STAUNTON
VIRGINIA

City of Staunton, Virginia

MS4 ANNUAL REPORT

For the Virginia Stormwater Management Program General Permit Registration Statement for Small Municipal Separate Storm Sewer Systems (MS4)

General Permit No. VAR040132

Reporting Period: Permit Cycle 2, Year 5
July 1, 2022 through June 30, 2023

Certification

CERTIFICATION STATEMENT

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.

Printed Name: Leslie M. Beauregard Title: City Manager

Signature: Date: September 27, 2023

Permit Number: VAR040132

MS4 Name: City of Staunton

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INTRODUCTION

Discharges from municipal separate storm sewer systems are regulated under the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP) Permit regulations and the Clean Water Act as point source discharges. MS4 regulations were developed and implemented in two phases. Implementation of the first phase began in the early 1990s and required that operators of MS4s serving populations of greater than 100,000 people (per the 1990 decennial census) apply for and obtain a permit to discharge stormwater from their outfalls. The second phase of MS4 regulations became effective March 23, 2003, and required that operators of small MS4s in "urbanized areas" (as defined by the latest decennial census) obtain a permit to discharge stormwater from their outfalls.

In August 2013, the City of Staunton received a Notice of Designation as a regulated small MS4. Part of the City's jurisdiction had been identified as being located within an urbanized area according to the 2010 Decennial Census. As a result, the City must apply for and maintain coverage under the General Permit for the Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems. Similar to the Phase I programs, small MS4 programs must be designed and implemented to control the discharge of pollutants from their storm sewer system to the maximum extent practicable in a manner that protects the water quality in nearby streams, rivers, wetlands and bays.

On May 16, 2018, the City of Staunton submitted a Registration Statement outlining the City's MS4 Program to the Department of Environmental Quality (DEQ). On November 1, 2018, the City received notification from DEQ that the City had obtained continuing coverage under the General VPDES Permit for Small MS4s. Coverage under the Virginia General Permit for Discharges from Small Municipal Storm Sewer Systems requires each MS4 locality to submit an annual report by October 1 of each year describing the status of the Program's implementation for the previous permit year, July 1 through June 30.

Stormwater discharges from Phase II (small) MS4s are regulated under the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. Small MS4s include storm sewer systems operated by cities, counties, towns, federal facilities such as military bases, Veteran's Affairs hospitals and research facilities, Department of Defense facilities and parkways, and state facilities such as VDOT, community colleges and public universities. Under the General Permit, small MS4s must develop, implement and enforce a program that includes the following "six minimum control measures":

- Public education and outreach on stormwater impacts
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention/good housekeeping for municipal operations

Activities within each of the control measures are termed Best Management Practices or BMPs.

This document is the City of Staunton's required Annual Report for Permit Cycle 2 - Permit Year 5. Permit Year 5 is the period starting on July 1, 2022 and ending on June 30, 2023. The annual report includes the status of the BMPs implemented as part of the City's MS4 Program Plan. The annual report lists the measurable goals and the accomplishments achieved for each BMP. The annual report also includes any changes to the City's MS4 Program Plan.

ABOUT STAUNTON

Located in the historic Shenandoah Valley, Staunton was first settled in 1732. The hamlet was named in honor of Lady Staunton, wife of Sir William Gooch who served as lieutenant-governor of Virginia from 1727 to 1749. The Virginia General Assembly established Staunton as a town in 1761.

Staunton, unique among cities for its natural beauty and architectural heritage, provides an excellent quality of life for its community by continuing the tradition of citizen leadership, innovation, and perseverance. The best of its history combined with the best new ideas and technology make Staunton an exceptional small city with charm, energy, ambiance, and creativity that others seek to emulate.

Today, Staunton is an independent city with a population of 25,750 as of 2020 census, located within Augusta County. Staunton is approximately 19.7 square miles in size. The urbanized area within the City of Staunton is 14.02 square miles as identified in Figure 1. This urbanized area represents a portion of the Staunton-Waynesboro Metropolitan Statistical Area, as defined by the Office of Management and Budget, which had a population of 125,433 as of the 2020 census.

The City of Staunton lies within four (4) major watersheds. The hydrologic unit codes (HUC) are the following:

Name	HUC 12	VAHU6
➢ Lewis Creek	020700050301	PS06
➢ Christians Creek/Barterbrook Branch	020700050202	PS09
➢ Middle River/Falling Spring Run	020700050302	PS07
➢ Middle River/Bell Creek	020700050104	PS04

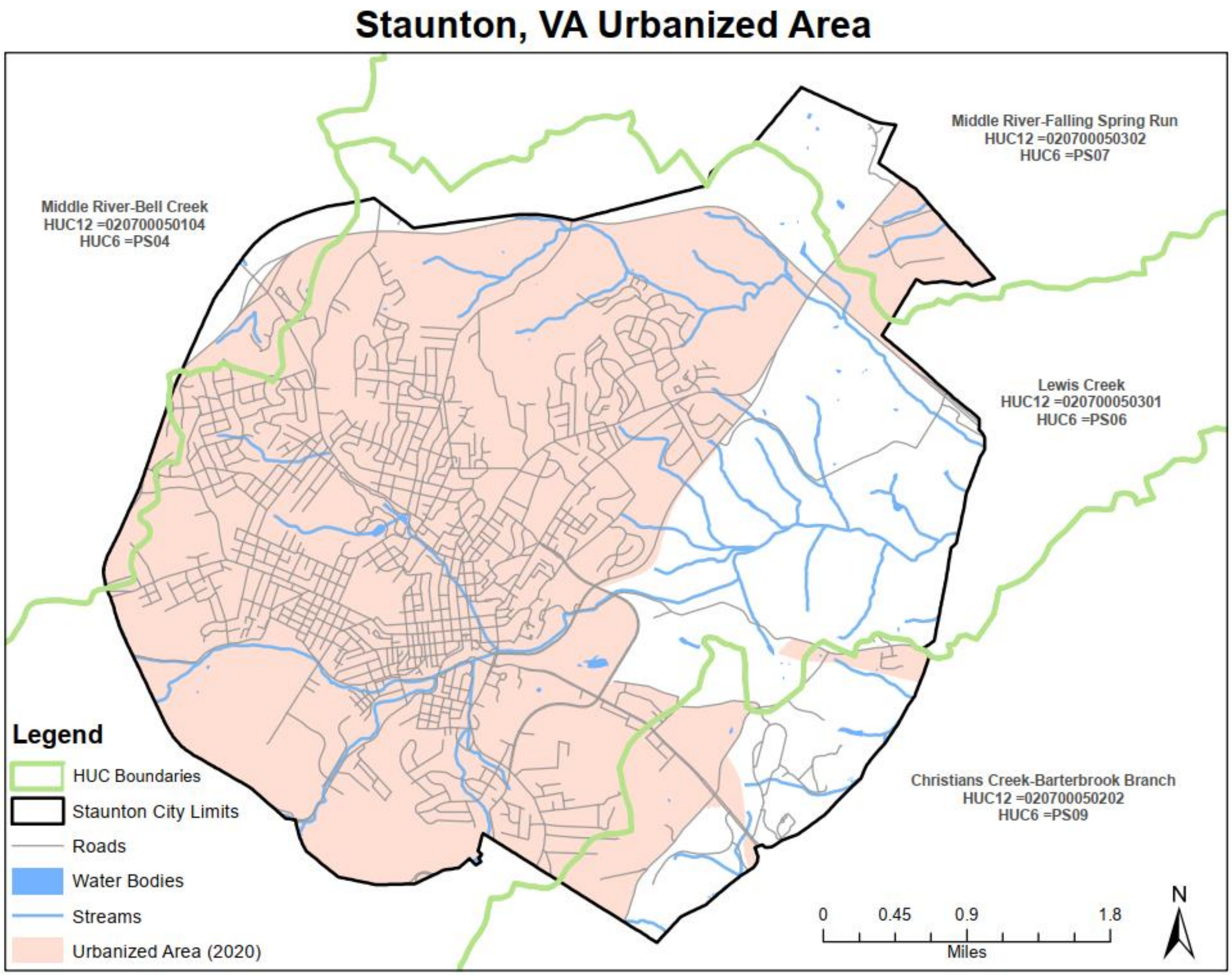

Staunton, VA Urbanized Area
Middle River-Falling Spring Run
HUC12 =020700050302
HUC6 =PS07
Middle River-Bell Creek
HUC12 =020700050104
HUC6 =PS04
Lewis Creek
HUC12 =020700050301
HUC6 =PS06
Christians Creek-Barterbrook Branch
HUC12 =020700050202
HUC6 =PS09
Legend
HUC Boundaries
Staunton City Limits
Roads
Water Bodies
Streams
Urbanized Area (2020)
0
0.45
0.9
1.8
Miles
N

Figure 1

MS4 PROGRAM

Minimum Control Measure 1 – Public Education and Outreach

The public education and outreach (PE&O) BMPs will be a critical component of City's MS4 program. The PE&O program will help the citizens of the community better understand the environmental challenges that they are facing as a community. This new knowledge will encourage the community as a whole to implement changes in their lifestyles that will reduce the negative impacts their daily choices have on the environment. Additionally, this program empowers the citizens to become part of the stormwater solution by developing an understanding of program goals and providing a variety of ways to communicate observed issues to the program administer.

