

**VSMP GENERAL PERMIT FOR SMALL MUNICIPAL  
SEPARATE STORM SEWER SYSTEMS  
PERMIT NUMBER: VAR040053**

**Permit Year 4 Annual Report  
Reporting Period: July 1, 2011 - June 30, 2012**



Submitted September 18, 2012

City of Winchester, Virginia  
Rouss City Hall  
Public Services Department  
15 North Cameron Street  
Winchester, VA 22601

## **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.

Dale Iman  
**Name**

City Manager  
**Title**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

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## 1.0 Introduction

This annual report was prepared by the Public Services Department, City of Winchester, Virginia, in accordance with Section II E of the General Permit (VAR04) for Discharges of Stormwater From Small Municipal Separate Storm Sewer Systems (MS4), effective July 9, 2008. As required under the permit, the City of Winchester reviewed its existing MS4 Program and revised the Program on January 8, 2009 to meet the conditions of the MS4 General Permit. This Program Plan was later revised on January 5, 2010 by the City to continue to meet the following goals:

- Reduce the discharge of pollutants to the “maximum extent practicable”;
- Protect water quality; and
- Satisfy the appropriate water quality requirements of the Clean Water Act.

The Program addresses the six minimum control measures identified in the General Permit to reduce pollutants. For each of the minimum control measures listed below, the City identified Best Management Practices (BMPs), measurable goals, schedules, and responsible parties:

- Public Outreach and Education
- Public Participation and Involvement
- Illegal Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention and Good Housekeeping

This Program is the basis for the information presented in this annual report. A copy of the Program is included in Appendix A.

This annual report covers the period from July 1, 2011 through June 30, 2012.

The requirements for the annual report, as outlined in Section II E of the General Permit, are as follows:

- a) Background Information: Name and permit number of the program submitting the annual report, annual report permit year, modifications to any operator’s department’s roles and responsibilities, number of new MS4 outfalls and associated acreage by Hydrologic Unit Code (HUC) added during the permit year, and signed certification;
- b) Status of compliance with permit conditions, an assessment of the appropriateness of the identified BMPs and progress towards achieving the identified measurable goals for each of the minimum control measures;
- c) Results of information collected and analyzed, including monitoring data, if any during the reporting period;
- d) A summary of the stormwater activities the operator plans to undertake during the next reporting cycle;

- e) A change in the identified BMPs or measurable goals for any of the minimum control measures including steps to be taken to address any deficiencies;
- f) Notice that the operator is relying on another government entity to satisfy some of the permit obligations (if applicable);
- g) The approval status of any program pursuant to Section II C (if appropriate), or the progress towards achieving full approval of these programs;
- h) Information required pursuant to Section I B 9;
- i) The number of illicit discharges identified and the narrative on how they were controlled or eliminated pursuant to Section II B 3(f);
- j) Regulated land-disturbing activities data tracked under Section II 4 (c);
- k) All known permanent stormwater management facility data tracked under Section II B5(b)(6) submitted in a database format as shown in the June 29, 2009, letter from Virginia Department of Conservation and Recreation (DCR) to the City of Winchester;
- l) A list of any new or terminated signed agreements between the operator and any applicable third parties where the operator has entered into an agreement in order to implement minimum control measures or portions of minimum control measures; and
- m) Copies of any written comments received during a public comment period regarding the MS4 Program Plan or any modifications.

### ***1.1 Background Information***

This report is submitted by the Public Services Department, City of Winchester, Virginia, in accordance with General Permit Number VAR040053 for Permit Year 4. There have been no changes to the City's roles and responsibilities since the program was revised on January 5, 2010. In that update, the following changes in the Responsible Party Role for BMPs were reported:

BMP 3.1 Continue hazardous spill response program and household hazardous waste collection. Responsible Party: Changed from City Engineer to City Refuse and Recycling Coordinator.

BMP 6.2 Continue use of salt storage building and vehicle washing facility at City Yards. Responsible Party: Changed from City Engineer to Public Works Operations Superintendent.

BMP 6.4 Continue street sweeping program and track amount of litter and debris removed. Responsible Party: Changed from City Engineer to Public Works Operations Superintendent.

Nine (9) new regulated MS4 outfalls were added in the City during this reporting year, all on Hoge Run.

Each of the remaining reporting requirements is addressed in the following sections.

## 2.0 Status of Compliance with Year 4 Permit Conditions (July 1, 2011-June 30, 2012)

As part of the City's MS4 program, the City is required to track and implement BMPs, gauge the effectiveness of BMP goals, and otherwise achieve progress towards the overall goal of reducing pollutants. This section of the annual report contains information for ongoing and completed activities within this reporting period for each of the minimum control measures identified in the General Permit and the measures adopted by the City in its program plan. Table 1 provides a summary of the BMPs conducted on an annual basis during this permit cycle as well as those initiated and/or completed within this reporting period. The following sections contain a description of each minimum control measure and progress made towards achieving the designated goals.

