

CITY OF FREDERICKSBURG

**VSMP General Permit for
Small Municipal Separate Storm Sewer Systems**

Permit # VAR040058

Year Two Annual Report

July 2014 – June 2015

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Appendix A

Background Information

- 1) City of Fredericksburg General Permit Number #VAR040058
- 2) Annual Report Permit Year Two – July 1, 2014 to June 30, 2015.
- 3) There are no modifications to the City's roles and responsibilities under the permit.
- 4) There have been no new MS4 outfalls added within the City during this second permit year.
Although as we continue to update our stormwater infrastructure and conveyance system map, new outfalls maybe added.
- 5) The signed registration statement is included in Appendix A of this report.

**CERTIFICATION STATEMENT AND SIGNATORY REQUIREMENTS
FOR MS4 PERMIT APPLICATIONS AND REPORTS**

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall, be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
3. The written authorization is submitted to the department.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Responsible Official Signature

9.25.15
Date

VAR040058

City of Fredericksburg

Permit Number

MS4 Name

Appendix B

Status of compliance

The status of compliance with the permit conditions, an assessment of the appropriateness of the identified best management practices, and progress toward achieving the identified measurable goals for each of the minimum control measures is being met. We have assessed our MCM's and activities of the program and believe that they are appropriate and effective in meeting our program plan and compliance with permit conditions. We feel that progress towards achieving the identified measurable goals is being accomplished as planned.

These assumptions in assessing the appropriateness and effectiveness of the MCM's, compliance with permit conditions and progress toward achieving the measurable goals will be conducted annually. In evaluating our MS4 program the "Municipal Stormwater Program Evaluation Guidance" by the Environmental Protection Agency EPA-833-R-07-003 will be utilized.

Appendix C

Results of Information Collected

Program Administration

The program reporting layout of results of information collected has been changed from a spreadsheet format to a narrative description format as outlined in the program plan and as follows:

- A. Evaluate program compliance, the appropriateness of the program BMPs, and progress towards achieving identified measurable goals.

Items to report: We have assessed our MCM's and activities of the program and believe that they are appropriate and effective in meeting our program plan and compliance with permit conditions. We feel that progress towards achieving the identified measurable goals is being accomplished as planned.

- B. Develop & implement a TMDL Action Plan for the Bacteria TMDL for the Tidal Freshwater Rappahannock River Watershed.

Items to report: Submission of the Action Plan with the Permit Year three annual report as per the Table 1 schedule in the general permit. Report on the progress of implementation and effectiveness of the TMDL Action Plan annually.

- C. Develop and implement a Chesapeake Bay TMDL Action Plan.

Items to report: Submission of the Action Plan with the Permit Year two annual report as per the table 1 schedule in the general permit. List of control measures implemented & summary of progress toward meeting the compliance targets during each reporting period and those to be implemented in the upcoming reporting period. See Attachment A.

MCM 1

- (A) Investigate strategies towards education and outreach of local groups of commercial, industrial and institutional entities likely to have stormwater impacts is ongoing and further being developed in addition to this year's activities.

Items to report: The City plans to perform these investigations in years one, two, and four of the permit and will distribute the information as appropriate based on these investigations. For this reporting period the city partnered with the University of Mary Washington. Saturday, 11 April 2015, the University of Mary Washington held their 25th annual Multicultural Fair. This event typically attracts 5,000 to 6,000 people from the student community, faculty and staff members and their families, and the greater Fredericksburg community. UMW Landscape and Grounds sponsored and staffed a Sustainability table during the event. Joni Wilson and Les Johnson (UMW) were on hand throughout the day engaging Fair visitors, providing them with informational handouts and answering questions related to precipitation, why it is important to everyone, and how it can be used, stored and released to the benefit of every member of the community.

Approximately 400 people visited the table over the course of the Fair that day. The Sustainability table treated these visitors to the variety of handouts described in the illustrations below, along with a short continuous-loop PowerPoint on pollution prevention. Educational materials were provided from several sources including Kevin Utt (City of Fredericksburg, VA), Paul Santay(Stafford County, VA), Kyle Hanes(Tri-County/City Soil and Water Conservation District), Tammi Oliva (VA Department of Forestry), and Rachel Herbert(EPA/Office of Water).

- (B)** Distribute printed media materials at the City, public facilities and make available electronically.

Items to report: The City publishes a yearly Water Quality Report on its website (hard copy also available upon request). The report has information on water in general, water conservation tips, stormwater and stormwater runoff. The report also has contact information for reporting violations and information on the NPDES program. Three distribution points were utilized, City Hall, Parks & Recreation Facility and the Public Library. Twenty five copies of the type of printed materials have been supplied to each distribution point through the year.

These media materials have been provided on the city's web site as well. The Environmental page experienced 90 page views with an average time on page of 2:01 and the Stormwater Management page experienced 622 page views with an average time on page of 2:34.

- (C)** Provide internet access and download capability on stormwater management and stormwater pollution prevention materials.

Items to report: The City's website has been updated and will be scheduled annually for updates on stormwater management and storm water pollution prevention materials. The website for storm water management, pollution prevention, and environmental outreach and education received a total of 712 viewers for this reporting period.

- (D)** Operate the City's Stormwater Pollution Hotline for citizen complaints.

Items to report: A hotline has been established on the city's website to promote, publicize and facilitate public reporting of storm water pollution and illicit discharges. The web link: <http://www.fredericksburgva.gov/index.aspx?NID=476> No calls had been reported for this reporting period.

- (E)** Identify three (3) high priority water quality issues that contribute to the discharge of stormwater pollution.

Items to report: Three high priority water quality issues have been identified in FY2014 as reported. The three high priority water quality programs have been implemented and ongoing with positive results to date. Prior to application for continued state permit coverage required in Section III M, the operator shall evaluate the education and outreach program as per the permit.

- (F)** Identify the target audiences and estimate the population size of the target audiences most likely to have significant impacts of the three high-priority WQ issues.

Items to report: List of target audiences and estimated populations. The target audiences and estimated populations have been submitted in the FY2014 annual report for the three high WQ issues selected. A summary report for each of the three activities conducted for this reporting period and activities that will be conducted during the next reporting period for each of the three high WQ issues can be found in Attachment B.

- (G) Develop relevant messages and associated educational material and outreach materials for message distribution to the selected target audiences.

Items to report: Summary of campaign results. The messages, educational and outreach materials used can be found in Attachment B.

- (H) Provide for public participation during public education and outreach program development.

Items to report: Document public participation during public education and outreach program development. The Clean and Green Commission meetings, held on the first Monday of the month are open to the public. During the development of these programs any public comments received are recorded in the monthly meeting minutes and considered in the development of these programs.

- (I) Conduct education and outreach activities designed to reach 20% of the population of each target audience. Adjust target audiences(s), message, educational materials and delivery mechanisms as needed.

Items to report: Status report. See Attachment B.

- (J) Implement a program to post waterway signage at road crossings of major streams in the City to identify the streams and their hydrologic connection to the Chesapeake Bay.

Items to report: The program is being developed and an on-going activity.

MCM 2

- (A) Provide hard copies of the City's MS4 Program Plan at City Hall, as well as providing the MS4 Program Plan on the City's website.

Items to report: Hard copies are available in the City Department of Planning & Community Development and Public Works. The website link:

<http://www.fredericksburgva.gov/index.aspx?nid=967>

- (B) Provide hard copies of the City's Annual Report at City Hall as well on the City's website.

Items to report: Hard copies are available in the City Department of Planning & Community Development and Public Works. The website link:

<http://www.fredericksburgva.gov/index.aspx?nid=967>

(C) Promote the City's storm drain Marking Program.

Items to report: All drains have been marked within the city limits, and periodic visual checks to ensure drains are still marked. Missing drain markers are replaced as needed.

(D) Investigate and promote, sponsor and/or participate in at least four local activities aimed at increasing public participation.

Items to report: Documentation of participation activities as follows:

1-City/Regional Recycling Center Operation

- City and regional recycling centers operated as follows:
 - Monday – Friday: 8:00 a.m. – 4:30 p.m.
 - Saturday – Sunday: 9:00 a.m. – 2:00 p.m.
 - Closed following days: New Year's Day, Easter Sunday, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day.

2-Curbside Recycling Program

- Curbside recycling was provided for all city trash accounts
- Total recyclables collected: FY2015: 1,763,540 pounds = 881.77 tons

3-Community Pride Program

- October 20, 2014 & November 10, 2014 : collected 44.5 tons of bulk trash
- April 6-14, 2015: collected 76.9 tons of bulk trash

4-Residential Bulk Waste Collection Program

- July 14-18, 2014
- January 5-9, 2015

MCM 3

(A) Maintain a storm sewer system map and out fall information table.

Item to report: A storm sewer system map and information table has been developed and is on going with updated information and will follow the new permit requirements in accordance with Table 1 of the permit. A copy of the current storm sewer map is available for review upon request by the public or by the department. Other points of discharge are being identified. Downstream regulated MS4's to which the City is physically interconnected or connected to may include VDOT, National Park Service, State Property and the University of Mary Washington

College. As the outfalls are defined and the storm sewer map refined, this will be further determined and any downstream MS4 operator will be notified.

- (B)** Review and amend as necessary the City Stormwater Pollution and Illicit Discharge Ordinance for consistency with the MS4 Permit.

Item to report: Ordinance reviewed and no amendments necessary.

- (C)** Develop, implement, and update (when appropriate) written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping into the City's MS4.

Items to report: Non stormwater discharges are prohibited through an ordinance or other legal mechanism. Written procedures to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping have been developed, reference is hereby made to the, City of Fredericksburg Illicit Discharge Detection and Elimination (IDDE) Standard Operating Procedures Manual, this is on file at the City Department of Planning & Community Development for review and available to the public or the department upon request.

- (D)** Promote, publicize, and facilitate public reporting of illicit discharges into of from the City's MS4. Conduct inspections in response to complaints and ensure that corrective actions have been implemented by the responsible party.

Item to report: A summary of the potential illicit discharges reported and the results of any follow up investigations. No reports filed for this reporting period.

A hotline has been established on the city's website to promote, publicize and facilitate public reporting of illicit discharges.

Web link: <http://www.fredericksburgva.gov/index.aspx?NID=476>

- (E)** Implement a HAZMAT Spill Response Program.

Items to report: The City will document hazardous spill response events throughout the year and report them in the annual report. See Attachment C.

- (F)** Implement a Household Hazardous Waste Collection Program.

Item to report: Documentation of participation activities as follows:

Household Hazardous Waste Collection Days

- May 30, 2015
- October 25, 2015

- (G)** Notify downstream MS4 operators of physical interconnection of storm sewer systems with the City's MS4.

Item to report: Initiated and ongoing until completed.

(H) Outfalls.

Item to report: Total number of outfalls screened, 50 outfalls have been screened, and See Attachment D for screening results and any follow up action information. There were no reports received for investigations of outfalls reported of suspected illicit discharges during this reporting period.

As noted in DEQ's May 5, 2015 MS4 Program Audit Report, which the City received on July 13, 2015, the city must update the outfall data base to contain fields that indicate the receiving stream to which the outfall discharges, whether or not the stream is impaired, any applicable TMDL's, and the estimated MS4 acreage served by each outfall. This is update currently underway.

(I) Septic Pump Out Program (SPOP)

Item to report: As necessary, all known systems in the data base that have been pumped out within the last five years, and this is being tracked as required through the City's Chesapeake Bay Program. This referenced material is in the Planning & Community Development Department located at 715 Princess Anne Street, Fredericksburg, Va. and is available to the public or the department upon request.

MCM 4

(A) Administer and implement the City's Erosion and Sediment Control (E&SC) Program in accordance with Virginia's Erosion and Sediment Control Program (VESCP) regulations.

Items to report: Applicable program oversight requirements are being meet by staff and the program is in compliance with the State Departments approved annual standards and specifications, inspection, enforcement, plan review procedures, written procedures, tracking, reporting, role and responsibly requirements and thus meeting the permit compliance conditions. Reference is hereby made to the City's Unified Development Ordinance (UDO) and the City's Erosion and Sediment Control Ordinance.

(B) Provide training for the City's E&SC Program inspection staff.

Items to report: Staff personnel hold certificates of competence required to administer such programs as required by State Law and Regulations. Ongoing training as conducted by the State or other agencies is being performed as needed for plan reviewers, inspectors and program administrators.

(C) Administer and implement the City's Virginia Stormwater Management Program (VSMP) in accordance with the regulations of the Virginia Stormwater Management Act.

Items to report: As a State (DEQ) Department approved VSMP Authority, effective July 1, 2014, the program is in compliance with the State Law and Regulation requirements and ongoing. As an Approved VSMP Authority, staff will conduct detailed Stormwater Management plan review, and Best Management Practice review, BMP pre and post inspections and Administration, Implementation and Oversight of the VSMP. Reference is also made to the Environmental Codes Standard Policy & Procedures Manual, the Stormwater Best Management Practices Inspection and Operation & Maintenance Plan (IO&M Plan). This referenced material is in the Planning & Community Development Department located at 715 Princess Anne Street, Fredericksburg, Va. and is available to the public or the department upon request.

- (D)** Administer and implement the City's Chesapeake Bay Program.

Items to report: This program is in compliance with the State regulated program requirements and ongoing.

- (E)** Tracking of regulated land disturbing activities.

Items to report: Land Disturbing Report:

- (1) 43 regulated land disturbing activities
- (2) 20.17 acres disturbed
- (3) # inspections conducted: 574
- (4) Enforcement action taken: None

- (F)** Administer and implement the City's LID Ordinance.

Items to Report: None.

MCM 5

- (A)** Administer and implement the City's Virginia Stormwater Management Program (VSMP) in accordance with the regulations of the Virginia Stormwater Management Act.

Items to report: As a State (DEQ) Department approved VSMP Authority, effective July 1, 2014, the program is in compliance with the State Law and Regulation requirements and ongoing. As an Approved VSMP Authority, staff will conduct detailed Stormwater Management plan review, and Best Management Practice review, BMP pre and post inspections and Administration, Implementation and Oversight of the VSMP. Reference is also made to the Environmental Codes Standard Policy & Procedures Manual, the Stormwater Best Management Practices Inspection and Operation & Maintenance Plan (IO&M Plan). This referenced material is in the Planning & Community Development Department located at 715 Princess Anne Street, Fredericksburg, Va. and is available to the public or the department upon request.

- (B)** Develop/present a seminar for Homeowner's Associations (HOAs) on the requirements for and proper maintenance of stormwater management facilities.

Items to report: Program under development, date of seminar and attendance list, this is on-going.

- (C)** Develop written procedures for inspection, maintenance, and enforcement of maintenance agreements (when applicable) for stormwater management facilities located within or discharging into the MS4.

Items to report: Written procedures; reference is made to the Stormwater Best Management Practices Inspection and Operation & Maintenance Plan (IO&M Plan). This referenced material is in the Planning & Community Development Department located at 715 Princess Anne Street, Fredericksburg, Va. and is available to the public or the department upon request.

- (D)** Inspect permanent, post-construction stormwater management facilities that are privately-owned at least once every five years.

Items to report: Total number of inspections completed and enforcement actions taken (if applicable). To be completed during this permit cycle.

- (E)** Annually inspect permanent, post-construction stormwater management facilities that are City-owned / operated.

Items to report: Total number of inspections completed. Six facilities have been inspected for this reporting period. Documentation is on file and available upon request.

- (F)** Conduct appropriate maintenance on permanent, post-construction storm water management facilities owned / operated by the City as necessary.

Items to report: Inclusion in the annual report of a description of maintenance activities performed during that permit year. Four facilities had maintenance conducted for this reporting period. Additional documentation is on file at the Public Works Department and available upon request. See attachment E.

- (G)** Develop and update, as necessary, the City's database of permanent, post construction stormwater management facilities.

Items to report: The City will submit an electronic database or spreadsheet of all stormwater management facilities brought online during each reporting year with the appropriate annual report. This document is provided in Attachment F.

As well, the city was the recipient of a DEQ 2015 Historical BMP Data Cleanup Grant. This document was developed to outline the methods used to convert the City of Fredericksburg's urban best management practice (BMP) data into a format suitable for delivery to the Virginia Department of Environmental Quality (DEQ), in support of the DEQ Historical BMP Inventory Grant. This project has been completed and delivered to DEQ in accordance with the grant criteria.

As noted in DEQ's May 5, 2015 MS4 Program Audit Report, which the City received on July 13, 2015, the city must update the BMP data base to contain fields for pervious and impervious areas treated by each facility. This is update currently underway.

MCM 6

- (A) Develop written procedures for daily good housekeeping on City owned/operated facilities.

Items to report: Operations and maintenance activities have been developed and with written implementation procedures designed to minimize or prevent pollutant discharge from (i) daily operations; (ii) equipment maintenance; and (iii) the application, storage, transport and desposal of pesticides, herbicides and fertilizers. Reference is hereby made that these IDDE Standard Operating Procedures, City shop SOP, Parks & Rec SOP are on file and available to employees and are made available to the public upon request. These procedures are part of the employee training program as well.

- (B) Identify all municipal, high-priority facilities including those that have a high potential for discharging pollutants.

Items to report: List of all municipal high-priority facilities and those facilities having a high potential of discharging pollutants. Two High Priority facilities have been identified by the city that may have a high potential of discharging pollutants. SWPPP's will be developed per the permit requirements for these facilities.

- (C) Develop and implement SWPPPs for all municipal high-priority facilities that have a high potential for discharging pollutants.

Items to report: SWPPP's will be developed per the permit requirements for these facilities and reported.

- (D) Identify all applicable lands where nutrients are applied to a contiguous area of more than one acre.

Items to report: The city has identified all applicable land where nutrients are applied to a contiguous area of more than one acre. The city does not apply any deicing agent containing urea or other forms of nitrogen or phosphorous to parking lots, roadways, and sidewalks, or other paved surfaces. This is reported in the Chesapeake Bay Action Plan as well.

The latitude and longitude as follows is provided as required:

Area 1: Dixon Street Park: Lat 38.286057, Long -77.455692

Area 2: Old Mill Park: Lat 38.315430, Long -77.467984

- (E) Develop and implement turf and landscape nutrient management plans on all lands where nutrients are applied to a contiguous area of more than one acre.

Items to report: A summary report on the development and implementation of the turf and landscape nutrient management plans. NMP's have been developed and implemented for Area 1, Dixon Park consisting of 15 acres. NMP's are being developed for the identified Area 2, Old Mill Park consisting of 2 acres. The city does not apply any deicing agent containing urea or other forms of nitrogen or phosphorous to parking lots, roadways, and sidewalks, or other paved surfaces. This is reported in the Chesapeake Bay Action Plan as well.

- (F)** Develop and implement an annual training plan and schedule in accordance with the requirements of the Permit.

Items to report: An Annual training program and schedule for employees has been established for municipal operations and has been ongoing. Training is conducted for the appropriate field personnel, maintenance personnel, public works facilities personnel, landscape/grounds personnel, recreational personnel and emergency/first responders for the recognition and reporting of illicit discharges, good housekeeping and stormwater pollution prevention practices on a biennial schedule.

- (G)** Provide annual training to field personnel in the recognition and reporting of illicit discharges.