The PE&O BMP will focus on the following high priority areas:

- Waste/Pollution Management was selected due to the immediate impact to the community. The City of Staunton spends significant resources every year to clean streets, maintain BMP's, and to facilitate better water quality for the community.
- Watershed Awareness brings attention to the importance of caring for and maintaining the quality of the City's watersheds because the City's watersheds are located at the headwaters of the Chesapeake Bay and so can impact downstream watersheds and ultimately the Chesapeake Bay itself.
- Chesapeake Bay and local waterway nutrient impacts was chosen to increase citizen understanding and support for the City's nutrient reduction efforts. The City will be required to dedicate significant resources on the reduction of nutrients to address TMDL's. Resource allocation will be restricted without significant community support and funding.

Modifications to MCM 1: None this permit year.

<u>BMP – 1.1 School Presentations (Category - Speaking Engagements)</u>

The City will continue to develop targeted presentations to school age children in grades 4 through 9. The presentations will be age appropriate with the goal to build on past presentations in future years. Presentations will include interactive tools to help better understand the effects of water pollution and strategies for prevention as they relate to the City's high priority topics.

Objective and Expected Results: By targeting grades 4 through 9, the City will be providing these children with the required information to foster stormwater awareness that will translate into long lasting positive changes toward stormwater issues.

Implementation Schedule: The City will continue to provide the presentations throughout the permit cycle. The City will target 4 to 6 presentations per year. The Environmental Programs Division will be responsible for developing and giving the presentations.

Method to Determine Effectiveness: The measure for this BMP is based on the total number of presentations per year and the total number of students. The annual report will include these numbers.

Annual Reporting: The audience for Permit Year 5 was based on the number of students in the 6th grade attending the presentations. After consulting with school officials, it was determined that 6th grade presents the best opportunity to accommodate stormwater topics within their curricula.

School Presentations

Permit Year 5	Number of Presentations Planned	Number of Presentations Conducted		Number of Students Impacted	Number Presentations Anticipated next year	Number Anticipated Students Impacted
		Power Point	Enviroscape			
July 1, 2022- June 30, 2023	4	4	12	201	4	200

Program	MCM	Presentation	Audience	Date	Number of Students
School Presentations	1.1	Stormwater, Watersheds, and Enviroscape for Shelburne 2022	Shelburne Middle School - 6th grade Science 12 Different Classes Ms. Evans	11/7/2022	201

BMP – 1.2 Waste Awareness Brochures (Category - Written Materials)

The City will develop educational brochures to provide information in an easy to read format. The brochures will concentrate on the high priority topics. In keeping the topics open to all high priority areas, the City will have the flexibility to modify the Program from one topic to another as priorities change from one year to the next. Each brochure will include information about the topic, identify desirable changes in behavior and provide contact information for questions and reporting. The educational brochures will be made available through mass mailings and at various City offices and community events.

Objective and Expected Results: By distributing educational brochures to the citizens, the City will be raising the general awareness of stormwater issues as well as providing actions the public can take to help protect water quality and minimize impacts to stormwater runoff.

Implementation Schedule: Waste brochures will continue to be developed and distributed throughout the permit cycle. The Environmental Programs Division will be responsible for the brochure's content and distribution.

Method to Determine Effectiveness: The effectiveness of this BMP is based on the total number of brochures distributed. The annual report will include this number.

Annual Reporting: The brochure is currently being updated and was not included in this year's utility billing. The new brochure will be sent out in January of 2024 and will be written so that it is easier to understand. The topic of the brochure will also be changed from BMPs to more general stormwater and pollution prevention terminologies and information.

Waste Awareness Brochures

Permit Year 5	Number of Brochures Distributed
July 1, 2022 - June 30, 2023	0

BMP – 1.3 Watershed Awareness (Category - Electronic Media)

The City has developed internet social media material to provide information in an easy to share format. The material concentrates on the topic of "Watershed Awareness". This topic was chosen in order to bring awareness to the importance of caring for and maintaining the quality of the City's watersheds and how the City's watersheds, located at the headwaters, affect downstream watersheds and ultimately the Chesapeake Bay. In keeping the social media format general, it will allow the City to have the flexibility to incorporate multiple types of social media outlets, i.e., Facebook, YouTube, etc. as priorities change and opportunities arise from one year to the next. Each post will include resources and information in regards to Staunton's watersheds and their impact on a local and state environmental well-being, identify desirable changes in behavior and provide contact information for questions and reporting. The material will be made available through social media posts through a public, City-run social media format.

Web link to the City's Facebook page:
https://www.facebook.com/stauntonstormwater

Objective and Expected Results: By using social media to reach citizens, the City will be raising the general awareness of the stormwater issues concerning watersheds, both locally and at the state level. The material will also provide actions the public can take to help protect water quality and minimize impacts to stormwater runoff.

Implementation Schedule: The Watershed Awareness social media material will continue to be developed and posted throughout the permit cycle. The Environmental Programs Division will be responsible for the social media material and its distribution.
Method to Determine Effectiveness: The effectiveness of this BMP is based on the total number of website hits. The annual report will include this number.

Annual Reporting: The estimated target audience reached is calculated by using Facebook's publishing tools and using audience details such as City of Staunton and Environmentalism, and the total number of hits, likes, and reaches on the Facebook page.

Watershed Awareness Social Media

Permit Year 5	Number Hits/Likes/Reaches
July 1, 2022 - June 30, 2023	4,426

Breakdown	Amount
FB Reaches	3,954
New FB page likes	69
Total FB likes	472
Total FB page visits	332

Page Followers	Amount
New	99
Total	528

65% of followers are women 35 and older. 57% of the Facebook page followers are from Staunton, and the remaining are from surrounding areas.

Flood Awareness Program

After the historic flooding in August of 2020, the City procured a flood study of the city's watershed and existing stormwater conveyance systems to determine potential flood meditation measures. The most impactful and cost-effective measure recommended was the implementation of a flood warning/awareness system. Since the last reporting cycle, the City's Flood Awareness Program have been brought online. Five in-stream depth sensors and six rain gauge sensors have been installed throughout the Lewis Creek watershed. These sensors connect to a **public dashboard** that displays almost real time stream depth and rain gauge data. Citizens can view this dashboard at any time and can also sign up to receive alerts via text message or email when conditions are indicative of potential flooding conditions within the flood prone/floodplain areas of the city. The dashboard will also be integrated into the National Weather Service and WHSV-TV3 weather alert systems.
The dashboard can be viewed here: *https://stauntonva.onerain.com/*.

Flood Awareness Program – Flood Awareness System

Permit Year 5	Number of Alert Subscribers
July 1, 2022 - June 30, 2023	151

Minimum Control Measure 2 – Public Involvement / Participation

The public involvement/participation (POP) BMP will promote valuable input and assistance from the community. Providing the public opportunities to play an active role in the program is instrumental in a successful program. By promoting the availability of the program to the community, public participation will increase leading to a reduction in stormwater pollutants and improved water quality.

The first Lewis Creek Technical Advisory Committee meeting (PCB study) on January 25, 2020 had 15 attendees, including representatives of various local and state agencies and concerned citizens. The second Lewis Creek Technical Advisory Committee meeting (Lewis Creek PCB Total Maximum Daily Load (TMDL) study) on August 18, 2021 had 14 attendees, including representatives of various local and state agencies and concerned citizens. Meeting summaries are available upon request. As of this year, the city is still waiting on the site remediation plan from CSX/DEQ for review. Plans have not yet been approved by DEQ.

Modifications to MCM 2: None this permit year

BMP – 2.1 Stormwater Webpage

The City has a dedicated stormwater webpage which provides detailed stormwater information to the public. The stormwater webpage is found on the City website at the address below. Information available on the webpage includes: definitions of common stormwater elements (i.e. stormwater, watershed, Chesapeake Bay, pollution prevention, etc.), details about why stormwater is important, identification of how citizens can help, links to the City's stormwater program elements (Ordinances, erosion & sediment control, policies, design standards, general permit, annual reports, etc.), links to Federal and State stormwater program information and contact information for reporting and questions.

Objective and Expected Results: The objective of the dedicated website is to provide large amounts of detailed federal, state and local program information, accessible to a large number of citizens. The expected result is to easily be able to search for and find detailed information on stormwater in general as well as information pertaining to the City of Staunton's MS4 Program. The website also provides citizens with information on how to comment on the City's MS4 program plan, and report erosion/sediment control issues, illicit discharges, and stormwater related complaints.

Implementation Schedule: The City has implemented the website and will maintain the website by adding the annual reports and updating the site's content and links. The Environmental Programs Division will be responsible for the page's content and will advise the webmaster of all required changes.

Method to Determine Effectiveness: The effectiveness of this BMP is based on the total number of website hits that occur each year. The annual report will include this number.