**Table 1- Permit Year 4 BMPs**

<b>Minimum Control Measure</b>	<b>BMP</b>
<i>Public Education and Outreach</i>	BMP 1.1: Continue broadcasting programs focused on stormwater
<i>Public Education and Outreach</i>	BMP 1.2: Continue disseminating stormwater information to the general public
<i>Public Education and Outreach</i>	BMP 1.3: Continue administering stormwater complaint hotline
<i>Public Education and Outreach</i>	BMP 1.4: Update and maintain stormwater information posted on City's website
<i>Public Education and Outreach</i>	BMP 1.5: Initiate formal program for presentations at elementary and high schools
<i>Public Involvement/Participation</i>	BMP 2.1: Continue encouraging participation in Adopt-A-Stream Program
<i>Public Involvement/Participation</i>	BMP 2.2: Post MS4 Permit and subsequent revisions to the City's website
<i>Illicit Discharge Detection and Elimination</i>	BMP 3.1: Continue hazardous spill response program and household hazardous waste collection
<i>Illicit Discharge Detection and Elimination</i>	BMP 3.2: Implement inspections of storm sewers within the City's five sub-watersheds; Redbud Run for Permit Year 4
<i>Illicit Discharge Detection and Elimination</i>	BMP 3.3: Continue enforcement of illicit connections, as needed, according to the City's Water Protection Ordinance
<i>Illicit Discharge Detection and Elimination</i>	BMP 3.4: Continue administering stormwater complaint hotline to identify illicit connections

<b>Minimum Control Measure</b>	<b>BMP</b>
<i>Illicit Discharge Detection and Elimination</i>	BMP 3.5: Implement measurement of household waste reduction through tracking of tonnage of garbage and recycling materials collected
<i>Illicit Discharge Detection and Elimination</i>	BMP 3.6: Implement program to replace or slipline sanitary sewers and manholes
<i>Construction Site Stormwater Runoff Control</i>	BMP 4.1: Continue program to require construction site operators to control waste
<i>Construction Site Stormwater Runoff Control</i>	BMP 4.2: Continue maintaining DCR Erosion and Sediment Control plan review, inspection, and administration certification for a minimum of two City employees
<i>Construction Site Stormwater Runoff Control</i>	BMP 4.3: Continue enforcement of erosion and sediment control as well as stormwater management and water quality
<i>Construction Site Stormwater Runoff Control</i>	BMP 4.4: Continue administering stormwater complaint hotline to identify problems at construction sites
<i>Construction Site Stormwater Runoff Control</i>	BMP 4.5: Continue tracking regulated land disturbing activities
<i>Post-construction Stormwater Management in New Development and Redevelopment</i>	BMP 5.1: Continue enforcement of erosion and sediment control as well as stormwater management and water quality
<i>Post-construction Stormwater Management in New Development and Redevelopment</i>	BMP 5.2: Continue requiring BMP maintenance agreements for all privately owned water quality and quantity BMPs
<i>Pollution Prevention/Good Housekeeping for Municipal Operators</i>	BMP 6.1: Continue implementing City Yards Storm Water Pollution Prevention Plan (SWPPP) and update every 3 years
<i>Pollution Prevention/Good Housekeeping for Municipal Operators</i>	BMP 6.2: Continue use of salt storage building and vehicle washing facility at City Yards
<i>Pollution Prevention/Good Housekeeping for Municipal Operators</i>	BMP 6.3: Continue training of City employees on Environmental Management Systems (EMS)
<i>Pollution Prevention/Good Housekeeping for Municipal Operators</i>	BMP 6.4: Continue street sweeping program and track amount of litter and debris removed

## **2.1 Public Education and Outreach on Stormwater Impacts**

The public education and outreach component was developed and incorporated into the City's Program to meet the programmatic component requirements of the General Permit. Table 2

describes the tasks, measurable goals, and status of the Public Education and Outreach on Stormwater Impacts BMPs. The objective of this component is to address the following goals:

- Distribute educational materials;
- Conduct community outreach to educate the public about the impacts of stormwater discharges on waterbodies; and
- Explain how to reduce pollutants in stormwater runoff.

**Table 2- Public Education and Outreach on Stormwater Impacts BMPs**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
1.1	Continue to provide access to programs focused on stormwater	The City will provide access to the public announcement “After the Storm” on the City’s stormwater website. In addition, the City will initiate web access to programs focused on stormwater in early 2010	Access to “After the Storm” through the website was continued in Permit Year 4
1.2	Continue disseminating information to general public	Estimate number of brochures distributed at the Wellness Festival and Earth Day Activities	Completed for Permit Year 4; ongoing activity
1.3	Continue administering stormwater complaint hotline	Number of calls received and the number of resolved and unresolved complaints	Completed for Permit Year 4; ongoing activity
1.4	Update and maintain stormwater information posted on City’s website	Number of responses to the posting including calls to the stormwater complaint hotline, participation in the Adopt-A-Stream Program, and hits to the City’s website	Completed for Permit Year 4; ongoing activity
1.5	Initiate formal program for presentations at elementary and high schools	Number of responses to letters sent to targeted schools and number of schools that participate in the program	Completed for Permit Year 4; ongoing activity

**2.1.1 BMP 1.1:** In 2010, the City incorporated access to the public informational video, “After the Storm,” on the City’s stormwater website at [www.winchesterva.gov/engineering/stormwater.php](http://www.winchesterva.gov/engineering/stormwater.php). The video highlights three case studies where polluted runoff threatens watersheds used for recreation, commercial fisheries and navigation, and drinking water. Insight is provided into problems as well as solutions to today’s water quality challenges. “After the Storm” also explains simple

steps citizens can follow to protect their local watershed. The City recently changed from broadcasting the program on the public access television channel to making it available on the City's website due to the fact that funding for the public access channel was eliminated by City Council. The website provides free information to citizens, households, public employees, and businesses. By changing the availability of this information from a limited broadcast schedule of four times per year on the public access channel to virtually unlimited availability on City's stormwater website, the City hopes to improve exposure and access to this important educational information.

The City's stormwater website recorded 188 page views during this permit period. Also during the permit period, no calls were received on the stormwater complaint hotline.

**2.1.2 BMP 1.2:** The City participated in the Wellness Festival on February 25, 2012. Approximately 100 informational brochures were distributed at this event. The informational brochures relayed information about the City's stormwater complaint hotline and the City's Adopt-A-Stream Program, as well as other stormwater pollution information. Outreach material to promote the stormwater complaint hotline and the Adopt-A-Stream Program is included in Appendix B.