Items to report: A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training. An Annual training program and schedule for employees has been established for municipal operations and has been ongoing. Training is conducted for the appropriate field personnel, maintenance personnel, public works facilities personnel, landscape/grounds personnel, recreational personnel and emergency/first responders for the recognition and reporting of Illicit Discharges, good housekeeping and stormwater pollution prevention practices on a biennial schedule. Training was conducted for all city field crews and maintenance personnel on June 30th in 2015. A total of 98 employees attended training.

- (H)** Provide annual training to City employees regarding good housekeeping and pollution prevention practices that are to be employed: (i) during road, street and parking lot maintenance; (ii) in and around maintenance and public works facilities; and (iii) in and around recreational facilities.

Items to report: A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training. An Annual training program and schedule for employees has been established for municipal operations and has been ongoing. Training is conducted for the appropriate field personnel, maintenance personnel, public works facilities personnel, landscape/grounds personnel, recreational personnel and emergency/first responders for the recognition and reporting of Illicit Discharges, good housekeeping and stormwater pollution prevention practices on a biennial schedule. Training was conducted for all city field crews and maintenance personnel on June 30th in 2015. A total of 98 employees attended training.

- (I)** Ensure and/or require that all employees or private contractors who apply pesticides and herbicides receive proper training and certification in accordance with the Virginia Pesticide Control Act.

Items to report: A summary report on the certification status of applicable City employees. Employees who apply pesticides and herbicides are properly trained and certified in accordance with the Virginia Pesticide Control Act, a list of certifications is maintained on file at the Parks, Recreation & Public Facilities Department. The city does not contract out any pesticide or herbicide applicators, all pesticide and herbicides applications are performed by certified city personnel.

- (J)** Ensure that City emergency response employees have training in spill response and provide in the first annual report a summary of the training or certification program provided to all such employees.

Items to report: A summary of the training or certification program provided to applicable City employees. The appropriate emergency response employees conduct training in spill response. A summary of this training is provided as follows: The City of Fredericksburg Fire Department requires personnel to maintain the minimum level of training in Hazardous Material Operations, in accordance with NFPA 1001, NFPA 742, and OSHA 1910.120. Our organization also maintains and operates a Virginia Department of Emergency Management Hazardous Materials Response team with personnel trained to the levels of Technician and/or Specialist. All initial training is conducted in accordance with, and by qualified instructors for the Virginia Department of Fire Programs and Department of Emergency Management. Annual training is conducted in accordance with Fire Department policy, and as mandated by the Virginia Department of Emergency Management; in accordance with NFPA 742 and OSHA 1910.120. Documentation is on file at the Fire Department and available to the public or Department upon request.

- (K)** Maintain required documentation on each training event for a period of three (3) years after each training event.

Items to report: A summary report providing documentation on each training event held. See Attachment G.

- (L)** Require that all municipal contractors use appropriate control measures and procedures for stormwater discharges to the City's MS4 and include oversight procedures in the City's MS4 program plan.

Items to report: A summary report on the enforcement actions taken (if applicable). Municipal contractors; must apply for a "Special Excavation Permit" to work within the city's Right of Way (ROW). Oversight for this permit requires that appropriate control measures and procedures for stormwater discharges are adhered to utilizing appropriate BMP practices. Such practices employed would be silt fence, Inlet protection, dewater socks etc. pending the location and type of work being performed in the ROW. Other pollution prevention measures include dumpster covers and concrete wash out areas. No enforcement actions are were taken for this reporting period.

Dumpster Permits; Dumpster permits issued in the city shall require the use of covers during a rain event producing runoff. These types of indirect stormwater runoff produces pollutants that can enter the MS4 system and cab be considered an Illicit Discharge.

- (M)** Street Sweeping Program

Items to Report: Amount of street sweeping debris. The street sweeping program was conducted on city streets throughout the year. The total amount of street sweeping debris collected: 440.47 tons (880,940 lbs.)

(N) Annual Leaf Collection Program

Items to Report: Amount of debris collected. The annual leaf collection program was conducted on city streets on November 3, 2014 through January 14, 2015. A total of 2,889 cubic yards (1,155,749 lbs.) of leaves was collected and transported to the landfill.

(O) Stormwater Inlet Maintenance

Items to Report: Amount of debris collected, inlets cleaned and repaired.

- Storm drain inlets repaired and/or reconstructed: 12
- Storm drain inlets cleaned: 1,570
- Storm drain pipes cleaned:
- Storm drain ditches cleaned and repaired: 7 locations
- Major projects: none
- Total pounds of debris removed: 29,210 pounds

(P) Environmental Management System (EMS)

Items to Report: Compliance status. This program element is ongoing for the City's Parks, Recreation and Public Facilities Department (one entity not two) which maintained its E3 rating through VEEP of the DEQ for this reporting period.

(Q) Inlet Trash Guard Program

Items to Report: Summary status of program development. This program is being developed and ongoing.

Appendix D

Planned stormwater activities

The following stormwater activities are planned to be undertaken during the next reporting cycle.

1. Dry weather screening of MS4 outfalls for illicit discharges
2. IDDE investigations
3. Continue infrastructure mapping
4. Continue SWMF maintenance oversight
5. Continue public education and outreach on stormwater impacts
6. Continue public involvement/participation
7. Continue Pollution Prevention and Good Housekeeping
8. Develop the Inlet Trash Guard Program

Appendix E

Programmatic Information

There are no changes to report in best management practices or measureable goals for this reporting year as identified in the Program Plan. The only changes are those incorporated as per the Table 1 Schedule of updates required; see Appendix I, Schedule of MS4 Program Plan Updates Required in this Permit.

Appendix F

The City of Fredericksburg is NOT relying on another government entity to satisfy some of the permit obligations.

Appendix G

Approval status of any program

There are no programs operated by the City of Fredericksburg that are intended to replace any of the Minimum Control Measures contained in Section II B of the General Permit.

Appendix H

General Permit Section 1 B.

Special conditions for approved TMDL's other than the Chesapeake Bay TMDL.

Updated TMDL Action Plans-TMDL's approved before July 2008, the Tidal Freshwater Rappahannock River TMDL was approved in 2009, and this scheduled condition does not apply to this permit.

Other TMDL Action Plans for applicable TMDL's approved between July 2008 and June 2013 as per the general Permit, Section 1 B. This is being performed as per the Table 1 schedule of the general permit.

General Permit Section 1 C.

Special condition for the Chesapeake Bay TMDL. This is being performed as per the Table 1 schedule of the general permit. Attached in this report is the City's TMDL Action Plan located in Attachment A.

Appendix I

Table 1: Schedule of MS4 Program Plan Updates Required in this Permit

For operators that have previously held MS4 state permit coverage, the operator shall update the MS4 Program Plan in accordance with the following schedule.

Table 1: Schedule of MS4 Program Plan Updates Required in this Permit		
Program Update Requirement	Permit Reference	Update Completed By
Public Education Outreach Plan (Minimum Control Measure 1 – Public Education and Outreach on Stormwater Impacts)	Section II B 1	12 months after permit coverage
Illicit Discharge Procedures - (Minimum Control Measure 3 – Illicit Discharge Detection and Elimination)	Section II B 3	
Individual Residential Lot Special Criteria (Minimum Control Measure 5 – Post-Construction Stormwater Management in New Development and Development on Prior Developed Lands)	Section II B 5 c (1) (d)	
Operator-Owned Stormwater Management Inspection Procedures (Minimum Control Measure 5 – Post-Construction Stormwater Management in New Development and Development on Prior Developed Lands)	Section II B 5	
Identification of Locations Requiring SWPPPs (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 b	
Nutrient Management Plan (NMP) Locations - (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 c (1) (a)	
Training Schedule and Program - (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6	
Updated TMDL Action Plans (TMDLs approved before July of 2008) – (Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other Than Chesapeake Bay)	Section I B	24 months after permit coverage
Chesapeake Bay TMDL Action Plan – (Special Condition for Chesapeake Bay TMDL)	Section I C	
Stormwater Management Progressive Compliance and Enforcement – (Minimum Control Measure 4 - Construction Site Stormwater Runoff Control)	Section II B 5	
Daily Good Housekeeping Procedures (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 a	
Other TMDL Action Plans for applicable TMDLs approved between July 2008 and June 2013 - (Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other Than Chesapeake Bay)	Section I B	36 months after permit coverage
Outfall Map Completed - (Minimum Control Measure 3 – Illicit Discharge Detection and Elimination) – Applicable to new boundaries identified as "urbanized" areas in the 2010 Decennial Census	Section II B 3 a (3)	48 months after permit coverage
SWPPP Implementation - (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 b (3)	
NMP Implementation - (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 c (1) (b)	60 months after permit coverage

*Updates should be submitted with the appropriate annual report.

The following plan updates are being provided to meet the Table 1 Schedule of MS4 Program Plan Updates Required in this Permit.

Section I B: Updated TMDL Action Plans (TMDLs approved before July of 2008) – (Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other Than Chesapeake Bay).

Items to Report: Submission of the Action Plan as per the Table 1 schedule in the general permit. The Special Condition for approved TMDL's other than the Chesapeake Bay TMDL. Updated TMDL Action Plans-TMDL's approved before July 2008, the Tidal Freshwater Rappahannock River TMDL was approved in 2009, and this scheduled condition does not apply to this permit.

Other TMDL Action Plans for applicable TMDL's approved between July 2008 and June 2013 as per the general Permit, Section 1 B. This is being performed as per the Table 1 schedule of the general permit.

Section I C: Chesapeake Bay TMDL Action Plan – (Special Condition for Chesapeake Bay TMDL).

Items to Report: Submission of the Action Plan as per the Table 1 schedule in the general permit. A Chesapeake Bay TMDL Action Plan has been developed, see Attachment A.

Section II B 5: Stormwater Management Progressive Compliance and Enforcement – (Minimum Control Measure 4 - Construction Site Stormwater Runoff Control).

Items to Report:

Section II B 6 a: Daily Good Housekeeping Procedures (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations).

Items to Report: A summary on the development and implementation of the daily operational procedures. Operations and maintenance activities have been developed and with written implementation procedures designed to minimize or prevent pollutant discharge from (i) daily operations; (ii) equipment maintenance; and (iii) the application, storage, transport and desposal of pesticides, herbicides and fertilizers. Reference is hereby made that these IDDE Standard Operating Procedures, City shop SOP, Parks & Rec SOP are on file and available to employees and are made available to the public upon request. These procedures are part of the employee training program as well.

Appendix J

Program Plan Modifications

There are no modifications proposed with this report.

Appendix K

MS4 Program updates requested by the Department

There are no requests for changes by the Department to this MS4 Program.

Attachment A:

Chesapeake Bay TMDL Action Plan

**CITY OF FREDERICKSBURG
CHESAPEAKE BAY
TOTAL MAXIMUM DAILY LOAD (TMDL)
ACTION PLAN**



City of Fredericksburg
Community Planning and Building
715 Princess Anne Street, Room 209
Fredericksburg, VA 22401
540-372-1080

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Certification

Document: Chesapeake Bay TMDL Action Plan

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

f Beverly R. Cameron
Signature

9.25.15
Date

BEVERLY R. CAMERON
Printed Name

CITY MANAGER
Title

Executive Summary

On December 29, 2010, the federal Environmental Protection Agency (EPA) published the Chesapeake Bay Total Maximum Daily Load (TMDL) for Nitrogen, Phosphorus, and Sediment. The TMDL identified nitrogen, phosphorus, and sediment as the Pollutants of Concern (POCs) causing the impairment to the Chesapeake Bay. The City of Fredericksburg, Virginia operates a regulated small municipal separate storm sewer system (MS4) located within the Fredericksburg 2000 Urbanized Area. Discharges from the City's MS4 are regulated under the Clean Water Act and State Water Control Law and, as such, are required to develop a Chesapeake Bay TMDL Action Plan to address the TMDL in accordance with the Virginia General Permit for Discharges of Stormwater from Small MS4s (MS4 General Permit).

In development of this TMDL Action Plan, the City conducted an evaluation of its existing legal authorities and determined that it does not anticipate requiring additional or new legal authorities in order to comply with the MS4 General Permit conditions. As part of the TMDL Action Plan, the City of Fredericksburg will develop nutrient management plans on two City facilities, totaling 17 acres, where nutrients were applied to greater than one contiguous acre of managed turf. The City will also continue to utilize its DEQ-approved VSMP Program as the Means and Methods to address discharges from New Sources. The City has not identified any future land disturbing projects that qualify for the grand-fathering condition established under its VSMP.

The City will rely on street sweeping as its primary Means and Methods to remove a total of 98.8 lbs. of nitrogen, 20.6 lbs. of phosphorus, and 7,925.4 lbs. of sediment from the annual Existing Source POC loads from both the 2000 and 2010 Urbanized Areas. Using the Mass Loading Approach described in Appendix V.G of DEQ Guidance Memo No. 15-2005, the City has determined that its Street Sweeping program will be required to collect a minimum of 56,457.1 lbs. (28.2 tons) of street sweeping debris annually in order to account for a 5% reduction in nitrogen, phosphorus and sediment. The City estimates that it will cost \$546,721.08 to meet the required reductions in Existing Sources as identified in this TMDL Action Plan.

Chapter 1: Introduction

On December 29, 2010, the federal Environmental Protection Agency (EPA) published the Chesapeake Bay Total Maximum Daily Load (TMDL) for Nitrogen, Phosphorus and Sediment. The TMDL identified nitrogen, phosphorus, and sediment as the pollutants of Concern (POCs) causing the impairment to the Chesapeake Bay. As a result, the TMDL established pollutant discharge limitations for both point sources, which are regulated under the federal Clean Water Act and the Virginia State Water Control Law, and non-point sources, which are not regulated.

Fredericksburg, Virginia operates a regulated small municipal separate storm sewer system (MS4) located within the Fredericksburg Urbanized Area boundary established by the 2000 U.S. Census (Figure 1) (2000 Urbanized Area). Discharges from the MS4 are regulated under the Clean Water Act and State Water Control Law and, as such, are required to meet any conditions established by the regulatory authority (Virginia Department of Environmental Quality [DEQ]) including those necessary to meet the TMDL requirements. For the City, these conditions are contained in the Special Condition for the Chesapeake Bay TMDL (Special Condition [Appendix 1]) found in the Virginia General Permit for the Discharge of Stormwater from Small MS4s (MS4 General Permit). The Special Condition requires that the City develop a Chesapeake Bay TMDL Action Plan that includes:

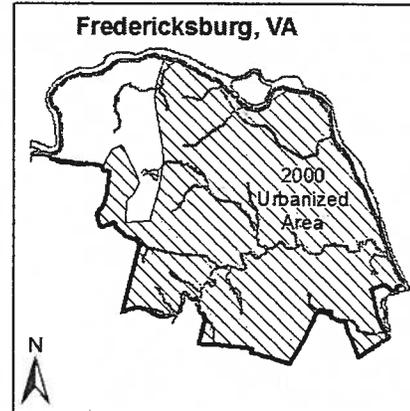


Figure 1: City of Fredericksburg and Associated 2000 UA

- An assessment of the City's current MS4 Program and existing legal authorities to determine if the City has sufficient legal authority to adequately address the Special Condition requirements
- Identification of any new or additional legal authority necessary to adequately address the Special Condition requirements
- Identification of the Means and Methods by which the City will address New Sources of the POCs
- An estimate of the Existing Source loads and calculated total POC required reductions
- Identification of the Means and Methods by which the City will address the Existing Source required reductions and an associated implementation schedule
- Identification of the Means and Methods by which the City will offset any increased loads from New Sources that initiated construction between July 1, 2009 and June 30, 2014
- Identification of the Means and Methods by which the City will address POC loads from Transitional Sources
- Identification of the Means and Methods by which the City will offset any increased loads from grandfathered projects that initiate construction after July 1, 2014
- A list of grandfathered projects
- An estimate of the cost for the City to implement the Special Condition

In addition, the City must provide an opportunity for the receipt and consideration of public comment regarding the Chesapeake Bay TMDL Action Plan.

This document represents the City of Fredericksburg's Chesapeake Bay TMDL Action Plan for the 2013-2018 MS4 General Permit cycle. The City will address any applicable modifications to the TMDL or Virginia Watershed Implementation Plan that occur during the current permit term as part of the City's permit reapplication, which is currently scheduled for submission to DEQ in March 2018.

Chapter 2: Current Program and Existing Legal Authority / New Modified Legal Authority

Under the MS4 General Permit's Special Condition, the City of Fredericksburg is required to:

- Conduct a review of its currently implemented MS4 program that includes review of the City's existing legal authorities and the City's ability to ensure compliance with the Special Condition; and,
- Identify any new or modified legal authority that the City has implemented or needs to implement in order to meet the conditions of the Special Condition

Compliance with the Special Condition represents adequate progress during the current MS4 General Permit cycle towards achieving TMDL wasteload allocations consistent with the assumptions and requirements of the Chesapeake Bay TMDL. The Special Condition further defines the compliance expectations for Chesapeake Bay TMDL Action Plan implementation to the maximum extent practicable (MEP) as well as demonstrating adequate progress. These are as follows:

- The City must develop and implement nutrient management plans in accordance with the schedule identified in the MS4 General Permit.
- The City must implement construction site stormwater runoff controls in accordance with the MS4 General Permit to address POC loads from Transitional Sources.
- The City must implement means and methods to address discharges from New Sources, which includes:
 - New development and development of prior developed lands after July 1, 2014;
 - Offset 5% of the POC loads based on the total load increase between July 1, 2009, and June 30, 2014; and,
 - Offset of the increase in the POC loads from grandfathered projects initiating construction after July 1, 2014, before completion of the individual grandfathered project
- The City must implement means and methods sufficient to meet the required reductions of POC loads from Existing Sources in accordance with the Special Condition.

This assessment reviews the City's existing legal authorities and ability to comply with the Special Conditions based on compliance defined in the Special Condition.

I. Development and Implementation of Nutrient Management Plans (NMPs)

Compliance Expectations

As required by the MS4 General Permit, the City of Fredericksburg has identified two facilities, totaling 17 acres, where nutrients were applied to greater than one contiguous acre of managed turf (Table 1).

Table 1: Fredericksburg Properties Requiring NMPs

Facility Name	Area (Acreage)	Latitude	Longitude
Dixon Street Park	15.0	38°17'13"N	77°27'14"W
Old Mill Park	2.0	38°19'02"N	77°28'03"W
Total Acreage	17.0		

The MS4 General Permit requires that the City implement turf and landscape NMPs on all 17.0 acres by June 30, 2018. In addition, the MS4 General Permit establishes the following measurable goals schedule:

- By June 30, 2015, the City will develop and implement NMPs on 15% of the identified managed turf and landscape.
- By June 30, 2016, the City will develop and implement NMPs on 40% of the identified managed turf and landscape.
- By June 30, 2017, the City will develop and implement NMPs on 75% of the identified managed turf and landscape.

The City has some flexibility in meeting this implementation schedule as the compliance requirement contained in the MS4 General Permit is that the City cannot miss the targeted milestones for two consecutive years or miss the completion date for development and implementation of 100% of the required NMPs.