Web link to the City's Stormwater Webpage:
Environmental Programs Division | City of Staunton

Annual Reporting:

Stormwater Webpage

Permit Year 5	Number of Website Hits
July 1, 2022 - June 30, 2023	1,086

<u>BMP – 2.2 Tree Planting & Restoration Program</u>

The City currently has a Tree Planting Program where new trees are planted and dead or diseased trees are replaced with new plantings and structural pruning is performed on young existing trees. The City also helps organize and participates in an Arbor Day/Earth Day event where seedlings are handed out to participants. The City will continue its tree planting program and its participation in the Arbor Day/Earth Day event. The City will hand out seedlings and educational brochures and discuss the benefits of tree planting on water quality.

Objective and Expected Results: Encourage the community to actively take part in stormwater enhancements. Raise the general awareness of stormwater issues as well as discussing actions, such as tree planting, the public can take to help protect water quality and minimize impacts to stormwater runoff.

Implementation Schedule: The City will continue its Tree Planting Program and participating in the Arbor Day/Earth Day event. Parks and Recreation will continue to be responsible for these programs

Method to Determine Effectiveness: The effectiveness of this BMP is based on the total number of trees planted, the number of trees pruned, the number of participants and the number of seedlings handed out at the Arbor Day/Earth Day event. The annual report will include these numbers.

Annual Reporting:
Tree planting day- multiple tree related events & tree planting days were held:

- Parks and Rec **<u>planted 125 new trees</u>** and **<u>pruned 739 trees</u>**. The number of trees planted/pruned by city staff greatly increased this year due to a storm on July 6th, 2022 that caused major tree damage.
- On April 27, Ware Elementary Students visited Gypsy Hill Park to learn about trees & watersheds, and the impact of activities in their own backyard. Also, fingerling trout which had been raised in their classrooms were released into the stream that runs through the park. About **<u>70 children attended and 70 tree seedlings</u>** were given out for the children to plant at home.
- On April 28, Landscape Board & parks staff visited the pre-K group at Dixon Learning center. The children learned about trees and had a visit from Smokey Bear. **<u>An apple tree</u>** was planted in the school garden and about **<u>40 tree seedlings</u>** were given out for the children to plant at home.
- Shenandoah Green held a tree seedling give away for Earth Day. They provided a tree shelter tube, stake, and net for each tree given away. They also followed up with many of the people who took the saplings to ensure they were planted. **<u>81 people took and planted 297 tree seedlings</u>**.
- Shenandoah Green also purchased and planted **<u>6 fruit trees</u>** for Jones Garden, a local community Garden.

Trees Planted/Pruned by Parks and Rec.

Permit Year 5	Total Number of trees planted	Total Number of trees pruned	Total Number of Arbor Day participants
July 1, 2022 - June 30, 2023	638	739	+/-110

BMP – 2.3 DEQ/DCR Adopt-A-Stream Program

The City actively participates in the Virginia Adopt-A-Stream program. The Stormwater Webpage includes links to Virginia's program with directions on how to apply. The City will procure and house the needed material for volunteers to use during the clean-up event. Materials will include safety information, trash bags, safety vests and traffic control-warning signs. The City will also coordinate trash pick-up if needed.

Objective and Expected Results: Encourage the community to actively take part in stormwater enhancements to improve stream quality.

Implementation Schedule: The City continues to implement the Adopt-A-Stream program. The Environmental Programs Division is responsible for the website's content and for coordinating the provision of available materials to volunteers.

Method to Determine Effectiveness: The effectiveness of this BMP is based on the total linear feet of stream adopted. The annual report will include this number.

Annual Reporting: The City received much interest in the Adopt-a-Stream program in Permit Year 5. With the help of the Lewis Creek Watershed Advisory Committee, one new club signed up to Adopt-a-Stream and five other organizations expressed interest in signing up in the next permit year. The **Shenandoah Valley Club of the Deaf** adopted a portion of Lewis that runs through the Virginia School for the Deaf and Blind's property. **(+/- 2900 linear feet adopted).**

The City and the Lewis Creek Watershed Advisory Committee also participated in the Chesapeake Bay Foundation's Clean the Bay Day on June 3, 2023. **63 volunteers** helped to clean up **1,335 pounds of trash** from 4 local streams. This event totaled **+/- 7,760 linear feet** of stream cleanup. The City plans to utilize its social media accounts to continue to gain interest in this BMP.

Clean the Bay Day cleanup on Gum Springs – Gypsy Hill Park

Number of Volunteers	Distance Covered (Linear Feet)	Number of Bags Collected	Total Weight Collected (lbs)
32	3,300	14	315

Clean the Bay Day cleanup on Asylum Creek – Bessie Weller through The Villages

Number of Volunteers	Distance Covered (Linear Feet)	Number of Bags Collected	Total Weight Collected (lbs)
9	3,265	6	120

Clean the Bay Day cleanup on Lewis Creek - VSDB

Number of Volunteers	Distance Covered (Linear Feet)	Number of Bags Collected	Total Weight Collected (lbs)
11	4,156	12	300

Clean the Bay Day cleanup on Lewis Creek – Commerce Road

Number of Volunteers	Distance Covered (Linear Feet)	Number of Bags Collected	Total Weight Collected (lbs)
11	4,156	17	600

BMP – 2.4 Adopt-A-Street Program

The City currently has an Adopt-A-Street Program designed to provide an opportunity for citizens and civic groups to get involved in their community. Individuals, organizations or businesses may participate. These groups agree to adopt a street and to keep the designated area cleared of litter and other debris. In exchange, the program participants are given materials to help them with the cleanup. Signs bearing the name of their organization will be posted at the beginning of their designated cleanup areas. Areas may include City streets, vacant lots, walkways and public parking lots. The Stormwater Webpage includes links to the City's program.

Objective and Expected Results: Encourage the community to actively take part in stormwater enhancements by decreasing the trash and litter that could possibly reach a waterway.

Implementation Schedule: This program will be ongoing with Public Works continuing to be responsible for its implementation.

Method to Determine Effectiveness*:* The effectiveness of this BMP will be based on the total miles of street adopted. The annual report will include this number.

Annual Reporting: Zero miles of street were adopted during Permit Year 5. The City plans to utilize its social media accounts to gain more interest in this BMP.

Adopt-A-Street Program

Permit Year 5	Total miles of street adopted
July 1, 2022 - June 30, 2023	0

<u>BMP – 2.5 Stormwater Partnerships (Monitoring)</u>

The City has established a partnership with the local environmental advocacy group, the **Lewis Creek Watershed Advisory Committee (LCWAC).** The partnership will ensure that local impaired waters and pollutants of concern are emphasized in education and outreach efforts.

Objective and Expected Results: To ensure the education, outreach efforts, and volunteer opportunities are enhanced to the maximum extent possible by a coordinated effort.

Implementation Schedule: The Environmental Programs Division will continue to send a representative to committee meetings during the upcoming permit cycle.

Method to Determine Effectiveness: The effectiveness of this BMP is based on the total number of meetings that were attended. The annual report will include this number.

Annual Reporting:

Stormwater Partnerships

Permit Year 5	Total Number of Meetings Attended
July 1, 2022 - June 30, 2023	11

This permit year the LCWAC has helped to implement the Trout Unlimited - "Trout in the Classroom" program into Staunton City Public Schools.

- **Ware Elementary** – 5th grade class
    - Continues to maintain tank from Fall 2022 through 2023-24 school year.
- **Bessie Weller Elementary** – 5th grade class
    - Now has a new tank up and running; ongoing awareness needed with Weller Woods Project to ensure health of Asylum Creek for planned trout release in Spring 2024
- **Shelburne Middle School** – 6th grade class
    - Now has a new tank up and running.
- **McSwain Elementary**
    - Plan for new program in Fall 2024
- **Stuart Hall (Private School)**
    - Potential plan for TIC at local private school – details still TBD.

Other Lewis Creek Watershed Advisory Committee Public Awareness Efforts:

- During the next reporting period, the LCWAC is considering the possibility of painting the wharf parking lot blue to delineate the location of Lewis Creek where it runs under the parking lot.
- This would be the first effort to gain public awareness of the stream location with the thought of possibly 'daylighting' Lewis Creek in this location in the future.

BMP – 2.6 Hazardous Waste Collection Day (Disposal/Collection Event)

The City will continue to participate in the regional household hazardous waste collection day. The event is held once a year in the fall at the Augusta County Government Center. The following types of waste are accepted; solvents, oil-based paints, fuels, used oil, computer equipment, lead-acid batteries, rechargeable batteries, herbicides/pesticides, small electronics, antifreeze, compact fluorescent bulbs, and fluorescent bulbs. Information about the event will be made available on the stormwater website. The City will also continue to promote this BMP by sharing informational flyers prior to the event.

Objective and Expected Results: By actively promoting the hazardous waste collection day, the City will reduce the risk of improper storage, disposal and discharges within the MS4.

Implementation Schedule: The program is ongoing. Public Works will continue to be responsible for coordinating the informational flyer.

Method to Determine Effectiveness: The City will track the total number of City vehicles dropping off hazardous waste. The annual report will include this number.

Annual Reporting:

Hazardous Waste Collection Day

Permit Year 5	Total Number of City Vehicles
July 1, 2022 - June 30, 2023	43

Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

For the purposes of this permit, an illicit discharge is defined as any discharge to a municipal separate storm sewer that is not composed entirely of storm water, with exceptions for those discharges which occur pursuant to any other VSMP permit. These discharges can have immediate and long-lasting impacts to the ecosystem of your local water bodies.