**2.1.3 BMP 1.3:** The City currently operates a stormwater complaint hotline. The hotline is advertised to the public on the City's website at [www.winchesterva.gov/engineering/stormwater.php](http://www.winchesterva.gov/engineering/stormwater.php). During this reporting period, no calls were received on the hotline. Outreach material to promote the stormwater complaint hotline is included in Appendix B. The City considered whether to distribute another utility bill insert advertising the stormwater complaint hotline during this permit year. Staff ultimately decided that an additional mailing is not warranted at this time, although distribution of a mailer will be considered again during the next permit year. The City will continue to support the hotline because it provides a mechanism to track and address any stormwater issues identified by the public. In addition, the City will consider posting the stormwater complaint hotline information on the City's Facebook page during the next permit year. By using this popular social media, the City will be able to reach a large number of people with this information. There were no stormwater-related posts on the City's Facebook page during this permit year.

**2.1.4 BMP 1.4:** The City has posted stormwater information on their website at <http://www.winchesterva.gov/engineering/stormwater.php>. Although no calls were received to the stormwater complaint hotline, three organizations participated in the Adopt-A-Stream Program during the reporting period and there have been 188 page views on the stormwater website.

**2.1.5 BMP 1.5:** The City Engineer continued the Watershed and Stormwater Educational Opportunities Program as part of the City's formal program of stormwater education at public schools within the City. The Engineering Department offers educational talks on stormwater and related issues, including water pollution, water conservation, the water cycle and watersheds.



The City Engineer delivered a presentation on watersheds and non-point source pollution to six classes of 6<sup>th</sup> graders at the Daniel Morgan Middle School on November 22, 2011 and April 13, 2012. This presentation utilized the Enviroscope model as a tool to convey the concepts of stormwater runoff to the students. The City will continue to pursue opportunities with the public schools to educate students about stormwater management and related issues.

## **2.2 Public Involvement/Participation**

The objective of this control measure is to promote the availability of the MS4 program plan to the public for review and comment, provide access to the annual stormwater report, and to promote community engagement in activities that will increase public participation, reduce stormwater pollutants, and improve water quality.

The City continues to encourage public involvement in stormwater management activities through its formal Adopt-A-Stream Program. Approximately 50 flyers containing information about this program were distributed at workshops and events throughout the permit year. Two organizations participated in this program during the permit year.

Fifty pet waste flyers were also distributed by the City of Winchester during Permit Year 4. This tri-fold brochure describes the impacts of pet waste on waterbodies, provisions of the City Code pertaining to pet waste, and how pet owners can lessen pet waste impacts. The citizens can also contact City staff regarding stormwater concerns or complaints through the City's stormwater complaint hotline. Copies of the Adopt-A-Stream Program flyer, pet waste brochure, and stormwater complaint hotline flyer are included in Appendix B. Table 3 describes the tasks, measurable goals, and status of the Public Involvement/Participation BMPs.

**Table 3- Public Involvement/Participation BMPs**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
2.1	Continue encouraging participation in Adopt-A-Stream Program	Adoption of five or more stream segments in the five year permit cycle	Completed for Permit Year 4; ongoing program



BMP	BMP Description	Measurable Goal	Status
2.2	Post the MS4 Permit and Subsequent Revisions to the MS4 Program on the City's Website	Post the MS4 Permit and the current Program Plan on the website	Ongoing; The current MS4 Program Plan dated January 2010 is posted on the website and available to the public. The MS4 Permit will be posted in Permit Year 5

**2.2.1 BMP 2.1:** The City has posted information about the Adopt-A-Stream Program on their website at <http://www.winchesterva.gov/engineering/adoptastream.php>. Also included on the website is an invitation to join the program as well as a flyer detailing the steps to join the program. During the reporting period for Permit Year 4, two organizations participated in the Adopt-A-Stream Program as noted in Table 4. Two stream segments were adopted with three cleanups occurring during this permit year.

**Table 4- Summary of Adopt-A-Stream Participation**

Participant	Stream Segment	Date of Clean Up	Bags of Debris Collected
Shenandoah University Students	Abrams Creek between Millwood Avenue and the Frederick County line	March 2012	18
Farris Family	Town Run between Pall Mall Street and Abrams Creek	August 2011 and June 2012	5 (August) 3 (June)

**2.2.2 BMP 2.2:** The current MS4 Program Plan for the City is posted on the City's website at [www.winchesterva.gov/engineering/stormwater.php](http://www.winchesterva.gov/engineering/stormwater.php). The General Permit will be posted in Permit Year 5. The City's posting of the permit, program plan and annual reports provides an opportunity for review and comment by all interested parties and complies with all applicable freedom of information requirements.

### **2.3 Illicit Discharge Detection and Elimination**

The goal of this minimum control measure is to develop, implement, and enforce a program to detect and eliminate illicit discharges into the municipal separate storm sewer system. To meet

this goal, the operator of a small MS4 must develop and maintain an updated storm sewer map, develop and implement procedures to detect illicit discharges and to monitor outfalls, and notify any downstream MS4 of physical interconnections. The tasks, measurable goals, and status of the Illicit Discharge Detection and Elimination BMPs are described in Table 5.

The City updates the storm sewer map on a continuous basis with the receipt of “as-built” development plans. A copy of the most recent storm sewer map is included in Appendix C.

