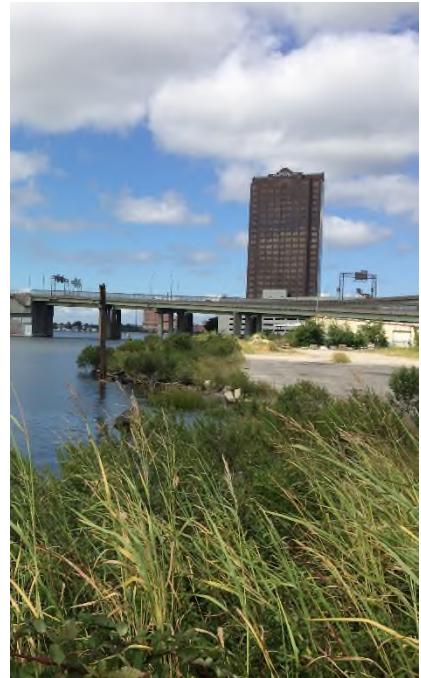




MS4 PROGRAM PLAN

VSMP Permit No. VA0088650
City of Norfolk, Virginia



2017.06

Revised April 2020

City of Norfolk Contract No. 25668

City of Norfolk Project No. 16043



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1.1 BACKGROUND

The City of Norfolk, with an area of approximately 54 square miles, is bordered to the north by the Chesapeake Bay and to the west by the Elizabeth River. The southern and eastern portions are bordered by the Cities of Portsmouth, Chesapeake, and Virginia Beach as shown in **Figure 1-1**.

The City of Norfolk, Virginia first obtained a permit to discharge stormwater from its municipal separate storm sewer system (MS4) in 1996 under Phase I of the National Stormwater Program administered in Virginia by the Department of Environmental Quality (DEQ). DEQ re-issued Norfolk's permit in 2001. In September 2005, Norfolk submitted a re-application for its MS4 permit. The City MS4 permit expired in March 2006 and was administratively continued until it was reissued on July 1, 2016.

The City has developed a stormwater management program both to comply with Federal and State regulations and to reduce the potential for pollutants to reach receiving waters through the MS4. This MS4 Program Plan documents best management practices (BMPs) Norfolk has implemented, and plans to implement, as part of its stormwater management program.

The Division of Environmental Storm Water Management, within the Department of Public Works, oversees Norfolk's municipal separate storm sewer system (MS4) program. **Figure 1-2** provides an overview of the MS4 program organizational structure on a City-wide basis.

1.2 PURPOSE OF THE MS4 PROGRAM PLAN

The MS4 Program Plan details Norfolk's comprehensive program to manage the quality of stormwater runoff discharged from the MS4. The MS4 Plan is divided into four chapters and six supporting appendices. Chapter one provides general background information and the purpose of the MS4 Program Plan, while Chapters two through four discuss the City's specific programs matched to the permit requirements. Appendix A provides a list of legal authority used by the City to implement the program; Appendix B provides a list of supporting documents included by reference; Appendix C contains a listing of permit milestone activities; Appendix D is a listing of various reporting requirements for the term of the permit; Appendix E contains a list of key contact information; and Appendix F lists any revisions made throughout the permit cycle.

Chapters two through four describe Norfolk's stormwater management (SWM) program in detail. Each program element included in Chapters 2, 3, and 4 of the MS4 Program Plan includes:

- the reference section of VSMP Permit No. VA0088650;
- the BMP goals and objectives;
- roles and responsibilities for the BMP; and,
- policies and procedures.

The MS4 Program Plan includes details regarding how Norfolk will implement its stormwater management program. Revision version number and date to this MS4 Program Plan will be documented in the footer of the revised pages, and summarized on the Revision Sheet located in this document. Modifications to the MS4 Program Plan will be made in accordance with Part A, Section I.7 of the MS4 permit.

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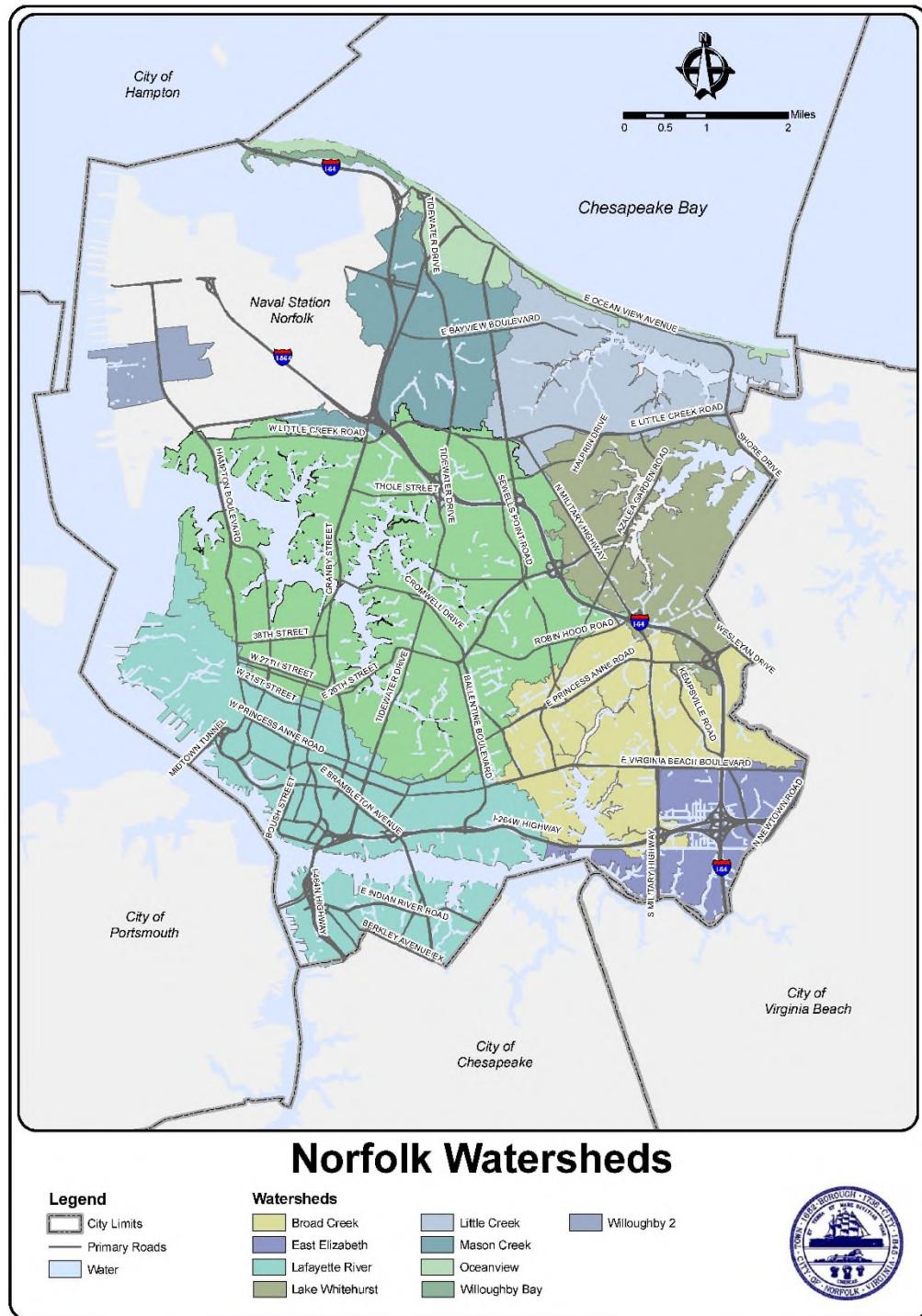


Figure 1-1. Norfolk Watersheds

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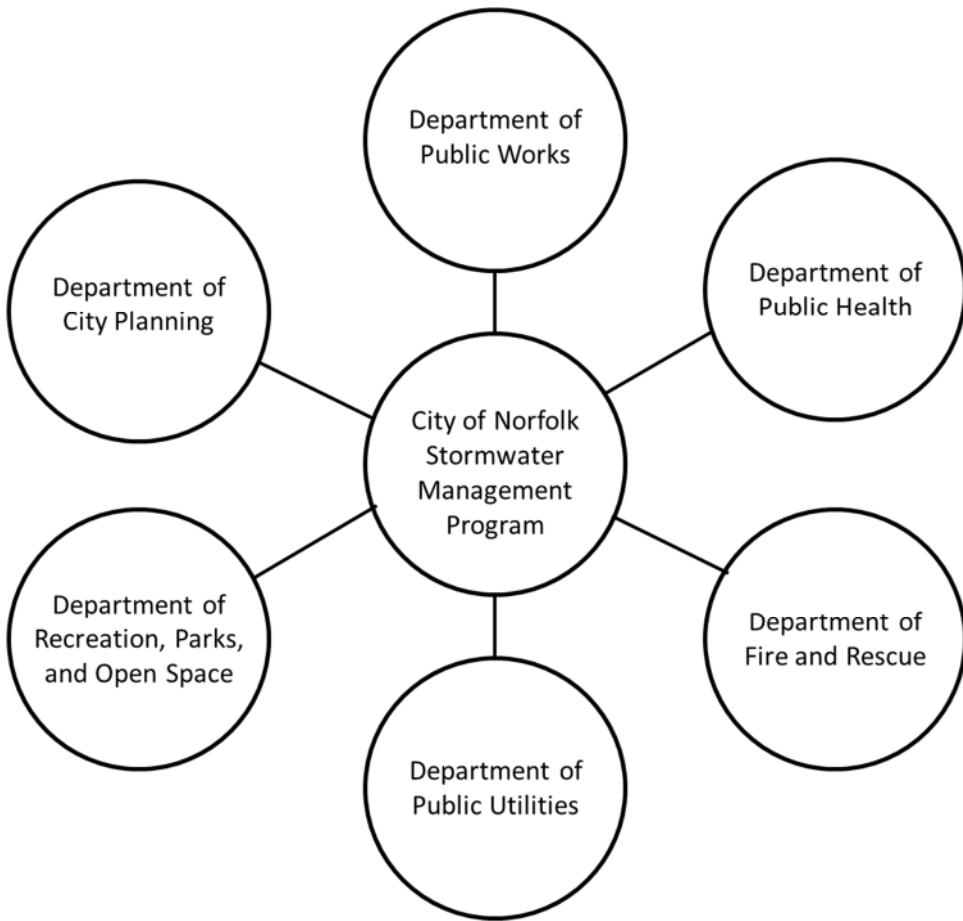


Figure 1-2. Stormwater Management Program Organizational Structure

This MS4 Program Plan will be posted on the City's website; will remain on file in the Department of Public Works, Division of Environmental Stormwater Management; and is available to the public upon request.

Norfolk will review the current MS4 Program Plan annually, in conjunction with preparation of the Annual Report. As specified in the MS4 permit, changes to the MS4 Program Plan will be made as follows:

- Norfolk may add (but not eliminate or replace) components, controls or requirements at any time. Additions will be reported in the Annual Report.
- Norfolk may update and/or modify specific standards and specifications, schedules, operating procedures, ordinances, manuals, checklists, and other documents routinely evaluated and modified, including those documents listed in Appendix A through Appendix F, if the updates and modifications: (i) are consistent with the conditions of the VSMP Permit; (ii) follow proper

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public notification and participation requirements as listed in the permit; and (iii) are documented in the Annual Report.

- Norfolk may replace, or eliminate without replacement, ineffective or infeasible strategies, policies, and BMPs specified in the MS4 permit with alternate strategies, policies, and BMPs upon written request and approval by DEQ provided that:
 - an analysis of how and/or why the strategies, policies, or BMPs are infeasible including whether or not they are cost prohibitive is provided;
 - an expectation of the effectiveness of replacement strategies, policies, or BMPs is provided;
 - an analysis of how the replacement BMPs are expected to achieve the goals of the replaced BMPs is provided;
 - a schedule for implementing the replacement strategies, policies, or BMPs is provided; and,
 - an analysis is provided of how the replacement strategies and policies are expected to improve Norfolk's ability to meet the strategies and policies being replaced.
- DEQ may, in accordance with the Virginia Administrative Processes Act, the VSMP regulations, and other applicable State laws, statutes and regulations, request Norfolk to modify the MS4 Program Plan to:
 - address impacts on receiving water quality caused by discharges from the MS4;
 - include more stringent requirements necessary to comply with new State or Federal statutory or regulatory requirements;
 - include other conditions necessary to comply with State or Federal requirements.

Minor revisions, such as editorial changes or changes to contact information for various BMPs that do not change the City's stormwater management program, will be made internally and furnished to DEQ with the next MS4 Annual Report.

1.3 LEGAL AUTHORITY

Norfolk has developed its MS4 program in accordance with Virginia Stormwater Management Law, Virginia Stormwater Management Regulations, and the current MS4 permit. The City has incorporated water quality measures into various chapters of Norfolk City Code which allow Norfolk to:

- control the contribution of pollutants to the MS4;
- prohibit illicit discharges to the MS4;
- control the discharge of spills and the dumping or disposal of materials other than stormwater into the MS4;
- require compliance with conditions in ordinances, permits, contracts, inter-jurisdictional agreements, or orders; and,
- carry out inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions, including the prohibition of illicit discharges to the MS4.

A list of the legal authority Norfolk uses to execute its MS4 Program is provided in Appendix A and is hereby incorporated by reference into the MS4 Program Plan. Norfolk will review and update its ordinances and other legal authority as necessary to control discharges to the MS4.

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1.4 ANNUAL REPORT

The MS4 Annual Report provides an update on the status of the BMPs implemented as part of this MS4 Program Plan during the preceding fiscal year (July 1 – June 30). Each Annual Report will be prepared in accordance with the MS4 discharge permit. Each Annual Report will also include a list of proposed changes to the MS4 Program Plan.

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2. MS4 PROGRAM IMPLEMENTATION

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2.1 CONSTRUCTION SITE RUNOFF CONTROL AND POST CONSTRUCTION RUNOFF CONTROL

2.1.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(a), page 6

2.1.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to implement local erosion and sediment (E&S) control and stormwater management (SWM) programs consistent with state law and the terms of the MS4 permit.

2.1.3 ROLES AND RESPONSIBILITIES

The Department of City Planning, Bureau of Environmental Services is responsible for:

- administering the City's E&S control and VSMP programs;
- coordinating the review and approval of site plans for E&S control, Chesapeake Bay Preservation Act, and Wetlands;
- reviewing Construction General Permit (CGP) registration statements and SWPPP for completeness;
- providing documentation to the Virginia Department of Environmental Quality (DEQ) regarding CGP registration statements;
- issuing land disturbance permits;
- performing inspections for compliance with erosion and sediment control regulations and Storm Water Pollution Prevention Plans (SWPPP) and land disturbance permits;
- tracking the number of regulated land disturbing activities approved and the total number of acres disturbed during the reporting period and providing this information to the Department of Public Works, Division of Environmental Storm Water Management no later than August 15th;
- providing monthly land disturbing reports to DEQ;
- tracking the number of land disturbing activity inspections conducted and the number and type of each enforcement action taken during the reporting period and providing this information to the Department of Public Works, Division of Environmental Storm Water Management no later than August 15th;
- tracking the land disturbing projects that qualify under the "Grandfathering" provision of the VSMP regulations that receive coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities during the reporting period and providing this information to the Department of Public Works, Division of Environmental Storm Water Management no later than August 15th;
- providing a summary of actions taken by Norfolk to implement programs consistent with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act and attendant regulations during the reporting period to the Department of Public Works, Division of Environmental Storm Water Management no later than August 15th;
- routinely reviewing the Norfolk Design and Construction Manual to ensure compliance with State Law; and,

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- enforcing wetland and CBPA regulations.