Compliance Assessment

The facilities identified in Table 1 are owned and operated by the City. As such, the City has the authorities necessary to implement NMPs on the managed turf and landscaping acreage as required by the MS4 General Permit. The City must develop NMPs for those properties, identified in Table 1, in accordance with the schedule identified in the MS4 General Permit.

Additional Legal Authority Modifications or New Legal Authorities Necessary

The City does not anticipate requiring additional or new legal authorities in order to comply with the requirement that it develop and implement NMPs the properties identified in Table 1.

II. Control of POC Loads from Transitional Sources

Compliance Expectations

Transitional POC sources are those sources considered temporary in nature and discharge throughout the MS4. The MS4 General Permit defines the compliance expectations for control of Transitional Sources to MEP while demonstrating adequate progress towards meeting the pollutant load reduction as 'implementation of the minimum control measure in Section II related to construction site stormwater runoff control in accordance with the [MS4 General Permit].'

Compliance Assessment

The City has the legal authority to implement the necessary programs, procedures and protocols to meet the compliance expectations for controlling POC loads from Transitional Sources. The City of Fredericksburg operates an approved Virginia Erosion and Sediment Control Program (VESCP), which was found to be 'consistent' with the Virginia Erosion and Sediment Control (ESC) Law and regulations during its November 2007 State evaluation. Legal authority for the VESCP is authorized under Chapter 78, Article V (Erosion and Sediment Control) and Chapter 72 (Unified Development Ordinance). The purpose of Chapter 78 is to prevent the general degradation of properties, stream channels, waters and other natural resources of the City of Fredericksburg by establishing requirements for the control of soil erosion, sediment deposition and stormwater runoff and by establishing procedures whereby these requirements shall be administered and enforced. Chapter 72 further protects certain critical natural and cultural features and resources (i.e., Chesapeake Bay Resource Protection Areas) by regulating the use and development of these separate overlay districts.

State-certified Erosion and Sediment Control (ESC) plan reviewers ensure the adequacy of the submitted ESC plans to meet the minimum standards required under Chapter 78. Land disturbing activities which disturb areas greater than 2,500 square feet are required to have an approved ESC plan prior to commencement of land disturbing activities.

The City also operates as a State-delegated Virginia Stormwater Management Program (VSMP) authority. Local authority for operation is authorized under Chapter §38 Article IV of the City Code. Under the VSMP, the City will not issue land disturbing permits for projects that disturb one acre or greater of land until the requirements of the VSMP MS4 General Permit for Stormwater Discharges from Construction Activities are met.

Once land disturbance begins, State-certified City inspectors conduct compliance inspections in accordance with the City's inspection schedule. All inspections are conducted using a standardized checklist by certified and dedicated inspectors, whose only task is to inspect the ESC controls. Enforcement actions are handled collaboratively between the Department of Public Works, the City Fire Marshall, and the City Attorney's Office.

Additional Legal Authority Modifications or New Legal Authorities Necessary

The City does not anticipate requiring additional or new legal authorities in order to comply with the requirement that it control Transitional Sources to the maximum extent practicable while demonstrating adequate progress towards meeting the pollutant load reduction as "implementation of the minimum control measure in Section II related to construction site stormwater runoff control in accordance with the [MS4 General Permit]."

III. Control of POC Loads from New Sources

Compliance Expectations

The City must implement Means and Methods to address the control of POC loads from New Sources in accordance with the Minimum Measure for Post-Construction Stormwater Management in New Development and Development of Prior Developed Lands. In addition, the City must identify projects initiated between July 1, 2009 and June 30, 2014 where the implemented water quality design criteria was less stringent than that equivalent to meeting an Average Land Cover Condition (ALCC) of 16% impervious cover. The City is required to offset 5.0% of the identified increase in POC loads resulting from implementation of these less stringent design requirements. Finally, the City must implement Means and Methods that ensure increases in the POC load from grandfathered projects, as defined by 9VAC25-870-48, are 100% offset prior to completion of the individual project.

Compliance Assessment

The City has the legal authority and associated programs, procedures and protocols in place to meet the compliance expectations regarding POC loads from New Sources. Chapter 38, Article IV of the Codified Ordinances of the City of Fredericksburg VSMP, was revised effective July 1, 2014 to establish the City's VSMP. Projects approved for construction after July 1, 2014 are required to meet the VSMP water quality design criteria found at 9VAC25-870-63; and, therefore, meet the minimum design criteria.

As the City previously implemented the ALCC of 16% impervious cover as part of its development requirements, the City also had appropriate legal authority in place to meet the compliance expectations for New Source loads initiating construction between July 1, 2009 and June 30, 2014.

Finally, as the ALCC in place for utilization by 'grandfathered' projects initiating construction after July 1, 2014 was based on 16% IP, the City does not need to address increases in future loads resulting from grandfathered projects.

The City has an adopted a Stormwater Best Management Practices Inspection and Operation & Maintenance Plan (IO&M Plan) and an Environmental Codes Standard Policy and Procedures Manual (ESCPP) in order to address the design of stormwater conveyance systems and related best management practices (BMPs). In addition, the IO&M and ESCPP adopt the most current versions of the VDOT Drainage Manual, the Virginia Erosion and Sediment Control Handbook, Virginia Stormwater BMP Clearinghouse Website (www.vwrrc.vt.edu/swc), and the Virginia Stormwater Management Handbook as the City's routine reference sources.

Section 38-413 (Long-term maintenance of permanent stormwater facilities) of the City Code requires submission of a construction record drawing of permanent stormwater management facilities as well as the recording of an instrument for long-term responsibility. The City will provide verification that the stormwater management facilities are maintained as designed through inspection and enforcement as required to maintain a compliant VSMP.

Additional Legal Authority Modifications or New Legal Authorities Necessary

The City does not anticipate requiring additional or new legal authorities in order to comply with the compliance expectations for controlling POC loads from New Sources.

IV. Control of POC Loads from Existing Sources

Compliance Expectations

The City is required to estimate the POC loads discharged through its MS4 using Table 2 c in the MS4 General Permit and calculate the required annual load reductions to these POC loads using Table 3 c in the MS4 General Permit. The City must implement sufficient Means and Methods to reduce the POC annual loads from Existing Sources based on these City calculations.

Compliance Assessment

The City intends to meet the POC annual load reduction requirements for Existing Sources by implementing a combination of the following Means and Methods:

- Street Sweeping
- Redevelopment on prior developed lands
 - Initiating construction between July 1, 2009 and June 30, 2014
 - Initiating construction July 1, 2014 and later

Street Sweeping

The City will conduct street sweeping on public streets and roadways. The City has legal authority to conduct street sweeping on the streets and roads located within the City limits.

Redevelopment of Prior Developed Lands

The City will credit POC reductions from Existing Source loads associated with redevelopment of prior developed lands. The City will credit reductions to Existing Source loads from both those projects initiating construction between July 1, 2009 and June 30, 2014 and those initiating construction after July 1, 2014.

As part of the City's stormwater management program between July 1, 2009 and June 30, 2014, the City required through Chapter 38, that water quality designs for prior developed lands be implemented so that "the nonpoint source pollutant load shall not exceed the greater of (a) the pollutant load, based on existing conditions, minus 10 percent; or (b) the pollutant load based on an ALCC of 16 percent IP."

As of July 1, 2014, Chapter 38 requires water quality designs for prior developed lands to meet the minimum VSMP requirements for redevelopment, which require that as part of redevelopment, water quality designs include a reduction of the phosphorus annual load by 20% for projects disturbing one acre or more and 10% for projects disturbing less than one acre with an exception for single family residences that are not part of a common plan of development or sale.

Chapter 38 also includes the legal authority for the City to ensure verification of long term maintenance of these facilities by requiring a dedicated easement in order that the City can provide maintenance or a maintenance agreement insuring that private maintenance is completed.

Additional Legal Authority Modifications or New Legal Authorities Necessary

The City does not require any additional or new legal authorities in order to comply with the compliance expectations for controlling POC loads from Existing Sources.

Chapter 3: Means and Methods to Address Discharges from New Sources

The City will utilize its DEQ-approved VSMP Program as the Means and Methods to address discharges from New Sources. The VSMP Program includes individual Means and Methods to design, construct, inspect and maintain stormwater management facilities. Individual descriptions of these Means and Methods can be found in the City's MS4 Annual Report for Year One (July 2013-June 2014) and include:

- BMP 4.5-Site Plan Review—"This is being conducted as required for the State regulated program requirements and on-going."
- BMP 4.6-VSMP—"As a State (DEQ) Department approved VSMP Authority, effective July 1, 2014, the program is in compliance with the State Law and Regulation requirements and on-going."
- BMP 5.1-BMP Inspection--"Reference is made to the City's Stormwater Best Management Practices and Operation and Maintenance Plan (IO&M Plan) and ongoing for both private and public facilities."

As a result of the implementation of these Means and Methods:

- Stormwater management facilities for New Sources that obtain plan approval after July 1, 2014 will be designed and implemented to meet the new water quality design criteria found at 9VAC25-870-63.
- Stormwater management facilities for New Sources on prior development lands that obtain plan approval after July 1, 2014 will be designed and implemented to reduce existing pollutant loads by 20% for land disturbing activities greater than one acre and 10% for regulated land disturbing activities less than one acre. Reductions to pollutant annual loads will be applied towards meeting the required Existing Source load reductions.
- As the City has identified zero (0) grandfathered projects, it has not selected Means and Methods to address increases in POC loads from grandfathered projects.
- New Sources initiating construction between July 1, 2009 and June 30, 2014 were required to meet the water quality design criteria equivalent to an ALCC of 16% IP.
- The City will verify the long-term maintenance and upkeep of stormwater management facilities.

By continuing to implement both a VESCP and a VSMP in a manner consistent and compliant with the applicable statutes and regulations and as described in the City's MS4 Program Plan, the City will demonstrate adequate progress during this permit term towards achieving TMDL wasteload allocations consistent with the assumptions and requirements of the Chesapeake Bay TMDL and implementation to the maximum extent practicable for addressing loads from New Sources.

Chapter 4: Estimated Existing Source Loads and Calculated Total POC Required Reductions

Stormwater runoff discharging through MS4 outfalls discharges into the Rappahannock Tidal Fresh (RPPTF) Chesapeake Bay Water Quality Segment-Shed. The City's Existing Source loads based on these regulated acres are found in Table 2. The required POC requirements for this TMDL Action Plan are found in Table 3. As of July 1, 2009, the City provided MS4 service to approximately 3,149 acres (1,789 impervious urban; 1,360 pervious urban) of land. This includes the total acreage included in both the 2000 and 2010 Urbanized Areas and other MS4s physically interconnected with the City stormwater infrastructure. Acreages were calculated using land uses and associated acreages identified in the document titled, "Estimating Impervious Surface Area: A Comparative Assessment of CITYgreen and NOAA's Impervious Surface Analysis Tool (ISAT) Methodologies (Final Draft)." The land uses identified in the referenced document were City-wide; thus, accounting for all Existing Source regulated acreage located within the City (i.e., 2000 and 2010 Urbanized Areas). The acreage attributed to the City's MS4 does not include the contributing acreage of the two other MS4s operating within the Fredericksburg jurisdictional boundaries or the lands owned by the U.S. federal government.

The Virginia Department of Transportation (VDOT) has regulatory control over 254.3 acres of land within the City. The City estimates that 80% of the VDOT MS4 acreage is impervious, which equates to 203.4 acres of impervious urban land use and 50.9 acres of pervious urban land use. The University of Mary Washington (UMW) operates an MS4 that serves 242.3 acres located within the heart of the City. The City estimates that 45% of the UMW MS4 acreage is impervious, which equates to 109.0 acres of impervious urban land use and 133.2 acres of pervious urban land use. In addition to the two regulated MS4s, the National Park Service (NPS) owns 122.5 acres of parkland including the Fredericksburg National Cemetery. The City estimates that 9% of the NPS acreage is impervious, which equates to 11.0 acres of impervious urban land use and 111.5 acres of pervious urban land use. As the City continues to refine its drainage infrastructure with other regulated MS4s, such as VDOT, the City reserves the right to redefine the actual acreage for which it is responsible for pollutant reductions.

Table 2: City of Fredericksburg MS4 Existing Source Loads for the Rappahannock River Basin

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs./acre)	Estimated Total POC Load Based on 2009 Progress Run by land use	Estimated Total POC Load, lbs.
Regulated Urban Impervious	Nitrogen	1,789	9.38	16,777	24,037
Regulated Urban Pervious		1,360	5.34	7,260	
Regulated Urban Impervious	Phosphorus	1,789	1.41	2,522	3,039
Regulated Urban Pervious		1,360	0.38	517	
Regulated Urban Impervious	Total Suspended Solids	1,789	423.97	758,313	834,459
Regulated Urban Pervious		1,360	56.01	76,146	

Chapter 4: Estimated Existing Source Loads and Calculated Total POC Required Reductions

Table 3: City of Fredericksburg MS4 Estimated Rappahannock River Pollutant Reductions Required During First Permit Cycle

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	First Permit Cycle Required Reduction in Loading Rate (lbs./acre)	Total Reduction Required First Permit Cycle (lbs.) by land use	Total Reduction Required First Permit Cycle (lbs.)
Regulated Urban Impervious	Nitrogen	1,789	0.04	71.6	98.8
Regulated Urban Pervious		1,360	0.02	27.2	
Regulated Urban Impervious	Phosphorus	1,789	0.01	17.9	20.6
Regulated Urban Pervious		1,360	0.002	2.7	
Regulated Urban Impervious	Total Suspended Solids	1,789	4.24	7,585.4	7,925.4
Regulated Urban Pervious		1,360	0.25	340.0	

Chapter 5: Means and Methods to Meet the Required Reductions and Schedule

The City has identified the following Means and Methods for implementation during the current permit cycle to meet the required POC of 98.8 lbs. of nitrogen, 20.6 lbs. of phosphorus, and 7,925.4 lbs. of sediment from the annual Existing Sources stormwater discharges:

- Redevelopment on prior-developed lands
 - Initiating construction between July 1, 2009 and June 30, 2014
 - Initiating construction July 1, 2014 and later
- Street Sweeping

I. Redevelopment on prior developed lands

The City will credit POC reductions from Existing Sources resulting from redevelopment on prior developed lands towards meeting the reduction requirements. As the City cannot guarantee the schedule or quantify the pollutant reductions gained by redevelopment on prior developed lands, the City will not utilize this Mean and Method of POC reduction for compliance planning in this plan. However, the City will apply credit towards meeting the associated POC reductions from Existing Sources towards as follows:

Reductions from Redevelopment of Existing Sources Initiating Construction between July 1, 2009 and June 30, 2014

The City will coordinate review and identification of reductions from redevelopment of these Existing Sources in conjunction with its on-going 2015 Historical BMP Data Cleanup. Review results and associated creditable reductions will be submitted as part of the FY2016 (PY03) MS4 Annual Report with the associated reductions credited towards meeting the required annual Existing Source reduction requirements.

Reductions from Redevelopment of Existing Sources Initiating Construction July 1, 2014 and later

The City will track and quantify POC reductions resulting from redevelopment of Existing Sources initiating construction after July 1, 2014. Reductions resulting from redevelopment of Existing Sources that initiate construction between July 1, 2014 and June 30, 2015 will be reported in conjunction with the POC reductions for redevelopment occurring between July 1, 2009 and June 30, 2014: Reductions resulting from redevelopment of Existing Sources that initiate construction after July 1, 2015 will be reported annually with the MS4 Annual Report.

II. Street Sweeping

The City of Fredericksburg has established an updated street sweeping schedule that consists of 13 separate routes totaling 119.62 lane miles of City streets as of February 24, 2015 (Appendix 2). The City staffs two full-time street sweeper operators and has a fleet of three street sweepers (two regenerative air sweepers with water tanks and dust control and one mechanical broom with a water tank and dust control). Two street sweepers are regularly in operation with the third used as a spare, when necessary.

The City will meet the required pollutant reductions for Existing Sources identified in Table 4 primarily through the use of a street sweeping program. Using the Mass Loading Approach described in Appendix V.G of DEQ Guidance

Chapter 5: Means and Methods to Meet the Required Reductions and Schedule

Memo No. 15-2005, the City has determined that its Street Sweeping program will be required to collect a minimum of 56,457.1 lbs. (28.2 tons) of street sweeping debris annually in order to account for the required reduction in POCs from Existing Sources (Table 4).

Table 4: Required Amount of Annual Street Sweepings Required to Meet the Required Existing Source Reductions

Targets		Conversion Factors			Total Collections Required	
Pollutant	5% Reduction Target	Lbs. per Dry Weight	Particle Size Distribution	Dry Weight	Street Sweepings, lbs.	Street Sweepings, tons
Nitrogen	98.8	0.0025	1.00	0.70	56,457.1	28.2
Phosphorus	20.6	0.0010	1.00	0.70	29,428.6	14.7
TSS	7,925.4	1.00	0.30	0.70	37,740.0	18.9

III. Proposed Schedule and Milestones

The City proposes the following (Table 5) and associated milestones to ensure that the required annual reductions in pollutant loads from Existing Sources are met:

- The City will conduct sufficient street sweeping to collect a minimum of 56,457.1 lbs. (28.2 tons) of debris from City streets and roads annually.
- The City will retain scale receipts documenting disposal of street sweepings in the selected landfill. These scale receipts will be available upon request.
- The City will report on the total weight of the street sweeping debris collected as part of its MS4 Annual Report and will certify that the required annual reductions in pollutant loads from Existing Sources have been met.
- The City will identify and report on the total number of reductions attributable to redevelopment on prior-developed lands initiating construction during the reporting period.

Table 5: City of Fredericksburg Implementation Schedule for Meeting Existing Source Load Reductions

Means and Methods	FY2014	FY2015	FY2016	FY2017	FY2018
Redevelopment on prior-developed lands	--	--	--	--	--
Complete review and quantify permanent POC reductions from Existing Sources initiating construction between July 1, 2009 and June 30, 2014	--	--	X	--	--
Complete review and quantify permanent POC reductions from Existing Sources initiating construction between July 1, 2014 and June 30, 2015	--	--	X	--	--
Complete review and quantify permanent POC reductions from Existing Sources initiating construction after July 1, 2015	--	--	--	X	X
Street sweeping	X	X	X	X	X

In addition to the City's street sweeping commitment, the City will continue to require and track permanent reductions in annual Existing Source loads resulting from the installation of stormwater management facilities on prior developed lands required as part of redevelopment in the City. As the City cannot predict when private

Chapter 5: Means and Methods to Meet the Required Reductions and Schedule

development may occur on these lands, the City cannot use associated reductions in development of a compliance schedule. However, as redevelopment on prior developed lands occurs, the City will apply the associated POC load reductions towards meeting its overall reductions to Existing Source loads.

The City also retains the ability to use adaptive management to further refine its strategy for meeting the POC reductions from Existing Sources, if it determines that the proposed schedule cannot be met. This adaptive management includes the potential water quality credits if warranted to ensure that the required reductions are met.