**Table 5- Illicit Discharge Detection and Elimination BMPs**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
3.1	Continue hazardous spill response program and two household hazardous waste collection days per month	Participation in the program and amount of waste collected during events	Completed for Permit Year 4; ongoing program
3.2	Implement inspections of storm sewers within the City’s five subwatersheds	Inspect Redbud Run and present findings, including information on any illicit connections identified and follow-up actions completed or planned	Completed for Permit Year 4 <sup>*</sup> ; ongoing program
3.3	Continue enforcement of illicit connections, as needed, according to the City’s Water Protection Ordinance	Track the number of calls to the stormwater complaint hotline (and/or emergency number) that address illicit connections. Track the number of illicit connections investigated and follow-up actions completed or planned	Completed for Permit Year 4; ongoing program
3.4	Continue administering stormwater complaint hotline to identify illicit connections	Track the response to the stormwater complaint hotline, including number of calls received, number of illicit connections identified and follow- up actions	Completed for Permit Year 4; ongoing program
3.5	Implement measurement of household waste reduction through tracking of tonnage of garbage and recycling materials collected	Measure the tonnage of garbage and recycling materials collected on annual basis. Track number of recycling bins distributed to residents	Completed for Permit Year 4; ongoing program

<sup>\*</sup> The City conducted dry weather inspections of Hoge Run during PY4 instead of Redbud Run since only about 200 feet of Redbud Run is located within the City. The City will inspect this short segment of Redbud Run during PY5.

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BMP	BMP Description	Measurable Goal	Status
3.6	Implement inflow and infiltration program to replace or slipline sanitary sewers to prevent illicit discharge	Track linear footage of sanitary sewer replacement and repairs and manhole replacement	Completed for Permit Year 4; ongoing program

**2.3.1 BMP 3.1:** The City collaborates with Frederick County on a joint hazardous spill response program and a household hazardous waste collection program. Household hazardous waste such as insecticides, pesticides, pool chemicals, antifreeze, transmission fluid, car batteries, fluorescent and compact light tubes, paints, thinners, solvents and household cleaners are collected from residents for proper disposal. Several of the items collected are sent off for recycling. These collections are held on the first and third Wednesdays of each month from noon to 6 p.m. during the months of April through October at the landfill's citizens' convenience center.

In addition, citizens can drop off household refuse and recyclables at 11 citizens' convenience sites located throughout Frederick County. These centers offer these services to Frederick County and Winchester residents at no charge. Citizens' convenience sites are located throughout the County.

These sites include:

- Albin: Located on Indian Hollow Road (Route 679) just off North Frederick Pike
- Greenwood: Located at the intersection of Greenwood and Senseny Roads behind the fire hall
- Clearbrook: Located on Martinsburg Pike at Clearbrook Park
- Gainesboro: Located on Gainesboro Road (Route 684) off North Frederick Pike
- Shawneeland: Located on Bowman's Lane (Route 613)
- Round Hill: Located just off McFarland Road (Route 817) along Northwestern Pike
- Middletown: Located on Valley Pike at the Middletown truck scales
- Double Toll Gate: Located on Front Royal Pike, just south of the Route 340 intersection
- Regional Landfill: Located on Landfill Road off Sulphur Spring Road (Route 655); 2.2 miles from the intersection of Millwood Pike and Sulphur Spring Road
- Gore: Located just off Back Creek Road (Route 704)
- Stare Tannery: Located on Brill Road (Route 6030)

Although the pounds of material collected during this reporting period have not been calculated by Frederick County as of this report, this is a popular program among residents. The City of Winchester will continue to support the County with this effort.

More information on household hazardous waste disposal is available on Frederick County's website at:

[http://www.co.frederick.va.us/public\\_works/recycling\\_landfill/solid\\_waste.aspx](http://www.co.frederick.va.us/public_works/recycling_landfill/solid_waste.aspx)

**2.3.2 BMP 3.2:** The City conducted dry weather inspections of Hoge Run during Permit Year 4. The inspection found 13 outfalls and 9 stream crossings (see updated Storm Utility Infrastructure Map, Appendix C). No illicit discharges were found along these streams. There were no follow-up activities needed as a result of dry weather inspections conducted along Buffalo Lick Run in Permit Year 3 since there were no major issues identified at the time.

**2.3.3 BMP 3.3:** There were no illicit connection calls to the stormwater complaint hotline or other such reports during this reporting cycle. Therefore, no illicit connections were investigated and no follow-up actions were conducted.

**2.3.4 BMP 3.4:** The stormwater complaint hotline was established for citizens to report problems with stormwater issues (such as flooding and erosion or water pollution), maintenance issues (such as clogged inlets or problems at stormwater ponds), and/or erosion and sediment control problems (such as failing silt fences at construction sites). It was also developed for citizens to report suspected stormwater violations such as unauthorized or illegal dumping of materials into streams and waterbodies. There were no illicit connection calls to the stormwater complaint hotline during this reporting cycle. Therefore, no illicit connections were investigated and there are no follow-up actions conducted.

**2.3.5 BMP 3.5:** The City has an established schedule for household trash and recycling pickup service for residents. This is a weekly service available to all residents whereby the City provides free recycling bins to residents. By providing the recycling service, the City reduces the amount of material that will be improperly disposed in the landfill or illegally dumped. In addition, the City provides weekly pickup of yard waste from March through January. This service also reduces the amount of material disposed in the landfill.

In this permit year, approximately 6,520 tons of household waste, 1,113 tons of yard waste and 2,139 tons of recycled materials (including scrap metal) were collected. The City distributed 1,342 recycling bins to residents and businesses, not including the downtown recycling bins or those that were distributed for special events.

**2.3.6 BMP 3.6:** The City has an established an inflow and infiltration abatement program to replace or slipline sanitary sewers and manholes, thus preventing illicit discharges to groundwater and streams. The City has implemented this BMP on an ongoing basis and will replace and slipline an average of 5,000 linear feet of sanitary sewer line per year. During Permit Year 4, the City replaced approximately 1,549 linear feet of sanitary sewer mains and lined approximately 4,052 feet of sanitary sewer pipe.