The Department of Public Works, Division of Environmental Storm Water Management is responsible for:

- coordinating the review and approval of site plans associated with post-construction storm water criteria requirements;
- confirming a notarized Declaration of Covenants (i.e. BMP Maintenance Agreement) is filed with the Clerk of the Court for associated post-construction Best Management Practice (BMP) inspection and maintenance;
- reviewing stormwater management plans;
- performing inspections for compliance with construction associated with post-construction BMP installation;
- issuing occupancy permits upon inspection and approval of records of construction (i.e. "As-built"); and,
- routinely reviewing the Norfolk Design and Construction Manual to ensure compliance with State Law.

2.1.4 POLICIES AND PROCEDURES

The City of Norfolk has developed a document, *City of Norfolk, VA Stormwater Design and Construction Manual* (VSMP manual), that outlines the specific requirements and exemptions set forth in the Virginia Storm Water Management Program (VSMP). The VSMP requirements are based on the total amount of land disturbance activity that occurs. Generally, projects with greater than 1 acre of land disturbance must obtain a Construction General Permit (CGP), pay associated fees, and comply with the standards outlined in the permit. Projects greater than 2500 square feet, but less than 1 acre, City-wide must provide water quality and quantity treatment based on the project, and must establish an E&S plan as outlined in the Norfolk Design and Construction Manual. Single Family residential homes less than 1 acre are generally exempt from the storm water quality and quantity requirements, but they do require an agreement-in-lieu of a plan unless part of a common plan of development.

Norfolk's VSMP is administered by the Department of City Planning, Bureau of Environmental Services with assistance and oversight provided by the Department of Public Works, Division of Environmental Storm Water Management. A comprehensive program review was conducted by the Department of Environmental Quality (DEQ) during program development in March 2014 and was approved for implementation on July 1, 2014. Any VSMP requirements more stringent than those required were reviewed and approved by the Department of Environmental Quality prior to implementation.

The VSMP manual outlines the specific requirements associated with site plan review and inspection required for compliance with E&S, VSMP and Chesapeake Bay Preservation Act laws and regulations. Details pertaining to these programs may be found in the Norfolk Design and Construction manual.

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Erosion and Sediment (E&S) Control:

The City of Norfolk implements an E&S control program in accordance with State regulations. Norfolk uses its E&S control program to meet the construction site runoff control requirements of the VSMP Construction General Permit.

Norfolk's erosion and sediment control program is administered by the Department of City Planning, Bureau of Environmental Services. A comprehensive program review was conducted by the Department of Conservation and Recreation (DCR) in August 2007 and the program was found to be "fully consistent."

Norfolk has multiple individuals in various departments (Department of Public Works, Department of City Planning, and Department of Utilities) who are qualified to perform E&S inspections. The Department of City Planning, Bureau of Environmental Services has employees responsible for ensuring compliance with E&S and VSMP permit requirements, which includes site plan review for E&S compliance, administering all land disturbance permits, and conducting E&S and VSMP inspections on sites under construction.

Norfolk requires all construction sites to have a Responsible Land Disturber (RLD) named prior to commencing land disturbance. This information is provided to the City by the applicant on the City of Norfolk Construction Site Information Form. This person is held liable for all problems that may arise during actual construction pertaining to E&S control measures.

Stormwater Management:

The City of Norfolk implements the Virginia Stormwater Management program in accordance with State regulations. Norfolk uses the E&S program, Chesapeake Bay Preservation Overlay program, and the Stormwater Management regulations to comply with the Virginia Stormwater Management program to reduce pollutants in runoff into the MS4.

Norfolk has multiple individuals who are certified to perform program administration, site plan review and inspection. These individuals are included in Departments of City Planning and Public Works.

As part of the plan review process, the Department of Public Works is responsible for the stormwater management plan review for all land disturbances greater than 2500 square feet as outlined in the VSMP manual. The Storm Water Engineer or his designee reviews the stormwater management plan for completeness. Upon notification from the Storm Water Engineer or his designee, the Department of City Planning notifies the applicant within 15-days of receipt as to whether the plan is complete and, if not, items that are required to be submitted for the plan to be considered complete. Once the submittal is deemed complete, the Storm Water Engineer reviews the plan to ensure compliance with regulations.

Additionally, during the plan review process, the Department of City Planning, Bureau of Environmental Services provides technical review of the Erosion and Sediment Control Plan as outlined in the VSMP manual.

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After all components of the plan have been reviewed and approved by various entities throughout the City, it is deemed approved by the Department of City Planning.

Prior to any land disturbance activity commencing, the property owner must submit the registration statement for the Construction General Permit (CGP), CGP fees, and a copy of the Storm Water Pollution Prevention Plan (SWPPP) to the Department of City Planning, Bureau of Environmental Services. The Storm Water Pollution Prevention Plan is comprised of: (1) the Stormwater Management Plan; (2) the Erosion and Sediment Control Plan; and (3) the Pollution Prevention Plan. The VSMP Administrator or his designee submits the registration to DEQ via a permitting database, and the owner posts any necessary bonds. Once registration is complete and a bond is issued, a Land Disturbance permit is issued by the Department of City Planning, Bureau of Environmental Services.

The Department of City Planning, Bureau of Environmental Services conducts routine inspections to ensure compliance with the SWPPP and CGP, including the E&S and P2 plans. Discrepancy reports, Notices of Violation, Stop Work Orders and/ or Summons may be issued for discrepancies based on frequency and severity.

The Department of Public Works performs construction and post construction inspections of permanent storm water facilities as outlined in the VSMP manual. Upon completion of the project, the site is inspected to ensure final stabilization has occurred and to ensure the storm water management facility (BMP) is installed in accordance with the approved site plan and is functioning as designed. Occupancy permits are then issued for the property and post-construction BMPs are tracked for future inspections. For post-construction information, refer to section 2.8 of the MS4 Program Plan and the VSMP Manual.

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2.2 PLANNING AND RETROFITTING ON PRIOR DEVELOPED LANDS

2.2.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.1, page 6

Part I, Section B.2.(b), page 7

2.2.2 BMP GOALS AND OBJECTIVES

The goal of this activity is to construct and track stormwater management (SWM) projects to improve water quality.

2.2.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water is responsible for developing, coordinating implementation efforts, and reporting on progress towards implementation or construction of the prioritized list of SWM projects.

2.2.4 POLICIES AND PROCEDURES

The Department of Public Works, Division of Environmental Stormwater Management serves as the lead city agency responsible for developing the prioritized list of stormwater management (SWM) projects being evaluated by the City for implementation or construction. The Division will generate and revise the summary sheet annually based on the proposed City budget for the upcoming fiscal year.

The Department of Public Works, Division of Environmental Storm Water Management will complete the design and construction of no less than five (5) water quality retrofit projects prior to the expiration of the state permit. The list of retrofit projects includes at a minimum the following projects:

1. Norfolk Juvenile Detention Center Pond Retrofit – Converted the existing dry pond / swale to a DEQ Level I retention pond by adding a wetland bench, buffer plantings, and forebay.
2. Ballentine School Retention Pond Retrofit – Upgraded the exiting pond by dredging and expanding the pond, adding wetland benches, buffer plantings, and a forebay.
3. Parkdale Stream Restoration – Stabilized a short section of urban stream by using natural channel design techniques including bank stabilization, log vanes, and re-establishment of wetland vegetation.
4. Lake Modoc – Update the exiting pond to a DEQ Level II retention pond by adding volume, installing wetland benches, and adding forebays.
5. Anne Outten Pond Retrofit – Update the existing pond to a DEQ Level II retention pond by adding volume, installing wetland benches, and adding a forebay.

Additional retrofit projects will be pursued as funding becomes available. Additional retrofit projects will be identified in each annual report.

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2.3 ROADWAYS

2.3.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(c), page 7

2.3.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to reduce the impacts on receiving waters from pollutants associated with street, road, and parking lot maintenance activities, including sanding and deicing activities.

2.3.3 ROLES AND RESPONSIBILITIES

The Department of Public Works is responsible for:

- routine maintenance of public streets, roads, and parking lots;
- applying sand and deicing materials during inclement weather; and,
- maintaining deicing material storage facilities.

2.3.4 POLICIES AND PROCEDURES

Street sweeping is an effective BMP that reduces pollutants from entering natural waterways through storm water runoff from streets, roads and parking lots, and plays a major role in meeting environmental requirements including the Chesapeake Bay Total Maximum Daily Load (TMDL) and MS4 permit compliance. This direct removal of sediment also contributes to the removal of other associated pollutants, including, metals, petroleum and nutrients.

Additionally, street sweeping operations remove trash, litter, leaves and other debris from streets prior to it entering the storm water system. Not only does this improve the aesthetics of neighborhoods, but it also greatly reduces flooding. By removing the debris from streets and roads prior to it entering the storm water system, sweeping efforts reduce stoppages in structures and pipes.

Street sweeping is conducted on a monthly basis in all other areas of the City on streets with curb and gutters (except downtown is performed daily). Street sweeping is performed Tuesday through Friday, with Monday as a make-up day. In areas throughout the City where there is a need for access to on-street parking due to the substantial number of cars with limited parking spaces, the street sweeping is conducted over a two-day period in an effort to retain one side of the street for parking at all times, for example: the odd side of the street is swept on Tuesday while the even side is swept on Wednesday.

The sweeping operations also have a hand crew that is designed to clean underpasses and dead ends by hand to support the street sweeping efforts.

The current staffing and equipment assets are adequate to maintain the current service level in all but three months of the year. During the months of October, November and December, the street sweeping unit works substantial overtime to remove the leaves falling from trees. The volume of leaves slows the sweeping operations by requiring multiple passes by street

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sweepers, increasing the number of disposal trips by tandems. During these heavy leaf times, the operations utilizes the Leaf Vacuum truck to assist with high volume areas.

Although snow and ice control is not a major operation for the City, the Department of Public Works maintains calibrated spreaders and practices good housekeeping measures to minimize potential pollution from deicing storage sites. Salt is stored at two locations in the City of Norfolk: (1) Public Works McKann Facility; and, (2) Central Business Park Sewells Point Facility. Stored deicing materials are covered to minimize pollutant runoff from precipitation. The City will not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, sidewalks and other paved surfaces. Following events where deicing materials are applied, street sweeping efforts will be made to remove residual material from roadways and streets.

Additionally, appropriate staff is trained biennially on good housekeeping and pollution prevention practices to be employed during road, street and parking lot maintenance. See section 2.11 of the MS4 Program Plan for more details.

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2.4 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION

2.4.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(d), page 7

2.4.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to control the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied to rights-of-way, parks, and other properties owned or operated by the City of Norfolk.

2.4.3 ROLES AND RESPONSIBILITIES

The Department of Recreation, Parks & Open Space, Bureau of Parks & Urban Forestry is responsible for:

- applying pesticides, herbicides, and fertilizers on City property managed by the Bureau;
- identifying all permittee lands where nutrients are applied to contiguous area of more than one acre and report this information to the Department of Public Works, Division of Environmental Storm Water Management no later than August 15th;
- developing and implementing Nutrient Management Plans for City property in accordance with the schedule required by the MS4 permit; and,
- ensuring staff and contractors applying pesticides and herbicides on City property managed by the Bureau maintain appropriate certification per the Virginia Pesticide Control Act.

The Fire Marshall's office is responsible for:

- regulating private applicators and sites that store large amount of pesticides, herbicides, and fungicides.

The Norfolk Department of Public Health is responsible for:

- tracking the acreage of permittee lands managed under Integrated Pest Management Plans and reporting this information to the Department of Public Works, Division of Environmental Storm Water Management no later than August 15th.

2.4.4 POLICIES AND PROCEDURES

PHF Application on City Land:

The mission of the Department of Recreation, Parks & Open Space, Bureau of Parks & Urban Forestry is to "enrich the quality of life for all by preserving and enhancing the environmental setting and assets of the City of Norfolk through creating, preserving and protecting landscaped areas for trees, shrubs and flowers on streets, greenways, parks and public grounds." The Bureau of Parks and Urban Forestry is an environmentally sensitive bureau responsible for the application of pesticide (to include herbicide, insecticide, and fungicide) and fertilizers to city property under their jurisdiction, including Norfolk Public School properties. When selecting a chemical for application, the Bureau strives to select the least hazardous/toxic chemical to human health and the environment.

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The City will develop nutrient management plans for city-owned land where nutrients are applied to a contiguous area greater than one acre. The areas identified to require a nutrient management plan include the following:

Site	Sq Ft	Acres
Lake Taylor Soccer Field 1	74,339	1.70
Lake Taylor Soccer Field 2	72,601	1.67
Lake Taylor Soccer Field 3	68,158	1.56
Lake Taylor Soccer Field 5	65,221	1.50
Lake Taylor Soccer Field 6	34,597	0.79
Lake Taylor Soccer Field 7	60,607	1.39
Lake Taylor Soccer Field 9	77,154	1.77
Lake Taylor Soccer Field 10	76,247	1.75
Lake Taylor Soccer Field 11	70,354	1.62
Lake Taylor Soccer Field 12	61,526	1.41
Lake Taylor Soccer Field 13	35,089	0.81
Lake Taylor Soccer Field 14	71,932	1.65
Lake Taylor Soccer Field 15	70,291	1.61
Norview Baseball Field	124,154	2.9
Norview Softball Field	95,729	2.2
Norview Stadium	92,631	2.1
Booker T. Washington Stadium	103,390	2.4
Blair Middle School Soccer Field	70,818	1.6
Ghent Elementary School Soccer Field	107,415	2.5
Northside Softball Field 1	90,852	2.1
Northside Softball Field 2	91,004	2.1
Northside Softball Field 3	91,416	2.1
Barraud Park RBI Field	97,463	2.2
Town Point Park Field 1	55,123	1.3
Town Point Park Field 2	42,525	1.0
Town Point Park Field 3	57,634	1.3
Town Point Park Field 4	24,162	0.6
Total:	1,982,432	45.5

The City will report in each annual report total acres upon which nutrients are applied, acres where plans are required, and acres of lands where plans have been implemented.

The Bureau stores pesticides in a locked caged area at the Parks and Urban Forestry facility in accordance with Virginia Department of Agriculture guidelines. The Bureau utilizes a Work Management Procedure Manual which includes information on pesticide application, application locations, and types of pesticides used. Bureau employees complete a form and routine maintenance time report whenever pesticide is applied. Once completed the form is fed

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into a work management database. The City can utilize the database to obtain summary data on amounts and types of pesticides applied and determine the amounts purchased.

City employees responsible for applying pesticides hold state certification as commercial pesticide applicators or as registered technicians, requiring biannual recertification training in pesticide use and safety. All chemical applications are made by VDACS certified pesticide applicators and technicians in compliance with product labeling.

Commercial PHF Storage on Private Land:

The Fire Marshall's office permits commercial pesticide, herbicide, fungicide applicators, which fall under the requirements based in the fire code. The applicators or retailers that store, apply, or dispose of any pesticide, herbicide or fungicide are regulated by the Fire Marshall's office. Permits are issued by the Fire Marshall's office annually.

Integrated Pest Management Plans:

The Norfolk Department of Public Health manages and tracks the permittee land managed under an Integrated Pest Management Plan. The City utilizes IPM to manage the mosquito and rodent populations City-wide, 66 square miles or 42,240 acres. The Norfolk Naval Base is excluded from the City's IPM program.

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2.5 ILLICIT DISCHARGES AND IMPROPER DISPOSAL

2.5.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(e), page 9

2.5.2 BMP GOALS AND OBJECTIVES

The Department of Public Works and the Department of Utilities actively work to identify and eliminate illicit discharges detected through dry weather screening, system inspections, system maintenance, public reporting, and other methods.

2.5.3 ROLES AND RESPONSIBILITIES

Department of Public Works, Division of Environmental Storm Water Management is responsible for implementing programs to address floatables and for non-wastewater illicit discharges to the MS4.