Chapter 6: Means and Methods to Offset Increased Loads from New Sources Initiating Construction between July 1, 2009 and June 30, 2014

Chapter 6: Means and Methods to Offset Increased Loads from New Sources Initiating Construction between July 1, 2009 and June 30, 2014

Between July 1, 2009 and June 30, 2014, the City conducted plans review and approval for projects associated with new development. This plan review required that stormwater management be designed to meet an ALCC of 16% IP. As such, the City had previously implemented the Means and Methods necessary to address these POC loads and is not required to offset any increase from New Sources initiating construction during the identified time period.

The City does not need to implement any additional Means and Methods as the City's proactive actions previously addressed the design requirements necessary to offset the increased loads from New Sources.

Chapter 7: Means and Methods to Offset Increased Loads from Grandfathered Projects that begin Construction after July 1, 2014

In order to be considered a grandfathered project, a land disturbing activity must not have obtained coverage under the Virginia General Permit for Stormwater from Construction Activities or begun land disturbance prior to July 1, 2014 while meeting the following criteria prior to July 1, 2012:

- The City must have approved [a proffered or conditional zoning plan, zoning with a plan of development, preliminary or final subdivision plat, preliminary or final site plan, or any document determined by the locality] to be equivalent.
- The approved document must have provided a layout as defined in 9VAC25-870-10.
- The approved document would demonstrate compliance with the Part II C technical criteria (9VAC25-870-96).

In order for a City project to be considered grandfathered, the City must have obligated full or partial funding for the project or approved a stormwater management plan prior to July 1, 2012; however, the project had not obtained coverage under the Virginia General Permit for Stormwater from Construction Activities or begun land disturbance prior to July 1, 2014. Finally, City projects, where funding was obligated from governmental bonding or public debt financing prior to July 1, 2012, is considered grandfathered.

The City has determined that zero (0) projects exists that meet the requirements necessary to be considered grandfathered.

Chapter 8: List of Future Projects, and Associated Acreage, that Qualify as Grandfathered

Chapter 8: List of Future Projects, and Associated Acreage, that Qualify as Grandfathered

Upon review, the City has determined that there are zero (0) grandfathered projects, totaling 0.00 acres, applicable under the VSMP grandfathering regulations.

Chapter 9: Estimate of the Expected Cost to Implement the Necessary Reductions

The City estimates that it will cost \$546,721.08 to meet the required reductions in Existing Sources as identified in this TMDL Action Plan.

This estimated cost is based on FY2015 expenses with a 3% increase for each of the remaining fiscal years covered under the current MS4 General Permit. Additional City expenses attributable to reductions in Existing Sources as a result of redevelopment on prior-developed lands are funded as part of the City's VSMP.

Chapter 10: Public Comments on the Draft TMDL Action Plan

The City placed a notice of the availability for the public to provide comment on its City of Fredericksburg Public Notice web page. The City notified the public that the City would receive public comments regarding its draft Chesapeake Bay TMDL Action Plan between August 11 and August 25, 2015 and provided a link to the MS4 Program web page, where the draft was placed. The City did not receive any comments during the two-week public comment period. As a result, the City made no changes to the draft and the draft Chesapeake Bay TMDL Action Plan is considered final.

Interested parties will be given an opportunity to provide comments regarding the Final Chesapeake Bay TMDL Action Plan directly to the Fredericksburg City Council during its September 22, 2015 meeting. However, these comments will be directed to City Council and not part of the original two-week public comment period; thus, any comments received will not be considered unless directed by City Council.

Chapter 11: Annual Reporting Requirements and Future Steps

The City will include each of the following with its MS4 Annual Report associated with the current MS4 General Permit Cycle:

- A summary on the development and implementation of NMPs and its compliance with the MS4 General Permit milestones
- A summary on the implementation of the VESCP and its compliance with the MS4 General Permit
- A summary of the implementation of the VSMP and its compliance with the MS4 General Permit including an electronic list of:
 - Stormwater management facilities implemented during the reporting period as part of new development for New Sources that includes the information required in Section II B 5 e of the MS4 General Permit
 - Stormwater management facilities implemented as part of development on previously developed land during the reporting period for Existing Sources that includes the information required in Section II B 5 e of the MS4 General Permit
- A summary report on the implementation of the schedule and milestones for meeting the required Existing Source annual load reductions including:
 - The total weight of street sweepings collected annually
 - Certification that a minimum of 56,457.1 lbs. (28.2 tons) of street sweepings have been collected
 - The applicable Existing Source reductions attributable to redevelopment on prior developed lands
- A summary of the expected POC Means and Methods that will be implemented during the next permit year and their expected progress towards meeting the required annual POC reductions.

Implementation of this TMDL Action Plan will result in sufficient implementation of Means and Methods to meet the compliance targets identified in the Special Condition. However, if the City is required to rely on the purchase of credits, either for permanent or temporary compliance, it will include documentation of such purchase as part of its reapplication for MS4 General Permit coverage due to DEQ in March 2018.

Also submitted with the City's reapplication package will be the second phase of the TMDL Action Plan. The second phase of the TMDL Action Plan will include¹:

- A list of Means and Methods, including an implementation schedule for the FY2019-FY2024 MS4 General Permit cycle, that will result in the reduction of annual POC loads from Existing Sources of:
 - 691 lbs. of nitrogen
 - 144 lbs. of phosphorus
 - 55,477 lbs. of sediment

¹ Contents of the next phase of the City of Fredericksburg Chesapeake Bay TMDL Action Plan are based on the current MS4 General Permit. Future modifications to the TMDL and MS4 General Permit Reapplication requirements may modify the current expectations included in this TMDL Action Plan.

Appendix 1
VA General Permit for Discharges of Stormwater from Small MS4s Special
Condition for the Chesapeake Bay

VA General Permit for Discharges of Stormwater from Small MS4s Special Condition for the Chesapeake Bay

C. Special condition for the Chesapeake Bay TMDL. The Commonwealth in its Phase I and Phase II Chesapeake Bay TMDL Watershed Implementation Plans (WIP) committed to a phased approach for MS4s, affording MS4 operators up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I and II WIPs to meet the Level 2 (L2) scoping run for existing developed lands as it represents an implementation of 5.0% of L2 as specified in the 2010 Phase I WIP. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

1. Definitions. The following definitions apply to this state permit for the purpose of the special condition for discharges in the Chesapeake Bay Watershed:

"Existing sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.

"New sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.

"Pollutants of concern" or "POC" means total nitrogen, total phosphorus, and total suspended solids.

"Transitional sources" means regulated land disturbing activities that are temporary in nature and discharge through the MS4.

2. Chesapeake Bay TMDL planning.

a. In accordance with Table 1, the operator shall develop and submit to the department for its review and acceptance an approvable Chesapeake Bay TMDL Action Plan. Unless specifically denied in writing by the department, this plan becomes effective and enforceable 90 days after the date received by the department. The plan shall include:

(1) A review of the current MS4 program implemented as a requirement of this state permit including a review of the existing legal authorities and the operator's ability to ensure compliance with this special condition;

(2) The identification of any new or modified legal authorities such as ordinances, state and other permits, orders, specific contract language, and interjurisdictional agreements implemented or needing to be implemented to meet the requirements of this special condition;

(3) The means and methods that will be utilized to address discharges into the MS4 from new sources;

(4) An estimate of the annual POC loads discharged from the existing sources as of June 30, 2009, based on the 2009 progress run. The operator shall utilize the applicable versions of Tables 2 a-d in this section based on the river basin to which the MS4 discharges by multiplying the total existing acres served by the MS4 on June 30, 2009, and the 2009 Edge of Stream (EOS) loading rate:

Table 2 a: Calculation Sheet for Estimating Existing Source Loads for the James River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs./acre)	Estimated Total POC Load Based on 2009 Progress Run
Regulated Urban Impervious	Nitrogen		9.39	
Regulated Urban Pervious			6.99	
Regulated Urban Impervious	Phosphorus		1.76	
Regulated Urban Pervious			0.5	
Regulated Urban Impervious	Total Suspended Solids		676.94	
Regulated Urban Pervious			101.08	

Table 2 b: Calculation Sheet for Estimating Existing Source Loads for the Potomac River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs./acre)	Estimated Total POC Load Based on 2009 Progress Run
Regulated Urban Impervious	Nitrogen		16.86	
Regulated Urban Pervious			10.07	
Regulated Urban Impervious	Phosphorus		1.62	
Regulated Urban Pervious			0.41	
Regulated Urban Impervious	Total Suspended Solids		1,171.32	
Regulated Urban Pervious			175.8	

Table 2 c: Calculation Sheet for Estimating Existing Source Loads for the Rappahannock River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs./acre)	Estimated Total POC Load Based on 2009 Progress Run
Regulated Urban Impervious	Nitrogen		9.38	
Regulated Urban Pervious			5.34	
Regulated Urban Impervious	Phosphorus		1.41	
Regulated Urban Pervious			0.38	
Regulated Urban Impervious	Total Suspended Solids		423.97	
Regulated Urban Pervious			56.01	

Table 2 d: Calculation Sheet for Estimating Existing Source Loads for the York River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	2009 EOS Loading Rate (lbs./acre)	Estimated Total POC Load Based on 2009 Progress Run
Regulated Urban Impervious	Nitrogen		7.31	
Regulated Urban Pervious			7.65	
Regulated Urban Impervious	Phosphorus		1.51	
Regulated Urban Pervious			0.51	
Regulated Urban Impervious	Total Suspended Solids		456.68	
Regulated Urban Pervious			72.78	

(5) A determination of the total pollutant load reductions necessary to reduce the annual POC loads from existing sources utilizing the applicable versions of Tables 3 a-d in this section based on the river basin to which the MS4 discharges. This shall be calculated by multiplying the total existing acres served by the MS4 by the first permit cycle required reduction in loading rate. For the purposes of this determination, the operator shall utilize those existing acres identified by the 2000 U.S. Census Bureau urbanized area and served by the MS4.

Table 3 a: Calculation Sheet for Determining Total POC Reductions Required During this Permit Cycle for the James River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	First Permit Cycle Required Reduction in Loading Rate (lbs./acre)	Total Reduction Required First Permit Cycle (lbs.)
Regulated Urban Impervious	Nitrogen		0.04	
Regulated Urban Pervious			0.02	
Regulated Urban Impervious	Phosphorus		0.01	
Regulated Urban Pervious			0.002	
Regulated Urban Impervious	Total Suspended Solids		6.67	
Regulated Urban Pervious			0.44	

Table 3 b: Calculation Sheet for Determining Total POC Reductions Required During this Permit Cycle for the Potomac River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	First Permit Cycle Required Reduction in Loading Rate (lbs./acre)	Total Reduction Required First Permit Cycle (lbs.)
Regulated Urban Impervious	Nitrogen		0.08	
Regulated Urban Pervious			0.03	
Regulated Urban Impervious	Phosphorus		0.01	
Regulated Urban Pervious			0.001	
Regulated Urban Impervious	Total Suspended Solids		11.71	
Regulated Urban Pervious			0.77	

Table 3 c: Calculation Sheet for Determining Total POC Reductions Required During this Permit Cycle for the Rappahannock River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	First Permit Cycle Required Reduction in Loading Rate (lbs./acre)	Total Reduction Required First Permit Cycle (lbs.)
Regulated Urban Impervious	Nitrogen		0.04	
Regulated Urban Pervious			0.02	
Regulated Urban Impervious	Phosphorus		0.01	
Regulated Urban Pervious			0.002	
Regulated Urban Impervious	Total Suspended Solids		4.24	
Regulated Urban Pervious			0.25	

Table 3 d: Calculation Sheet for Determining Total POC Reductions Required During this Permit Cycle for the York River Basin

***Based on Chesapeake Bay Program Watershed Model Phase 5.3.2**

Subsource	Pollutant	Total Existing Acres Served by MS4 (6/30/09)	First Permit Cycle Required Reduction in Loading Rate (lbs./acre)	Total Reduction Required First Permit Cycle (lbs.)
Regulated Urban Impervious	Nitrogen		0.03	
Regulated Urban Pervious			0.02	
Regulated Urban Impervious	Phosphorus		0.01	
Regulated Urban Pervious			0.002	
Regulated Urban Impervious	Total Suspended Solids		4.60	
Regulated Urban Pervious			0.32	

(6) The means and methods, such as management practices and retrofit programs that will be utilized to meet the required reductions included in subdivision 2 a (5) of this subsection, and a schedule to achieve those reductions. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions;

(7) The means and methods to offset the increased loads from new sources initiating construction between July 1, 2009, and June 30, 2014, that disturb one acre or greater as a result of the utilization of an average land cover condition greater than 16% impervious cover for the design of post-development stormwater management facilities. The operator shall utilize Table 4 to develop the equivalent pollutant load for nitrogen and total suspended solids. The operator shall offset 5.0% of the calculated increased load from these new sources during the permit cycle.

VA General Permit for Discharges of Stormwater from Small MS4s Special Condition for the Chesapeake Bay

(8) The means and methods to offset the increased loads from projects as grandfathered in accordance with 9VAC25-870-48, that disturb one acre or greater that begin construction after July 1, 2014, where the project utilizes an average land cover condition greater than 16% impervious cover in the design of post-development stormwater management facilities. The operator shall utilize Table 4 to develop the equivalent pollutant load for nitrogen and total suspended solids.

(9) The operator shall address any modification to the TMDL or watershed implementation plan that occurs during the term of this state permit as part of its permit reapplication and not during the term of this state permit.

Table 4: Ratio of Phosphorus Loading Rate to Nitrogen and Total Suspended Solids Loading Rates for Chesapeake Bay Basins

Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphorus Loading Rate (lbs./acre)	Nitrogen Loading Rate (lbs./acre)	Total Suspended Solids Loading Rate (lbs./acre)
James River Basin	1.0	5.2	420.9
Potomac River Basin	1.0	6.9	469.2
Rappahannock River Basin	1.0	6.7	320.9
York River Basin	1.0	9.5	531.6

(10) A list of future projects and associated acreage that qualify as grandfathered in accordance with 9VAC25-870-48;

(11) An estimate of the expected costs to implement the requirements of this special condition during the state permit cycle; and

(12) An opportunity for receipt and consideration of public comment regarding the draft Chesapeake Bay TMDL Action Plan.

b. As part of development of the Chesapeake Bay TMDL Action Plan, the operator may consider:

(1) Implementation of BMPs on unregulated lands provided any necessary baseline reduction is not included toward meeting the required reduction in this permit;

(2) Utilization of stream restoration projects, provided that the credit applied to the required POC load reduction is prorated based on the ratio of regulated urban acres to total drainage acres upstream of the restored area;

(3) Establishment of a memorandum of understanding (MOU) with other MS4 operators that discharge to the same or adjacent eight digit hydrologic unit within the same basin to implement BMPs collectively. The MOU shall include a mechanism for dividing the POC reductions created by BMP implementation between the cooperative MS4s;

(4) Utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting;

(5) A more stringent average land cover condition based on less than 16% impervious cover for new sources initiating construction between July 1, 2009, and June 30, 2014, and all grandfathered projects where allowed by law; and

(6) Any BMPs installed after June 30, 2009, as part of a retrofit program may be applied towards meeting the required load reductions provided any necessary baseline reductions are not included.

3. Chesapeake Bay TMDL Action Plan implementation. The operator shall implement the TMDL Action Plan according to the schedule therein. Compliance with this requirement represents adequate progress for this state permit term towards achieving TMDL wasteload allocations consistent with the assumptions and requirements of the TMDL. For

VA General Permit for Discharges of Stormwater from Small MS4s Special Condition for the Chesapeake Bay

the purposes of this permit, the implementation of the following represents implementation to the maximum extent practicable and demonstrates adequate progress:

- a. Implementation of nutrient management plans in accordance with the schedule identified in the minimum control measure in Section II related to pollution prevention/good housekeeping for municipal operations;
- b. Implementation of the minimum control measure in Section II related to construction site stormwater runoff control in accordance with this state permit shall address discharges from transitional sources;
- c. Implementation of the means and methods to address discharges from new sources in accordance with the minimum control measure in Section II related to post-construction stormwater management in new development and development of prior developed lands and in order to offset 5.0% of the total increase in POC loads between July 1, 2009, and June 30, 2014. Increases in the POC load from grandfathered projects initiating construction after July 1, 2014, must be offset prior to completion of the project; and
- d. Implementation of means and methods sufficient to meet the required reductions of POC loads from existing sources in accordance with the Chesapeake Bay TMDL Action Plan.

4. Annual reporting requirements.

- a. In accordance with Table 1, the operator shall submit the Chesapeake Bay Action Plan with the appropriate annual report.
- b. Each subsequent annual report shall include a list of control measures implemented during the reporting period and the cumulative progress toward meeting the compliance targets for nitrogen, phosphorus, and total suspended solids.
- c. Each subsequent annual report shall include a list of control measures, in an electronic format provided by the department, that were implemented during the reporting cycle and the estimated reduction achieved by the control. For stormwater management controls, the report shall include the information required in Section II B 5 e and shall include whether an existing stormwater management control was retrofitted, and if so, the existing stormwater management control type retrofit used.
- d. Each annual report shall include a list of control measures that are expected to be implemented during the next reporting period and the expected progress toward meeting the compliance targets for nitrogen, phosphorus, and total suspended solids.

5. The operator shall include the following as part of its reapplication package due in accordance with Section III M:

- a. Documentation that sufficient control measures have been implemented to meet the compliance target identified in this special condition. If temporary credits or offsets have been purchased in order to meet the compliance target, the list of temporary reductions utilized to meet the required reduction in this state permit and a schedule of implementation to ensure the permanent reduction must be provided; and
- b. A draft second phase Chesapeake Bay TMDL Action Plan designed to reduce the existing pollutant load as follows:
 - (1) The existing pollutant of concern loads by an additional seven times the required reductions in loading rates using the applicable Table 3 for sources included in the 2000 U.S. Census Bureau urbanized areas;
 - (2) The existing pollutant of concerns loads by an additional eight times the required reductions in loading rates using the applicable Table 3 for expanded sources identified in the U.S. Census Bureau 2010 urbanized areas;
 - (3) An additional 35% reduction in new sources developed between 2009 and 2014 and for which the land use cover condition was greater than 16%; and
 - (4) Accounts for any modifications to the applicable loading rate provided to the operator as a result of TMDL modification.

Appendix 2 - City of Fredericksburg Street Sweeping Routes (as of February 24, 2015)

Appendix 2 - City of Fredericksburg Street Sweeping Routes (as of February 24, 2015)



Attachment B:

Three High Water Quality Issues Program Data

- **Cigarette Butt Campaign**
- **Pet Waste Campaign**
- **River Clean Up Campaign**

Cigarette Butt Campaign

Program Overview:

This is the second year (Reporting period FY2014-FY2015) of implementation of this High Water Quality issue. This reporting period goal was to target a main gateway into City in order to reduce cigarette butt litter by 10%. This will include the 100-2800 blocks of the Princess Anne Street. There are estimated to be about 200 properties along this area with an undetermined amount of merchant traffic patronizing this area. The campaign plan is to target 100% of the businesses and property owners with this campaign program with the expected goal of reducing cigarette butt litter by 10%. The campaign consists of education in the form of flyers, posters, handouts and yard signs along this corridor to include a portion of the historic downtown district. The plan includes providing sidewalk ashtrays to businesses along this corridor and having them sign a pledge to keep sidewalks clean of cigarette butt litter. This plan is estimated to achieve the 20% education and outreach activities required in the permit.