## **2.4 Construction Site Stormwater Runoff Control**

The goal of this minimum control measure is to develop, implement and enforce procedures to reduce pollutants in stormwater runoff which result from construction activities involving a land disturbance of one acre or greater. Table 6 describes the tasks, measurable goals, and status of the Construction Site Stormwater Runoff Control BMPs.

**Table 6- Construction Site Stormwater Runoff Control BMPs**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
4.1	Continue program to require construction site operators to control waste	Percentage and number of construction sites that meet compliance requirements with first and follow-up, as needed, site inspections	Completed for Permit Year 4; ongoing program
4.2	Continue maintaining DCR Erosion and Sediment Control plan review, inspection, and administration certification for a minimum of two City employees	The City will maintain two employees who are certified or describe action taken if the number drops below two.	Completed for Permit Year 4; ongoing program
4.3	Continue enforcement of erosion and sediment control as well as stormwater management and water quality	Number of plans reviewed, number approved, and number requiring a Virginia Pollutant Discharge Elimination System (VPDES) permit	Completed for Permit Year 4; ongoing program
4.4	Continue administering stormwater complaint hotline to identify problems at construction sites	Track the number of complaints received from the stormwater complaint hotline that are associated with construction site problems	Completed for Permit Year 4; ongoing program
4.5	Continue tracking regulated land disturbing activities	Track the total number of regulated disturbing activities and total disturbed acreage for the reporting period	Completed for Permit Year 4; ongoing program

**2.4.1 BMP 4.1:** The City's Water Protection Ordinance includes requirements for construction site operators to control waste. This task was measured by the percentage and number of construction sites that met compliance requirements with first and follow-up site inspections (if needed). For this reporting cycle, 99% of the construction sites inspected met the City's requirement for controlling waste upon a first inspection. 100% of construction sites inspected met the City's requirement for controlling waste upon a second inspection.

**2.4.2 BMP 4.2:** The City currently has one program administrator, one combined administrator, and three inspectors on staff, all of whom maintain Virginia DCR Erosion and Sediment Control plan review, inspection, and administration certification, respectively. The City also has two professional engineers on staff qualified to review plans under the program.

**2.4.3 BMP 4.3:** The City monitors all construction activities occurring within the City limits as part of its erosion and sediment control program authorized by the Virginia Erosion and Sediment Control Law and Regulations. Construction activities are also monitored under the City's stormwater management program as authorized by the Virginia Stormwater Management Act and Regulations.

Within this reporting cycle:

- 19 construction plans were reviewed and 18 construction plans were approved by the City; and
- 8 of these plans required a VPDES permit.

During this reporting period, the City maintained an affirmative status of "consistent" from DCR. This status is posted on DCR's website at [http://www.dcr.virginia.gov/stormwater\\_management/eslpr.shtml](http://www.dcr.virginia.gov/stormwater_management/eslpr.shtml).

**2.4.4 BMP 4.4:** During this reporting cycle, no complaints were received from the stormwater complaint hotline regarding construction site problems.

**2.4.5 BMP 4.5:** The land disturbing activities were tracked as plans and notifications were received. During this reporting period:

- 35 land disturbing activities were reported; and
- 45.13 acres were disturbed.

## ***2.5 Post-construction Stormwater Management in New Development and Redevelopment***

The goal of this minimum control measure is to develop and implement procedures for the inspection and maintenance of permanent structural and non-structural BMPs for both City-maintained and privately-maintained facilities. The tasks, measurable goals, and status of the Post-Construction Stormwater Management BMPs are described in Table 7.

**Table 7- Post-Construction Stormwater Management BMPs**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
5.1	Continue enforcement of erosion and sediment control as well as stormwater management and water quality	Track the type and number of BMPs installed, HUC of the BMPs, waterbody the BMP discharges to, number of acres treated to the nearest tenth of an acre, and inspection and maintenance schedules	Completed for Permit Year 4; ongoing program
5.2	Continue requiring BMP maintenance agreements for all privately-owned water quality and quantity BMPs	The number of BMPs inspected, the number in compliance with operation and maintenance requirements, and the number requiring action to correct deficiencies	Ongoing program

**2.5.1 BMP 5.1:** All site plans are reviewed for water quality calculations and must show compliance with the State stormwater management regulations regarding the phosphorus reductions required for development and redevelopment projects.

Appendix D contains an inventory of the known structural BMPs that discharge to the small MS4. During this reporting period, one new BMP was brought online. This information includes the project name, the applicant, whether the applicant is public or private, the tax map number, the ID number, date received, date signed by engineer, date signed by city attorney, date recorded, instrument number, BMP type, HUC, water body, acres treated, status, whether it is maintained and inspected, last inspection date and maintenance schedule.

**2.5.2 BMP 5.2:** BMP maintenance agreements are required for all privately owned water quality and water quantity BMPs. The City maintains a log of executed maintenance agreements. During this reporting period, the City finalized an implementation program to notify all property owners of inspections required on an annual basis and stipulated that inspections be completed by July 31, 2012. A copy of the letter and BMP inspection form is included in Appendix D along with the log of executed maintenance agreements.

During this reporting period, 60 private BMPs on 41 sites were inspected through the City's BMP maintenance program. Fifty-four of those BMPs were found to be in compliance with operations and maintenance requirements, and copies of the inspection reports outlining the corrective actions required on the remaining 6 BMPs were copied to the owners. The City will be performing follow-up inspections on these BMPs over the next three months.



