets

DATE: 1/21/20

SUBJECT: Storm Water Best Management Practices

EMPLOYEE NAME	EMPLOYEE SIGNATURE
Berry Scott	
Browning Guy	
Burke Samuel	
Castle Jimmy	
Decroy Doug	
Houser Tommy	
Hubbard Jeffery	
Ker Shawn	
McConnell David	
McCracken Kevin	
McMahan Joshua	
McNutt Samuel	Retired
Mullins Gary	
Owens Danny	
Poe Jerrod	
Smith Eric	
Stanley Jay	Not Available
Taylor John	
Thomas Jessee	
DARRELL MURRAY	
Temps:	
Hall Shawn	
Lahr Gage	