The targeted area was store fronts and apartment complexes along the major entry into the City from the north: the entire length of Princess Anne Street (100 block to 2800 block), consisting of approximately 200 properties.

We partnered with the Main Street Program, University of Mary Washington, Friends of the Rappahannock, and American Canoe Association for this campaign.

Proposed messages, educational and outreach material:

- Cigarette Butt Litter Campaign brochure to describe the campaign
- 5 qt. buckets with holes drilled, a landscape fabric inserted at the bottom and filled with sand and a scoop
- Window clings - adhesive friendly for both inside and outside windows of businesses and vehicles
- Yard signs
- Pledges signed by business owners to have their employees use the sand buckets, as well as to encourage their customers to do so, too
- Calling cards that read "Did you know? Cigarette filters are actually 95% plastic fibers. They never biodegrade."
- Banner displayed on the fence at Maury Commons Park at William and Kenmore Streets

Note: See attachments.

Summary/Results:

Numbers of items distributed:

- Buckets with scoops 83 distributed
- Window clings 100 plus another 300 delivered to Fred Bus, to City Depts. with vehicles and to many businesses who offered the clings to their customers
- Yard signs 95 plus another 50 for UMW who held their campaign on campus during their first week of classes
- Pledges 60 signed pledges
- "Did You Know" cards 4,000 distributed to businesses, organizations and individuals

Note: See attachments.

Commission members and volunteers participated in the campaign. We also paid an intern for an accumulated 400 hours of service, who worked in all aspects of the campaign, including organizing our spreadsheet of all those who participated, utilized buckets, window clings, yard signs and pledges. Information collected indicated that close to 350 properties were targeted.

In addition one partner, American Canoe Association (ACA), received a grant specifically for reducing the cigarette butt litter at City Dock. This was an additional campaign area that was identified. For the initial data collection, 2,000 cigarette butts were collected and 100 cigarette butt cup receptacles were distributed to smokers at the dock who also signed pledges. In September, ACA installed 3 cigarette butt receptacles at City Dock.

Furthermore, another partner, Friends of the Rappahannock (FOR), held their annual Fall River Clean Up on Sat., Oct. 18, 2014. We had 8 volunteers to walk the historic district to pick up cigarette butts. The total butts collected were 3,500.

Note: Further documentation supportive of this program development is on file with the Clean and Green Commission meeting minutes and is available upon request.

Status Report:

Since the implementation of this campaign, we have seen an increased awareness of the issue of cigarette butts as litter. We are witnessing the use of the sand buckets, as well, an extreme decline in butt liter. The City Clean & Green Commission is working to change and strengthen the litter ordinance from a Class 4 to a Class 1 misdemeanor.

The City believes and has determined that based on the results collected, the selected target audiences, the messages delivered, and the mechanisms used to implement this MCM public education and outreach program for three high WQ issues, that these efforts has made a positive impact to the audiences. The messages delivered have reached the targeted audiences, and the mechanisms made a noticeable difference in the community. The City believes that the goals for this program have been met in accordance with permit requirements and conditions for appropriateness and effectiveness.

Next Reporting Period:

The next education and outreach activities for this high water quality issue will include continuing the cigarette butt litter campaign. This will include the following:

- Identify locations where public trash can receptacles are appropriate for installation of an attached ashtray
- Target the Downtown Tourist/Merchant area (portions of Caroline Street, Princess Anne Street, William Street, Sophia Street)
- Analysis of the area to re-locate trash cans for optimum use (e.g. near restaurants where smoking is not allowed)
- Continue the distribution of educational cards and window clings
- Refurbishing last year adoptees' sand pails
- Analysis of additional clean up of a city park
- Get additional participation of city government vehicles and Fred Bus to place signs on vehicle windows
- Continue to monitor City Dock
- Continue to assist previous participants with educational material
- Utilize high school students who need community service hours

The estimated percentage of the target audience to be reached is approximately 20% of the estimated 100 properties located in this area. This does not include the amount of population that patronizes these properties. Also, potential exposure includes not only the City of Fredericksburg's local population of 28,213 (based on last census data) but the additional 210,000 people that visit Fredericksburg (This information is taken from the Fredericksburg Visitors Center data for 2014).

Dogs are Litter Too

**Help Keep
Fredericksburg
Litter Free**



Butts
are
Litter
Too

PLEASE HAVE YOUR
FARRE READY





ACA | Canoe - Kayak - SUP - Raft - Rescue
503 Sophia Street, Ste.100| Fredericksburg, Virginia 22401
Phone: (540) 907-4460 | www.americancanoe.org

RE: 2014 Cigarette Litter Prevention Program

Dear Michael Ward,

July 25, 2014

The American Canoe Association (ACA) has received a grant from the Boat Owners Association of the United States (BoatUS) and Keep America Beautiful. The ACA is requesting the City of Fredericksburg to authorize the **Cigarette Litter Prevention Program** as described in this letter. This **Cigarette Litter Prevention Program** allows the ACA to purchase cigarette receptacles, cigarette signage for City Dock Park and educate residents in the Fredericksburg, Virginia area on cigarette litter. This program will help residents and recreation users dispose of cigarettes responsibly while keeping City Dock free of cigarette butts and keeping litter cigarette butts out of the Rappahannock River.

Over the past eight years this **Cigarette Litter Prevention Program** has consistently cut cigarette butt litter by half in the first 4-6 months after the implementation of the program. Survey results show as communities continue to monitor the program, cigarette reductions are sustained or even increase over time. This cumulative impact is measured through a sustainability survey, which documents continued reductions in cigarette butt and cigar tip litter over time following the initial implementation of this program. Data validates the long-term value of strategically placed ash receptacles, ongoing public education, including signage, and other strategies for reducing cigar tip and cigarette butt litter.

The **Cigarette Litter Prevention Program** has been proven to:

- Increase public awareness that cigarette butt and cigar tips on the ground are litter.
- Decreased the amount of cigarette litter with posted signage and other outreach material at visible points around parks.
- Mitigate cigarette butt litter by over half with well-placed ash receptacles.
- Have adult smokers properly dispose of cigarette butts and cigar tips with portable ashtrays and not in an environment affecting the health of park visitors, recreation users, wildlife, and water quality.

It will be the job of the ACA Stewardship Department with a core of volunteers to:

- Perform three sustainability survey scans
- Purchase and install durable and removal ash receptacles and securely fasten them after the first sustainability survey scan
- Submit a Public Service Announcement for print, radio, and television news about the **Cigarette Litter Prevention Program**
- Document the use of the durable ash receptacles at City Dock Park in Fredericksburg, Virginia

The ACA along with a core of volunteers will manage this project throughout its entirety. Once the **Cigarette Litter Prevention Program** is complete the City of Fredericksburg may choose to keep or have the ACA remove the ash receptacles. During this program period the ACA and volunteers will empty the ash receptacles on a bi-weekly basis.

Mapped Area of Sustainability Survey Scan

The map highlighted in figure 1 in yellow will be the area all three surveys take place. The preliminary sustainability survey scan will take place at City Dock Park within the month of July. The parking lot, dock area, and the green space will be part of this initial survey. The boat ramp, shore line, and street will not be part of the surveys.

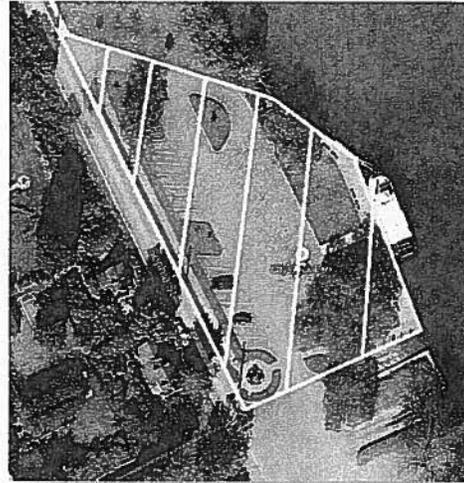


Figure 1

Mapped Area of Ash Receptacle Locations

The area marked in red in figure are where ash receptacles will be placed. These will be placed on the dock next to the water to keep recreation users and visitors of the park from putting cigarette butts on the ground or throwing them directly into the Rappahannock River. These ash receptacles will keep cigarette butts and cigar tips from entering the waterway which have a direct effect on wildlife and water quality.



Figure 2

Timeline of the Litter Prevention Program

Month / Year	Survey
July 2014	Initiate the preliminary sustainability survey scan at City Dock Park
August 2014	Add the removable ash receptacles
May 2015	Initiate the second sustainability survey scan at City Dock Park
July 2015	Initiate the third and final sustainability survey scan at City Dock Park
August 2015	Coordinate with the City of Fredericksburg to keep or remove the ash receptacles

Sustainability Survey Scan

This survey scan counts cigarette butt litter and cigar tips in a small section of the program area. The sustainability survey scan was developed by Keep America Beautiful as a method to quantify cigarette butt and cigar tip litter in a target area. Survey scans have been field tested in downtown areas, beaches, parks, and rest stop areas along roadways. The initial scan will provide a baseline of data and help to identify where individuals are smoking and may litter cigarette butts and cigar tips. Our area survey scan will include areas that are used most: parking lot; green picnic area; boat dock.

Step 1: Assemble the sustainability survey scan team

Step 2: Implement the sustainability survey scan in the area specified in the map on page two

Step 3: Document the data collected

Step 4: Submit the collected data to BoatUS and Keep America Beautiful

About BoatUS

Boat Owners Association of The United States (BoatUS) works to provide quality service, savings, and representation to the boating community since 1966. BoatUS has over half a million Members.

About Keep America Beautiful

Keep America Beautiful is the nation's leading nonprofit that brings people together to build and sustain vibrant communities. Their powerful network of community-based affiliates work with millions of volunteers who take action in their communities to transform public spaces into beautiful places.

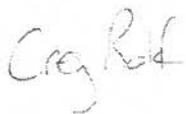
At the cornerstone of Keep America Beautiful, education and behavioral change are their top priority. Their service projects are based on the knowledge and needs of local communities. They provide the right tools and resources to guide people's understanding and actions to reduce waste, increase recycling, protect the natural areas of their communities and ensure beauty is the lasting signature.

About the ACA

Founded in 1880, the ACA is a 501 (c) (3) national nonprofit organization serving the broader paddling public by providing education related to all aspects of paddling, stewardship support to help protect paddling environments, and sanctioning of programs and events to promote healthy paddlesport competition and recreation. The ACA provides our members throughout all 50 states and 26 countries with the following: safe access to all paddling venues; paddling support for people of all levels and abilities; and the opportunity to influence stewardship issues and public policy that affect paddlers. The ACA works hard to create strategic alliances with organizations that represent the outdoor experience. Those partnerships help expand the awareness of paddlesports and communicate the healthy benefits of canoeing, kayaking, rafting, and stand up

paddle boarding as lifetime recreational activities. At the heart of the ACA are the people who paddle, cherish, and protect the rivers, lakes, streams, bays, and oceans of the United States and beyond.

Thank you,

A handwritten signature in cursive script that reads "Greg Rolf".

Greg Rolf
Stewardship Coordinator
ACA | Canoe-Kayak-SUP-Raft-Rescue



CLEAN & GREEN COMMISSION

YARD SIGN AGREEMENT

Thank you for participating and supporting the "BUTTS ARE LITTER TOO" campaign.

Please provide the information below.

Date _____

Name _____

Address _____

Phone _____

Email _____

Location of Yard Sign _____

Signature _____

Date of YARD SIGN RETURN _____

Your signature indicates that you agree to return the sign on this date to Public Works at City Hall

Thank you for helping to keep Fredericksburg CLEAN AND GREEN!



CLEAN & GREEN
COMMISSION

CIGARETTE BUTT LITTER CAMPAIGN PLEDGE

As an employee of the City of Fredericksburg,

I pledge to support our city by:

1. Disposing of my cigarette butt properly during working hours.
2. Disposing of my cigarette butt properly while driving and when shopping/eating out/at home.
3. Encouraging proper disposal of cigarette butts when in the company of other smokers.

Name (please print)

Signature

Date



CLEAN & GREEN
COMMISSION

CIGARETTE BUTT LITTER CAMPAIGN PLEDGE

As an employee of the City of Fredericksburg,

I pledge to support our city by:

1. Disposing of my cigarette butt properly during working hours.
2. Disposing of my cigarette butt properly while driving and when shopping/eating out/at home.
3. Encouraging proper disposal of cigarette butts when in the company of other smokers.

Name (please print)

Signature

Date

Date

9/8/2014

Bill To City of Fredericksburg
Clean & Green Commission
PO Box 267
Fredericksburg, VA 22404

Pay To Ian Duffy
1217 Brent St
Fredericksburg , VA 22401

Project N: 2014 Cigarette Butt Campaign

ITEM	DESCRIPTION	QTY	COST	TOTAL AMOUNT
	PULL SIGNS Date of work - 9-1-14 Times worked 1:30 PM - 3:30 PM report attached	2 HRS	\$15.00	\$30.00
TOTAL				\$30.00

Type	#	Street	Business name	Business type
X	2206	Airport Ave	Diesel Express	Auto Repair
X	2202	Airport Ave	Fredericksburg Machine & Steel LLC	Auto Repair
X	2111	Airport Ave	Time to Ride	Motorcycle Repair
X	109A	Amelia	Find it at Freds	Thrift Shop
X	311	Bridgewater	Tire Tread Service	Auto Service
X	196	Cambridge	Autos Direct	Auto Dealer
X	100	Caroline	Hughes Home	Nursing Home
X	531	Caroline	Vanity Salon	Salon
X	711	Caroline	Richard Johnson Inn	Hotel
X	712	Caroline	PONSHOP Studio	Art Gallery
X	803	Caroline	Rocking the Horse	Art Gallery
X	1011	Caroline	When Pigs Fly	Art Gallery
X	1017	Caroline	Re-Run Shoppe	Consignment Shop
X	1025	Caroline	Techs in the Burg	Computer
X	1107	Caroline	Carter Hair Design	Salon
X	1115	Caroline	Eileen's Bakery & Café	Bakery
X	1300	Caroline	St. James House	Museum
X	1303	Caroline	Schooler House	Bed & Breakfast
X	1304	Caroline	Rising Sun Tavern	Museum
X	1414	Caroline	Creative Color	Printers
X	1500	Caroline	Bea Paolucci	
X	1501	Caroline	Barbara & John Suval	Residence
X	2410	Caroline	Old Mill Park	Park
X	241	Charles	Headliners	Barber Shop
X	1823	Charles	William O. Wills O.D.	Optometrist
X	108	Charlotte	Mary White Law	Law Office
X	1300	College Ave	Kitty and Ben Waffle	Residence
X	4333	Davenport	PMC	Mailing Company
X	3219	Fall Hill Ave	Friends of the Rappahannock	
X	1	Greenbrier	Colonial Village	Rental Office
X	308	Hanover	Fredericksburg United Methodist	Church
X	314	Jeff Davis Hwy	Hard Times Café	Restaurant
X	322	Jeff Davis Hwy	Sunshine Cleaners	Cleaners
X	324	Jeff Davis Hwy	Diva Hair & Wigs (Beauty Supply)	Beauty Supply
X	326	Jeff Davis Hwy	Sam's Pizza and Subs	Restaurant
X	502	Kenmore	M-J Printers, Inc	Printers
X	504	Kenmore	Patton's Automotive	Auto Specialist
X	510	Kenmore	Downtown Cleaners	Cleaners
X	632	Kenmore	Kenmore Club	
X	725	Kenmore	Union First Market Bank	Bank
X		Lafayette	Lafayette Triangle Park	Park
X	200	Lafayette	Train Station green area	Park
X	301	Lafayette	Dixie's Hair Studio	Hair Salon
X	406	Lafayette	Colonial Tavern	Tavern
X	411	Lafayette	Pulliam's Auto Center	Auto Parts Store
X	600	Lafayette	ILM Corporation	Document conversion
X	812	Lafayette	Mr. White's Sign	
X	816	Lafayette	Mr. White's Sign	
R	227	Princess Anne		Residence

1:30 - 3:30

249,076.0 -
249,105.7

Ian Duffy
9/1/14

X	232	Princess Anne		Residence
X	400	Princess Anne	25 30 Espresso Inc	Espresso Bar
X	401	Princess Anne	Janney Marshall Co.	
X	530	Princess Anne	Cullen Inc.	
X	710	Princess Anne	Woodbridge & Coleman	Law Office
X	900	Princess Anne	PNC	Bank
X	1009	Princess Anne	HOOKED	Boutique
X	1019	Princess Anne	Baptist Church	Church
X	1204	Princess Anne	Suburban City Salon	Salon
X	1210	Princess Anne	Reid Engineering	Office
X	1414	Princess Anne	Cameron Fickny	Residence
X	1503	Princess Anne	The Equipment Connection	
X	1517	Princess Anne	Billingsley Printing	Printers
X	1601	Princess Anne	MacDoc Property Management	
X	1821	Princess Anne	Rodriguez Auto LLC	Auto Sales
X	1900	Princess Anne	Star Ink	Tattoo Parlor
X	1904	Princess Anne	Relax Inn	Motel
X	1914	Princess Anne	Colonial Motel	Motel
X	1919	Princess Anne	Jack Brown's Tattoo Revival LLC	Artist
X	2000	Princess Anne	Tire Zone Inc	Tire Specialist
X	2010	Princess Anne	Princess Anne (Slaic*)	Gas Station
X	2206	Princess Anne	Keystone Coffee	
X	2504	Princess Anne	Autos Direct Downtown	Auto Sales
X	1104	Prince Edward	Patty Hoffman Residence	Residence
X		Prince Edward	Hurkamp Park	Park
X		Sophia	Riverfront Park	Park
X		Sophia	City Dock	Park
X	301	Sophia	Bill and Susan Beck	Residence
X	609	Sophia	England Construction	Construction
X	800	Sophia	Lisa G Salon	Salon
X	1017	Sophia	Happy Clam	Restaurant
X	1104	Sophia	Sophia Street Studios	Art Studio
X	1106	Sophia	Trista Chapman Residence	Residence
X	3007	Village Lane	Rebecca Jones Residence	Residence
X	300	William	Pappagallo Fine Gifts & Imports	Toy Store
X	301	William	Hyperion Espresso	Coffee Shop
X	309	William	Bistro Bethem	Restaurant
X	314	William	Vivify	Restaurant
X	324	William	Castiglia's	Restaurant
X	401	William	Olde Towne Butcher	Butcher Shop
X	402	William	Kybecca	Restaurant
X	411	William	Deutschland Downtown	Restaurant
X	422	William	Ristorante Renato's	Restaurant
X	501	William	Paymon Rugs	Rug Dealer
X	510	William	Rescue Squad	Rescue Squad
X	600	William	Primavera Pizzeria & Grill	Restaurant
X	811	William	Food Mart	Gas Station
X	510	Wolfe	Mii Gii's Thrift Shop	Thrift Shop
X	621	Wolfe	Residence	Residence
X	1900	Stafford Ave	St. Mary's Catholic Church	Church
X	316	Forbes	Huckleberry's	Thrift Shop