Modifications to MCM 3: None.

BMP – 3.1 IDDE Detection Program

The City will update and maintain the IDDE Program to detect, identify and address unauthorized discharges. The program will use maintained and updated storm sewer mapping with all outfalls identified. The mapping system will be used to screen for illicit discharges. The dry weather screening element of the program includes:

- Prioritized screening schedule
- Perform a minimum 50 field screenings per year
- Methodologies to collect general information such as the date of last rain, quantity of rain, visual observations, etc.
- Defines the time frame to conduct investigations based on priorities
- Methodologies to determine the source of all illicit discharges
- Mechanisms to eliminate illicit discharges, including procedures for legal action
- Methods for follow up
- Mechanisms to track all investigations

The City will prohibit non-stormwater discharges into the storm sewer system through modifications to the ordinance. The stormwater webpage and stormwater hotline will be used to promote and facilitate public reporting of illicit discharges. A copy of the program has been included in Appendix A.

Objective and Expected Results: The goal of this control measure is to maintain, update, and enforce a program to detect, identify and address illicit discharges into City's regulated MS4 system.

Implementation Schedule: The City will maintain and implement the IDDE program throughout the permit cycle. Environmental Programs Division is responsible for implementing the program with support from Public Works for investigations. The Environmental Programs Division is responsible for ongoing maintenance of the storm sewer mapping.

The illicit discharge ordinance, City of Staunton City Code, Title 13, Division IV, Illicit Discharge and Connections, can be found at: http://www.codepublishing.com/VA/staunton.html

Physical interconnection letters were sent to VDOT and Augusta County during Permit Cycle 1, Year 2.

Method to Determine Effectiveness: The City will track the number of illicit discharges detected and enforcement actions. The annual report will include these numbers.

Annual Reporting: None during Permit Year 5

No active illicit discharges were observed or required follow-up. Further documentation of the outfall screenings and reports of illicit discharges are available upon request. A summary of all illicit discharge reports and investigations has been included in Appendix A.

51 MS4 regulated outfalls were screened in Permit year 5 – no illicit discharges detected.

Outfalls Referred for Maintenance

Responsible Department	Total Number of Outfalls Referred
Public Works	11
Parks and Rec	0
Owners of private BMPS	0

Mapping and Information Tables Confirmation Statement:

Mapping updates continued during Permit Year 5 to add/delete regulated outfalls as necessary, and currently there are **353 regulated outfalls**. An outfall point of discharge map has been included in Appendix B. Further documentation of the outfalls and points of discharge is available upon request.

BMP – 3.2 Mapping of Stormwater Network

The City will continue to maintain an accurate storm sewer system mapping and information table for City owned stormwater facilities using GIS and GPS locating technologies. Information to be collected and maintained includes:

- Outfalls
- Natural Streams
- Structural stormwater BMPs type and location
- Storm sewer type and size
- The storm sewer map will include at least the following:
- Location of all MS4 outfalls
- A unique identifier for each outfall
- The name and location of all waters receiving discharges from MS4 outfalls and the associated HUC (6th order)

The associated information table for each outfall will include at least the following:

- A unique identifier
- The estimated MS4 acreage served
- The name of the receiving water and indication if the receiving water is impaired
- The name of any applicable TMDL(s)

Objective and Expected Results: The storm sewer mapping will be a critical element of the IDDE (BMP 3.1) and structural BMP maintenance (BMP 5.2) programs. Accurate and up-to-date mapping will be necessary for these programs to succeed.

Implementation Schedule: The City will continue to maintain the storm sewer mapping throughout the duration of the permit cycle. Environmental Programs Division will be responsible for developing and maintaining the sewer mapping using GIS/CAD.

Method to Determine Effectiveness: The City will track the number of storm structures mapped. The annual report will include these numbers.

Annual Reporting:

Mapping of Stormwater Network

Permit Year 5	Total number of storm sewer structures	Total number of storm sewer outfalls
July 1, 2022 - June 30, 2023	2,747	749

<u>BMP – 3.3 SPCC Training</u>

The City will continue to provide personnel with spill prevention control and countermeasure training. The plan specifies material handling procedures and storage requirements and identifies spill cleanup procedures for areas and processes in which spills may potentially occur.

Objective and Expected Results: The SPCC training attempts to standardize operating procedures and employee training toward the goal of minimizing accidental pollutant release that could contaminate storm water runoff.

Implementation Schedule: The SPCC training is a current policy that will continue to be implemented throughout the permit cycle. Each department or division, Environmental Programs Division, Public Works and Parks & Recreation will continue to be responsible for their departmental or divisional SPCC training.

Method to Determine Effectiveness: The City will track the number of personnel trained. The annual report will include this number.

Annual Reporting:

Personnel Trained

Department	Number of Employees Trained	Date
Public Works	24	8/19/2023
Parks and Rec	17	Several trainings throughout the year

Minimum Control Measure 4 – Construction Site Runoff Control

Uncontrolled stormwater runoff from construction sites can significantly impact rivers, lakes and estuaries. Sediment is the main pollutant of concern leaving a construction site. However, there are also other pollutants that commonly discharge from construction sites, including fertilizer, pesticides, oil and grease, concrete truck washout and construction debris. The construction site stormwater runoff control (CSSRC) BMP will be developed to significantly reduce or eliminate construction site pollutants from entering the local water bodies.

Modifications to MCM 4: None this permit year

BMP – 4.1 Erosion and Sediment Control Program (VESCP)

The City administers an existing program that applies to large sites as well as single family home construction. The Environmental Programs Division reviews site plans and performs site inspections. Any commercial site and any disturbance over 10,000 square feet require an erosion and sediment control plan to be submitted and approved. The City issues a land-disturbance permit prior to any land-disturbance taking place. A pre-construction meeting is held to discuss VESCP controls and to review the plan. A City VESCP inspector also makes site visits and approves the initial controls installed. The program is enforceable through the City Code (Chapter 13).
The City employs one DEQ certified VESCP/VSMP Combined Administrator and one Environmental Programs Specialist who is a DEQ certified VESCP/VSMP Inspector and Plan Reviewer.

The legal authorities utilized by the City to ensure compliance with our VESCP and VSMP Programs include the following:

- Staunton City Code - Title 13
- City's Subdivision and Zoning Ordinance
- Virginia Erosion and Sediment Control Law and Regulations
- Virginia Stormwater Management Act and Regulations

Additional information concerning the City's Erosion and Sediment Control Program (VESCP) can be found at: https://www.ci.staunton.va.us/departments/Environmental Programs Division-division/erosion-and-sediment-control-program

Written procedures and policies for plan review, inspection and enforcement can be found at: http://www.codepublishing.com/VA/staunton.html and https://www.ci.staunton.va.us/government/permits

Objective and Expected Results: The City's VESCP is in place to prevent adverse impacts from erosion and sedimentation from all construction sites.

Implementation Schedule: The VESCP is an existing program and will continue to be implemented throughout the permit cycle. Environmental Programs Division will continue to be responsible for the VESCP.

Method to Determine Effectiveness: A number of parameters will be tracked pertaining to the VESCP including; number of land disturbing activities, acres of land disturbed, number of inspections, and enforcement actions. The annual report will include these values.

Annual Reporting:

Erosion and Sediment Control Program (VESCP)

Permit Year 5	Actions	Total	Commercial sites	Single-family sites
July 1, 2022 - June 30, 2023	Total number of regulated land-disturbing activities	44	5	39
	Total number of acres disturbed	37.30	30.05	7.25
	Total number of inspections conducted	973	154	819
Permit Year 5	**Enforcements**	**Total**	**Notice to Comply**	**Stop Work Orders**
July 1, 2022 – June 30, 2023	Total number of enforcement actions taken	248	217	31

Minimum Control Measure 5 – Post Construction Runoff Control

Post-construction stormwater impacts are increases in the type and quantity of pollutants entering the receiving streams. An increase in the quantity of runoff can cause stream bank scouring and downstream flooding. Implementing a combination of structural and non-structural BMPs can reduce the water quality effects of increased impervious areas and are crucial elements of MS4 programs. Procedures need to be developed and implemented to inspect and maintain all permanent structural BMPs for both City and privately maintained facilities.
Modifications to MCM 5: No modifications in Permit Year 5

BMP – 5.1 Virginia Stormwater Management Program – Require VSMP Permits

The City became a VSMP Authority on July 1, 2014, responsible for administration of our local VSMP Program in accordance with Commonwealth of Virginia regulations. The City will require a VSMP permit for land disturbances of 1 acre or greater and land disturbances less than 1 acre but part of a common plan of development 1 acre or greater. Evidence of permit coverage from DEQ will be required prior to any land-disturbance taking place. The City Environmental Programs Division is responsible for BMP 5.1. Written procedures for inspection and enforcement are located in the Environmental Programs Division offices at 116 W Beverley Street. A copy of the VSMP approval letter is in Appendix Q of the MS4 Program Plan 2018-2023.
The City employs one DEQ certified VESCP/VSMP Combined Administrator and one Environmental Programs Specialist who is a DEQ certified VESCP/VSMP Inspector and Plan Reviewer. See BMP 4.1 for a description of the legal authorities and written procedures utilized by the City to ensure compliance with our VESCP and VSMP Programs.