The Department of Utilities, Division of Wastewater Management is responsible for inspecting the sanitary sewer system and addressing wastewater illicit discharges to the MS4.

2.5.4 POLICIES AND PROCEDURES

The City of Norfolk, at this time, has not imposed any special conditions or restrictions on discharges to the MS4 for those categories authorized under Part I.A.1.b.3 of the MS4 permit.

The Department of Utilities, Division of Wastewater conducts preventative maintenance to repair pipes and clear blockages in an effort to minimize exfiltration from the sanitary sewer system. The Division maintains a list of lines and a schedule of when they are to be inspected and maintained. The Division performs television inspection of sanitary sewer lines. Potential problem areas are inspected on a 7-, 14-, 30-, or 60-day basis, depending on the assigned level of risk. The Division tracks the maintenance and inspection performed and reports this data annually to the Division of Environmental Storm Water Management for inclusion in the annual report.

The Department of Public Works, Keep Norfolk Beautiful group implements a number of community engagement opportunities to reduce floatables. These voluntary programs include Adopt-A-Spot, Great American Cleanup, and Clean the Bay Day. During these events, volunteer groups are asked to collect debris in a manner that it may be tracked. This information is reported to the Division of Environmental Storm Water Management annually.

Additionally, Keep Norfolk Beautiful also conducts the City's Litter Index annually. Volunteers inspect a specified area throughout the City annually to assess the effectiveness of the various litter prevention programs implemented. Litter Index results are reported to the Division of Environmental Storm Water Management annually.

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The Department of Public Works, Division of Environmental Storm Water Management also implements maintenance programs such as street sweeping and system cleaning that reduce floatables. The street sweeping program is further described in section 2.3 of this Program Plan. Tons of debris removed through these programs are tracked and reported annually.

The City of Norfolk, under the authority of Section 41.1 of the City Code, prohibits the dumping or disposal of used motor vehicle fluids, household hazardous waste (HHW), sanitary sewage, grass clippings, leaf litter, and animal waste into the MS4. The Department of Public Works, Division of Waste Management collects used motor vehicle fluids and household hazardous waste (HHW) for proper disposal at the HHW collection facility located at SPSA. The HHW program will be publicized and promoted no less than twice per year. Please refer to section 2.10 of the Program Plan for additional information.

The Department of Public Works, Division of Environmental Storm Water Management investigates suspected illicit discharges into the storm water system. An investigation is initiated as soon as the Department receives notice of a potential violation. Inspections consist of a visual observation of an outfall or structure to check for discharges or signs indicating a discharge. Annual dry weather screening of the MS4 is described in BMP 2.12 – Dry Weather Screening.

Illicit discharges meeting permit reporting requirements (chemicals, sewage, etc.) are reported to DEQ within 24 hours and are followed up with a written report. The written report includes the date of the incident, location of the incident, party responsible for the incident, the date and time the incident was reported to DEQ, and any actions taken to correct the discharge. Norfolk requires the elimination of illicit discharges within 30 days of discovery. Where this is not possible, Norfolk works with the operator of the illicit discharge to take reasonable and prudent measures to minimize the discharge in an expeditious manner.

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2.6 SPILL PREVENTION AND RESPONSE

2.6.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(f), page 10

Part II, Section G, page 31

Part II, Section H, page 32

2.6.2 BMP GOALS AND OBJECTIVES

The goal of BMP 2.6 is to prevent petroleum and hazardous material spills from reaching the stormwater system through spill prevention, response, and containment. This BMP also describes the process Norfolk utilizes to report sanitary sewer overflows and spills in accordance with Part II.G, REPORTS OF UNAUTHORIZED DISCHARGES, and Part II.H, REPORTS OF UNUSUAL OR EXTRAORDINARY DISCHARGES, of the permit.

2.6.3 ROLES AND RESPONSIBILITIES

The Fire Marshall's office responds to hazardous material spills. The Department of Utilities, Division of Wastewater Management responds to and reports sanitary sewer spills. The Department of Public Works reports non-wastewater spills to the federal and state agencies.

2.6.4 POLICIES AND PROCEDURES

Petroleum and Hazardous Material Spills:

The Department of Fire-Rescue Services maintains trained staff and equipment to respond to emergency spills, hazardous material spills, and radiological accidents. The hazmat team for the Fire-Rescue Services initially contains the spill to ensure it does not enter the storm water system. After evaluating the spill, the hazmat team determines if a contractor will need to be hired to conduct clean-up efforts.

Members of the Fire Marshall's Office comprising the Environmental Crimes Task Force investigate and manage any clean-up efforts of illicit discharges or spills throughout the City. They coordinate with private residents/business owners to ensure clean-up efforts occur in a timely fashion. If the private parties are unable to complete the clean-up efforts, these members will accomplish the clean-up and later bill the private parties to recover the costs.

Non-sewage illicit discharges to the storm water system must be reported to the Division of Environmental Storm Water Management within 24-hours of the illicit discharge. The Fire Marshall's office notifies the Division and the Coast Guard National Response Center (NRC), if spills reach navigable waters, via phone or e-mail. Once the Division has been notified of the details pertaining to the non-sewage illicit discharge, the Virginia Department of Environmental (DEQ) are notified within 24-hours of the illicit discharge. A written report outlining the details is mailed to DEQ within 5 working days. The report includes information pertaining to the date and time of the discharge, the amount and type of the discharge, the location of the discharge, the responsible party information, a detailed description of the discharge and clean-up efforts, and any impact to natural water ways.

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Sanitary Sewer Spills:

The Department of Utilities makes notification of sanitary sewer spills to DEQ through the DEQ/HRPDC Sanitary Sewer Overflow Reporting System (SSORS). SSORS is a web-based spill reporting and tracking system developed by the HRPDC that simplifies the initial notification and 5-day letter reporting requirements for sanitary sewer overflows. Once Norfolk logs into the SSORS system and enters necessary data, a report is automatically sent to DEQ and, for spills exceeding 1,000 gallons, to the Virginia Health Department.

Data collected in SSORS includes the date and time of reporting, date and time of the incident, location of the incident, possible receptors/affected water body, material spilled, amount spilled, amount cleaned up, amount reaching state waters, and corrective actions taken.

SSORS provides a summary of spill reports, upon request, that can be downloaded into Microsoft Excel or similar programs.

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2.7 INDUSTRIAL & HIGH RISK RUNOFF

2.7.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(g), page 10

2.7.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to implement a program to identify and control pollutants in stormwater discharges to the MS4 from industrial and high risk runoff facilities (e.g., municipal landfills; other treatment, storage, or disposal facilities for municipal waste; hazardous waste treatment, storage, disposal and recovery facilities; and facilities subject to EPCRA Title III, Section 313) and other industrial or commercial discharges that Norfolk determines are contributing a significant pollutant loading to the MS4.

2.7.3 ROLES AND RESPONSIBILITIES

The Department of Fire-Rescue Services is responsible for:

- inspecting facilities subject to Section 313 of EPCRA and other facilities determined to be contributing substantial pollutant loadings.

The Department of Public Works, Division of Environmental Storm Water Management is responsible for:

- obtaining an updated list of VPDES-permitted industrial dischargers within the City on an annual basis;
- reviewing DMRs, if any, submitted by VPDES industrial stormwater permittees;
- inspecting outfalls of facilities with VPDES industrial stormwater permits at the point of connection to the MS4;
- developing and maintaining a list of industrial or commercial stormwater discharges determined to be contributing a significant pollutant load to the MS4; and,
- coordinating with DEQ.

2.7.4 POLICIES AND PROCEDURES

High Risk Facilities Other than VPDES-Permitted Facilities:

The Department of Fire-Rescue Services permits and inspects commercial and industrial facilities subject to section 313 of EPCRA. Permits for these industrial sites are issued once per year. The Fire Marshall's investigators ensure that the facilities follow proper storage and housekeeping procedures for hazardous or environmentally sensitive chemicals. Inspections are conducted, and discrepancies are noted. For all violations, a Notice or Violation or Summons may be issued to the organization to have the discrepancies corrected. Any information regarding possible illicit discharges is forwarded to the Department of Public Works for further investigation.

The Department of Fire-Rescue also permits and monitors demolition certificates, fireworks performances, hazardous materials storage, underground fuel tank filling or removal, and welding or cutting metal.

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The Department of Fire-Rescue schedules inspections to ensure that facilities that store an Extremely Hazardous Substance are inspected on an annual basis. Inspections for these facilities follow guidelines established in the International Fire Code.

VPDES-Permitted Facilities:

The Department of Public Works, Division of Environmental Storm Water Management requests DEQ to provide an updated list of VPDES-permitted industrial dischargers within the City each year. This list is maintained in the Department of Public Works, Division of Environmental Storm Water Management.

The Division also maintains a list of high risk industrial and/or commercial dischargers to the MS4 that do not have a VPDES industrial discharge permit. The list includes, but is not limited to, major automotive facilities such as: repair shops, body shops, auto detailers, auto dealers, tire repair shops, service stations, commercial car washes, and car rental facilities. It also includes other facilities such as nurseries, landscape facilities, pet care facilities, carpet cleaning facilities, junk dealers, transportation services, laundry and dry cleaners, and areas with a history of complaints.

Inspection of facility discharges to the MS4 are prioritized by Norfolk based on: historical discharges; local water quality impairments for pollutants; DMR violations; and citizen complaints. Norfolk inspects, but does not necessarily monitor, all VPDES industrial permitted outfalls that tie into to the City's MS4 at least once every five years. The City also inspects other non-VPDES-permitted facilities that tie into the MS4 to determine their risk of contributing significant loading.

The Department of Public Works, Division of Environmental Storm Water Management reports to and coordinates with the DEQ regarding an industrial facility when Norfolk has evidence that the facility is:

- contributing a significant pollutant load to the MS4;
- manufacturing, processing, or storing raw materials outside without coverage under a VPDES industrial stormwater permit; or,
- releasing non-stormwater discharges without coverage under an existing VPDES permit.

The Department of Public Works, Division of Environmental Storm Water Management will report to DEQ any facility that has submitted a copy of the signed DMR. The Division will cross reference this list with the list of permitted facilities.

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2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

2.8.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(h), page 11

2.8.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to ensure that inspection and maintenance is performed on stormwater management (SWM) facilities and infrastructure maintained by the City of Norfolk, including residential properties which qualify for maintenance, as well as SWM facilities not maintained by the City of Norfolk which discharge to the MS4. This BMP also ensures that MS4 system outfalls and pervious and impervious area mapping is updated and maintained.

2.8.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water Management is responsible for:

- inspecting City-owned SWM facilities, stormwater pump stations, and SWM facilities on Norfolk Public Schools' grounds to ensure necessary maintenance is performed;
- performing MS4 outfall and pervious and impervious area mapping;
- inspecting privately-owned SWM facilities to ensure necessary maintenance is performed; and,
- performing routine and major maintenance of City-owned SWM facilities, stormwater pump stations, and identified flood-prone areas.

The Department of Recreation, Parks, and Open Space Division of Parks and Forestry is responsible for:

- routine mowing of the tops of City-owned SWM facilities (not along the slopes); and,

The Department of Public Health, Division of Vector Control is responsible for:

- tidal ditch maintenance.

The Norfolk Public School system is responsible for:

- maintaining SWM facilities on school grounds, unless a written agreement has been developed between the school system and the City of Norfolk stating otherwise.

2.8.4 POLICIES AND PROCEDURES

Inspections of SWM facilities owned or operated by the City of Norfolk:

The Department of Public Works has instituted an aggressive inspection and maintenance program. Inspection of city owned BMPs are typically conducted once every year. Inspection of BMPs include debris accumulation, sediment accumulation, erosion, structure integrity, vegetation, water quality, and intended design function. Discrepancies are noted and scheduled for corrective action. The City maintenance crews perform maintenance on the city-owned BMPs based on inspection discrepancies or a preventative maintenance program. Re-inspections of storm water facilities are conducted to ensure maintenance has been completed.

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Inspections and maintenance of storm water structures owned by the City of Norfolk:

The Department of Public Works, Division of Environmental Storm Water Management performs inspection and maintenance on storm water structures owned by the City, including catch basins, drop inlets, manholes, and ditches. The City utilizes multiple methods to inspect and identify problem areas for maintenance. Work is scheduled and documented utilizing a work management database tracking program. Operations maintains various crews to perform system cleaning, pipe cleaning, structure repair, pipe repair, non-tidal ditch maintenance, BMP maintenance, pipe CCTV, pump station repairs, portable pump repairs, generator maintenance, and floodgate maintenance. Performance measures are tracked and reported in the annual report.

Citizen complaints are used to identify areas that require immediate maintenance. Citizens utilize the City's Impact Call Center to report complaints associated with flooding, poor drainage, stoppages, or pipe cave-ins. These complaints are tracked in a reporting system, inspected, and necessary follow up action scheduled through either operational crews or contractors.

The Department of Public Works have identified flood-prone areas within the City. Prior to weather events and in times of low backlog, crews are utilized to perform preventative maintenance on catch basins, ditches, and other components of the storm water system in these areas.

The Department of Public Works has also implemented a storm water preventative maintenance inspection program for storm water structures such as catch basins, manholes, and drop inlets. This program uses a fulltime employee to perform visual inspections of the storm water system. The Inspector identifies the structure based on GIS nomenclature. The structure is field verified with the GIS database system; if discrepancies are observed, the inspector documents the discrepancies for updating the GIS. The inspector also observes the structure for dry weather or illicit discharges; if discovered, the source is identified and eliminated. Lastly, the inspector reviews the structure for required maintenance including structural damage, pipe damage, or cleaning. If maintenance is required, a service request is entered for operational crews to schedule and complete maintenance.

The Department of Public Works also performs routine maintenance on City-owned non-tidal ditches. Off-road ditch maintenance is generally performed by either operational crews or contractors. Home owners with road-side ditches adjacent to their property are expected to conduct minor maintenance (removing trash and litter and cutting grass) on their property up to the city right of way, including roadside ditches. City crews perform grading or pipe flushing where necessary on roadside ditches and will assist with minor maintenance where workloads allow.

The Department of Public Works is responsible for the maintenance of twelve (12) stormwater pump stations, portable pumps and emergency generators within the City of Norfolk. Public Works staff complete routine inspections of the assets and ensure that maintenance is

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performed as required to ensure proper working order. Additionally, the crews perform preventative maintenance on the City's flood wall in downtown Norfolk at a minimum of twice per year.

Tidal Ditch Maintenance:

The Department of Public Health, Division of Vector Control is responsible for the tidal ditch maintenance program. This program involves the maintenance of 73 ditches, with a total length of 33 miles. Approximately 22 miles of ditches are cleaned annually. All work is done by hand in accordance with the City's Corps of Engineers permit. The inspection and maintenance of tidal marsh ditches is coordinated and prioritized with the U.S. Army Corps of Engineers.

School SWM Facility Maintenance:

The Norfolk Public School system is responsible for all the maintenance activities for the SWM facilities located on school operated property.

The Department of Public Works, Division of Environmental Storm Water Management performs annual inspections of all structural BMPs located on property operated by the Norfolk school district. Discrepancies are noted and an inspection report is documented. NPS is notified of the discrepancies for follow-up corrective action.

Private SWM Facility Inspections not maintained by the City of Norfolk:

The Department of Public Works, Division of Environmental Storm Water Management conducts regular inspections of privately-owned structural BMPs. Inspections of all privately-owned BMPs are conducted routinely, but at a minimum of once every 5-years.