Name: Ashley Balderson

Time Sheet

Month: August

Date	Start Time	End Time	Hours	Activities
8/11/14	8:30 am	8:30pm	12	Revised editorial Meeting at Arma Worked on revising spreadsheet
8/4/14	8:00 am	12:30pm	7	wrote up script
8/4/14	4:00 pm	6:30 pm		Revised Editorial
8/5/14	8:00 am	5:00 pm	9	Finished & Sent Script. Finished editorial worked on revising spreadsheet meeting
8/6/14	8:30 am	5:00 pm	8.5	Added banners to make list of and pledge signers to make into map
8/7/14	9:00am	12:30 pm		Organized all pledgea. Emailed Arma + Paula about editorial.
8/7/14	1:00 pm	4:00pm	6.5	Worked on business spreadsheet. Implemented editorial map idea.
8/8/14	8:00 am	5:00 pm	9	Worked on business spreadsheet. Added apartment complexes and residences
8/12/14	7:30 am	7:30 pm	12	Added business. Organized pledges w/Arma intent to city hall. picked up supplies.
8/13/14	8:30	1p:00pm	9.5	confirmed sand. worked around downtown and business to Arma pledge.
8/14/14	8:00am	8:00pm	12	took pictures of around bucket & Added business walked around downtown got banners to Arma. passed out into cars at night. Put together yard signs. Took sign to church worked on spreadsheet cost and for buckets. Organized new spread- ger delivering buckets + yard signs.
8/15/14	8:00 am	10:00 pm	10	Made delivery spreadsheet. Filled sand buckets delivered yard signs. Put together pledge packets
8/18/14	7:30 am	10:00 pm	10.5	Finished and printed delivery spreadsheet. Started delivering buckets and yard signs.
8/19/14	6:30 am	5:00 pm	10.5	Contacted previous sign locations. Delivered buckets, sign + stickers
8/20/14	7:30 am	5:30 pm	10	Went down to city dock to hand out ashtray cups. Worked on sign spreadsheet continued work on spreadsheets. Went back to dock to hand out ashtrays.
8/21/14	7:00 am	6:30 pm	11.5	Organized last years handover 1st. Congrats people. Started draft spreadsheet. Filled last of the buckets. Delivered bucket signs et.
8/22/14	8:00 am	7:00 pm	11	Entered & organized all spreadsheet info. Started draft proposal. Worked on draft
8/23/14	7:00 am	5:00 pm	10	Continued work on spreadsheets. Went back to dock to hand out ashtrays.
8/24/14	7:00 am	5:30 pm	10.5	Organized last years handover 1st. Congrats people. Started draft spreadsheet. Filled last of the buckets. Delivered bucket signs et.
8/25/14	7:00 am	7:00 pm	12	Entered & organized all spreadsheet info. Started draft proposal. Worked on draft
8/26/14	7:00 am	6:00 pm	11	Continued work on spreadsheets. Went back to dock to hand out ashtrays.
8/27/14	8:00 am	7:00 pm	11	Organized last years handover 1st. Congrats people. Started draft spreadsheet. Filled last of the buckets. Delivered bucket signs et.
8/28/14	8:30 am	6:00 pm	9.5	Finished spreadsheet. Finished & organized final delivery application. Finished spreadsheet

Name: Ashley Balderson

Time Sheet

Month: July

Date	Start Time	End Time	Hours	Activities
6/30/14	9:00 am	5:00 pm	8	Surveyed area. Made plan + worksheets. Made bucket template. Walked area + talked to business.
7/1/14	8:30 am	5:00 pm	8.5	Worked on spreadsheet design. Designed information card. finished contract, media, presence. journaling
7/2/14	8:30 am	6 pm	10.5	Made new template. traced + cut 55 circles. made list of churches + addresses + list of businesses. put 3 stickers on each bucket. Drilled 7 holes in each bucket. Made sample bucket + put photos in bucket.
7/3/14	8:30 am	4:30 pm	8	Fixed cards. made flyer. worked on list of churches.
7/7/14	8:30 am	5:00 pm	8.5	Worked on list of churches and addresses. Added to business list.
7/8/14	9:00 am	6:30 pm	9.5	Worked on creating addresses, emails and contact info. made list into spreadsheet.
7/9/14	9:00 am	5:00 pm	8	Organized business spreadsheet to make bucket. Added more business.
7/10/14	9:00 am	12:00	3	Met with Anne discussed future of project. got more assignments.
7/10/14	2:00 pm	8:00 pm	6	Made calendar of bill hours. Plan for completion. Added url to card, formatted made new flyer, agenda.
7/11/14	9:00 am	9:30 am	0.5	Added business addresses + phone #s. Meeting with Anne + Paula.
7/14/14	8:00 am	8:30 pm	12.5	Brought Sandi. Met w/ Paula + Grey. Went to City Dock. Visited businesses + got pledges signed.
7/15/14	8:00 am	5:00 pm	9	Emailed Grey. Added Businesses. Signed Re mapped new area of downtown + added.
7/16/14	8:00 am	11:30 am	3.5	Added businesses added reared + phone #s.
7/17/14	11:00 am	5:00 pm	6	Added businesses added reared + phone #s.
7/18/14	8:00 am	3:00 pm	8	Added businesses added reared + phone #s.
7/21/14	7:30 am	5:00 pm	8.5	Looked up updated facts about but 11 then finished first draft.
7/22/14	8:30 am	10:00 am	3	Rewrote article.
7/23/14	9:30 am	12:00 pm	9	Wrote a couple drafts of historical area added to list of businesses.
7/24/14	11:00 am	4:00 pm	5	Made new residential area spreadsheet.
7/25/14	9:00 am	5:30 pm	8.5	Added to residential spreadsheet. Added to Editor's draft.
7/28/14	8:30 am	5:00 pm	8.5	met w/ Paula + Grey. collected + counted bills at dock. Met Nancy + Grey. Meeting.
7/29/14	9:00 am	5:00 pm	8	Reformatted info card. called back Sandi + asked for cards + flyers + walked around to businesses.
7/30/14	8:30 am	5:30 pm	9	cut out information cards. Went around to businesses and names made...

Type	#	Street	Business name	Business type	Phone number	Owner	Bucket	Sticker	Yardsign	Flyer	Pledge	Notes
	311	Bridgewater	Tire Tread Service	Auto Service	(540) 371-7703	Gerald Bar	1	1				
	602	Caroline	Picket Post	Antique Store	(540) 373-7847							
	606	Caroline	Gemstone Creations	Jewelry Store	(540) 373-6960	Jennifer Jensen						
	611	Caroline	Colonial Cupcakes	Bakery	(540) 373-6960							
	705	Caroline	705 Joint Venture	Business Manage	(540) 656-2093							
	706	Caroline	Old Town Fredericksburg		(540) 373-1776							
	712	Caroline	PONSHOP Studio	Art Gallery	(540) 656-2215	Scarlett an	1			Y		
	716	Caroline	Party Elegance LLC	Party Equipment	(540)889-7770							
	718	Caroline	Valor Art & Frame Ltd.	Picture Frame Sh	(540) 372-3376							
	719	Caroline	Olde Towne Tobacconist	Cigar Shop	(540) 371-3715							
	719	Caroline	Fredericksburg Jeweler	Jewelry Store	(540) 656-2332							
	723	Caroline	Griffin Bookshop & Coffee B:	Coffee Shop	(540) 899-8041							
	725	Caroline	Irish Eyes	Gift Shop	(540) 373-0703							
	804	Caroline	A Place in Time Inc	Gift Shop	(540) 374-5075							
	805	Caroline	Riverby Books	Book Store	(540) 373-6148							
	808	Caroline	Sorry Mom Tattoo	Body Piercing Shk	(540) 373-2443							
	810	Caroline	Aspetto Clothiers	Clothing Store	(540) 547-8487							
	810	Caroline	Jabberwocky Children's Book Toy Store	Toy Store	(540) 371-5684							
	810	Caroline	Simpatica	Women's Clothin	(540)899-0977							
	819	Caroline	The Cat's Closet	Clothing Store	(540) 371-0404							
	820	Caroline	Comfort One Shoes	Shoe Store	(540) 899-6040							
	826	Caroline	The Virginia Wine Experience	Wine Store	(540) 373-8878							
	827	Caroline	Monkee's of Fredericksburg	Clothing Store	(540)368-2111	Jane and Catherine						
	902	Caroline	Picker's Supply Inc.	Musical Instrume	(540) 371-4669							
	903	Caroline	Ulman's Jewelry	Jewelry Store	(540) 373-9243							
	907	Caroline	Ava Laurene Bride	Bridal Shop	(800) 517-5524							
	907	Caroline	Tea and Sandwich and Gifts	Gift Shop	(540) 368-0675							
	914-9	Caroline	Caroline Square	Gift Shop	(540) 371-4454	Debbie Padgett						
	918	Caroline	Way Back When	Antique Store	(540) 370-1942							
	920	Caroline	Made in Virginia Store	Gift Shop	(540) 371-2030							
	922	Caroline	Upstairs Downstairs Antique:	Antique Store	(540) 373-0370							

Type

#	Street	Business name	Business type	Phone number	Owner	Bucket	Sticker	Yardsign	Flyer	Pledge	Notes
1013	Princess Anne										
1019	Princess Anne	Fredericksburg Baptist Church									
1103	Princess Anne	RCG Associates	Accountant	(540) 371-7735				1			
1104	Princess Anne										
1105	Princess Anne										
1106	Princess Anne										
1107	Princess Anne										
1108	Princess Anne										
1111	Princess Anne										
1200	Princess Anne										
1201	Princess Anne										
1204	Princess Anne										
1210	Princess Anne										
1300	Princess Anne										
1301	Princess Anne										
1305	Princess Anne										
1307	Princess Anne										
1309	Princess Anne										
1311	Princess Anne										
1314	Princess Anne										
1315	Princess Anne										
1317	Princess Anne										
1319	Princess Anne	International Auto Specialist	Auto Specialist	(540) 899-2210							
1400	Princess Anne										
1401	Princess Anne										
1406	Princess Anne										
1408	Princess Anne										
1412	Princess Anne										
1414	Princess Anne	Cameron Fickny	Residence								
1418	Princess Anne										
1422	Princess Anne										

R

1

Y

Type	#	Street	Business name	Business type	Phone number	Owner	Bucket	Sticker	Yardsign	Flyer	Pledge	Notes
	2701	Princess Anne										
	2800	Princess Anne										
R	301	Sophia	Bill and Susan Beck	Residence	(540) 373-2253				1			
	811	Sophia	Pantry Shelf Natural Foods	Grocery Store	(540) 368-8040							
	818	Sophia	Woodcock & Associates	Tax Preparation S	(540) 373-7625	Sharon Kidd						
	915	Sophia	Rocking the Chair	Gift Shop	(540) 371-2233							
	101	William	Virginia Deli	Deli	(540) 373-8900							
	104	William	Bike Works	Bicycle Shop	(540) 373-4421							
	200	William	Crown Jewelers	Gift Shop	(540) 373-9276							
	205	William	Old Town Yarnery	Knit Shop	(540) 373-6050							
	214	William	Raven Hi Fi	Home Theater St	(540) 372-2001	Suzanne M	1				Y	
	300	William	Pappagallo Fine Gifts & Impo	Toy Store	(540) 373-4882							
	301	William	Hyperion Espresso	Coffee Shop	(540) 373-5858							
	305	William	Sweet Caroline's Boutique	Gift Shop	(540) 373-4168							revisit
	307	William	Dog Crazy	Pet Store	(540) 370-4105	Lee S. Russ	1	2			Y	
	401	William	Olde Towne Butcher	Butcher Shop	(540) 373-3338							
	402	William	Kybecca	Asian Fusion Rest								
	501	William	Paymon Rugs	Rug Dealer		Paymon M	1				Y	
	600	William	Primavera Pizzeria & Grill	Restaurant		Rami Hami	1				Y	
	510	Wolfe	Mii Gii's Thrift Shop	Thrift Shop		Gladys	1	1				revisit
	417	Wolfe	Marstel-Day			Rebecca Rubin						send email with photo & stickers
	196	Cambridge(Falmc	Autos Direct	Auto Dealer		Jeff Sneath	2	2	2		Y	

Pet Waste Campaign

Program Overview:

This is the second year (Reporting period FY2014-FY2015) of implementation of this High Water Quality issue. This reporting period plan was to target the heavily traveled areas of the current trail systems; the Rappahannock Trail, the Heritage Trail and the small pocket parks located within the city. This will determine where more pet waste stations could be utilized based on last year's quantified results and citizen comments to determine where new pet waste stations would be most effective and to add stations to those areas. In addition, pet waste stations will be analyzed for the need to increase pet waste bag refilling.

The estimated number of people reached and targeted audience will be the 2065 licensed pet owners in the city and the numerous visitors with pets that utilize these facilities in the city. The potential exposure includes not only the City of Fredericksburg local population of 28,213 (based on last census data) but the additional 210,000 people that visit Fredericksburg. (based on Fredericksburg Visitors Center data for 2014).

Messages and educational outreach material:

- "Pooches for the Planet" flyers
- Pet Waste Stations with signage
- Continued stocking of "Mutt Mitt" bags at stations
- Monitoring of posted clean up signs and installing signs at new locations as needed
- Continued information posting on city website
- Continued posting of messages and educational material on City "Dog Park" webpage

In addition, the City is actively enforcing the "Pet Waste Ordinance" as established in City Code, Article VI, Chapter 14, Section 14.152.

Summary/Results:

- In Jul 2014, had 10 doggie bag stations in operation.
- In Jan 2015, 6 stations were added:
 - 1 at the Canal Path trailhead
 - 3 along the VCR Trail
 - 1 in Alum Springs Park
 - 1 in Wolfe Street Triangle Park
 - 1 in Hurkamp Park
- Feb 2015, reinstalled a station on the Canal Path by the new Fall Hill Ave Bridge over the canal. This station had been taken out of operation in Feb 2014, due to construction of the new bridge.

- Mar 2015, 1 station was added in the pocket park by the train station, at Caroline St and Frederick St.
- 18 stations are now in operation
- From July 2014 through June 2015, 50,400 bags were used.

Note: Further documentation supportive of this program development is on file and available upon request.

Status Report:

Since the implementation of this campaign, we have seen an increased awareness of the issue of Pet Waste. The City believes and has determined that based on the results collected, the selected target audiences, the messages delivered, and the mechanisms used to implement this MCM public education and outreach program for a high WQ issue, that these efforts have made a positive impact to the audiences. The messages delivered have reached the targeted audiences, and the mechanisms made a noticeable difference in the community. The City believes that the goals for this program have been met in accordance with permit requirements and conditions for appropriateness and effectiveness.

Next Reporting Period:

The next education and outreach activities associated with this high water quality issue will be to continue this campaign. To include:

- Monitoring Pet Waste Stations with signage and analysis of additional stations
- Continued stocking of "Mutt Mitt" bags at stations
- Monitoring of posted "clean up signs" and installing signs at new locations as needed
- Continued information posting on city website
- Continued posting of messages and educational material on City "Dog Park" webpage

The estimated number of people reached and targeted audience will be the 2065 licensed pet owners in the city and the numerous visitors with pets that utilize these facilities in the city. Also, potential exposure includes not only the City of Fredericksburg's local population of 28,213 (based on last census data) but the additional 210,000 people that visit Fredericksburg. (This information is taken from the Fredericksburg Visitors Center data for 2014).

River Clean Up Campaign

Program Overview:

This is the second year (Reporting period FY2014-FY2015) of implementation of this High Water Quality issue. This reporting period plan was to again target areas of the Rappahannock River that front the City, as well as other City property along the Rappahannock and Rapidan Rivers. Trash receptacles have been placed at strategic locations along the river and trail systems that abuts the river, and along the canal that runs through the city.

The River Cleanup Campaign had been scheduled in the fall for October 18, 2014 and October 26, 2014. Several Cleanup activities were scheduled for the spring of 2015.

It is estimated that the target audience that will be reached is hard to quantify, for these events are advertized in the local paper with a circulation of 46K-50K copies, and posted on various organizations websites that partner with the City, such as Friends of the Rappahannock, and the American Canoe Association. The City website was also utilized to provide information on this campaign and how one could participate.

Summary/Results:

Data shows that on average 40-50 people attend and participate in these events. The following data is provided for the events that have been scheduled:

Fall 2014:

October 18, 2014: 225 Volunteers, 19 sites, 4,020 pounds trash removed
October 26, 2014 (canal): 20 Volunteers, 1 site, 1,500 pounds trash removed

Spring 2015:

April 4, 2015: 75 volunteers, 7 sites, 3,900 pounds trash removed
April 11, 2015: 11 Volunteers, 3 sites, 450 pounds trash removed
April 25, 2015: 25 UMW student volunteers, 1 site (snowden wetland), 800 pounds trash removed
April 25, 2015: 67 volunteers, 4 sites, 1250 pounds trash removed
May 20, 2015: 5 volunteers, Ficklen Island, 115 pounds of trash removed
June 20, 2015: 20 Volunteers, Ficklen Island, 450 pounds of trash removed
June 28, 2015: 15 volunteers, 2 sites, 350 pounds trash removed
July 25, 2015: 4 volunteers, Ficklen Island, 300 pounds trash removed
July 28, 2015: 3 volunteers, Canal, 100 pounds trash removed.

Additionally, the City's owns approximately 4,200 acres of land along the Rappahannock and Rapidan Rivers. This property spans throughout five municipalities. The City has hired a full time person to monitor this property in a manner in accordance with the Conservation Easement that the City placed on this land.

Some ongoing activities:

- Continued monitoring of the watershed property via foot, 4x4, ATV & canoe
- Continued response to e-mails and phone calls about the watershed property
- Continued signing of the property, new and replacement of destroyed and stolen signs
- The watershed Patrol Officer Continued responses to the five municipalities that surround the property for various issues
- Ongoing trash removed for the property
- Ongoing outreach and education on pollution prevention

We have worked with the state DGIF to improve access roads to remote areas along the watershed property for emergency egress. Stabilized a river bank and inserted a canoe slide to help with erosion. We continued to educate citizens about the watershed concerns throughout the five municipalities. We Work with adjoining counties such as Stafford, Spotsylvania, and Culpeper to continue recreational use of the watershed property without destroying it or polluting. The City provides a webpage on our Watershed Property and has developed a Watershed Management Plan describing the uses and prohibited activities.

Status Report:

Since the implementation of this campaign, we have seen an increased awareness of the issue of trash and waste materials. The City believes and has determined that based on the results collected, the selected target audiences, the messages delivered, and the mechanisms used to implement this MCM public education and outreach program for a high WQ issue, that these efforts have made a positive impact to the audiences. The messages delivered have reached the targeted audiences, and the mechanisms made a noticeable difference in the community. The City believes that the goals for this program have been met in accordance with permit requirements and conditions for appropriateness and effectiveness.

Next Reporting Period:

The next education and outreach activities associated with this high water quality issue will be to continue this campaign. To include:

- Schedule clean up dates
- Continue webpage updates
- Continue monitoring the river banks
- Continue trash receptacle pickup
- Continue outreach and education to those that visit the Watershed Property

The estimated number of people reached and targeted audience will be hard to determine, although by educating the community on the webpage and advertizing the cleanup events will increase the target audience knowledge of improper disposal of waste.