Objective and Expected Results: The City will adhere to current Commonwealth of Virginia regulations with regard to the VSMP permitting to prevent adverse impacts of urban stormwater runoff.

Implementation Schedule: The City of Staunton will implement local VSMP administration in accordance with Commonwealth of Virginia Regulations and will continue to require applicable VSMP requirements be instituted throughout the permit cycle. The City will implement changes to their local ordinances to comply with modifications to the VSMP permitting regulations. Environmental Programs Division will be responsible for verifying VSMP permit compliance.

Method to Determine Effectiveness: The total number of permits, inspections, enforcement actions, exemptions applied for and exemptions granted will be tracked. The annual report will include these values.

Annual Reporting:

Stormwater Management Program (VSMP)

Permit Year 5	Permits	Total	Commercial sites	Single-family sites
July 1, 2022 - June 30, 2023	Total number of regulated land-disturbing activities	28	5	23
	Total number of exemptions applied for	0	0	0
	Total number of inspections conducted	620	154	466
Permit Year 5	**Enforcement**	**Total**	**Notices to Comply**	**Stop Work Orders**
July 1, 2022- June 30, 2023	Total number of enforcement actions taken	188	159	29

BMP – 5.2 Structural BMP Maintenance

The City has a program to ensure proper maintenance of all City owned structural BMPs. The City will continue to require a maintenance agreement for any new privately owned structural BMP. The City will continue to encourage owners of private structural BMPs without agreements to acquire the maintenance agreement. The City's Environmental Programs Division maintains a database of stormwater management facilities. This database is located at the Environmental Programs Division offices at 116 W Beverley Street.

Objective and Expected Results: By continuing the BMP maintenance program the City will ensure BMPs are performing optimally and are minimizing adverse impacts to state waters.

Implementation Schedule: The BMP maintenance program will be an ongoing effort throughout the permit cycle. The development of the program will be a joint effort between Environmental Programs Division and Public Works. Public Works will be responsible for the actual maintenance of all City owned structural BMPs. Environmental Programs Division will be responsible for documenting new privately owned BMP agreements.

Maintenance Required/Performed in Permit Year 5: Routine maintenance/debris clearing as needed.

Method to Determine Effectiveness: The City will track the total number of new BMP agreements. The annual report will include this number.

Annual Reporting:

Structural BMP Maintenance

Permit Year 5	Total Number of BMP Maintenance Agreements	Number of SWM Agreements		Number of SWM Facilities	
		New BMPs	Existing BMPs	New BMPs	Existing BMPs
July 1, 2022 - June 30, 2023	15	4	11	4	11

BMP – 5.3 Structural BMP Inspection

The City operates a program to inspect structural BMPS within the City. The existing maintenance agreements require property owners of private BMPs to inspect maintain and submit a report to the City upon request. The standardized report is available on the stormwater webpage. The City will also inspect private BMPs once every five years. City owned BMPs will be inspected annually per the program described in BMP 5.2.

Objective and Expected Results: By continuing the BMP inspection program the City will attempt to ensure BMPs are performing optimally and achieving design pollutant reduction.
Implementation Schedule: The BMP inspection program will be ongoing throughout the permit cycle. Environmental Programs Division will be responsible for implementing the programs and performing the inspections.

Method to Determine Effectiveness: The City will track the total number of BMP inspections performed by private owners and completed by City personnel. The annual report will include these numbers.

Annual Reporting:

Structural BMP Inspection

Permit Year 5	Total number of inspections	
	Public BMPs	Private BMPs
July 1, 2022 - June 30, 2023	19	37

BMP – 5.4 Structural BMP Database

The maintenance of the structural BMP database will be instrumental in implementing BMP 5.2 and BMP 5.3. The BMP database includes the type of BMP, ownership, location, date brought online, HUC code, receiving waters, if receiving waterway is impaired, if maintenance agreement exists, number of acres treated and most recent inspection.

Objective and Expected Results: The database will be used to track BMP inspections and maintenance to ensure that all BMPs are functioning properly and as designed.

Implementation Schedule: The BMP database will be maintained throughout the permit cycle. Environmental Programs Division will be responsible for compiling and maintaining the database.

Method to Determine Effectiveness: The City will include the updates to the BMP database in the annual report.

Annual Reporting: The BMP database for BMPs brought online during Permit Year 5 has been included in Appendix C. *SMF information as required was provided to CGP through database for which coverage was obtained*.

BMP – 5.5 BMP Warehouse Submittal Confirmation Statement

All BMPs not reported in accordance with Part I.E.5 were reported through DEQ BMP Warehouse per Part I.E.5.g of the MS4 General Permit.

Minimum Control Measure 6 – Pollution Prevention / Good Housekeeping

The Pollution Prevention/Good Housekeeping BMPs allow the City to examine and alter its own actions in an effort to reduce the amount of pollutant that collects on streets, parking lots, and open spaces because of runoff from vehicle maintenance areas and poor stormwater maintenance.

Modifications to MCM 6: None in Permit Year 5

BMP – 6.1 Street Sweeping

The City is in the process of modifying its street sweeping program to best conform to the new TMDL guidance standards.

Objective and Expected Results: The street sweeping program will reduce the adverse effects that pollutants found on public roads have on receiving waters.

Implementation Schedule*:* Public works will continue this ongoing program through the permit cycle.

Method to Determine Effectiveness: The City will track the number of road miles swept and relative data collected. The annual report will include these numbers.

Annual Reporting:

Street Sweeping

Permit Year 5	Total number of road miles swept	Total number of tons collected
July 1, 2022 - June 30, 2023	2,645	575

BMP – 6.2 Pollution Prevention Training

City departments, Public Works, Parks & Recreation and Fire Department, will continue its pollution prevention training to its employees. Bi-monthly safety committee meetings will incorporate environmental protection into the agenda as part of Public Works' environmental management systems program.

Objective and Expected Results: The pollution prevention training empowers employees with the knowledge and operating procedures to minimize accidental pollutant release that could contaminate storm water runoff. Through this training, employees realize environmental stewardship has many far-reaching benefits.

Implementation Schedule: The pollution prevention training is a current policy implemented throughout the permit cycle. Each department, Public Works, Parks & Recreation, Fire Department and the Police Department will continue to be responsible for their departmental pollution prevention training.

Method to Determine Effectiveness: The City will track the number of personnel trained. The annual report will include this number.

Annual Reporting:

Pollution Prevention Training

Permit Year 5	Total number of City personnel trained	Department	Training Date
July 1, 2022 - June 30, 2023	24	Public Works	8/19/2023
	17	Parks & Rec	Several trainings throughout the year
	50	Fire Department	June 5th, 6th, & 7th 2023
	56	Police Department	8/14/2023

BMP – 6.3 Yard Debris Collection Program

The City will continue its yard debris collection program. Residents are asked to rake leaves to the curb each fall where Public Works crews vacuum them up for composting. Usually, each area of the City will have two specific periods for leaf collection. Leaves may be bagged and, in limited numbers, put out with regular refuse.

Objective and Expected Results: By collecting and composting yard waste the City is reducing the amount of gross discards that would otherwise end up in streams.

Implementation Schedule: This is a program that Public Works will continue throughout the permit cycle.

Method to Determine Effectiveness: The City will track the total number of cubic yards and loads of debris collected. The annual report will include these numbers.

Annual Reporting:

Yard Debris Collection Program

Permit Year 5	Total number of cubic yards collected	Total number of loads collected
July 1, 2022 - June 30, 2023	7,629	484

In addition to the annual leaf cleanup, a special cleanup was held in the aftermath of a severe thunder storm that occurred on July 6th, 2022.

BMP – 6.4 Dedicated Vehicle Wash Facility

The City currently operates and maintains two dedicated vehicle/equipment wash facilities, one at its equipment maintenance shop and one at its parks and recreation maintenance shop.

Objective and Expected Results: This program eliminates the many pollutants that would otherwise enter into the stormwater system if a dedicated vehicle wash facility did not exist.

Implementation Schedule: This is an ongoing program that Public Works will continue throughout the permit cycle.

Method to Determine Effectiveness: The City will track the total number of vehicles washed. The annual report will include this number.

Annual Reporting:

Dedicated Vehicle Wash Facilities

Permit Year 5	Total number of vehicles washed
July 1, 2022 - June 30, 2023	1,455

Lower numbers are due to a mild winter. Vehicles are typically washed after plowing snow, but no weather events required plowing this year.

BMP – 6.5 Storm Sewer Inspection and Maintenance

The City has developed a programmatic storm sewer inspection and maintenance program. The program includes expected routine maintenance and non-routine (repair) maintenance.

Objective and Expected Results: The storm sewer inspection and maintenance program will ensure the storm sewer system is in good working order.

Implementation Schedule: The ongoing program will continue throughout the permit cycle. Environmental Programs Division and Public works will be responsible for developing and implementing the program.