Prior to site plan approval for a project constructing a privately-owned BMP, a Declaration of Covenants (i.e., BMP Maintenance Agreement) must be completed and recorded with the city Clerk of the Court. The Declaration of Covenants outlines the property owner's responsibility to maintain the BMP and permits the City of Norfolk to conduct routine inspections and maintenance if necessary. Additionally, per the authority of Section 41.1 of the Norfolk City Code, the City requires property owners to install and maintain BMPs per their approved site plan. Violation of this ordinance may result in a class 1 misdemeanor charge.

If a condition is discovered on a private BMP and maintenance is required, the owner of the BMP is notified by an inspection report to correct all maintenance items. The BMP is then re-inspected to ensure all maintenance items are corrected and in compliance with all state and federal regulations. If problems persist, enforcement action is taken. The Department of Public Works, Operations Division has the authority to write either a Uniform Notice of Violation or a Summons to have the owner respond to the problems. If the owner does not respond, the City has the authority to make any necessary corrections and charge the owner for the costs of the repairs. If the problem surrounding the BMP requires significant expense, the City is willing to work with the owner to ensure proper measures are being taken over a specified time frame.

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Individual Residential Lot BMPs

Single-family residential homes are exempted from the required installation of storm water BMPs through the City's Virginia Stormwater Management Program unless part of a common plan of development or greater than 1 acre.

The City has implemented a number of outreach methods to introduce voluntary BMPs on residential lots including the Star Homes Programs. Through the RiverStar Homes, BayStar Homes and LakeStar Homes programs, the City offers a voluntary pledge to property owners to implement structural or non-structural best management practices on their private properties. The programs may also offer up financial assistance, when available, for the installation of voluntary BMPs on their properties. If these practices are installed, a modified maintenance agreement and inspection requirement is implemented with the program.

The City has also implemented a storm water rate reduction program to incentivize residential property owners to install voluntary structural best management practices on their private property. This program provides a specified credit based on the type and number of BMPs installed. The property owners are required to inspect and self-report annually to continue to obtain the rate reduction. City staff will inspect once every 5-years to ensure the practices are still in place and functioning as designed.

Mapping:

The Department of Public Works Division of Environmental Storm Water Management maintains and updates electronic maps of the storm sewer system. Older mapping has been digitized into the system. The current maps are based largely on maps developed in the early 1970's. Existing mapping is being updated routinely.

As new areas are developed or redeveloped, the City identifies the new stormwater system and the new files are then added to the existing database. Should staff identify areas of the existing system that are not included in the electronic files, the staff member reports the finding to the Storm Water Division GIS Specialist. The GIS Specialist will then coordinate with City surveyors to survey the system and incorporate it into the existing files. Field verification is being completed daily through the storm water inspection program. New outfalls or structures identified or installed are updated.

The City mapped the MS4 service area using the following process:

1. Areas within previously identified drainage catchments in which stormwater infrastructure was also found were considered to be within the MS4 service area.
2. Drainage catchments that did not contain stormwater infrastructure were assessed using the most recently available aerial photography and LIDAR elevation data to determine whether surface drainage flowed into an adjacent catchment or directly into an adjacent waterway. Areas draining directly to waterways or natural drainage features (i.e., ditches where creeks or streams were modified), that did not otherwise

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drain through City stormwater infrastructure, were considered to be outside the MS4 service areas and all other areas considered inside.

3. Any areas considered to be within the MS4 service area after steps 1 and 2 were further refined to exclude the following: Phase II MS4 service areas, property within VDOT right-of-way, sites that have individual VPDES permits, contiguous forested areas greater than 900 m², wetlands, and open water.

The City will run an analysis of the contributing drainage within each local watershed. This will include the impervious, pervious and total acres served by the MS4. Additionally, this analysis will identify which areas are treated with stormwater controls. This area will be reviewed and updated as necessary by January 2021.

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2.9 CITY FACILITIES

2.9.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(i), page 14

2.9.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to implement good housekeeping and stormwater pollution prevention activities at City facilities with a focus on high priority municipal facilities. High priority municipal facilities include composting facilities, equipment storage and maintenance facilities, materials storage yards, pesticide storage facilities, public works yards, recycling facilities, salt storage facilities, solid waste handling and transfer facilities, and vehicle storage and maintenance yards.

2.9.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water Management is responsible for:

- updating facility SWPPPs as required and ensuring that up-to-date editions are kept at the high priority municipal facilities; and,
- installing and maintaining markings on all stormwater inlets on high priority municipal facilities.

Individual high priority municipal facility managers are responsible for:

- implementing the required SWPPP activities and conditions, including inspections and recordkeeping.

2.9.4 POLICIES AND PROCEDURES

Good Housekeeping:

The City of Norfolk employs good housekeeping practices at municipal facilities to alleviate the potential for stormwater runoff pollution by, among other things, implementing the following specific practices:

- wastewater and vehicle wash water are not discharged to the MS4 unless specifically authorized by a separate VPDES permit;
- yard waste and grass clippings are not dumped into the MS4; and,
- fluid leaks from municipal vehicles are prevented from entering the storm sewer system to the maximum extent practicable.

The Division of Environmental Storm Water Management will develop guidelines and provide them to other City Departments utilizing the Division's training and public information and outreach programs.

The Division of Environmental Storm Water Management will install medallions on high priority municipal facilities following the SWPPP finalization. During annual inspections, the medallions will be verified.

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Stormwater Pollution Prevention Plans (SWPPP) for High Priority Facilities:

The Department of Public Works, Division of Environmental Storm Water Management have identified nine facilities that meet the high priority definition. SWPPPs have been prepared for each facility identifying potential discharge of pollutants and BMPs installed to address those pollutants:

Separate VDPES Industrial Permits Required:

Department of Public Works
Waste Management Facility
1176 Pineridge Road, Norfolk, VA

Department of Public Works
Operations Yard (Storm Water and Streets & Bridges)
2233 McKann Avenue, Norfolk, VA

Separate VDPES Industrial Permits Not Required:

Department of Recreation, Parks & Open Space
Parks & Urban Forestry
2839 Dana Street, Norfolk, VA

Department of Utilities
37th Street Water Treatment Plant
3719 Parker Avenue, Norfolk, VA

Department of Utilities
Moores Bridges Water Treatment Plant
6040 Water Works Road, Norfolk, VA

Department of Utilities
Combined Operations Center
1316 Ballentine Road, Norfolk, VA

Department of General Services
Facilities Management
2840 Dana Street, Norfolk, VA

Department of General Services
Fleet Maintenance Facility
1188 Lance Road, Norfolk, VA

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Norfolk Public Schools
School Fleet Maintenance Facility
5555 Raby Road, Norfolk, VA

Copies of the SWPPPs will be maintained at each high priority facility and at the Department of Public Works, Division of Environmental Stormwater Management.

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2.10 PUBLIC EDUCATION/PARTICIPATION

2.10.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(J), page 16

2.10.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to develop and implement public education and public participation programs regarding local stormwater and water quality issues for a wide variety of stakeholders located in the City of Norfolk. It is the goal to increase stormwater knowledge in an effort to change behaviors to result in a reduction in pollution.

2.10.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Waste Management is responsible for:

- serving as the lead Norfolk agency for collection and disposal of household hazardous waste (HHW) including used oil, toxic materials, herbicides, pesticides and fertilizers;
- the HHW-related educational programs;
- serving as the lead Norfolk agency for oversight over the recycling collection program; and,
- managing the household yard waste disposal educational programs and enforcement.

The Department of Public Works, Keep Norfolk Beautiful (KNB) is responsible for:

- serving as the lead Norfolk agency for education and outreach associated with litter prevention, recycling and beautification;
- assisting with HHW-related educational outreach programs including used oil, toxic materials, herbicides, pesticides and fertilizers;
- assisting with pet waste and household yard waste disposal educational programs;
- coordinating community clean-up projects;
- coordinating various environmental public involvement and volunteer programs; and,
- coordinating with the Norfolk Environmental Commission (NEC) and Friends of Norfolk's Environment (FONE).

The Department of Public Works, Division of Environmental Stormwater Management is responsible for:

- assisting with the household hazardous waste (HHW) education program;
- assisting with household yard waste disposal educational programs;
- implementing the illicit discharge education and reporting programs;
- promoting water quality improvement initiatives;
- promoting and publicizing proper disposal of pet waste and residential car washes;
- promoting and publicizing proper use, application, and disposal of herbicides, pesticides and fertilizers;
- identifying and targeting commercial, industrial and institutional entities that have significant stormwater impacts;
- conducting community engagement presentations on stormwater-related issues;

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- managing the BayStar Homes program;
- encouraging private property owners to implement voluntary storm water management techniques;
- coordinating the stormwater and flooding websites including posting the permit, annual reports, actions plans, MS4 Program Plan and water quality project updates; and,
- performing various other stormwater education and outreach programs.

The Department of Fire-Rescue is responsible for:

- Illicit discharge and spill reporting;
- Pesticide, herbicide and fertilizer storage and application; and
- Commercial, industrial and institutional inspections.

2.10.4 POLICIES AND PROCEDURES

The City has robust education and outreach programs that vary from year to year to address water quality improvement, pollution prevention, good housekeeping, sustainability, recycling, litter prevention, HHW collection, e-waste collection, yard waste collection, illicit discharge and detection, and public involvement for project development. The City utilizes various techniques to reach students, residents, civic leagues, managers, business owners, and City staff. These techniques include community meetings, presentations, workshops, mass mailings, social media, constant contact, brochures, website, and the media. These public involvement campaigns keep residents informed and allow them the opportunity to provide input, participate, and comment. Public involvement assists management with decision making processes.

School Education Programs:

The City, Department of Public Works, coordinates with a multitude of public schools each year. The goal of the Department is to educate Norfolk's youth regarding environmental topics including water quality improvement, the water cycle, stormwater management, litter prevention and recycling.

Star Homes Programs:

The City, Department of Public Works, currently administers the city-wide Bay Star Homes program. This is a program where residents pledge to do good for the environment. This program is designed to encourage and teach residents how simple acts at home make a difference to the environment. The program includes water quality improvement, water conservation, energy efficiency, recycling, and litter prevention. Upon signing up for the program, residents receive ongoing information such as tips, opportunities to receive free items when available (ex: rain barrels, trees, soil analysis, nutrient management plans, etc.), volunteer opportunities, event notifications, and workshop information. The Department also partners with the Elizabeth River Project (ERP), a not-for-profit special interest group, on a similar program known as River Star Homes.

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Watershed Management Task Force:

The City currently has a Watershed Management Task Force (WMTF) comprised of representatives from a number of City Departments as well as not-for-profit special interest groups. The WMTF meets regularly to coordinate on water quality projects and initiatives.

Impact Call Center:

The City maintains the "Impact" call center. This centralized location allows residents to contact one location via phone or website for all concerns or questions related to City-work or programs. Once these questions or complaints are received, staff at the impact center are trained to notify the appropriate Department/Division. The Division responds to the inquiries and reports back to the Impact center as to the outcome. The Impact center maintains this information in a database system.

Website Updates:

Within Norfolk, each department is responsible for the content on its individual portion of the City website, www.norfolk.gov. The Department of Communications and Information Technology are responsible for overall coordination and content. Divisions can submit material to Communications/Information Technology for inclusion on the website, or they can submit material to an internal website and request that Information Technology post it to the public website. Information Technology staff review the material to ensure it conforms to City guidelines and then post it to the public website.

The Department of Public Works is responsible for the content of the Department website, which includes information regarding the MS4 permit, illicit discharges, recycling, litter prevention, etc.

The City posted a copy of the MS4 permit on the Department of Public Works website in July 2016. Additionally, the City will post copies of each annual report on the City's website no later than October 30th of each permit year, beginning on October 30, 2017. Lastly, the City will post the current MS4 Program Plan on the website within 30-days of approval from DEQ.

Illicit Discharges and Improper Disposal of Materials into the MS4:

The Department of Public Works has developed programs to educate the public regarding illicit discharges to the MS4. The Department utilizes various media venues to identify and report illicit discharges and spills including but not limited to civic presentations, training sessions, website information, brochures, social media, letters, Star Homes programs, and ultimately enforcement activity. The general message of "Only Rain Down the Storm Drain" is a slogan utilized by the City to inform residents that anything other than storm water is a violation. The City actively promotes reporting illicit discharges through either the Impact Call Center or directly to Storm Water staff.

The Department of Fire-Rescue manages the HazMat response team. They are the primary responders for any chemical spill in the City. By code, the City's Fire Marshall's Office must be contacted whenever a chemical spill occurs in the geographic boundary of the City of Norfolk.

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The inspectors and investigators educate the commercial businesses and industrial facilities on the proper storage, disposal, and clean-up efforts of hazardous materials/waste. The Fire Marshall's office reports spills that have reached a natural waterway to the NRC. They also refer information pertaining to any discharges to the City's MS4 to the Storm Water environmental staff for further analysis, enforcement, and reporting, where applicable.

The Department of Public Works, Environmental Storm Water Management manages the training program to educate appropriate City staff on spill response and illicit discharge detection. Refer to section 2.11 of this manual for additional information on the City's training program for staff.

Local Water Quality Improvement Project Initiatives:

The Department of Public Works has a comprehensive public involvement and outreach program for project design and construction of water quality projects. Civic league presentations and other stakeholder outreach is arranged during the project design process to obtain stakeholder input. Upon completion of design, projects go through the standard City Site Plan Review process, where departments throughout the City review projects for completeness and compliance with all applicable City standards. Appropriate permits are obtained where necessary. Prior to construction beginning, outreach is performed to keep stakeholders up-to-date of the project status.

Public and Private Golf Course Outreach:

The City of Norfolk currently has 3-golf courses in the geographic boundary: (1) Lamberts Point Golf Course; (2) Ocean View Golf Course; and (3) Sewells Point Golf Course (Navy). The City will send a letter to these three golf courses within the permit cycle encouraging them to utilize integrated management practice plans and techniques to reduce runoff of fertilizer and pesticides. Virginia state law, §10.1-104.5, *Nutrient management plans required for golf courses; penalty*, requires all land operated as a golf courses to develop and implement a nutrient management plan on or before July 1, 2017.

Management and Disposal of Used Oil and Household Hazardous Waste:

The Department of Public Works, Division of Waste Management hosts the collection and disposal of household hazardous waste (HHW). The HHW collected typically includes pesticides, fertilizers, herbicides, paints, thinners and solvents, car cleaners, and household cleaners. Waste Management also maintains a recycling program for used oil and old car batteries at the same location. The Department of Public Works promotes the City's HHW program through various outreach media including, but not limited to, the City's website, brochures, and presentations.

Pet Waste:

The Department of Public Works has a multitude of programs to address proper disposal of pet waste. The City's "Scoop the Poop" program has been an ongoing campaign that has been coordinated through the Hampton Roads Planning District Commission and adopted by the City. The "Scoop the Poop" campaigning varies from year to year, but is incorporated in outreach

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campaigns through civic presentations, school programming, special events, festivals, and other media venues and brochure development. Additionally, proper pet waste disposal is a key component of the City's Star Homes programs.

Household Yard Waste:

The Department of Public Works, Division of Waste Management, manages the household yard waste collection program. Household yard waste is collected each week during normal trash collection. Residents place yard waste in clear, plastic bags and is picked-up through the bulk waste collection method for recycling or composting. The Department of Public Works promotes the yard waste collection program through various outreach media including, but not limited to, the City's website, brochures, and event presentations.

Litter Prevention and Local Cleanup Programs:

The City of Norfolk organizes and promotes volunteer litter removal programs to provide a means by which citizens can get involved in environmental cleanup efforts and to remove litter from the City. The Keep Norfolk Beautiful group develops and implements programs to encourage citizens to participate in litter collection and recycling in the city. KNB utilizes various techniques to solicit volunteers to assist with local cleanup efforts including community meetings, presentations, workshops, mass mailings, social media, Constant Contact, brochures, website, event calendars, and the media.