Also, potential exposure includes not only the City of Fredericksburg's local population of 28,213 (based on last census data) but the additional 210,000 people that visit Fredericksburg. (This information is taken from the Fredericksburg Visitors Center data for 2014).

Attachment C:

HAZMAT Spill Response Log

Reporting July 1, 2014 thru June 30, 2015 (Investigations)

Incident Date	Incident Address	Suspected Discharge	Resolution	Date Closed
01/26/2015	Canal Street at Caroline & Princess Anne Street	Rainbow sheen on street (possibly gasoline)	City Shop contacted to place sand on street to absorb and create traction	01/26/2015
06/16/2015	806 Charlotte Street	Asbestos materials in dumpster	Private contractor contracted to properly transport and dispose of contents	06/19/2015
06/26/2015	925 Caroline Street	Hydraulic fluid leaked from pump that supplies the freight elevator	Absorbent & absorbent pads were used to contain the leak. Informed owner that a cleanup contractor must be called	06/26/2015
06/30/2015	1400 Railroad Avenue	Two (2) gallon of diesel fuel spilled at rail yard	No City Services required. CSX conducted clean up	06/30/2015

Attachment D:

Outfall Screening Data

City of Fredericksburg IDD Field Screening Results Fiscal Year 2015/Permit Year 2



Planning & Community Development
Planning Services Division
715 Princess Anne Street
Fredericksburg, Virginia 22401
Phone (540) 372-1080

Introduction

The City of Fredericksburg (City) is required by the VPDES General Permit for the Discharge of Stormwater from Small MS4s to annually conduct dry weather screening at a minimum of fifty (50) MS4 outfalls¹ under its ownership and/or operation. The City and its contractor, GKY, developed a prioritized list of fifty four (54) outfalls from the Rappahannock River watershed as a selection pool for conducting field screening activities. The inclusion of additional outfalls, above the minimum number required by the General Permit, provided the City additional outfalls to select from while conducting field activities if accessibility or other issues were encountered. When proximity allowed, the additional outfalls were also screened; therefore, field screening was completed on 54 of 54 selected outfalls following the procedures defined in the City's Illicit Discharge Detection and Elimination (IDDE) Standard Operating Procedures Manual (SOP). Field screening results for each outfall were categorized into one of four following categories:

- **Clear**—Outfalls where measurable flow was not present or where measurable flow was present and the field screening results met the pass criteria established in the SOP were designated as **Clear**.
- **Suspect**—Outfalls with measurable flow and the field screening results failed to meet the pass criteria established in the SOP were designated as **Suspect**. Follow-up actions must be taken in accordance with the SOP for these outfalls.
- **Surface Water Conveyance**—Stormwater conveyances previously identified as outfalls but, as a result of field screening activities, did not meet the legal definition of an outfall because they were stormwater conveyances that connected "segments of the same stream or other surface waters" were designated as **Surface Water Conveyances**. **Surface Water Conveyances**, previously identified as outfalls, should be removed from the City's Dry Weather Screening Database.
- **Does Not Exist**—Outfalls identified during the desktop exercise but not found to exist during field screening activities were designated as **Does Not Exist**. *Outfalls that were found not to exist should be removed from the City's Dry Weather Screening Database.*

Dry Weather Field Screening Results

The results of the field screening activities are summarized in Table 1.

Table 1: Summarized Field Screening Results

Category	Quantity	Percentage
Clear	31	57%
Suspect	12	22%
Surface Water Conveyance	9	17%
Does Not Exist	2	4%
Total	54	100%

The *Date of Last Field Screening* in the City's *Dry Weather Screening Database* should be updated to match the Screening Date identified in Table 2 (*IDD Field Screening Results*) for the listed outfalls.

¹ "Outfall" means, when used in reference to municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters. (9VAC25-870-10. Definitions)

- **Suspect**—Outfalls identified as **Suspect** and requiring County follow-up in accordance with the SOP are:
 - swOTFL-01602
 - swOTFL-02406
 - swOTFL-02411
 - swOTFL-02418
 - swOTFL-02420
 - swOTFL-02804
 - swOTFL-02808
 - swOTFL-03205
 - swOTFL-03206
 - swOTFL-03229
 - swOTFL-03230
 - swOTFL-04001

- **Surface Water Conveyances** —Outfalls identified as **Surface Water Conveyances** that should be removed from the City's Dry-Weather Screening Database are:
 - swOTFL-02801
 - swOTFL-02812
 - swOTFL-03226
 - swOTFL-03227
 - swOTFL-03247
 - swOTFL-03256
 - swOTFL-03601
 - swOTFL-04004
 - swOTFL-04013

- **Does Not Exist** —Outfalls identified as **Do Not Exist** that should be removed from the City's Dry-Weather Screening Database are:
 - swOTFL-02403
 - swOTFL-02803

Individual inspection forms for are contained in the attached digital folder titled IDD Field Screening Results.

Table 2 : IDD Field Screening Results

Node ID (Outfall)	Screening Date	Result	Pass/Fail	Follow-Up Required	Comment
swOTFL-01602	6/30/2015	Suspect	Fail	Yes	Failed: Chlorine
swOTFL-02406	6/23/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-02411	6/23/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-02418	6/23/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-02420	6/23/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-02804	6/23/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-02808	6/23/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-03205	6/30/2015	Suspect	Fail	Yes	Failed: Conductivity*, pH
swOTFL-03206**	6/30/2015	Suspect	Fail	Yes	Failed: Chlorine
swOTFL-03229	6/30/2015	Suspect	Fail	Yes	Failed: Conductivity*, Chlorine, Turbidity
swOTFL-03230	6/30/2015	Suspect	Fail	Yes	Failed: Conductivity*
swOTFL-04001	6/30/2015	Suspect	Fail	Yes	Failed: Conductivity*, Chlorine
swOTFL-02801	6/23/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-02812	6/23/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-03226	6/30/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-03227	6/30/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-03247†	6/30/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-03256	6/30/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-03601	6/23/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database

swOTFL-04004	6/23/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-04013	6/30/2015	Surface Water Conveyance	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-02403	6/23/2015	Does Not Exist	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-02803	6/23/2015	Does Not Exist	N/A	No	Remove From Dry-Weather Screening Database
swOTFL-00002	6/30/2015	Clear	Pass	No	
swOTFL-01202	6/23/2015	Clear	Pass	No	
swOTFL-01603	6/30/2015	Clear	Pass	No	
swOTFL-01604	6/23/2015	Clear	Pass	No	
swOTFL-01605	6/30/2015	Clear	Pass	No	
swOTFL-02001	6/30/2015	Clear	Pass	No	
swOTFL-02404	6/23/2015	Clear	Pass	No	
swOTFL-02410	6/23/2015	Clear	Pass	No	
swOTFL-02417	6/23/2015	Clear	Pass	No	
swOTFL-02421	6/23/2015	Clear	Pass	No	
swOTFL-02805	6/23/2015	Clear	Pass	No	
swOTFL-02806	6/23/2015	Clear	Pass	No	
swOTFL-02807	6/23/2015	Clear	Pass	No	
swOTFL-03204	6/23/2015	Clear	Pass	No	
swOTFL-03215	6/23/2015	Clear	Pass	No	
swOTFL-03224*	6/30/2015	Clear	Pass	No	
swOTFL-03225	6/30/2015	Clear	Pass	No	
swOTFL-03228	6/30/2015	Clear	Pass	No	
swOTFL-03231	6/30/2015	Clear	Pass	No	
swOTFL-03233	6/30/2015	Clear	Pass	No	
swOTFL-03237	6/30/2015	Clear	Pass	No	
swOTFL-03250	6/30/2015	Clear	Pass	No	
swOTFL-03253	6/30/2015	Clear	Pass	No	
swOTFL-03602	6/23/2015	Clear	Pass	No	
swOTFL-04003	6/23/2015	Clear	Pass	No	
swOTFL-04005	6/23/2015	Clear	Pass	No	

swOTFL-04006	6/23/2015	Clear	Pass	No	
swOTFL-04009	6/23/2015	Clear	Pass	No	
swOTFL-04010	6/23/2015	Clear	Pass	No	
swOTFL-04011	6/23/2015	Clear	Pass	No	
swOTFL-04012	6/23/2015	Clear	Pass	No	

* Conductivity exceeded the threshold of 350 $\mu\text{s}/\text{cm}$ as defined in the City's Illicit Discharge Detection and Elimination (IDDE) Standard Operating Procedures Manual (SOP); however, all levels were below the industrial discharge limit of 2,000 $\mu\text{s}/\text{cm}$.

** The swMAIN lines in ArcGIS at swOTFL-03206 appear to be pointing in the opposite direction of flow. The swMAIN lines at this node should be reevaluated to determine the correct outfall for the Dry-Weather Screening Database.

† swOTFL-03247 was a suspect discharge in the 2014 field screening, but passed this during the 2015 field screening.

‡ swOTFL-03224 was a suspect discharge in the 2014 field screening, but was concluded to be surface water conveyance during the 2015 field screening.

Should you have any questions regarding the results presented in this report, please feel free to contact us at (703) 870-7000 or by email at dfritz@gky.com.

Sincerely,

GKY & Associates, Inc.

Attachment(s):

Attachment A – IDD Field Screening Results

Attachment E:

Operator Owned Maintenance Activity

SWMP Inspection and Maintenance

Work Needed

Regular Maintenance Checks: Monthly and after large rain events

(Initial)

- 1 Conduct routine inspection for trash or other debris that may be blocking inlet or outlet pipes, riser, or emergency spillway
- 2 Inspect riser cover for trash or debris
- 3 Inspect for sediment accumulation at the inlets

Annual Maintenance

(Initial)

- 1 Security: Check fence condition (no damage, no animals burrowed under fence, gate is locked, No Trespassing signs in place)
- 2 Mow banks of SWMP as necessary
- 3 Remove any tree or brush development that may compromise the security fencing, or banks of the SWMP.
- 4 Inspect side slopes and spillways for erosion, settling cracks, or animal burrowing
- 5 Inspect for accessible sediment accumulation in pond
- 6 Inspect inlet and outlet pipe(s) for structural integrity
- 7 Inspect riprap.
- 8 Reestablish permanent vegetation on eroded slopes
If necessary, have qualified professional selectively herbicide
- 9 invasive species.

Aug-14

Work Completed/ Notes

Work Needed

Sep-14

Work Completed/ Notes

Work Needed

Oct-14

Work Completed/ Notes

Work Needed

LSALE
N/A
OK

OK
N/A

Brush to be
removed; most
likely contactor
work

OK
OK
OK
OK
N/A
N/A

SWMP Inspection and Maintenance

Work Needed

Regular Maintenance Checks: Monthly and after large rain events (Initial)

- 1 Conduct routine inspection for trash or other debris that may be blocking inlet or outlet pipes, riser, or emergency spillway
- 2 Inspect riser cover for trash or debris
- 3 Inspect for sediment accumulation at the inlets

Annual Maintenance

- 1 (Initial)
Security: Check fence condition (no damage, no animals burrowed under fence, gate is locked, No Trespassing signs in place)
- 2 Mow banks of SWMP as necessary
- 3 Remove any tree or brush development that may compromise the security fencing, or banks of the SWMP.
- 4 Inspect side slopes and spillways for erosion, settling cracks, or animal burrowing
- 5 Inspect for accessible sediment accumulation in pond
- 6 Inspect inlet and outlet pipe(s) for structural integrity
- 7 Inspect riprap.
- 8 Reestablish permanent vegetation on eroded slopes
If necessary, have qualified professional selectively herbicide
- 9 invasive species.

Aug-14

Work Completed/ Notes

Work Needed

Sep-14

Work Completed/ Notes

Work Needed

Oct-14

Work Completed/ Notes

Work Needed

LSALE

OK
N/A
OK

GOOD
N/A

OK
OK
OK
OK
OK
N/A
N/A

SWMP Inspection and Maintenance

Work Needed

Regular Maintenance Checks: Monthly and after large rain events

(Initial)

- 1 Conduct routine inspection for trash or other debris that may be blocking inlet or outlet pipes, riser, or emergency spillway
- 2 Inspect riser cover for trash or debris
- 3 Inspect for sediment accumulation at the inlets

Annual Maintenance

(Initial)

- 1 Security: Check fence condition (no damage, no animals burrowed under fence, gate is locked, No Trespassing signs in place)
- 2 Mow banks of SWMP as necessary
- 3 Remove any tree or brush development that may compromise the security fencing, or banks of the SWMP.
- 4 Inspect side slopes and spillways for erosion, settling cracks, or animal burrowing
- 5 Inspect for accessible sediment accumulation in pond
- 6 Inspect inlet and outlet pipe(s) for structural integrity
- 7 Inspect riprap.
- 8 Reestablish permanent vegetation on eroded slopes
If necessary, have qualified professional selectively herbicide
- 9 invasive species.

Nov-14

Work Completed/ Notes

Work Needed

Dec-14

Work Completed/ Notes

LRS

OK
OK
OK
Structures cleared
Needs cleaning

LRS

OK
OK

OK

OK
OK
OK
OK
OK
OK
OK

SWMP Inspection and Maintenance

Work Needed

Regular Maintenance Checks: Monthly and
after large rain events

(Initial)

- 1 Conduct routine inspection for trash or other debris that may be blocking inlet or outlet pipes, riser, or emergency spillway
- 2 Inspect riser cover for trash or debris
- 3 Inspect for sediment accumulation at the inlets

Annual Maintenance

(Initial)

- 1 Security: Check fence condition (no damage, no animals burrowed under fence, gate is locked, No Trespassing signs in place)
- 2 Mow banks of SWMP as necessary
- 3 Remove any tree or brush development that may compromise the security fencing, or banks of the SWMP.
- 4 Inspect side slopes and spillways for erosion, settling cracks, or animal burrowing
- 5 Inspect for accessible sediment accumulation in pond
- 6 Inspect inlet and outlet pipe(s) for structural integrity
- 7 Inspect riprap.
- 8 Reestablish permanent vegetation on eroded slopes
- 9 If necessary, have qualified professional selectively herbicide invasive species.

Attachment F

BMP Data Base

Historical Data Cleanup

Grant Contract Number: 16069

Data Reporting Entity: City of Fredericksburg
(Grantee)

Localitie(s) Represented: City of Fredericksburg Locality Contact: Kevin Utt 540-372-1080
(Name, Phone #, E-mail)

Locality Contact: (Name) (XXX)-XXX-XXXX
(Name, Phone #, E-mail)

Locality Contact: (Name) (XXX)-XXX-XXXX
(Name, Phone #, E-mail)

Locality Contact: (Name) (XXX)-XXX-XXXX
(Name, Phone #, E-mail)

Locality Contact: (Name) (XXX)-XXX-XXXX
(Name, Phone #, E-mail)

Date Installed	BMP Name	Practice Description	Total Acres Treated	Impervious Acres Treated	Practice Treatment: Area OR Applic	Measurement Unit
2005	Wet Pond	A water impoundment st	180		ACRE	
01-08-2013	Dry Detention	Dry Detention Ponds are	12.57		ACRE	
2011	Wet Pond	A water impoundment st	105.22		ACRE	
01-30-2015	Dry Detention	Dry Detention Ponds are	2.03		ACRE	
2009	Dry Detention	Dry Detention Ponds are	16.87		ACRE	
01-29-2007	Wet Pond	A water impoundment st	11.32		ACRE	
05-31-2011	Dry Detention	Dry Detention Ponds are	10.36		ACRE	
2010	Dry Detention	Dry Detention Ponds are	1.25		ACRE	
10-31-2009	Dry Detention	Dry Detention Ponds are	3.28		ACRE	
2009	Wet Pond	A water impoundment st	22.02		ACRE	
01-03-2008	Dry Detention	Dry Detention Ponds are	3.51		ACRE	
03-14-2015	Dry Detention	Dry Detention Ponds are	4.84		ACRE	
08-11-2014	Dry Detention	Dry Detention Ponds are	0.5		ACRE	
2005	Wet Pond	A water impoundment st	23.41		ACRE	
10-24-2011	Wet Pond	A water impoundment st	7.7		ACRE	

2012	Filtering Pract Practices that capture ar	0.64	ACRE
2005	Wet Pond A water impoundment st	28.1	ACRE
08-28-1998	Wet Pond A water impoundment st	5.64	ACRE
07-30-2004	Erosion & Sec Erosion and sediment cc	0.64	ACRE
2008	Filtering Pract Practices that capture ar	1.72	ACRE
2012	Filtering Pract Practices that capture ar	0.08	ACRE
2010	Filtering Pract Practices that capture ar	0.88	ACRE
01-04-2008	Wet Pond A water impoundment st	9.45	ACRE
10-31-2009	Dry Extended Dry extended detention (	7	ACRE
08-30-2006	Wet Pond A water impoundment st	17.76	ACRE
2014	Filtering Pract Practices that capture ar	0.17	ACRE
08-21-2014	Dry Extended Dry extended detention (	2.36	ACRE
2012	Dry Detention Dry Detention Ponds are	0.77	ACRE
05-18-2015	Filtering Pract Practices that capture ar	0.52	ACRE
04-09-2001	Dry Extended Dry extended detention (	3.35	ACRE
01-08-2013	Dry Detention Dry Detention Ponds are	2.87	ACRE
06-26-2009	Hydrodynamic Dry Detention Ponds are	0.66	ACRE
10-12-2010	Filtering Pract Practices that capture ar	0.5	ACRE
07-22-2011	Dry Well A depression to form an	0.12	ACRE
02-05-2015	Bioretention, ; An excavated pit backfill	0.12	ACRE
11-24-2009	Filtering Pract Practices that capture ar	0.38	ACRE
2011	Cisterns & Ra Cisterns & Rain Barrels (	0.78	ACRE
08-25-2000	Dry Detention Dry Detention Ponds are	3.32	ACRE
04-18-2002	Wet Pond A water impoundment st	7.47	ACRE
10-21-2009	Dry Detention Dry Detention Ponds are	0.31	ACRE
03-15-2015	Dry Detention Dry Detention Ponds are	3.44	ACRE
05-26-2009	Filtering Pract Practices that capture ar	21.13	ACRE
08-30-2012	Underground A depression to form an	0.1	ACRE
08-26-2011	Underground A depression to form an	0.22	ACRE
04-16-2012	Infiltration Tre A depression to form an	0.48	ACRE
2011	Dry Detention Dry Detention Ponds are	0.72	ACRE
2012	Cisterns & Ra Cisterns & Rain Barrels (	0.02	ACRE
08-04-2009	Filtering Pract Practices that capture ar	0.26	ACRE
10-28-2009	Hydrodynamic Dry Detention Ponds are	1.56	ACRE
10-24-2014	Dry Well A depression to form an	0.1	ACRE
09-09-1999	Dry Well A depression to form an	0.24	ACRE