## **2.6 Pollution Prevention/Good Housekeeping for Municipal Operations**

The goal of this minimum control measure is to develop, implement, evaluate, and modify an operation, maintenance, and training program for municipal operations. This goal includes updating SWPPPs for City facilities, training City staff, and developing storm water pollution prevention protocols for City contractors. The tasks, measurable goals, and status of the Pollution Prevention/Good Housekeeping BMPs are described in Table 8.

**Table 8- Pollution Prevention/Good Housekeeping BMPs**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
6.1	Continue implementing City Yards SWPPP and update every 3 years	Quarterly visual monitoring, annual facility inspection, and updated SWPPP	Completed for Permit Year 4; ongoing program
6.2	Continue use of salt storage building and vehicle washing facility at City Yards	Monthly City Yards inspection to observe that salt and vehicle washing are contained with the respective facilities and corrective measures taken if needed	Completed for Permit Year 4; ongoing program
6.3	Continue training of City employees on EMS	Train all employees	Completed for Permit Year 4; ongoing program
6.4	Continue street sweeping program and track amount of litter and debris removed	Track miles of streets swept annually during the reporting period	Completed for Permit Year 4; ongoing program

**2.6.1 BMP 6.1:** The City Yards, which is a storage and maintenance facility for heavy equipment and materials operated by the Public Works Department, has an approved SWPPP in place in order to limit discharges of pollutants to the storm sewer system. The plan outlines proposed improvements that will eliminate potential sources of pollution and provides recommendations to eliminate discharges of pollutants to streams and waterways. Standard Operating Procedures are included as part of the SWPPP. The SWPPP is reviewed and updated every three years. The SWPPP was updated most recently in 2010 to include corrective measures needed as a result of site inspections. A copy of the SWPPP is included in Appendix E.



As required in VPDES Permit No. VAR050822 for this facility, quarterly visual monitoring was conducted on October 19, 2011, January 17, 2012 and April 20, 2012. The annual facility inspection was performed in conjunction with visual monitoring on January 17, 2012.

As a result of the inspection, corrective measures were undertaken. One outfall point (Outfall #2) was removed from the plan and one non-stormwater discharge, the street sweeper water filling station, was added to the SWPPP.

**2.6.2 BMP 6.2:** The City operates and maintains a salt storage and vehicle washing facility. The facility is in use as planned and designed. Inspections of the facility were conducted as part of the City Yard inspections on October 19, 2011, January 17, 2012 and April 20, 2012.

**2.6.3 BMP 6.3:** The City requires all employees to attend a short training session on Environmental Management Systems (EMS) to raise the awareness among employees of environmental impacts associated with common work-related activities. Eighteen (18) City department heads and supervisors attended an MS4 permit information session on June 29, 2012 to educate staff about the requirements of the City's MS4 permit and program plan. A copy of the presentation delivered to employees is contained in Appendix F.

**2.6.4 BMP 6.4:** City streets are swept on a regular basis to remove pollutants and improve appearance. During this reporting period, 5,960 lane miles of streets were swept.

### 3.0 Results of Information Collected and Analyzed

There are no requirements for monitoring or data analysis as part of this Program.

### 4.0 Summary of New Stormwater Activities Planned for Permit Year 5

Table 9 outlines the BMPs planned for each of the minimum control measures for Permit Year 5 and their status.

**Table 9- New MS4 Stormwater Activities for Permit Year 5**

<b>Minimum Control Measure</b>	<b>BMP</b>	<b>Planned Activity</b>	<b>Comment</b>
Illicit Discharge Detection and Elimination	BMP 3.1 Inspections of storm sewers within City's five watersheds	Inspection of Hoge Run	Conducted in Permit Year 4; Inspection of Redbud Run will be conducted in Permit Year 5.

In addition, the City will continue with the following activities initiated in Permit Years 1, 2, 3 and 4:

- BMP 1.1: Broadcasting programs focused on stormwater;
- BMP 1.2: Disseminating information to the general public;
- BMP 1.3: Administering the stormwater complaint hotline;
- BMP 1.4: Updating and maintaining stormwater information posted on City's website;
- BMP 1.5: Initiating the formal program for presentations at elementary and high schools;
- BMP 2.1: Encouraging participation in the Adopt-A-Stream Program;
- BMP 2.2: Posting the MS4 Permit and Subsequent Revisions to the City's Website;
- BMP 3.1: Conducting hazardous spill response program and two household hazardous waste collection days per month;
- BMP 3.2: Implementing inspections of storm sewers within the City's sub-watersheds;
- BMP 3.3: Enforcing the prohibition of illicit connections, as needed, according to the City's Water Protection Ordinance;
- BMP 3.4: Administering the stormwater complaint hotline to identify illicit connections;
- BMP 3.5: Providing household trash and recycling services to residents;
- BMP 3.6: Conducting an inflow and infiltration abatement program to replace or slipline sanitary sewer system;
- BMP 4.1: Conducting a program to require construction site operators to control waste;
- BMP 4.2: Maintaining DCR Erosion and Sediment Control Plan review, inspection, and administration certification for a minimum of two City employees;
- BMP 4.3: Enforcing erosion and sediment control as well as stormwater management and water quality;
- BMP 4.4: Administering the stormwater complaint hotline to identify problems at construction sites;

- BMP 4.5: Tracking regulated land disturbing activities;
- BMP 5.1: Enforcing erosion and sediment control as well as stormwater management and water quality;
- BMP 5.2: Requiring BMP maintenance agreements for all privately-owned water quality and quantity BMPs;
- BMP 6.1: Conducting monitoring and annual inspections of the City Yards;
- BMP 6.2: Using salt storage building and vehicle washing facility at City Yards as designed;
- BMP 6.3: Training of City employees on EMS; and
- BMP 6.4: Street sweeping program and track amount of litter and debris removed.