KNB annual programs include the following:

- Great American Cleanup - GAC consists of multiple community cleanup events that occur between April 1 – June 6. Campaigns run constantly to get volunteers to the table to perform focused cleanup efforts.
- Clean the Bay Day - Clean the Bay Day is a one-day event that occurs in June of each year. This program is coordinated with the Chesapeake Bay Foundation (CBF). Areas along waterways are identified and volunteers are solicited to do a massive cleanup. Reports are sent to CBF following the event.
- Adopt-a-spot – Adopt-a-spot is a year-round program where organizations/groups may adopt a high-litter area to do cleanups quarterly.
- International Costal Cleanup - ICC consists of multiple community cleanup events, including a training workshop, that happen throughout the months of September and October. Campaigns run constantly to get volunteers to the table to do focused cleanup efforts.
- Litter Index – KNB conducts an annual litter index program where specified areas are driven and the litter content of the area is documented by volunteers to measure success of the various programs.

Residential Car Washing:

The Department of Public Works incorporates residential car washing education in standard outreach campaigns through civic presentations, school programming, special events, festivals, and other media venues and brochure development.

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Additionally, the City has undertaken campaigns regarding commercial mobile detailing and fun-raiser car washes. The City has a program for mobile detailing that requires a mini-education program prior to receiving a business license. This education program includes the legal implications for discharging processed waste water into the storm water system. Additionally, the City, in coordination with the Hampton Roads Planning District Commission, has developed a campaign for alternative fun-raising opportunities in lieu of car washes.

Pesticide, Herbicide, and Fertilizer Application:

The Department of Public Works has developed brochures and public bill inserts addressing proper use and disposal of pesticides, herbicides and fertilizers by home owners. The brochures are distributed at public outreach events and publicized at general presentations to schools, civic leagues, and other interested parties. Additionally, this information is advertised on the City's website.

The Departments of Public Works and Fire-Rescue regulates commercial businesses, industrial facilities, and distributors on the proper storage of pesticides, herbicides and fertilizers. The Departments perform routine inspections on these sites.

Commercial applications of pesticides, herbicides, and fertilizers are required to be certified by the state of Virginia.

Private Property Stormwater Management Initiatives:

The City of Norfolk developed the BayStar Homes Program in 2014 as a homeowner initiative to "Do Good" for the environment. This program was introduced to expand the "River Star Homes" program started by the Elizabeth River Project, to the entire City. Under this program residents pledge to implement green practices at home such as recycling, reducing the application of fertilizer to their property, installing rain barrels, planting trees, turning lights off, etc. In 2015, the Norfolk program was adopted regionally by the Hampton Roads Planning District Commission for all localities within Hampton Roads.

The City of Norfolk also has a stormwater rate reduction program to encourage private property owners to install stormwater structural BMPs on their lots.

Commercial, Industrial, and Institutional Stormwater Management Initiatives:

The Departments of Public Works and Fire-Rescue regulate commercial, industrial, and institutional entities. The Departments perform routine inspections on these sites. During inspections, the inspectors educate managers and property owners on, among other things, stormwater pollution prevention. This education may range from verbal communication to written notices or violations depending on the severity of the violation.

BayStar Business Programs:

As part of the regional effort, the City, Department of Public Works, administers the city-wide Bay Star Business program started in May 2018. This is a program where business managers or

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owners pledge to do good for the environment at their facility. This program is designed to encourage and teach businesses and their employees how simple acts at work make a difference to the environment. The program includes water quality improvement, water conservation, energy efficiency, recycling, and litter prevention. Upon signing up for the program, businesses receive information on pollution prevention practices that may be implemented. The program is focused on businesses that may have impacts to water quality.

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2.11 TRAINING

2.11.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(k), page 17

2.11.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to ensure that appropriate Norfolk employees receive training in a variety of subject matter to assist in implementing the MS4 program.

2.11.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water Management is responsible for:

- providing biennial training event(s) and records of the training regarding:
 - recognition and reporting of illicit discharges; and,
 - good housekeeping and pollution prevention practices employed during road, street, and parking lot maintenance; in and around Norfolk's maintenance and public works facilities; and, in and around Norfolk's recreation facilities.

The Department of Recreation, Parks & Open Space, Bureau of Parks & Urban Forestry is responsible for:

- ensuring that employees applying pesticides and herbicides on City property managed by the Bureau of Parks & Urban Forestry are properly trained and or certified.

The Fire Marshall's office is responsible for:

- regulating private applicators and sites that store large amount of pesticides, herbicides, and fungicides; and,
- providing requisite spill response training to emergency response personnel.

2.11.4 POLICIES AND PROCEDURES

The Department of Public Works, Division of Environmental Storm Water Management has identified various City field staff that will be required to attend different training sessions depending on their job responsibilities. Departments included in the various training sessions include Public Works; Recreation, Parks and Open Space; Utilities; General Services; Schools; and Fire and Rescue.

The Department of Public Works, Division of Environmental Stormwater Management is responsible for employee training and records retention for: recognition and reporting of illicit discharges, good housekeeping, pollution prevention practices for road, street, parking lot maintenance, municipal yards, and recreation facilities. Records of training events will be maintained for a period of not less than the permit cycle and will contain the training date, the number of employees attending the training, and the objective of the training event.

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City employees responsible for applying pesticides hold state certification as commercial pesticide applicators or as registered technicians, requiring biannual recertification training in pesticide use and safety. All chemical applications are made by VDACS certified pesticide applicators and technicians in compliance with product labeling. There are approximately 100 employees who are either registered technicians or commercial applicators.

The Fire Marshall's office permits commercial pesticide, herbicide, fungicide applicators, which fall under the requirements based in the fire code. The applicators or retailers that store, apply, or dispose of any pesticide, herbicide or fungicide are regulated by the Fire Marshall's office. The permits are issued by the Fire Marshall's office annually.

Training and certification requirements and procedures for City employees and Contractors in the requirements of the Virginia Stormwater Management Act and the Virginia Erosion and Sediment Control Law and attendant regulations are provided in *Section 2.1 – Construction Site Runoff Control and Post Construction Runoff Control*. Departments of Public Works and Planning ensure that appropriate staff are trained and/or certified by DEQ as administrators, inspectors and site plan reviewers.

The Department Fire-Rescue hold continuous training for emergency spill response. The Fire Department's Spill Response Team is certified in the appropriate Hazwoper certification depending on their role within the City. Additionally, the Department of Public Works also ensures that appropriate staff attend 8-hour Hazwoper training annually for awareness. Lastly, the City employees a Spill Response contractor that has certified staff on board to respond to chemical spills and illicit discharges.

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2.12 DRY WEATHER SCREENING

2.12.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(l), page 18

2.12.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to detect the presence of potential illicit connections and unauthorized discharges to the MS4 by conducting dry weather screening.

2.12.3 ROLES AND RESPONSIBILITIES

Department of Public Works, Division of Environmental Storm Water Management is responsible for administering the dry weather screening program.

2.12.4 POLICIES AND PROCEDURES

The Department of Public Works performs dry weather monitoring during inspection and maintenance of the storm water system. When a Public Works employee performing system maintenance discovers flow during a period of no precipitation, the employee reports the discharge immediately to the Environmental staff for tracking.

The Department of Public Works also conducts dry weather monitoring on a complaint driven basis. If a resident reports flow during a dry weather event, the complaint is investigated to ensure the flow is not an illicit discharge. Residents also report strange odors to the Division of Environmental Storm Water Management, and the Environmental Staff investigates to ensure there is no illicit discharge.

The Department of Public Works also performs dry weather monitoring each year during industrial inspections and standard preventative maintenance storm system inspections. The dry weather sampling typically occurs approximately 48-hours after a rainfall event. The City screens at a minimum 50 sites throughout the city based on:

- areas of concern such as commercial car washes, car dealerships, pet kennels, and restaurants;
- sites requiring further investigation, as identified through previous screening;
- the age and density of development, with a focus on older residential, commercial and industrial areas;
- the general land uses in the city;
- areas with poorly maintained gas stations, service stations, and shopping centers; areas with environmentally sensitive downstream features; and,
- areas having a history of complaints.

During monitoring, the structures are checked for flowing water or discharge. If flow is discovered, the lines are traced back using GIS mapping and field samples, where applicable, are taken to determine the source of flow. Samples may be analyzed in the field for pH, alkalinity,

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chlorine, petroleum and detergents. Action is taken if the sample results fall outside a targeted range of values.

If an illicit discharge is discovered during dry weather monitoring and action is required based on the screening values, efforts are made to contain the discharge, take necessary corrective actions, and report the discharge immediately to the Department of Environmental Quality (DEQ). If the discharge is suspected to require coverage under a storm water permit, the owner/manager is notified to contact DEQ regarding obtaining a storm water permit.

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2.13 INFRASTRUCTURE COORDINATION

2.13.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section B.2.(m), page 19

2.13.2 BMP GOALS AND OBJECTIVES

The goal of this BMP is to ensure that the City of Norfolk and the Virginia Department of Transportation (VDOT) share information and otherwise coordinate on issues which may affect their respective MS4s.

2.13.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water Management is responsible for addressing MS4 infrastructure coordination with VDOT.

2.13.4 POLICIES AND PROCEDURES

Norfolk will meet with VDOT annually at a date to be determined to discuss issues of mutual importance to the interconnected portions of their respective MS4. The primary issues to be discussed include mapping, Chesapeake Bay TMDL Action Plans, other TMDL Action Plans, credits for projects implemented to address TMDLs, illicit discharge detection and elimination, and water quality monitoring. The results of the annual meeting and efforts accomplished during the reporting year will be summarized in the Annual Report.

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3. MONITORING REQUIREMENTS

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3.1 IN-SYSTEM/WET WEATHER MONITORING

3.1.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section C.1, page 20

3.1.2 BMP GOALS AND OBJECTIVES

The goal of this activity is to develop and implement an in-system monitoring program to characterize stormwater discharged to the MS4, to identify pollutants of concern, and to determine pollutant loadings associated with various land-uses.

3.1.3 ROLES AND RESPONSIBILITIES

Department of Public Works, Division of Environmental Storm Water Management is responsible for coordinating the administration and execution of the wet weather monitoring program with the Hampton Roads Planning District Commission (HRPDC).

3.1.4 POLICIES AND PROCEDURES

The City of Norfolk, in cooperation with the United States Geological Survey (USGS), the Hampton Roads Planning District Commission (HRPDC), and the Hampton Roads Sanitation District (HRSD) participates in a regional effort to monitor the quantity and quality of stormwater in the Hampton Roads Region to improve the understanding of sediment and nutrient loadings from urban areas in the Coastal Plain of Virginia. The Hampton Roads Regional Water Quality Monitoring Program is funded by the HRPDC, via local governments, including Norfolk, and is jointly operated by the USGS Virginia Water Science Center and HRSD.

The objectives of the regional program are to collect data to:

- characterize sediment and nutrient loadings from the major types of land-uses in the Hampton Roads region; and,
- compare the measured sediment and nutrient loads to the Chesapeake Bay Watershed Model loads and allocations to support improvement of the model accuracy.

The regional monitoring network includes a series of twelve (12) monitoring stations located across Hampton Roads. Two (2) of these stations are located in the city of Norfolk at storm drain outfalls located at:

- Sheppard Avenue, Latitude 36°55'24.65", Longitude 76°15'01.79"; and,
- USAA Drive, Latitude 36°52'30.30", Longitude 76°12'26.46".

Each monitoring station includes a continuous-record (data collected every 5 minutes) for flowrate, water temperature, specific conductance, and turbidity. The monitoring stations are also equipped with automatic samplers for the collection of wet weather samples. Wet weather samples are collected at least quarterly, and are analyzed for the following parameters:

- Total Suspended Solids;
- Ammonia as Nitrogen;
- Nitrate plus Nitrite Nitrogen;

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- Total Kjeldahl Nitrogen;
- Orthophosphate; and,
- Total Phosphorus.

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3.2 STREET SWEEPING MONITORING PROGRAM

3.2.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section C.2, page 20

3.2.2 BMP GOALS AND OBJECTIVES

The goal of this activity is to develop and implement a street sweeping monitoring program to evaluate the pollutant reductions achieved by both mechanical broom and regenerative air vacuum sweepers.

3.2.3 ROLES AND RESPONSIBILITIES

Department of Public Works, Division of Environmental Storm Water Management is responsible for administering and executing the street sweeping monitoring program.

3.2.4 POLICIES AND PROCEDURES

The City of Norfolk will monitor the quantity and quality of residual materials collected from street sweeping activities to improve the understanding of sediment and nutrient removal resulting from this practice. During the first year of the VSMP permit, Norfolk will develop a plan, including monitoring protocols, to conduct a monitoring program to investigate the efficiency of both mechanical broom sweepers and regenerative air vacuum sweepers.

During the first year of the permit term, Norfolk will select a minimum of three sites in the city to monitor the effectiveness of the street sweeping program. Samples will be collected at least quarterly for the duration of the permit, and will be analyzed for the following parameters:

- Total Nitrogen; and,
- Total Phosphorus.

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3.3 STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING

3.3.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section C.3, page 21

3.3.2 BMP GOALS AND OBJECTIVES

The objective of this activity is to maintain a database to track information regarding known public and private stormwater management (SWM) facilities within the City.

3.3.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Operations Division is responsible for maintaining the SWM facility database.

3.3.4 POLICIES AND PROCEDURES

The Department of Public Works, Operations Division maintains a database of public and private SWM facilities in the City. Once a site plan is approved, the Department of Planning and Community Development provides a copy of the approved site plan to the Department of Public Works, Operations Division for staff to enter the permanent SWM facility into the database. The database includes the following:

- Site plan number
- Site plan title
- ***Site address – required by permit***
- ***SWM facility latitude and longitude – required by permit***
- ***Type of SWM facility – required by permit***
- ***Date brought online – required by permit***
- ***Discharges to the MS4? – required by permit***
- Reviewing Engineer
- Design Engineer
- Contractor
- ***Ownership – public or private – required by permit***
- Owner
- Total site area
- Total impervious area
- ***Impervious area treated – required by permit***
- ***Pervious area treated – required by permit***
- Pollutant removed
- ***HUC 6 Watershed – required by permit***
- ***303(d) impaired segments the SWM discharges to – required by permit***
- ***Is there a BMP Maintenance Agreement? – required by permit***
- Site plan approval date
- ***Date of last inspection – required by permit***

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- Date of next scheduled inspection
- Inspection results
- Comments

The data base is utilized to determine when a SWM facility is due for a routine inspection and to track past discrepancies. Once the inspection has occurred, the data base is updated and discrepancies are noted in the data base for future re-inspections.

An electronic copy of the SWM facility database, except for those facilities providing only peak flow control as required by Norfolk City Code, is provided to DEQ with each Annual Report in a format acceptable to DEQ.

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**4. TMDL ACTION PLANNING
AND IMPLEMENTATION**

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4.1 CHESAPEAKE BAY SPECIAL CONDITION

4.1.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section D.1, page 22

4.1.2 BMP GOALS AND OBJECTIVES

The goal of this activity is to develop and implement a Total Maximum Daily Load (TMDL) Action Plan for total nitrogen, total phosphorus, and total suspended solids for wasteloads allocated to the Norfolk MS4 in the Chesapeake Bay TMDL as of July 1, 2016.

4.1.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water Management is responsible for developing, coordinating implementation efforts, and reporting on progress towards plan goals for the Chesapeake Bay TMDL.

4.1.4 POLICIES AND PROCEDURES

The Department of Public Works, Division of Environmental Stormwater Management serves as the lead city agency responsible for developing the Chesapeake Bay TMDL Action Plan. The Action Plan will be developed not later than July 1, 2018; will be incorporated by reference into this MS4 Program Plan; and will be developed with input solicited through public participation. Norfolk will utilize the *Chesapeake Bay TMDL Special Condition Guidance* dated May 15, 2015 and released by DEQ in development of the Chesapeake Bay TMDL Action Plan.