Method to Determine Effectiveness: The City will document the number of storm structures and linear feet of storm sewer inspected. The annual report will include these numbers.

Annual Reporting:

Storm Sewer Inspection

Permit Year 5	Total number of Storm Structures Inspected	Total Linear Feet of Storm drain Inspected
July 1, 2022 - June 30, 2023	302	3,266

BMP – 6.6 Develop/Maintain SWPPPs for Required City Facility

The City has identified four high priority City facilities that it operates. They are listed below.

Municipal High-Priority Facilities with A High Potential for Pollutant Discharge

Name of facility	Facility Address	Operator	Location of SWPPP
Public Works Operations Facility	1911 Craigmont Road	Public Works	1911 Craigmont Road
Parks and Recreation Maintenance Facilities	330 Park Boulevard	Parks and Recreation	330 Park Boulevard
Middlebrook Avenue Salt Storage Facility	866 Middlebrook Avenue	Public Works	1911 Craigmont Road
Parks and Recreation Pools	600 Churchville Avenue / 1000 Montgomery Avenue	Parks and Recreation	1000 Montgomery Avenue

The City will maintain the Stormwater Pollution Prevention Plans (SWPPPs) for each high priority facility. The SWPPS will be maintained by the facilities operators, which include Public Works and Parks and Recreation staff. Each SWPPP is located on site at the facility and is available upon request.

Objective and Expected Results: These documents will provide guidance to prevent and reduce pollutant runoff from municipal operations.

Implementation Schedule: The City will maintain the SWPPPs for each high priority facilities throughout the permit cycle.

Method to Determine Effectiveness: The annual report will include the total number of SWPPP inspections completed.

Annual Reporting:

Permit Year 5 - SWPPP Inspections Performed

Name of facility	Facility Address	Number of Inspections Performed	Number of SWPPP Evaluations	Number of weather events prompting inspection
Public Works Operations Facility	1911 Craigmont Road	27	1	2
Parks and Recreation Maintenance Facility	330 Park Boulevard	52	4	1
Middlebrook Avenue Salt Storage Facility	866 Middlebrook Avenue	12	1	0
Parks and Recreation Pools	600 Churchville Avenue & 1000 Montgomery Avenue	92	1	0

BMP – 6.7 Develop/Maintain Nutrient Management Plans for Required City Sites

The City has identified six sites, over one acre, that require a Nutrient Management Plan (NMP). Those sites are listed below.

Municipal Facilities Requiring Nutrient Management Plans

Name of facility	Facility Address	Planner	Acres Covered Under NMP
Gypsy Hill Golf Course	300 Park Boulevard	Parks and Recreation	1.90
John Moxie Baseball Stadium – Gypsy Hill	600 Churchville Avenue	Parks and Recreation	2.5
Jerry May, Bosserman, and Kiwanis Baseball Fields – Gypsy Hill	600 Churchville Avenue	Parks and Recreation	2.5
Springel, Harlow, and Lancaster Girl's Softball Fields – Montgomery Hall	1000 Montgomery Avenue	Parks and Recreation	5.4
Montgomery Hall Park Soccer Complex	1000 Montgomery Avenue	Parks and Recreation	4
Winston Wine Football Complex – Gypsy Hill	600 Churchville Avenue	Parks and Recreation	2.25

The City maintains a Nutrient Management Plan for each of these sites. The plans are located at each of the facilities and are available for review upon request.

Objective and Expected Results: The developed NMP will define the amount, source, placement, form and timing of the application of nutrients and soil amendments to ensure optimal management.

Implementation Schedule: The City will continue to implement the NMP through this permit cycle.

Method to Determine Effectiveness: The annual report will include the total amount of nutrients applied to the acreage of each site.

Annual Reporting:

Permit Year 5 - Municipal Facilities Requiring Nutrient Management Plans

Name of facility	Facility Address	Acres Covered Under NMP	Total Amount of Nutrients Applied (lbs./acre)
Gypsy Hill Golf Course	300 Park Boulevard	1.90	Nitrogen: 84.07 Phosphorus:2.61 Potassium: 63.60
John Moxie Baseball Stadium – Gypsy Hill	600 Churchville Avenue	2.5	Nitrogen: 43.56 Potassium: 43.56
Jerry May, Bosserman, and Kiwanis Baseball Fields – Gypsy Hill	600 Churchville Avenue	2.5	Nitrogen: 43.56 Potassium: 43.56
Springel, Harlow, and Lancaster Girl's Softball Fields – Montgomery Hall	1000 Montgomery Avenue	5.4	Nitrogen: 121.97 Phosphorus: 43.56
Montgomery Hall Park Soccer Complex	1000 Montgomery Avenue	4	Nitrogen: 44.00 Potassium: 7.84
Winston Wine Football Complex – Gypsy Hill	600 Churchville Avenue	2.25	Nitrogen: 172.93 Potassium: 43.56

Chesapeake Bay TMDL

In December of 2010, the United States Environmental Protection Agency established a total maximum daily load (TMDL), or "Pollution Diet", to limit the amount of phosphorus, nitrogen, and sediments that can be released into the streams, creeks, and rivers that feed the Chesapeake Bay. These measures were established as an effort to improve the water quality of the Bay and to return it to a swimmable and fishable state. The Bay TMDL limits were divided into smaller TMDLs that were assigned to drainage basins across six (6) states including Virginia. To respond to the TMDL the Commonwealth of Virginia committed to a phased approach to implementation for MS4 programs. The phased approach for MS4 communities includes a requirement to meet a reduction goal of 40% during the 2018 - 2023 MS4 Permit Cycle. The City of Staunton has developed a draft TMDL action plan based on the 2013 – 2018 permit cycle guidance document. *The City is working with consultants to update for the phase II TMDL action plans based on the new guidance. This will include both street sweeping and tree canopy based on the new guidance. The City is aware of the new requirements and is in the process of evaluating the City tracking and reporting methodologies to determine what new measures will be implemented in future plan adjustments. Once the action plan is finalized, the City of Staunton will then employ appropriate actions to meet the planning document during the 2018 – 2023 period, to the maximum extent practicable.*

Objective and Expected Results: *The development of a Chesapeake Bay TMDL Action Plan based on new guidance of November 12, 2020 that will provide implementation guidelines and a program of management practices that will facilitate compliance with the condition of future permits.*

Implementation Schedule: The City submitted the TMDL Action Plan for the second permit cycle (July 1, 2018- June 30, 2023) on April 29, 2020.

1) Part II.A.13a – BMPs not Reported to the BMP Warehouse - *No BMPs installed*
2) Part II.A.13.b – Credits - *No Credits purchased*
3) Part II.A.13.c - *No BMPs installed*
4) Part II.A.13.d – BMPs planned for the Next Reporting Period – *Gypsy Hill Park Stream Restoration* & Cole Avenue Stream Restoration

Local TMDL

The City of Staunton is located within the South River and Middle River watersheds in Augusta County Va. This waterway was listed as high priority on the impairment list for fecal coliform and general benthic in 1996. As a result, a TMDL was developed and approved in April of 2004. The City was not specifically allocated a waste load as part of the TMDL planning process. The final TMDL instead provided allocations to the major sub-watersheds including Lewis Creek.

Modification: Per discussion between the City of Staunton and Virginia DEQ it was identified that the City is not required to develop a TMDL Action Plan for the Lewis Creek watershed per email dated April 8, 2020 from Nesha Mcrae.

Objective and Expected Results: Not applicable.

Implementation Schedule: Not applicable.

Responsible Parties

The departments and divisions of responsibility for implementation of MS4 program elements are included in BMP descriptions above. Contact information for each responsible party is located below:

Executive Officer
Title: City Manager
Name: Leslie M. Beauregard
Address: P.O. Box 58 Staunton, VA 24402
Phone: 540-332-3812
Email: beauregardlm@ci.staunton.va.us

Program Management
Environmental Programs Division
Title: Environmental Programs Administrator
Name: Peter K. Kesecker
Address: P.O. Box 58, Staunton, VA 24402
Phone: 540-332-3853
Email: keseckerpk@ci.staunton.va.us

Department of Public Works
Title: Director
Name: Jeffrey M. Johnston
Address: P.O. Box 58, Staunton, VA 24402
Phone: 540-332-3892
Email: johnstonjm@ci.staunton.va.us

Department of Parks and Recreation
Title: Director
Name: Christopher J. Tuttle
Address: P.O. Box 59, Staunton, VA 24402
Phone: 540-332-3945
Email: tuttlecj@ci.staunton.va.us

Staunton Fire Department
Title: Fire Chief
Name: R. Scott Garber
Address: P.O. Box 58, Staunton, VA 24402
Phone: 540-332-3884
Email: garberrs@ci.staunton.va.us