10-23-2014	Wet Pond	A water impoundment st	47.15	ACRE
11-28-2011	Bioretention, ; An excavated pit backfill		0.35	ACRE
1995	Dry Detention	Dry Detention Ponds are	7.7	ACRE
2014	Filtering Pract Practices that capture ar		0.03	ACRE
08-09-2007	Bioretention, ; An excavated pit backfill		1.28	ACRE
1987	Dry Extended Dry extended detention (		7.72	ACRE
2012	Underground	A depression to form an	0.31	ACRE
2009	Surface Sand Practices that capture ar		7.23	ACRE
05-05-2015	Bioretention, ; An excavated pit backfill		0.94	ACRE
10-23-2014	Wet Pond	A water impoundment st	1.66	ACRE
2012	Dry Detention	Dry Detention Ponds are	1.95	ACRE
2012	Infiltration Bas	A depression to form an	14.13	ACRE
05-28-2008	Underground	A depression to form an	0.64	ACRE
01-29-2008	Nutrient Mana	Urban nutrient manager	8.78	ACRE
08-15-2014	Hydrodynamic Dry Detention	Ponds are	0.35	ACRE
11-05-2007	Filtering Pract Practices that capture ar		1.13	ACRE
05-15-2015	Dry Well	A depression to form an	0.08	ACRE
03-07-2007	Bioretention, ; An excavated pit backfill		0.24	ACRE
03-07-2007	Underground	A depression to form an	1.34	ACRE
1995	Dry Extended Dry extended detention (		1.63	ACRE
08-28-2009	Dry Well	A depression to form an	0.21	ACRE
10-16-2014	Bioretention, ; An excavated pit backfill		1.35	ACRE
11-24-2014	Underground	A depression to form an	1.11	ACRE
09-09-2014	Bioretention, ; An excavated pit backfill		0.08	ACRE
01-09-2015	Dry Well	A depression to form an	0.14	ACRE
1997	Dry Detention	Dry Detention Ponds are	1.01	ACRE
10-28-2009	Underground	A depression to form an	0.14	ACRE
03-17-2005	Wet Pond	A water impoundment st	11.7	ACRE
01-08-2013	Wet Pond	A water impoundment st	5.21	ACRE
01-19-2006	Wet Pond	A water impoundment st	5.87	ACRE
2009	Wet Pond	A water impoundment st	23.02	ACRE
08-11-2014	Wet Pond	A water impoundment st	11.4	ACRE
08-11-2014	Wet Pond	A water impoundment st	7.45	ACRE
2010	Wet Pond	A water impoundment st	46	ACRE
2009	Wet Pond	A water impoundment st	20.32	ACRE
01-09-2002	Wet Pond	A water impoundment st	7.02	ACRE

10-06-2011	Wet Pond	A water impoundment st	14.64	ACRE
04-23-2007	Dry Extended	Dry extended detention (	23.05	ACRE
08-19-2014	Dry Extended	Dry extended detention (	4.48	ACRE
09-25-1998	Dry Extended	Dry extended detention (	7.32	ACRE
06-12-1997	Wet Pond	A water impoundment st	30.61	ACRE
1995	Wet Pond	A water impoundment st	40.21	ACRE
1995	Wet Pond	A water impoundment st	3.89	ACRE
2012	Dry Extended	Dry extended detention (	21.9	ACRE
1995	Dry Extended	Dry extended detention (	5.65	ACRE
1995	Dry Extended	Dry extended detention (	3.6	ACRE
1995	Wet Pond	A water impoundment st	21.48	ACRE
1995	Wet Pond	A water impoundment st	3.98	ACRE
1995	Wet Pond	A water impoundment st	1.16	ACRE
1995	Dry Detention	Dry Detention Ponds are	2.51	ACRE
1995	Dry Extended	Dry extended detention (	7.48	ACRE
1995	Dry Extended	Dry extended detention (	3.37	ACRE
10-14-2014	Bioretention,	; An excavated pit backfill	0.2	ACRE
10-14-2014	Bioretention,	; An excavated pit backfill	0.4	ACRE
10-14-2014	Bioretention,	; An excavated pit backfill	0.23	ACRE
10-14-2014	Bioretention,	; An excavated pit backfill	0.39	ACRE
10-14-2014	Bioretention,	; An excavated pit backfill	0.47	ACRE
10-14-2014	Bioretention,	; An excavated pit backfill	0.12	ACRE
04-14-2000	Dry Detention	Dry Detention Ponds are	1.66	ACRE
04-14-2000	Dry Detention	Dry Detention Ponds are	3.11	ACRE
04-14-2000	Dry Detention	Dry Detention Ponds are	3.28	ACRE
08-11-2014	Wet Pond	A water impoundment st	4.8	ACRE
01-08-2013	Dry Detention	Dry Detention Ponds are	3	ACRE
01-08-2013	Dry Detention	Dry Detention Ponds are	0.3	ACRE
09-14-2009	Filtering Pract	Practices that capture ar	0.84	ACRE
09-14-2009	Filtering Pract	Practices that capture ar	0.72	ACRE
08-09-2014	Filtering Pract	Practices that capture ar	2.76	ACRE
08-09-2014	Filtering Pract	Practices that capture ar	0.28	ACRE
08-09-2014	Filtering Pract	Practices that capture ar	1.31	ACRE
08-09-2014	Filtering Pract	Practices that capture ar	0.71	ACRE
08-09-2014	Filtering Pract	Practices that capture ar	4.17	ACRE
09-10-2014	Dry Detention	Dry Detention Ponds are	2.41	ACRE

09-10-2014	Dry Detention Ponds are	2.68	ACRE
2005	Dry Extended detention (	9.41	ACRE
2005	Dry Extended detention (	22.45	ACRE
2005	Dry Extended detention (	29.01	ACRE
2010	Wet Pond A water impoundment st	20.76	ACRE
2010	Wet Pond A water impoundment st	22.43	ACRE
2010	Dry Extended detention (	14.44	ACRE
2010	Dry Extended detention (	25.91	ACRE
2010	Dry Extended detention (	7.54	ACRE
01-29-2008	Nutrient Mana Urban nutrient manager	1.84	ACRE
01-29-2008	Nutrient Mana Urban nutrient manager	2.36	ACRE
01-29-2008	Nutrient Mana Urban nutrient manager	6.15	ACRE
01-29-2008	Nutrient Mana Urban nutrient manager	5.3	ACRE
01-29-2008	Nutrient Mana Urban nutrient manager	6.67	ACRE
01-29-2008	Nutrient Mana Urban nutrient manager	1.54	ACRE
2010	Dry Extended detention (	1.04	ACRE
2010	Dry Extended detention (	6.01	ACRE
11-28-2011	Filtering Pract Practices that capture ar	0.35	ACRE
11-28-2011	Bioretention, ; An excavated pit backfill	0.58	ACRE
08-25-2000	Bioretention, ; An excavated pit backfill	0.82	ACRE
1995	Dry Detention Ponds are	0.83	ACRE
2009	Dry Detention Ponds are	3.24	ACRE
2009	Filtering Pract Practices that capture ar	0.35	ACRE
10-23-2014	Bioretention, ; An excavated pit backfill	1.54	ACRE
09-17-2013	Filtering Pract Practices that capture ar	0.32	ACRE
09-17-2013	Filtering Pract Practices that capture ar	0.78	ACRE
10-20-2005	Wet Pond A water impoundment st	41.09	ACRE
10-20-2005	Wet Pond A water impoundment st	11.39	ACRE

kwutt@fredericksburgva.gov

(E-mail Address)

(E-mail Address)

(E-mail Address)

(E-mail Address)

Practice Location

Amount Applied	County Name	State FIPS	HUC12	Latitude	Longitude
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Attachment G

Training Data

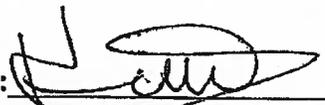
ENVIRONMENTAL MEETING

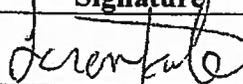
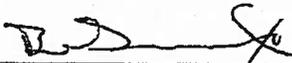
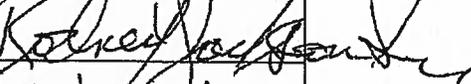
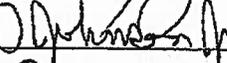
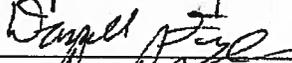
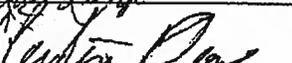
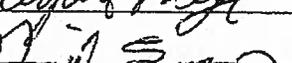
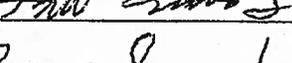
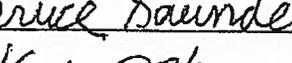
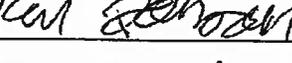
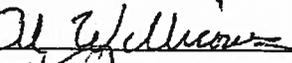
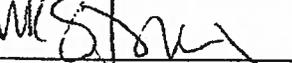
Training: Stormwater Pollution Prevention (SWPP) Training

Date: June 30, 2015

Location: City of Fredericksburg

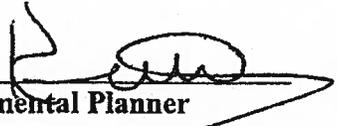
Instructor: Kevin Utt

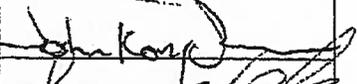
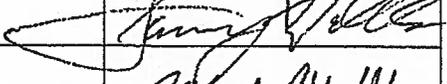
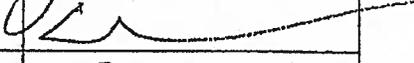
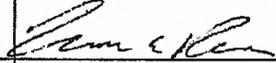
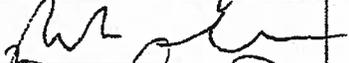
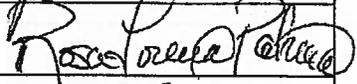
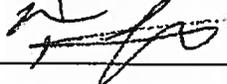
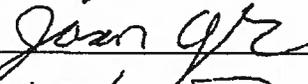
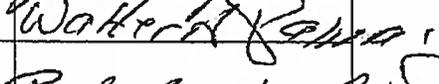
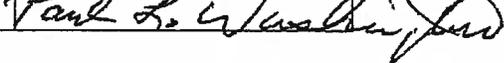
Signature: 
Stormwater Administrator and Environmental Planner

Print Name	Department	Signature
1. Loren Kato	Safety	
2. Brian Devereaux	Parks and Rec.	
3. Franklyn Morris	PW	
4. R J	PW	
5. O Johnson Jr.	PW	
6. Darrell Fye	PW	
7. Guido A. Gomez	PW	
8. Clayton Plage	Park Rec	
9. David Saunders	PW	
10. Bruce Saunders	PW	
11. Ken Johnson	PW	
12. Al Williams	PR	
13. Wendy Stone	PRPF	
14. Erin Balda	Park & Rec	
15. Reggie Coleman	WWTF	

ENVIRONMENTAL MEETING

Training: Stormwater Pollution Prevention (SWPP) Training
Date: June 30, 2015
Location: City of Fredericksburg

Instructor: Kevin Utt
Signature: 
 Stormwater Administrator and Environmental Planner

Print Name	Department	Signature
1. Kevin Sanders	P.W	
2. John Karp	P.R.	
3. Jimmy Walker	PR	
4. Muhammad Abdullah	P.W	
5. JASON Oesterheld	PW	
6. ADAM McMan	PW	
7. Joey Paul	PW	
8. Robert E Johnston Jr	PW	
9. William Sanchez	PW	
10. Jordan Mooney	PW	
11. ROSA PALMA	PR	
12. Travis Cope	PW	
13. Jason Ogle	P.W	
14. Walter J. Palma	P.W.	
15. PAUL L. WASHINGTON	P.W.	

ENVIRONMENTAL MEETING

Training: Stormwater Pollution Prevention (SWPP) Training

Date: June 30, 2015

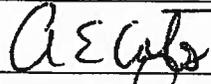
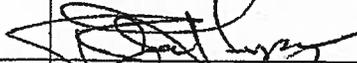
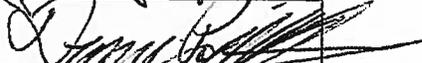
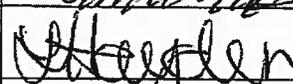
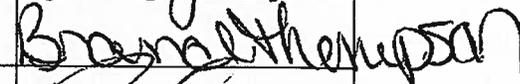
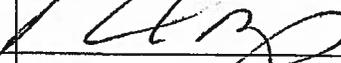
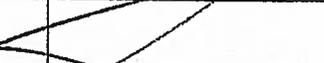
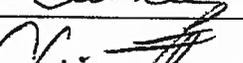
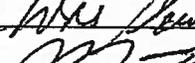
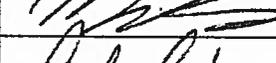
Location: City of Fredericksburg

Instructor: Kevin Utt

Signature:

Stormwater Administrator and Environmental Planner



Print Name	Department	Signature
1. Adelaide Coles	PF	
2. Richard Thompson	PF	
3. Devin Pruitt	PR & PF	
4. Tamara Hayden	PW	
5. Brandi Thompson	PR	
6. Randy Myers	P & R	
7. James		
8. James Baylor	P.U	
9. EARL ZEE	P.W.	
10. Chris Flowers	PR	
11. M. Med/Sanchez	PF	
12. Josh Banks	PW	
13. Chris Lane	P.W.	
14. L. Berry Carson	PW	
15.		

ENVIRONMENTAL MEETING

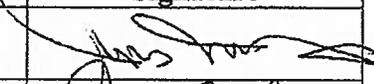
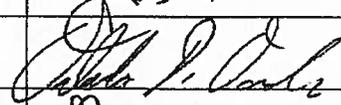
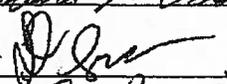
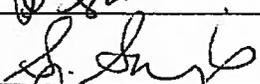
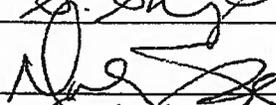
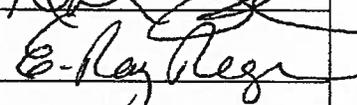
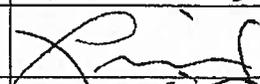
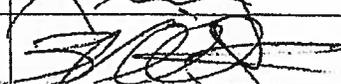
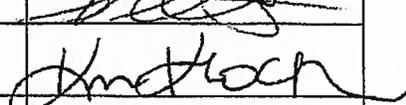
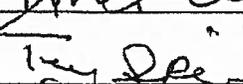
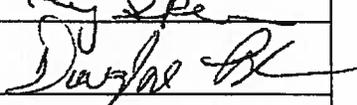
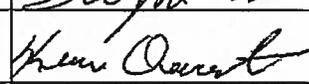
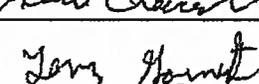
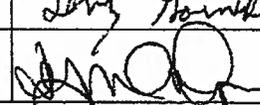
Training: Stormwater Pollution Prevention (SWPP) Training

Date: June 30, 2015

Location: City of Fredericksburg

Instructor: Kevin Utt

Signature: 
Stormwater Administrator and Environmental Planner

Print Name	Department	Signature
1. James McRae	P.R	
2. Orlando Davidson	PEU	
3. DaQuan Lucas	P+R	
4. Stephanie Sellings	P+R	
5. Denise Sanders	P&R	
6. RAY REGAN	PF	
7. Jack Nave	PW	Jack Nave
8. Raphael Isher	TW	
9. William Skinner	WWTP	
10. Kim Klock	WWTP	
11. Tully Spinnel	P&R	
12. Douglas Brock	SIP	
13. Kevin Derricote	P.W.	
14. TERRY GARNETT	P.W.	
15. Lynn Dyson	PR PF	

ENVIRONMENTAL MEETING

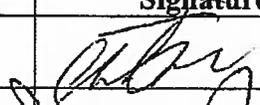
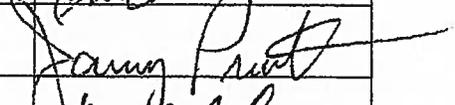
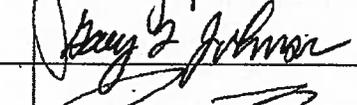
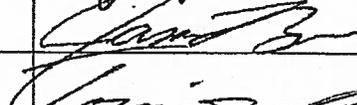
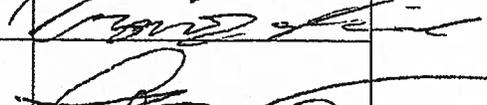
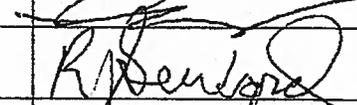
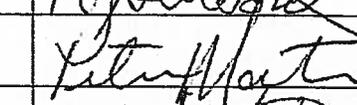
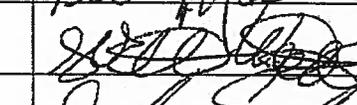
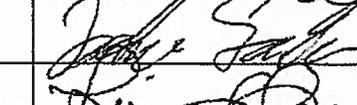
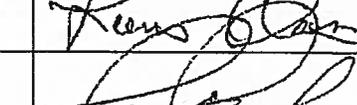
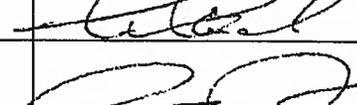
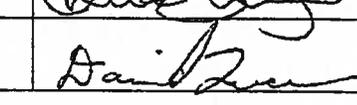
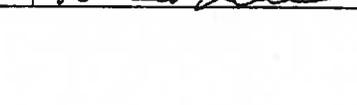
Training: Stormwater Pollution Prevention (SWPP) Training

Date: June 30, 2015

Location: City of Fredericksburg

Instructor: Kevin Utt

Signature: 
Stormwater Administrator and Environmental Planner

Print Name	Department	Signature
1. Christian Nevas	PR & P	
2. Jamey Pruitt	PR & PF	
3. GARY JOHNSON	PW	
4. James Johnson James Johnson	PW	
5. Travis Irvine	PR & PF	
6. Robert Seward Robert Seward	PW	
7. Robert Seward	PF	
8. Peter Martin	PR	
9. Justin Wright	PR & PF	
10. John Seaver	PW	
11. LOUIS ADAMS	PW	
12. Michael Ward	PR & PF	
13. Ben Jablonski	PF	
14. AARON SIMMONS	PR & PF	
15. David Quann	PW - WWTF	

ENVIRONMENTAL MEETING

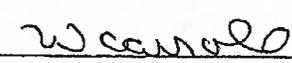
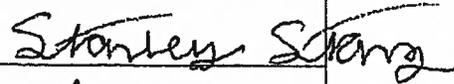
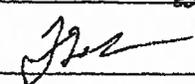
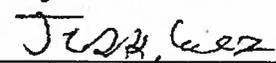
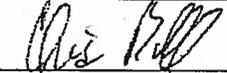
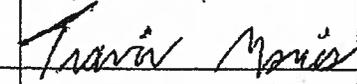
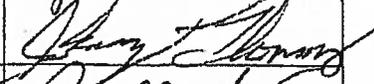
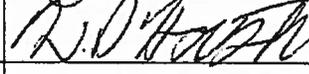
Training: Stormwater Pollution Prevention (SWPP) Training

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Signature: 
Stormwater Administrator and Environmental Planner

Print Name	Department	Signature
1. Wanda Carroll	PF	
2. Stanley Strong	P.W.	
3. Jeff Sale	P.W.	
4. Jess Cole	P.W.	
5. Chris Bell	P.W.	
6. Travis Morris	P.W.	
7. Ryan Hennessy	P.R.	
8. Johnny Thomas	SP	
9. Ray Martin	P.W.	
10. David Houston	P.F.	
11.		
12.		
13.		
14.		
15.		