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4.2 TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

4.2.1 REFERENCE SECTION OF VSMP PERMIT

Part I, Section D.2, page 26

4.2.2 BMP GOALS AND OBJECTIVES

The goal of this activity is to develop and implement Total Maximum Daily Load (TMDL) Action Plans for pollutants in which wasteloads have been allocated to the Norfolk MS4 in TMDLs approved as of July 1, 2016, excluding the Chesapeake Bay TMDL.

4.2.3 ROLES AND RESPONSIBILITIES

The Department of Public Works, Division of Environmental Storm Water Management is responsible for developing, coordinating implementation efforts, and reporting on progress towards plan goals for TMDLs other than the Chesapeake Bay TMDL.

4.2.4 POLICIES AND PROCEDURES

The Department of Public Works, Division of Environmental Stormwater Management serves as the lead city agency responsible for developing TMDL Action Plans. Currently, the only TMDL Action Plan requiring development and implementation is for *Enterococcus* in certain segments of the Elizabeth River Watershed. The Action Plan will be developed not later than July 1, 2018; will be incorporated by reference into this MS4 Program Plan; and will be developed with input solicited through public participation. Norfolk will consider the Local TMDL Action Plan Guidance dated April 2015 and released by DEQ in development of the Action Plan.

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APPENDIX A

LIST OF LEGAL AUTHORITY INCORPORATED BY REFERENCE

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Item	Date
Norfolk City Code, Chapter 14.5: Environmental Offenses	April 13, 1999
Norfolk City Code, Chapter 15: Erosion and Sediment Control	July 1, 2014
Norfolk City Code, Chapter 41.1: Stormwater Management	July 1, 2014
Norfolk City Code, Chapter 41.2: Virginia Stormwater Management Program	July 1, 2014
Norfolk City Code, Chapter 42.5: Subdivisions	July 22, 2014
Norfolk City Code, Chapter 45: Trees and Other Vegetation	February 28, 2012
Norfolk City Code, Chapter 49: Wetlands and Coastal Primary Sand Dunes	July 1, 2016
Norfolk City Code, Appendix A, Zoning Ordinance, Article 3.9.6: CBPA-O: Chesapeake Bay Preservation Area Overlay	March 1, 2018
Norfolk City Code, Appendix A, Zoning Ordinance, Article 5: Development Standards	March 1, 2018

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APPENDIX B

**LIST OF DOCUMENTS
INCORPORATED BY REFERENCE**

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Reference Section	Document	Date
2.1	Norfolk Stormwater Design and Construction Manual	July 2014
2.3	Standard Operating Procedures (SOPs) for Road, Street, and Parking Lot Maintenance	October 2018
2.4	Nutrient Management Plan – Lake Taylor	June 2018
2.4	Nutrient Management Plan – Norview, Booker T. Washington, Blair, Ghent, Northside, and Barraud Park	June 2019
2.5	Procedures for Reducing Floatables	June 2017
2.7	Procedures to Inspect Outfalls of Facilities with VPDES Industrial Stormwater Permits	June 2017
2.8	Policies and Procedures to Ensure Inspection and Maintenance of Privately Maintained SWM Facilities without Maintenance Agreements	June 2017
2.9	Stormwater Pollution Prevention Plan (SWPPP) 37 th Street Water Treatment Plant	June 2017
2.9	Stormwater Pollution Prevention Plan (SWPPP) Moores Bridges Water Treatment Plant	June 2017
2.9	Stormwater Pollution Prevention Plan (SWPPP) Department of Utilities Operations Center (Ballentine)	June 2017
2.9	Stormwater Pollution Prevention Plan (SWPPP) School Fleet Maintenance Facility	June 2017
2.9	Stormwater Pollution Prevention Plan (SWPPP) Facilities Management	June 2017
2.9	Stormwater Pollution Prevention Plan (SWPPP) Fleet Maintenance Facility	June 2017
3.2	Street Sweeping Monitoring Protocols	June 2017
4.1	Chesapeake Bay TMDL Action Plan	June 2018
4.2	TMDL Action Plan for <i>Enterococcus</i> in the Elizabeth River Watershed	June 2018

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APPENDIX C

MILESTONE ACTIVITIES

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TABLE C.1
MILESTONE ACTIVITIES, JULY 1, 2016 – JUNE 30, 2017

General Milestone: In accordance with Part I, Section B.1, page 6 and Part I, Section B.2.(b), page 7 of the VSMP Permit, not later than 30 days following funding allocation for project development, the City shall identify and summarize the project on the City's website.

Permit Section	Plan Section	Milestone	Milestone Date	Complete Date
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	3/30/2017	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	6/30/2017	<input type="checkbox"/>

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TABLE C.2

MILESTONE ACTIVITIES, JULY 1, 2017 – JUNE 30, 2018

***General Milestone:** In accordance with Part I, Section B.1, page 6 and Part I, Section B.2.(b), page 7 of the VSMP Permit, not later than 30 days following funding allocation for project development, the City shall identify and summarize the project on the City's website.*

Permit Section	Plan Section	Milestone	Milestone Date	Complete Date
Part I, Section B.2.(d), page 7	2.4	Identify all land owned or operated by Norfolk, including latitude and longitude, where nutrients are applied to a contiguous area of more than one acre.	7/1/2017	<input type="checkbox"/>
		Track the total acreage of land upon which nutrients are applied and controlled and the acreage of lands where turf and nutrient management plans are required and have been implemented.	7/1/2017	<input type="checkbox"/>
Part I, Section B.2.(e), page 9	2.5	Inspect a minimum of 724,000 linear feet of sanitary sewer.	7/1/2017	<input type="checkbox"/>
Part I, Section B.2.(g), page 10	2.7	Obtain a list of industrial stormwater permittees and copies of permits from the Department of Environmental Quality (DEQ) to determine which facilities are required to submit copies of Discharge Monitoring Reports (DMR) to Norfolk.	7/1/2017	<input type="checkbox"/>
		Develop and implement a prioritized schedule and procedure(s) to inspect outfalls of facilities with VPDES industrial stormwater permits at the point of connection to the MS4.	7/1/2017	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Draft policies and procedures to ensure inspection and maintenance of privately maintained SWM facilities without maintenance agreements are being conducted	7/1/2017	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
		Inspect, visually or otherwise, a minimum of 4,060 storm sewer structures such as catch basins, drop inlets, and manholes	7/1/2017	<input type="checkbox"/>
		Inspect, visually or otherwise, a minimum of 35,460 linear feet of ditches and conveyances in the MS4.	7/1/2017	<input type="checkbox"/>
Part I, Section B.2.(i), page 14	2.9	Identify all high priority municipal facilities that do not require a separate VPDES industrial stormwater permit.	7/1/2017	<input type="checkbox"/>
		Identify those high priority municipal facilities having a high potential to discharge pollutants.	7/1/2017	<input type="checkbox"/>
Part I, Section B.2.(l), page 18	2.12	Perform dry weather screening on a minimum of fifty (50) sites.	7/1/2017	<input type="checkbox"/>
Part I, Section B.2.(m), page 19	2.13	Meet with VDOT to coordinate on priority issues for Norfolk's MS4 program (including operations and maintenance issues) and TMDL action planning relevant to the interconnectivity of the MS4s.	7/1/2017	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Develop written street sweeping monitoring program protocols and procedures.	7/1/2017	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	9/30/2017	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	9/30/2017	<input type="checkbox"/>
Part I, Section B.2.(e), page 9	2.5	Develop policies and procedures to implement a floatables reduction program.	10/1/2017	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.2.(h), page 11	2.8	Implement previously developed policies and procedures designed to ensure inspection and maintenance of privately maintained SWM facilities without maintenance agreements.	10/1/2017	<input type="checkbox"/>
Part I, Section B.2.(J), page 16	2.10	Post a copy of the Annual Report due to DEQ not later than October 1, 2017 on the City of Norfolk website.	11/1/2017	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	12/31/2017	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples	12/31/2017	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Map the MS4 service area and each MS4 outfall. Provide each outfall with a unique identification number, local watershed, sixth order HUC, receiving water, and latitude and longitude in decimal degrees.	1/1/2018	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	3/30/2018	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	3/30/2018	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	6/30/2018	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	6/30/2018	<input type="checkbox"/>

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TABLE C.3
MILESTONE ACTIVITIES, JULY 1, 2018 – JUNE 30, 2019

General Milestone: *In accordance with Part I, Section B.1, page 6 and Part I, Section B.2.(b), page 7 of the VSMP Permit, not later than 30 days following funding allocation for project development, the City shall identify and summarize the project on the City's website.*

Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.2.(c), page 7	2.3	Compile and maintain a list of permittee maintained roads and streets, including the street name, the miles of roadway not treated by stormwater management (SWM) facilities, and the miles of roadway treated by SWM facilities.	7/1/2018	<input type="checkbox"/>
Part I, Section B.2.(d), page 7	2.4	Implement turf and nutrient management plans on not less than 15% (cumulative) of the lands requiring such plans.	7/1/2018	<input type="checkbox"/>
		Track the total acreage of land upon which nutrients are applied and controlled and the acreage of lands where turf and nutrient management plans are required and have been implemented.	7/1/2018	<input type="checkbox"/>
Part I, Section B.2.(e), page 9	2.5	Inspect an additional minimum of 724,000 linear feet of sanitary sewer.	7/1/2018	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Identify the number of impervious, pervious and total acres served by the MS4 as of June 30, 2009 for each local watershed, sixth order HUC, and Chesapeake Bay segment.	7/1/2018	<input type="checkbox"/>
		Identify the number of impervious, pervious and total acres treated by stormwater controls as of June 30, 2009 for each local watershed, sixth order HUC, and Chesapeake Bay segment.	7/1/2018	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
		Inspect, visually or otherwise, an additional minimum of 4,060 storm sewer structures such as catch basins, drop inlets, and manholes.	7/1/2018	<input type="checkbox"/>
		Inspect, visually or otherwise, an additional minimum of 35,460 linear feet of ditches and conveyances in the MS4.	7/1/2018	<input type="checkbox"/>
Part I, Section B.2.(k), page 17	2.11	Provide the <u>first</u> biennial training event(s) to appropriate field personnel in the recognition and reporting of illicit discharges.	7/1/2018	<input type="checkbox"/>
		Provide the <u>first</u> biennial training event to appropriate employees in good housekeeping and pollution prevention (GHPP) practices to be employed during road, street, and parking lot maintenance.	7/1/2018	<input type="checkbox"/>
		Provide the <u>first</u> biennial training event to appropriate employees in GHPP practices to be employed in and around Norfolk's maintenance and public works facilities.	7/1/2018	<input type="checkbox"/>
		Provide the <u>first</u> biennial training event to appropriate employees in GHPP practices to be employed in and around Norfolk's recreation facilities.	7/1/2018	<input type="checkbox"/>
Part I, Section B.2.(l), page 18	2.12	Perform dry weather screening on a minimum of fifty (50) sites.	7/1/2018	<input type="checkbox"/>
Part I, Section B.2.(m), page 19	2.13	Meet with VDOT to coordinate on priority issues for Norfolk's MS4 program (including operations and maintenance issues) and TMDL action planning relevant to the interconnectivity of the MS4s.	7/1/2018	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section D.1, page 22	4.1	Submit, for approval by the Virginia Department of Environmental Quality (DEQ), the Final Chesapeake Bay TMDL Action Plan for total nitrogen, total phosphorus, and total suspended solids.	7/1/2018	<input type="checkbox"/>
Part I, Section D.2, page 26	4.2	Submit, for approval by the Virginia Department of Environmental Quality (DEQ), the Final TMDL Action Plan for <i>Enterococcus</i> for the Elizabeth River watershed.	7/1/2018	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	9/30/2018	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	9/30/2018	<input type="checkbox"/>
Part I, Section B.2.(J), page 16	2.10	Post a copy of the Annual Report due to DEQ not later than October 1, 2018 on the City of Norfolk website.	11/1/2018	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	12/31/2018	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	12/31/2018	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	3/30/2019	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	3/30/2019	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	6/30/2019	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	6/30/2019	<input type="checkbox"/>

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TABLE C.4
MILESTONE ACTIVITIES, JULY 1, 2019 – JUNE 30, 2020

General Milestone: In accordance with Part I, Section B.1, page 6 and Part I, Section B.2.(b), page 7 of the VSMP Permit, not later than 30 days following funding allocation for project development, the City shall identify and summarize the project on the City's website.

Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.2.(c), page 7	2.3	Develop and implement written Standard Operating Procedures (SOPs) for road, street, and parking lot maintenance activities designed to minimize pollutant discharge.	7/1/2019	<input type="checkbox"/>
Part I, Section B.2.(d), page 7	2.4	Implement turf and nutrient management plans on not less than 40% (cumulative) of the lands requiring such plans.	7/1/2019	<input type="checkbox"/>
		Track the total acreage of land upon which nutrients are applied and controlled and the acreage of lands where turf and nutrient management plans are required and have been implemented.	7/1/2019	<input type="checkbox"/>
Part I, Section B.2.(e), page 9	2.5	Inspect an additional minimum of 724,000 linear feet of sanitary sewer.	7/1/2019	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Inspect, visually or otherwise, an additional minimum of 4,060 storm sewer structures such as catch basins, drop inlets, and manholes.	7/1/2019	<input type="checkbox"/>
		Inspect, visually or otherwise, an additional minimum of 35,460 linear feet of ditches and conveyances in the MS4.	7/1/2019	<input type="checkbox"/>
		Revise the policies and procedures for inspecting privately maintained SWM facilities based on the findings of implementing the draft policies and procedures since October 1, 2017.	7/1/2019	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.2.(i), page 14	2.9	Develop and/or update and implement individual Stormwater Pollution Prevention Plans (SWPPP) for each high priority municipal facility having a high potential to discharge pollutants.	7/1/2019	<input type="checkbox"/>
Part I, Section B.2.(l), page 18	2.12	Perform dry weather screening on a minimum of fifty (50) sites.	7/1/2019	<input type="checkbox"/>
Part I, Section B.2.(m), page 19	2.13	Meet with VDOT to coordinate on priority issues for Norfolk's MS4 program (including operations and maintenance issues) and TMDL action planning relevant to the interconnectivity of the MS4s.	7/1/2019	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	9/30/2019	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	9/30/2019	<input type="checkbox"/>
Part I, Section B.2.(J), page 16	2.10	Post a copy of the Annual Report due to DEQ not later than October 1, 2019 on the City of Norfolk website.	11/1/2019	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	12/31/2019	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	12/31/2019	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	3/30/2020	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	3/30/2020	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	6/30/2020	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	6/30/2020	<input type="checkbox"/>

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TABLE C.5
MILESTONE ACTIVITIES, JULY 1, 2020 – JUNE 30, 2021

General Milestone: *In accordance with Part I, Section B.1, page 6 and Part I, Section B.2.(b), page 7 of the VSMP Permit, not later than 30 days following funding allocation for project development, the City shall identify and summarize the project on the City's website.*

Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.2.(d), page 7	2.4	Implement turf and nutrient management plans on not less than 75% (cumulative) of the lands requiring such plans.	7/1/2020	<input type="checkbox"/>
		Track the total acreage of land upon which nutrients are applied and controlled and the acreage of lands where turf and nutrient management plans are required and have been implemented.	7/1/2020	<input type="checkbox"/>
Part I, Section B.2.(e), page 9	2.5	Inspect an additional minimum of 724,000 linear feet of sanitary sewer.	7/1/2020	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Inspect, visually or otherwise, an additional minimum of 4,060 storm sewer structures such as catch basins, drop inlets, and manholes.	7/1/2020	<input type="checkbox"/>
		Inspect, visually or otherwise, an additional minimum of 35,460 linear feet of ditches and conveyances in the MS4.	7/1/2020	<input type="checkbox"/>
Part I, Section B.2.(k), page 17	2.11	Provide the <u>second</u> biennial training event to appropriate field personnel in the recognition and reporting of illicit discharges.	7/1/2020	<input type="checkbox"/>
Part I, Section B.2.(k), page 17	2.11	Provide the <u>second</u> biennial training event to appropriate employees in GHPP practices that are to be employed during road, street, and parking lot maintenance; employed in and around	7/1/2020	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
		Norfolk's maintenance and public works facilities; and, employed in and around Norfolk's recreation facilities.		
Part I, Section B.2.(l), page 18	2.12	Perform dry weather screening on a minimum of fifty (50) sites.	7/1/2020	<input type="checkbox"/>
Part I, Section B.2.(m), page 19	2.13	Meet with VDOT to coordinate on priority issues for Norfolk's MS4 program (including operations and maintenance issues) and TMDL action planning relevant to the interconnectivity of the MS4s.	7/1/2020	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	9/30/2020	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	9/30/2020	<input type="checkbox"/>
Part I, Section B.2.(J), page 16	2.10	Post a copy of the Annual Report due to DEQ not later than October 1, 2020 on the City of Norfolk website.	11/1/2020	<input type="checkbox"/>
Part I, Section C.1, page 20	3.1	Collect quarterly in-system wet weather system monitoring samples.	12/31/2020	<input type="checkbox"/>
Part I, Section C.2, page 20	3.2	Collect quarterly street sweeping monitoring program samples.	12/31/2020	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Update the number of impervious, pervious and total acres served by the MS4 for each local watershed, sixth order HUC, and Chesapeake Bay segment.	1/1/2021	<input type="checkbox"/>
		Update the number of impervious, pervious and total acres treated by stormwater controls for each local watershed, sixth order HUC, and Chesapeake Bay segment.	1/1/2021	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section D.1, page 22	4.1	Submit, as part of the permit reapplication for coverage, documentation that sufficient control measures have been implemented (or documentation detailing that implementation will be complete by the permit expiration date) to meet the permit compliance targets for the Chesapeake Bay TMDL Action Plan. If temporary credits or offsets have been purchased in order to meet the compliance target, provide a list of temporary reductions utilized to meet the 5% permit reduction requirement and a schedule of implementation to ensure a permanent 5% reduction.	1/1/2021	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Update the number of impervious, pervious and total acres served by the MS4 for each local watershed, sixth order HUC, and Chesapeake Bay segment.	1/1/2021	<input type="checkbox"/>
		Update the number of impervious, pervious and total acres treated by stormwater controls for each local watershed, sixth order HUC, and Chesapeake Bay segment.	1/1/2021	<input type="checkbox"/>
		Submit, as part of the permit reapplication for coverage, a draft second phase Chesapeake Bay TMDL Action Plan.	1/1/2021	<input type="checkbox"/>
Part I, Section D.2, page 26	4.2	Submit, as part of the permit reapplication for coverage, the best management practices and other practices that will be implemented during the next permit term as well as an evaluation of and modification to the estimated end date for achieving the applicable TMDL wasteload allocations	1/1/2021	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
for <i>Enterococcus</i> for the Elizabeth River Watershed.				

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TABLE C.6

MILESTONE ACTIVITIES, JULY 1, 2021 – NOVEMBER 1, 2021

General Milestone: *In accordance with Part I, Section B.1, page 6 and Part I, Section B.2.(b), page 7 of the VSMP Permit, not later than 30 days following funding allocation for project development, the City shall identify and summarize the project on the City's website.*

Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.1, page 6	2.2	Complete no less than five (5) stormwater management (SWM) projects from a prioritized list of projects, including those implemented or constructed to address the Chesapeake Bay or other TMDLs.	7/1/2021	<input type="checkbox"/>
Part I, Section B.2.(d), page 7	2.4	Implement turf and nutrient management plans on all lands requiring such plans.	7/1/2021	<input type="checkbox"/>
		Track the total acreage of land upon which nutrients are applied and controlled and the acreage of lands where turf and nutrient management plans are required and have been implemented.	7/1/2021	<input type="checkbox"/>
Part I, Section B.2.(e), page 9	2.5	Inspect an additional minimum of 724,000 linear feet of sanitary sewer.	7/1/2021	<input type="checkbox"/>
Part I, Section B.2.(h), page 11	2.8	Inspect, visually or otherwise, an additional minimum of 4,060 storm sewer structures such as catch basins, drop inlets, and manholes.	7/1/2021	<input type="checkbox"/>
		Inspect, visually or otherwise, an additional minimum of 35,460 linear feet of ditches and conveyances in the MS4.	7/1/2021	<input type="checkbox"/>
Part I, Section B.2.(l), page 18	2.12	Perform dry weather screening on a minimum of fifty (50) sites.	7/1/2021	<input type="checkbox"/>

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Permit Section	Plan Section	Milestone	Milestone Date	Complete
Part I, Section B.2.(m), page 19	2.13	Meet with VDOT to coordinate on priority issues for Norfolk's MS4 program (including operations and maintenance issues) and TMDL action planning relevant to the interconnectivity of the MS4s.	7/1/2021	<input type="checkbox"/>
Part I, Section B.2.(J), page 16	2.10	Post a copy of the Annual Report due to DEQ not later than October 1, 2021 on the City of Norfolk website.	11/1/2021	<input type="checkbox"/>

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APPENDIX D
REPORTING REQUIREMENTS

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**TABLE D.1
INTERIM REPORTING DUE JULY 1, 2017**

3.2 STREET SWEEPING MONITORING PROGRAM

- A list of the sites to be monitored along with the methodology and monitoring protocols.

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TABLE D.2
ANNUAL REPORT DUE OCTOBER 1, 2017

- 2.1 CONSTRUCTION SITE RUNOFF CONTROL AND POST CONSTRUCTION RUNOFF CONTROL**
 - The number of regulated land disturbing activities approved and the total number of acres disturbed during the reporting period.
 - The number of land disturbing activity inspections conducted and the number and type of each enforcement action taken during the reporting period.
 - A list of land disturbing projects that qualify under the "Grandfathering" provision of the VSMP regulations that receive coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities during the reporting period.
 - A summary of actions taken by Norfolk to implement programs consistent with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act and attendant regulations during the reporting period.
- 2.2 PLANNING AND RETROFITTING ON PRIOR DEVELOPED LANDS**
 - A prioritized stormwater management (SWM) project summary sheet listing potential projects to be completed during the permit term, including for each project: type of project or BMP; number of acres treated by the BMP; pervious and impervious acres treated by the BMP; condition of the downstream channel; amount of total pollutant reduction; implementation feasibility; and the estimated cost of implementation.
 - For projects retrofitting prior developed lands and not implemented to address the Chesapeake Bay or other TMDLs, Norfolk will submit a summary of projects implemented during the reporting period including: the type of land being retrofitted; the retrofit performed; the actual or anticipated completion date; the total acreage retrofitted; the total pervious and impervious acreage; and the location by latitude and longitude in decimal degrees.
- 2.3 ROADWAYS**
 - No reporting requirements.
- 2.4 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION**
 - A list of all City lands and applicable acreage on which nutrients are applied to more than one contiguous acre.
 - A summary of turf and landscape nutrient management plan compliance including the total cumulative acreage and the acreage implemented during the reporting year.
 - The number of acres of Norfolk property managed under Integrated Pest Management Plans.
- 2.5 ILLICIT DISCHARGES AND IMPROPER DISPOSAL**
 - A description of the procedures to reduce floatables including procedures for measuring program effectiveness.

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- A list of illicit discharges identified, the source, a description of follow-up activities, and whether the illicit discharge has been eliminated.
- The linear footage of sanitary sewer inspected during the reporting year.

2.6 SPILL PREVENTION AND RESPONSE

- A list of spills occurring during the reporting year that qualified for immediate reporting along with the source of the spill and a description of any follow-up actions taken.

2.7 INDUSTRIAL AND HIGH RISK RUNOFF

- A list of known industrial and high risk discharges, including any non-VPDES regulated industrial and commercial stormwater dischargers, determined to be contributing a significant pollutant load to the MS4.
- A schedule of inspections and procedures for inspecting outfalls from industrial and high risk dischargers.
- A summary of implementing the outfall inspection schedule, including a list of facilities and/or outfalls inspected during the prior year.
- A list of referrals to the DEQ.

2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

- Written SWM facilities and infrastructure inspection and maintenance procedures.
- Strategy to address maintenance of privately owned SWM facilities from the individual lot on which they are located.
- A summary of activities performed in support of the inspection and maintenance program.
- A summary of inspections performed and notifications of needed maintenance and repair actions required which were sent to owners of privately maintained SWM facilities.
- A summary of actions taken to address the failure of owners of privately maintained SWM facilities to abide by maintenance agreements.

2.9 CITY FACILITIES

- A list of all high priority municipal facilities.

2.10 PUBLIC EDUCATION/PARTICIPATION

- A list of all public outreach and educational activities conducted, the estimated number of individuals reached through the programs, and evaluation of effectiveness of the programs, and recommendations for any future changes.
- A summary of voluntary retrofits completed on private property.
- A summary of voluntary stormwater management (SWM) techniques encouraged on private property.

2.11 TRAINING

- A summary of the training and/or certification program provided to emergency response employees.

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- Documentation of any training events held during the reporting year, if applicable, including: the training date; number of employees attending the training; and the objective of the training event.

2.12 DRY WEATHER SCREENING

- The total number of outfalls in the MS4; the number of stations screened; and a list of dry weather screening locations along with results and any follow-up actions.

2.13 INFRASTRUCTURE COORDINATION

- Documentation of coordination efforts with VDOT for the reporting year regarding: mapping; Chesapeake Bay TMDL Action Plans; other TMDL Action Plans; credit for TMDL implementation; illicit discharge detection and elimination; and, water quality monitoring.

3.1 IN-SYSTEM/WET WEATHER MONITORING

- A list and location of sites in the city of Norfolk to be monitored.
- Monitoring protocols to be followed.
- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.2 STREET SWEEPING MONITORING PROGRAM

- A list and location of sites in the city of Norfolk to be monitored.
- Monitoring protocols to be followed.
- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.3 STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING

- An electronic copy of the updated SWM facility database.
- A summary of actions taken to ensure maintenance of private SWM facilities.
- A summary of the program to ensure maintenance of City-owned SWM facilities.

4.1 CHESAPEAKE BAY SPECIAL CONDITION

- No reporting requirements.

4.2 TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

- No reporting requirements.

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TABLE D.3
INTERIM REPORTING DUE JANUARY 1, 2018

2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

- Map of the MS4 service area and each MS4 outfall. Each outfall will be provided with a unique identification number, local watershed, sixth order HUC, receiving water, and latitude and longitude in decimal degrees.

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TABLE D.4
ANNUAL REPORT DUE OCTOBER 1, 2018

- 2.1 CONSTRUCTION SITE RUNOFF CONTROL AND POST CONSTRUCTION RUNOFF CONTROL**
 - The number of regulated land disturbing activities approved and the total number of acres disturbed during the reporting period.
 - The number of land disturbing activity inspections conducted and the number and type of each enforcement action taken during the reporting period.
 - A list of land disturbing projects that qualify under the "Grandfathering" provision of the VSMP regulations that receive coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities during the reporting period.
 - A summary of actions taken by Norfolk to implement programs consistent with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act and attendant regulations during the reporting period.

- 2.2 PLANNING AND RETROFITTING ON PRIOR DEVELOPED LANDS**
 - Revised SWM project summary sheet(s);
 - A current web link to the project status page; and,
 - A status update for those water quality projects which were implemented or constructed during the reporting year.

- 2.3 ROADWAYS**
 - No reporting requirements.

- 2.4 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION**
 - A summary of turf and landscape nutrient management plan compliance including the total cumulative acreage and the acreage implemented during the reporting year.
 - The number of acres of Norfolk property managed under Integrated Pest Management Plans.

- 2.5 ILLICIT DISCHARGES AND IMPROPER DISPOSAL**
 - A list of sites surveyed for floatables, a summary of observations at each site, and a determination as to the effectiveness of the floatables reduction program.
 - A list of illicit discharges identified, the source, a description of follow-up activities, and whether the illicit discharge has been eliminated.
 - The linear footage of sanitary sewer inspected during the reporting year.

- 2.6 SPILL PREVENTION AND RESPONSE**
 - A list of spills occurring during the reporting year that qualified for immediate reporting along with the source of the spill and a description of any follow-up actions taken.

- 2.7 INDUSTRIAL AND HIGH RISK RUNOFF**

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- A summary of implementing the outfall inspection schedule, including a list of facilities and/or outfalls inspected during the prior year.
- A list of referrals to the DEQ.

2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

- The number of impervious, pervious and total acres served by the MS4 as of June 30, 2009 for each local watershed, sixth order HUC, and Chesapeake Bay segment.
- The number of impervious, pervious and total acres treated by stormwater controls as of June 30, 2009 for each local watershed, sixth order HUC, and Chesapeake Bay segment.
- A summary of activities performed in support of the inspection and maintenance program.
- A summary of inspections performed and notifications of needed maintenance and repair actions required which were sent to owners of privately maintained SWM facilities.
- A summary of actions taken to address the failure of owners of privately maintained SWM facilities to abide by maintenance agreements.

2.9 CITY FACILITIES

- No reporting requirements.

2.10 PUBLIC EDUCATION/PARTICIPATION

- A list of all public outreach and educational activities conducted, the estimated number of individuals reached through the programs, and evaluation of effectiveness of the programs, and recommendations for any future changes.
- A summary of voluntary retrofits completed on private property.
- A summary of voluntary stormwater management (SWM) techniques encouraged on private property.

2.11 TRAINING

- Documentation of any training events held during the reporting year, if applicable, including: the training date; number of employees attending the training; and the objective of the training event.

2.12 DRY WEATHER SCREENING

- The total number of outfalls in the MS4; the number of stations screened; and a list of dry weather screening locations along with results and any follow-up actions.

2.13 INFRASTRUCTURE COORDINATION

- Documentation of coordination efforts with VDOT for the reporting year regarding: mapping; Chesapeake Bay TMDL Action Plans; other TMDL Action Plans; credit for TMDL implementation; illicit discharge detection and elimination; and, water quality monitoring.

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3.1. IN-SYSTEM/WET WEATHER MONITORING

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.2 STREET SWEEPING MONITORING PROGRAM

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.3 STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING

- An electronic copy of the updated SWM facility database.
- A summary of actions taken to ensure maintenance of private SWM facilities.
- A summary of the program to ensure maintenance of City-owned SWM facilities.

4.1 CHESAPEAKE BAY SPECIAL CONDITION

- A list of control measures implemented during the reporting period along with the cumulative progress towards meeting compliance targets for total nitrogen, total phosphorus, and total suspended solids.
- A list of control measures that were implemented during the reporting cycle and the estimated reduction achieved by the control. For stormwater management controls, including the information required in Part I.C.3.a of the permit and whether an existing stormwater management control was retrofitted, and if so, the existing stormwater management control type retrofit used.
- A list of control measures expected to be implemented during the next reporting period and the expected progress toward meeting the permit compliance targets for total nitrogen, total phosphorus, and total suspended solids.

4.2 TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

- A summary on the implementation progress of the TMDL Action Plans and associated evaluation, including any monitoring conducted in support of the Action Plan.