APPENDICES

APPENDIX A

ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM DATABASE

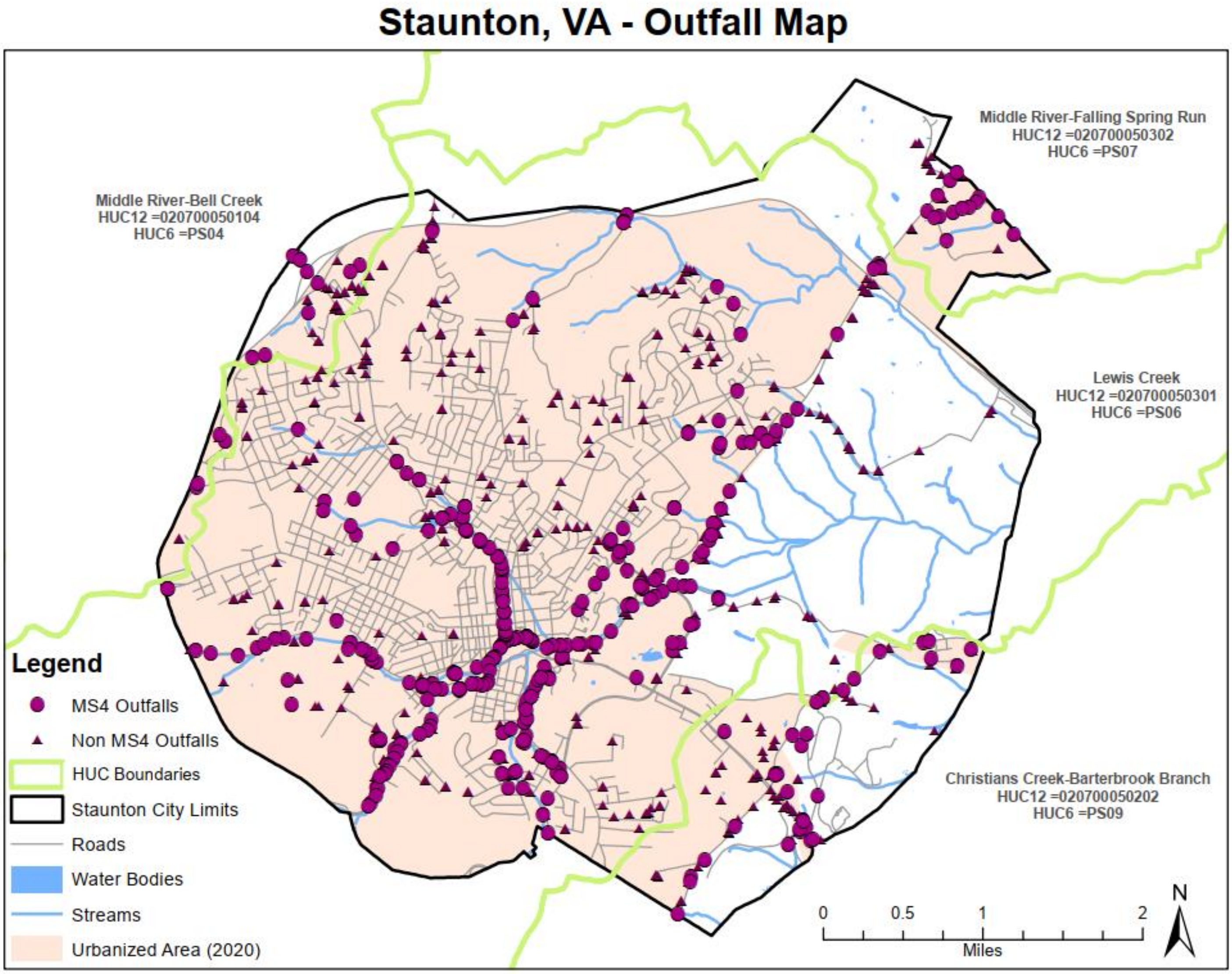
Illicit Discharge Detection and Elimination (IDDE) Database - FY22					July 1, 2022 through June 30, 2023					
Number	Notification Type	Date Potential Illicit Discharge Observed	Date Potential Illicit Discharge Reported	Did Discharge Reach Local Waterway	Was Discharge to Impaired Waters	Photos	Reports	Description of the Investigation (Including Follow Ups)	Resolution of the Investigation	Date Closed
1	VADEQ was notified via online pollution report	7/7/2022	7/7/2022	No	N/A	N/A		Cause of Spill: a Utility pole containing three 50 kVA overhead transformers was damaged during a storm. Upon impact with the ground, the transformers released 105 gallons of PCB-contaminated mineral oil to the groud and surrounding soils. Location: 811 Alleghany Avenue - Gypsy Hill Park, oil migrated into Staunton High School Football Stadium. (aprox. 105 gallons)	Site was contained and covered in poly in anticipation of additional severe weather. The following morning, third party environmental reponse contractor removed an estimated 30 tons of soil and debris from the spill area. PCB remediation waste was collected into 3 sludge boxes/ boxes are covered and stored in a secure location pending disposal. The damged transformers were removed from the site, impacted soil and vegetation have been collected and are being stored pending analysis. 8/25/22: Via email from Therron "lex" Lex - resoration has been completed and grass is germinating nicely.	8/25/2022
2	Inspection report emailed to VADEQ. VDH has been notified	7/19/2022	7/20/2022	Yes, Peyton's Creek	N/A	N/A		Corrective Action Taken: On Tuesday, July 19, 2022, at about 11:00AM, Public Works received a call from a park maintenance worker about an overflowing manhole at the referenced address. A crew was dispatched and found the overflowing manhole (SMX3831). The crew jetted the downstream main and after a few minutes, cleared the blockage restoring flow to the system. An estimated 600 gallons of sewage had discharged from the manhole and permeated into the surrounding ground, but some of the sewage discharged into Peyton Creek. No fish kills or significant detrimental impacts to the stream were noted. The specific cause of the blockage and subsequent overflow was not determined.	Lime was applied to the affected area. The crew will return to the site to television inspect the sewer main.	7/20/2022
3	Inspection report emailed to VADEQ. VDH has been notified	8/6/2022	8/8/2022	Yes, Peyton's Creek	N/A	N/A		Corrective Action Taken: On Saturday, August 6, 2022, at about 2:00PM, the Public Works after-hours emergency call center received a call from a citizen about an overflowing manhole at the referenced address. A crew was dispatched and found the overflowing manhole (SMX3831). The crew jetted the downstream main and after a few minutes, cleared the blockage restoring flow to the system. An estimated 600 gallons of sewage had discharged from the manhole and permeated into the surrounding ground, but some of the sewage discharged into Peyton Creek. No fish kills or significant detrimental impacts to the stream were noted. Roots were the suspected cause of the blockage and overflow	. Lime was applied to the affected area. The crew will return to the site to television inspect the sewer main.	8/8/2022
4	Spill contained before entering bottom of storm	9/4/2022	9/4/2022	No	N/A	N/A		Fire Department: "[W]e responded to a call at 240 N. Central (parking lot in front of Chicano Boy) Ave today for oil leaking into to a storm drain. When we arrived we found a car with Virginia plates TUC-7293 with 1-2 Gallons of oil spilled under it. It appeared that the oil came from the car but was not leaking anymore. Some of the oil had started	Fire Department: "We put stay dry on the leak and some in the bottom of	9/4/2022
5	VADEQ was notified via online pollution report	10/6/2022	10/7/2022	No	N/A	N/A		On Thursday, 10/6/22, at about 7:45PM, Public Works received a call about sewage overflowing from a manhole just off the street at the intersection of Hickory Street and F Street. A crew immediately dispatched to the site and found sewage seeping out of a manhole (SMX1451) and permeating into the surrounding ground. The crew jetted the downstream main and were able to clear the apparent blockage. The exact cause of the blockage was not determined.	The crew completed cleaning the main and applied lime to the affected area. The discharge did not reach State Waters and no impacts were observed.	10/7/2022