## **5.0 Changes in Identified BMPs or Measurable Goals**

BMP 1.1, “Continue Airing TV Programs focused on Stormwater”, on the public access channel was discontinued. The City now makes this material available to citizens through a link on the City’s website to the web video of “After the Storm” where citizens may view it. The City will post links to other stormwater videos as they become available in Permit Year 5.

BMP 1.3, “Continue Administering Stormwater Complaint Hotline”, will be supplemented by posting the stormwater complaint hotline information on the City of Winchester’s Facebook page. By using this popular social media, the City will be able to provide a large number of people with this information. The City will continue this activity in Permit Year 5.

BMP 3.5, “Household Waste Reduction”, is a new BMP added to the Program Plan in January 2010. This BMP will track the tonnage of trash and recyclables collected in the City’s residential trash pickup service.

BMP 3.6, “Illicit Discharge Elimination”, is a new BMP added to the Program Plan in January 2010. This BMP is part of the City’s inflow and infiltration abatement program to prevent illicit discharges from sanitary sewers from reaching streams or groundwater. This BMP will measure the linear feet of sanitary sewer replaced or lined, and sanitary manholes replaced.

## **6.0 Reliance on Other Government Entities**

The City of Winchester does not rely on other government entities to meet the requirements of the VSMP General Permit.

## **7.0 Approval Status of Qualifying Local Programs**

The Virginia Soil and Water Conservation Board evaluated the City’s Erosion and Sediment Control Program in accordance with requirements of §10.1-561(E) of the Virginia Erosion and Sediment Control Law and 4VAC50-30-90(B) of Virginia Erosion and Sediment Control Regulations, and found the program to be consistent with the laws and regulations on September 20, 2007.

## **8.0 Total Maximum Daily Loads (TMDLs) with Waste Load Allocations (WLAs)**

A TMDL, as defined by the Environmental Protection Agency, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that load among the various sources of that pollutant. Pollutant sources are characterized as either point sources that receive a WLA or nonpoint sources that receive a load allocation. Each state is responsible for developing TMDLs for all impaired waters within their jurisdiction.

Currently, implementation plans are being developed within Virginia to address the TMDLs developed for the drainage area of the Chesapeake Bay. This will include the MS4 Permit area for the City of Winchester. The City acknowledges that when these plans are finalized, the City will modify their Program Plan, as needed, to meet any new requirements. Also, the City will participate in the development of the implementation plans for these TMDLs.

### **8.1 WLAs**

Within the City of Winchester, TMDLs and WLAs were developed and approved by the Virginia Soil and Water Conservation Board. The contributing drainage area for these loads extends beyond the City's designated MS4 permit area. The TMDL WLAs for the City, as stated in the Virginia Stormwater Management Program (VSMP) Permit Registration Statement, dated January 5, 2010, are:

- 443 ton/year of sediment to Abrams Creek;
- 269.2 ton/year of sediment to the Lower Opequon Creek; and
- $19.4 \times 10^{12}$  cfu/year of bacteria to Abrams Creek.

A map showing the drainage areas to impaired streams for the City is included in Appendix A.

In January 2009, the City adopted an ordinance that included language on migratory and nonmigratory waterfowl. The purpose of the ordinance is to control the feeding and baiting of migratory and nonmigratory waterfowl in order to protect the public health and property and the water quality of lakes, ponds, rivers and streams in Winchester. The intent of the ordinance is to reduce the amount of fecal matter from waterfowl deposited in the water and on the adjacent shoreline and waterfront property caused in part by the feeding and baiting of these fowl by the public. This ordinance remains in effect and is enforced by the City.

The City continues to maintain several BMPs that address the identified WLAs in the TMDLs as required under the General Permit. Detailed information on the evaluation techniques and the measurements of success can be found in Section 2.0 of this report. Table 10 describes the activities, waterbody/reach, and pollutant of concern to address the identified WLAs in the TMDLs.

**Table 10- BMPs to Address Pollutants**

<b>BMPs/Activities</b>	<b>Water Body/Reach</b>	<b>Pollutant(s) of Concern</b>
Maintain stormwater complaint hotline to receive reports of bacterial contamination	Abrams Creek	Fecal Coliform
Sweep city streets on a regular basis to remove sediment and debris	Abrams Creek Lower Opequon Creek	Sediment
Continue program to require construction site operators to control waste	Abrams Creek Lower Opequon Creek	Sediment
Review all site plans for water quality calculations and show compliance with Virginia's stormwater management regulations regarding the phosphorus reductions required for development and redevelopment projects	Abrams Creek Lower Opequon Creek	Sediment
Continue program to replace or slipline sanitary sewers and manholes	Abrams Creek	Fecal coliform
Continue program to provide household trash and recycling pickup service for residents	Abrams Creek	Fecal coliform
Continue to review stormwater management BMPs that improve water quality and inspect these as part of the City's annual inspection program.	Abrams Creek Lower Opequon Creek	Fecal Coliform, Sediment

## **8.2 Stormwater Discharges and Pollutant Loadings**

Section I B(9)(b) of the General Permit calls for an estimate of the volume of stormwater discharged and quantity of WLA pollutant.

The quantity of WLA pollutants was computed for Abrams Creek and Redbud Run, a tributary to the Lower Opequon Creek, within the City. The quantities were computed by pro-rating the total WLA for sediment and bacteria for Abrams Creek and the Lower Opequon Creek by the length of impaired stream within the City's MS4 area to the total length of impaired stream. This results in the following quantities:

- 129.7 tons/year of sediment for Abrams Creek
- 12 tons/year of sediment for Redbud Run
- $2,528 \times 10^{12}$  cfu/year of bacteria for Abrams Creek

This methodology does not account for land use or for any BMPs that are in place within the City's MS4 area. In Permit Year 4, the City examined the methodology used to determine the WLAs but did not propose revised WLAs for the Winchester MS4 area.