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TABLE D.5
ANNUAL REPORT DUE OCTOBER 1, 2019

- 2.1 CONSTRUCTION SITE RUNOFF CONTROL AND POST CONSTRUCTION RUNOFF CONTROL**
 - The number of regulated land disturbing activities approved and the total number of acres disturbed during the reporting period.
 - The number of land disturbing activity inspections conducted and the number and type of each enforcement action taken during the reporting period.
 - A list of land disturbing projects that qualify under the "Grandfathering" provision of the VSMP regulations that receive coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities during the reporting period.
 - A summary of actions taken by Norfolk to implement programs consistent with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act and attendant regulations during the reporting period.
- 2.2 PLANNING AND RETROFITTING ON PRIOR DEVELOPED LANDS**
 - Revised SWM project summary sheet(s);
 - A current web link to the project status page; and,
 - A status update for those water quality projects which were implemented or constructed during the reporting year.
- 2.3 ROADWAYS**
 - A copy of the written Standard Operating Procedures (SOPs) designed to minimize the discharge of pollutants associated with roadway maintenance activities.
- 2.4 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION**
 - A summary of turf and landscape nutrient management plan compliance including the total cumulative acreage and the acreage implemented during the reporting year.
 - The number of acres of Norfolk property managed under Integrated Pest Management Plans.
- 2.5 ILLICIT DISCHARGES AND IMPROPER DISPOSAL**
 - A list of sites surveyed for floatables, a summary of observations at each site, and a determination as to the effectiveness of the floatables reduction program.
 - A list of illicit discharges identified, the source, a description of follow-up activities, and whether the illicit discharge has been eliminated.
 - The linear footage of sanitary sewer inspected during the reporting year.
- 2.6 SPILL PREVENTION AND RESPONSE**
 - A list of spills occurring during the reporting year that qualified for immediate reporting along with the source of the spill and a description of any follow-up actions taken.

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2.7 INDUSTRIAL AND HIGH RISK RUNOFF

- A summary of implementing the outfall inspection schedule, including a list of facilities and/or outfalls inspected during the prior year.
- A list of referrals to the DEQ.

2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

- A summary of activities performed in support of the inspection and maintenance program.
- A summary of inspections performed and notifications of needed maintenance and repair actions required which were sent to owners of privately maintained SWM facilities.
- A summary of actions taken to address the failure of owners of privately maintained SWM facilities to abide by maintenance agreements.

2.9 CITY FACILITIES

- No reporting required.

2.10 PUBLIC EDUCATION/PARTICIPATION

- A list of all public outreach and educational activities conducted, the estimated number of individuals reached through the programs, and evaluation of effectiveness of the programs, and recommendations for any future changes.
- A summary of voluntary retrofits completed on private property.
- A summary of voluntary stormwater management (SWM) techniques encouraged on private property.

2.11 TRAINING

- Documentation of any training events held during the reporting year, if applicable, including: the training date; number of employees attending the training; and the objective of the training event.

2.12 DRY WEATHER SCREENING

- The total number of outfalls in the MS4; the number of stations screened; and a list of dry weather screening locations along with results and any follow-up actions.

2.13 INFRASTRUCTURE COORDINATION

- Documentation of coordination efforts with VDOT for the reporting year regarding: mapping; Chesapeake Bay TMDL Action Plans; other TMDL Action Plans; credit for TMDL implementation; illicit discharge detection and elimination; and, water quality monitoring.

3.1 IN-SYSTEM/WET WEATHER MONITORING

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

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3.2 STREET SWEEPING MONITORING PROGRAM

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.3 STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING

- An electronic copy of the updated SWM facility database.
- A summary of actions taken to ensure maintenance of private SWM facilities.
- A summary of the program to ensure maintenance of City-owned SWM facilities.

4.1 CHESAPEAKE BAY SPECIAL CONDITION

- A list of control measures implemented during the reporting period along with the cumulative progress towards meeting compliance targets for total nitrogen, total phosphorus, and total suspended solids.
- A list of control measures that were implemented during the reporting cycle and the estimated reduction achieved by the control. For stormwater management controls, including the information required in Part I.C.3.a of the permit and whether an existing stormwater management control was retrofitted, and if so, the existing stormwater management control type retrofit used.
- A list of control measures expected to be implemented during the next reporting period and the expected progress toward meeting the permit compliance targets for total nitrogen, total phosphorus, and total suspended solids.

4.2 TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

- A summary on the implementation progress of the TMDL Action Plans and associated evaluation, including any monitoring conducted in support of the Action Plan.

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TABLE D.6
ANNUAL REPORT DUE OCTOBER 1, 2020

- 2.1 CONSTRUCTION SITE RUNOFF CONTROL AND POST CONSTRUCTION RUNOFF CONTROL**
 - The number of regulated land disturbing activities approved and the total number of acres disturbed during the reporting period.
 - The number of land disturbing activity inspections conducted and the number and type of each enforcement action taken during the reporting period.
 - A list of land disturbing projects that qualify under the "Grandfathering" provision of the VSMP regulations that receive coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities during the reporting period.
 - A summary of actions taken by Norfolk to implement programs consistent with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act and attendant regulations during the reporting period.

- 2.2 PLANNING AND RETROFITTING ON PRIOR DEVELOPED LANDS**
 - Revised SWM project summary sheet(s);
 - A current web link to the project status page; and,
 - A status update for those water quality projects which were implemented or constructed during the reporting year.

- 2.3 ROADWAYS**
 - No reporting required.

- 2.4 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION**
 - A summary of turf and landscape nutrient management plan compliance including the total cumulative acreage and the acreage implemented during the reporting year.
 - The number of acres of Norfolk property managed under Integrated Pest Management Plans.

- 2.5 ILLICIT DISCHARGES AND IMPROPER DISPOSAL**
 - A list of sites surveyed for floatables, a summary of observations at each site, and a determination as to the effectiveness of the floatables reduction program.
 - A list of illicit discharges identified, the source, a description of follow-up activities, and whether the illicit discharge has been eliminated.
 - The linear footage of sanitary sewer inspected during the reporting year.

- 2.6 SPILL PREVENTION AND RESPONSE**
 - A list of spills occurring during the reporting year that qualified for immediate reporting along with the source of the spill and a description of any follow-up actions taken.

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2.7 INDUSTRIAL AND HIGH RISK RUNOFF

- A summary of implementing the outfall inspection schedule, including a list of facilities and/or outfalls inspected during the prior year.
- A list of referrals to the DEQ.

2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

- A summary of activities performed in support of the inspection and maintenance program.
- A summary of inspections performed and notifications of needed maintenance and repair actions required which were sent to owners of privately maintained SWM facilities.
- A summary of actions taken to address the failure of owners of privately maintained SWM facilities to abide by maintenance agreements.

2.9 CITY FACILITIES

- No reporting requirements.

2.10 PUBLIC EDUCATION/PARTICIPATION

- A list of all public outreach and educational activities conducted, the estimated number of individuals reached through the programs, and evaluation of effectiveness of the programs, and recommendations for any future changes.
- A summary of voluntary retrofits completed on private property.
- A summary of voluntary stormwater management (SWM) techniques encouraged on private property.

2.11 TRAINING

- Documentation of any training events held during the reporting year, if applicable, including: the training date; number of employees attending the training; and the objective of the training event.

2.12 DRY WEATHER SCREENING

- The total number of outfalls in the MS4; the number of stations screened; and a list of dry weather screening locations along with results and any follow-up actions.

2.13 INFRASTRUCTURE COORDINATION

- Documentation of coordination efforts with VDOT for the reporting year regarding: mapping; Chesapeake Bay TMDL Action Plans; other TMDL Action Plans; credit for TMDL implementation; illicit discharge detection and elimination; and, water quality monitoring.

3.1 IN-SYSTEM/WET WEATHER MONITORING

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

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3.2 STREET SWEEPING MONITORING PROGRAM

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.3 STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING

- An electronic copy of the updated SWM facility database.
- A summary of actions taken to ensure maintenance of private SWM facilities.
- A summary of the program to ensure maintenance of City-owned SWM facilities.

4.1 CHESAPEAKE BAY SPECIAL CONDITION

- A list of control measures implemented during the reporting period along with the cumulative progress towards meeting compliance targets for total nitrogen, total phosphorus, and total suspended solids.
- A list of control measures that were implemented during the reporting cycle and the estimated reduction achieved by the control. For stormwater management controls, including the information required in Part I.C.3.a of the permit and whether an existing stormwater management control was retrofitted, and if so, the existing stormwater management control type retrofit used.
- A list of control measures expected to be implemented during the next reporting period and the expected progress toward meeting the permit compliance targets for total nitrogen, total phosphorus, and total suspended solids.

4.2 TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

- A summary on the implementation progress of the TMDL Action Plans and associated evaluation, including any monitoring conducted in support of the Action Plan.

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**TABLE D.7
INTERIM REPORTING DUE JANUARY 1, 2021**

3.2 STREET SWEEPING MONITORING PROGRAM

- A summary of the final street sweeping monitoring program results, analysis and interpretation of the data with respect to long-term patterns/trends.

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TABLE D.8
ANNUAL REPORT DUE OCTOBER 1, 2021

- 2.1 CONSTRUCTION SITE RUNOFF CONTROL AND POST CONSTRUCTION RUNOFF CONTROL**
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 - Revised SWM project summary sheet(s);
 - A current web link to the project status page; and,
 - A status update for those water quality projects which were implemented or constructed during the reporting year.

- 2.3 ROADWAYS**
 - No reporting requirements.

- 2.4 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION**
 - A summary of turf and landscape nutrient management plan compliance including the total cumulative acreage and the acreage implemented during the reporting year.
 - The number of acres of Norfolk property managed under Integrated Pest Management Plans.

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 - A list of sites surveyed for floatables, a summary of observations at each site, and a determination as to the effectiveness of the floatables reduction program.
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 - A list of spills occurring during the reporting year that qualified for immediate reporting along with the source of the spill and a description of any follow-up actions taken.

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2.7 INDUSTRIAL AND HIGH RISK RUNOFF

- A summary of implementing the outfall inspection schedule, including a list of facilities and/or outfalls inspected during the prior year.
- A list of referrals to the DEQ.

2.8 STORMWATER INFRASTRUCTURE MANAGEMENT

- The number of impervious, pervious and total acres served by the MS4 for each local watershed, sixth order HUC, and Chesapeake Bay segment.
- The number of impervious, pervious and total acres treated by stormwater controls for each local watershed, sixth order HUC, and Chesapeake Bay segment.
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- Documentation of any training events held during the reporting year, if applicable, including: the training date; number of employees attending the training; and the objective of the training event.

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- The total number of outfalls in the MS4; the number of stations screened; and a list of dry weather screening locations along with results and any follow-up actions.

2.13 INFRASTRUCTURE COORDINATION

- Documentation of coordination efforts with VDOT for the reporting year regarding: mapping; Chesapeake Bay TMDL Action Plans; other TMDL Action Plans; credit for TMDL implementation; illicit discharge detection and elimination; and, water quality monitoring.

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3.1 IN-SYSTEM/WET WEATHER MONITORING

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.2 STREET SWEEPING MONITORING PROGRAM

- A summary of the wet weather monitoring program sampling results for the reporting period, along with an analysis and interpretation of the sampling data.

3.3 STRUCTURAL AND SOURCE CONTROLS COMPLIANCE MONITORING AND TRACKING

- An electronic copy of the updated SWM facility database.
- A summary of actions taken to ensure maintenance of private SWM facilities.
- A summary of the program to ensure maintenance of City-owned SWM facilities.

4.1 CHESAPEAKE BAY SPECIAL CONDITION

- A list of control measures implemented during the reporting period along with the cumulative progress towards meeting compliance targets for total nitrogen, total phosphorus, and total suspended solids.
- A list of control measures that were implemented during the reporting cycle and the estimated reduction achieved by the control. For stormwater management controls, including the information required in Part I.C.3.a of the permit and whether an existing stormwater management control was retrofitted, and if so, the existing stormwater management control type retrofit used.
- A list of control measures expected to be implemented during the next reporting period and the expected progress toward meeting the permit compliance targets for total nitrogen, total phosphorus, and total suspended solids.

4.2 TMDL ACTION PLANS OTHER THAN THE CHESAPEAKE BAY TMDL

- A summary on the implementation progress of the TMDL Action Plans and associated evaluation, including any monitoring conducted in support of the Action Plan.

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**APPENDIX E
KEY CONTACTS**

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Department of Public Works
Division of Environmental Storm Water Management
POC: June Whitehurst, Environmental Programs Manager
(757) 823-4005

Department of Public Works
Division of Streets & Bridges
POC: Maurice Gunn, Assistant City Engineer
(757) 823-4059

Department of Public Works
Division of Waste Management
POC: Androse Jefferson, Waste Management Superintendent
(757) 441-1176 Ext: 4221

Department of Public Works
Financial & Budget Management
POC: Karen Colombo, Manager of Budget & Accounting
(757) 664-4665

Department of Public Works
Keep Norfolk Beautiful
POC: Sarah Sterzing, KNB Education Manager
(757) 441-1347

Department of City Planning
Environmental Services
POC: Seamus McCarthy, Bureau Manager
(757) 664-4363

Department of Utilities
Wastewater Division
POC: Miguel Gonzalez, Operations Manager
(757) 823-1000

Department of Recreation, Parks & Open Space
Parks & Forestry
POC: Steven Patton, Division Head
(757) 823-4024

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Department of Public Health
Vector Control
POC: Norman Grefe, Sr. Environmental Health Manager
(757) 683-2824

Department of Fire & Rescue
Fire Marshall's Office
POC: Michael Rose, Assistant Fire Marshall
(757) 664-6404

**CITY OF NORFOLK MS4 PROGRAM PLAN
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APPENDIX F

**SUMMARY OF
MS4 PROGRAM PLAN REVISIONS**

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VSMP Permit No. VA0088650

Date	Program Plan Section	Nature of Revision
10/30/2018	2.2	Added the list of five water quality retrofit projects to be completed by the end of the permit cycle.
10/30/2018	2.4	Added the list of city-owned land that requires nutrient management plan development.
10/30/2018	2.9	Changed "Norfolk Public Schools" Fleet Maintenance Facility to "Department of General Services" Fleet Maintenance Facility. This facility was mis-labeled in the original plan.
10/30/2018	2.10	Added BayStar Business education program for commercial, industrial, and institutional entities.
10/30/2018	Appendix A	Changed "Norfolk City Code, Appendix A, Zoning Ordinance, Chapter 11—2" dated July 1, 2014 to the new zoning ordinance information. The new section references Article 3.9.6 of the Zoning ordinance adopted on March 1, 2018.
10/30/2018	Appendix A	Changed "Norfolk City Code, Appendix A, Zoning Ordinance, Chapter 26" dated July 1, 2014 to the new zoning ordinance information. The new section references Article 5 of the Zoning ordinance adopted on March 1, 2018.
10/30/2018	Appendix A	Removed "Norfolk City Code, Appendix A, Zoning Ordinance, Chapter 17: Landscaping and Buffer" dated Sept 13, 2011.
10/30/2018	Appendix B	Updated 2.3 SOP with actual completed date of October 2018.
10/30/2018	Appendix B	Added 2.4 Nutrient Management Plan – Lake Taylor with actual completed date of June 2018.
10/30/2018	Appendix B	Added 2.4 Nutrient Management Plan – Norview, Booker T. Washington, Blair, Ghent, Northside, and Barraud Park with completion date of June 2019
10/30/2018	Appendix B	Updated 2.7 Procedures for reducing floatables with actual completed date of June 2017; Procedures covered in Program Plan.
10/30/2018	Appendix B	Updated 2.8 Inspection of Privately Maintained Facility with actual completed date of June 2017.
10/30/2018	Appendix B	Updated 4.1 with completed date of June 2018
10/30/2018	Appendix B	Updated 4.2 with completed date of June 2018
10/30/2018	Appendix E	Changed the Point of Contact for Waste Management from Michael Etheridge to Androse Jefferson.

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