6	VADEQ was notified via online pollution report	10/15/2022	10/17/2022	No	N/A	N/A		On Saturday, 10/15/22, at about 5:00PM, Public Works (PW) received a call from Staunton PD for sewage overflowing from a manhole just off the street at the intersection of Hickory Street and F Street. A PW crew was dispatched to the site and found sewage seeping out of a manhole (SMX1451) and permeating into the surrounding ground. The crew jetted the downstream main and were able to clear the apparent blockage. The exact cause of the blockage was not determined; however, roots and grease were the suspected cause.	The crew completed cleaning the main and applied lime to the affected area. The discharge did not reach State Waters and no impacts were observed. The crew will TV inspect the line this week.	10/17/2022
7	VADEQ was notified via online pollution report	12/1/2022	12/2/2022	No	N/A	N/A		Corrective Action Taken: On Thursday, 12/1/22, at about 8:00AM, Public Works (PW) received a call from a PW employee for a water main break at [20 Bagby Street]. A PW crew was dispatched to the site and found sewage overflowing from a manhole. The discharged sewage flowed off the pavement to a gravel shoulder where it permeated into the ground.	The crew jetted the downstream main and cleared the blockage. The crew pulled some wipes from the sewer main which were the suspected cause of the blockage. The discharge did not reach State Waters and no impacts were observed. Lime was applied to the area the next day.	12/2/2022
8	VADEQ was notified via online pollution report	12/2/2022	12/2/2022	No	N/A	N/A		Corrective Action Taken: On Friday, 12/2/22, at about 9:00AM, Public Works (PW) received a call from a citizen for a water main break at [12 Virginia Avenue]. A PW crew was dispatched to the site and found sewage overflowing from a manhole. The discharged sewage flowed along the curb and gutter down the street where it evaporated, dried, or otherwise seeped into the cracks of the asphalt.	The crew jetted from the downstream manhole towards the upstream manhole and cleared the blockage. The crew pulled a cement trowel from the upstream manhole which was the apparent cause of the blockage. The discharge did not reach State Waters and no impacts were observed.	12/2/2022
9	VADEQ was notified via online pollution report	12/13/2022	12/14/2022	Yes, Lewis Creek	Yes	N/A		On Tuesday, 12/13/22, at about 10:30AM, a Public Works (PW) employee discovered an overflowing manhole (SMX3630) located adjacent to Lewis Creek near 919 Middlebrook Avenue. A PW crew was dispatched to the site and, upon arrival, began jetting the sewer main. In a short time, the blockage was cleared and normal flow was restored. Roots and a pipe sag were believed to be the cause of the blockage and subsequent overflow. The discharged sewage flowed over ground to Lewis Creek. An estimated 200 gallons of sewage was discharged onto the ground and into the creek. No fish kills or other impacts were observed.	The crew cleaned the site and applied lime around the affected area. A repair to eliminate the pipe sag is planned for later this month.	12/14/2022
10	VADEQ was notified via online pollution report	12/15/2022	12/16/2022	Yes, Lewis Creek	Yes	N/A		On Thursday, 12/15/22, at about 3:00PM, Public Works (PW) received a call for a sewage overflow at 1 Mill Street. A PW crew was dispatched to the site where the crew found a small amount of sewage discharging from the sewer cleanout located adjacent to Lewis Creek.	The crew jetted the lateral from the cleanout until the blockage was cleared and normal flow was restored. While jetting the lateral, the crew observed coagulated grease which was believed to be the cause of the blockage and subsequent overflow. The discharged sewage (20 gallons) flowed into Lewis Creek. No fish kills or significant stream impacts were observed.	12/16/2022
11	VADEQ was notified via online pollution report	1/5/2023	1/6/2023	No	N/A	N/A		On Thursday, 1/5/23, at about 11:00AM, Public Works (PW) received a call from a citizen about a sewage overflow at 212 Williams Street. A PW crew was dispatched to the site. The crew found sewage overflowing from the sewer cleanout to the home and running down the ditch and onto the street. The crew tried jetting the lateral without success, but then noticed the recent gas line work in the area. The crew called the gas company and when they arrived, both PW and the gas company attempted to TV inspect the lateral, again without success. The decision was made to excavate and after exposing the utilities, a gas line cross bore was found.	The cross bore was repaired and normal flow was restored to the home. An estimated 500 gallons of sewage was discharged. The crew vacuumed most of it, cleaned the street, and applied lime around the affected area.	1/6/2023
12	VADEQ was notified via online pollution report	1/5/2023	1/6/2023	No	N/A	N/A		On Thursday, 1/5/23, at about 8:00AM, Public Works received a call about a sewer backup at 348 Sherwood Avenue. A crew was sent to the site and found a minor amount of sewage (estimated 10 gallons) seeping out of the cleanout and a nearby manhole. The crew jetted the downstream sewer lateral and main, clearing the apparent blockage. Roots are the suspected cause of the blockage and subsequent overflow.	The sewage discharged onto the surrounding lawn and permeated into the ground. Sewage did not reach State Waters. Lime was applied to the affected area.	1/6/2023

13	VADEQ was notified via online pollution report	1/22/2023	1/23/2023	No	N/A	N/A		On Sunday, 1/22/23, at about 12:15PM, Public Works (PW) received a call from Staunton Police Department about a sewage overflow at 12 Mulberry Street. A PW crew was already working nearby and mobilized to the site. The crew found sewage seeping from a manhole (SMX2279) and running down the asphalt street.	The crew jetted the sewer main from the downstream manhole and after only a couple of minutes, the blockage was cleared and normal flow was restored. The crew pulled back many wipes when jetting the line which were the suspected cause of the backup/overflow. An estimated 10 gallons of sewage was discharged which mostly evaporated from the street. The crew washed the street anyway. No impact to State waters.	1/23/2023
14	VADEQ was notified via online pollution report	1/25/2023	1/26/2023	No	N/A	N/A		On Wednesday, 1/25/23, at about 2:00PM, Public Works (PW) received a call about a sewage overflow at 520 Baltimore Avenue. A PW crew was dispatched to the site. The crew found sewage seeping from the ground in the side yard and running toward and down the asphalt street.	The home did not have a cleanout so the crew jetted the sewer main in front of the home. The crew also positioned a vac truck to collect sewage from the gutter pan along the street. After about 30 minutes of jetting the main, the blockage was cleared and the overflow ceased. The location of the overflow appeared to be a broken lateral on the homeowner's property. A large amount of wipes and hygiene products were found in the yard at the site, which is the suspected cause of the blockage. An estimated 500 gallons of sewage were collected from the street. No impact to State waters.	1/26/2023
15	VADEQ was notified via online pollution report	2/17/2023	2/21/2023	Yes	No	N/A		At midday Friday, 2/17/23, Public Works (PW) was informed by a citizen of an overflowing manhole at 366A National Ave near the City's National/New Hope sewer lift station. PW crew was called and dispatched to the site, arriving in early afternoon. Crew went to the lift station and walked upstream checking several manholes along the way. Crew did not observe any active overflows at that time, but did note several manholes surcharged with I/I from the prior heavy rains.	This morning (2/21/23), PW received a call from David Higgins, property owner, describing the incident and including more specific information on location, including the last manhole near the lift station. A PW crew was dispatched to the site this morning. The crew found evidence (debris, toilet tissue, etc.) around the last manhole before the lift station. They observed that the embankment along the drainage swale had fallen away from the precast manhole partially exposing it. Evidence showed that I/I diluted sewage had escaped the structure from underneath the "watertight" frame and seams of the manhole sections. Crew cleaned the area and applied lime. Crew is returning this afternoon to begin repairs to the structure. An I/I investigation will be needed in the future to address the core issue in this sewer basin.	2/21/2023
16	VADEQ was notified via online pollution report	4/27/2023	4/28/2023	No	N/A	N/A		On Thursday, 4/27/23, at about 1:30PM, the Public Works (PW) utility locator opened a manhole near 122 S Jefferson Street and found that the manhole was surcharged, but not overflowing.	A PW crew was dispatched to the site. The crew jetted the downstream sewer main and cleared the apparent blockage. However, an estimated 5 gallons of sewage was discharged as part of the cleaning operations. The discharged sewage ran onto the pavement around the manhole. After clearing the blockage, the crew cleaned the road and washed most of the sewage back into the manhole. No impact to State waters.	4/28/2023
17	VADEQ was notified via online pollution report	5/9/2023	5/10/2023	No	N/A	N/A		On Tuesday, 5/9/23, at about 10:00AM, Public Works (PW) received a call of a sewage overflow behind the referenced address. A PW crew was dispatched to the site and found sewage overflowing from a previously unknown and unmapped sewer manhole. The crew jetted the downstream sewer main and after some time, cleared the apparent blockage. Many large root masses were removed from the main, which were the apparent cause of the blockage and subsequent overflow.	An estimated 50 gallons of sewage had discharged from the system and mostly permeated into the surrounding ground. The remaining sewage was cleaned as best as possible and removed. Lime was then applied to the affected area. No impact to State waters. Due to the heavy roots encountered, the crew will return to the site to conduct root treatment/removal and to CCTV inspect the line.	5/10/2023

APPENDIX B

OUTFALL AND POINTS OF DISCHARGE MAP



APPENDIX C

BMP DATABASE ADDITIONS

BMP DATABASE
PRIVATELY OWNED BMPs BROUGHT ONLINE
FROM July 1, 2022 thru June 30, 2023

BMP NO.	SITE NAME	SITE ADDRESS	OWNER	SITE LOCATION		FACILITY TYPE	ACRES TREATED			ONLINE DATE		VA HU6	RECEIVING WATERS	IMPAIRED WATERS	SWM AGREEMENT
				LATITUDE	LONGITUDE		TOTAL	PERVIOUS	IMPERVIOUS	MONTH	YEAR				
	Villages at Staunton Phase !	101 Stribling Lane	Stage Five, LLC	38.143446	-79.065038	Extended Detention	10.07	7.97	2.7	3	2022	PS06	Asylum Creek	No	6/13/2023
BCN-13	Waffle House	103 Crossing Way	Waffle House, Inc	38.132614	-79.039202	Extended Detention	1.04	0.59	0.45	8	2022	PS09	Christians Crrek Trib (N)	No	2/6/2023
BPF-32	W4 Carwash	102 Community Way	W4 Properties Staunton, LLC	38.138285	-79.04829	underground facility	1.03	0.44	0.59	9	2022	PS09	Poor Farms Draft	No	2/6/2023

APPENDIX D

Assessment of the Appropriateness of Identified BMPs

The City of Staunton has determined that the best management practices included in the MS4 Program Plan that the City already had in place during Permit Year 5 represent an appropriate selection and implementation of a stormwater management program as defined by the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems.

No deficiencies have been found within the existing BMPs or within the new BMPs currently being developed for the Program.