The estimated annual volume of stormwater was derived using the Simple Method approach for the five watersheds within the City as shown in Table 11. The volume of runoff represented in the table below uses readily available Geographic Information System (GIS) data to derive the percent impervious cover and does not subtract portions of the City that are permitted under separate National Pollution Discharge Elimination Systems permits (e.g. Virginia Department of Transportation MS4 Permit). These volumes are subject to revision as additional information is made available and processed.

**Table 11- Annual Stormwater Volume**

Description	Discharge to Impaired Waters?	Area (acres)	Impervious (%)	Runoff Coefficient	Runoff Volume (ft <sup>3</sup> )
MS4 to Redbud Run	Yes	167	42	0.428	10,041,020
MS4 to Town Run	Yes	2,068	33	0.347	100,808,604
MS4 to Abrams Creek (excluding Town Run)	Yes	2,450	41	0.419	144,210,771
MS4 to Buffalo Lick Run	No	789	33	0.347	38,461,310
MS4 to Hoge Run	No	422	29	0.311	18,437,007
<b>Total</b>		<b>5,896</b>			<b>311,958,711</b>

## 9.0 Identification of Illicit Discharges

In accordance with Section II B(3)(f), Illicit Discharge Detection and Elimination, the City is required to track the number of illicit discharges identified and how they were controlled or eliminated. The City identifies illicit discharges through its stormwater complaint hotline. During this reporting period, there were no stormwater complaints received on the City's hotline.

## 10.0 Land Disturbing Activities

In accordance with Section II B(4)(c), Construction Site Stormwater Runoff Control, of the General Permit, the City must track regulated land-disturbing activities for the reporting period. During this reporting period, a total of 35 land-disturbing activities were recorded for a total disturbance of 45.13 acres.

## 11.0 Stormwater Management Facilities

In accordance with Section II B(5)(b)(6), Post-construction Stormwater Management in New Development and Redevelopment, the City must track all known permanent stormwater management facilities that discharge to the regulated MS4. Table 12 contains the required information for all as-built facilities and Table 13 provides information on stormwater facilities that are under construction.

**Table 12- As-Built Stormwater Management Facilities**

Facility	Type	HUC	Impaired receiving waters	Acres Treated
3D Cleaning	SWM Pond	PU17	Abrams Creek	0.146
804 Amherst Street	Pervious Pavement, Grass Swales	PU17	Abrams Creek	0.12
Aiken Strip Mall	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	6.0
All Points Warehouse	SWM Pond	PU16	Opequon Creek-Hoge Run	8.8
Allston Mews	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	1.5
American Woodmark	SWM Pond	PU16	Opequon Creek-Hoge Run	2.6
Amherst St. CVS	SWM Pond	PU17	Abrams Creek	43.5
Bank of Clarke County	Downstream Defender	PU17	Abrams Creek	1.12
Battle Park Estates	SWM Pond	PU16	Opequon Creek-Hoge Run	35.6
Berryville Ave. CVS	Underground Detention	PU17	Abrams Creek	1.1
Burke Center	SWM Pond	PU17	Abrams Creek	7.1
Byrd Office Building	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	2.06
Castleman Subdivision	Underground Detention	PU17	Abrams Creek	6.39
Cedar Creek Grade (a)	Filtterra Units	PU17	Abrams Creek	2.7
Cedar Creek Grade (b)	Filtterra Units	PU17	Abrams Creek	2.7
Centre at Winchester	SWM Pond	PU17	Abrams Creek	8.5
Cottages at Willow Lawn	SWM Pond	PU17	Abrams Creek	40.6
Dermatology Associates	SWM Pond	PU17	Abrams Creek	5.2
Drissi Plaza	Underground Detention	PU17	Abrams Creek	2.1

Facility	Type	HUC	Impaired receiving waters	Acres Treated
FCPS Admin Annex	Rain Garden, Infiltration Swale	PU17	Abrams Creek	0.2
Fern Adams Building	Underground Detention	PU17	Abrams Creek	0.47
Frederick Douglas School	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	78.9
Friendship Fire Hall	SWM Pond	PU17	Abrams Creek	50.5
Ft. Collier Rd. Food Lion	SWM Pond	PU17	Abrams Creek	20.2
George Washington Autopark	Filtterra Units	PU17	Abrams Creek	0.2
Henkel-Harris	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	30.1
High End Automotive	SWM Pond, Rain Garden	PU16	Opequon Creek-Hoge Run	0.5
Hilton Garden Inn	Underground Detention	PU17	Abrams Creek	5.5
Hirschberg Office Building	Infiltration	PU17	Abrams Creek	1.1
History and Tourism Center	Rain Garden	PU17	Abrams Creek	3.4
HN Funkhouser	SWM Pond, Grass Swale	PU17	Abrams Creek	1.9
Home Depot	SWM Pond	PU17	Abrams Creek	
Hope Drive Subdivision	SWM Pond	PU17	Abrams Creek	66.0
Islamic Society of Winchester	Pervious Pavement	PU17	Abrams Creek	
John Handley High School	Underground Detention	PU17	Abrams Creek	8.2
Jubal Early Plaza Lot I-Lot 2	Detention Pond	PU17	Abrams Creek	4.22
Jubal Early Plaza II-Lot 9	Detention Pond	PU17	Abrams Creek	4.22
KSR LLC	Sand Filter	PU17	Abrams Creek	0.17
Landing at Park Heights	Planter Wall	PU17	Abrams Creek	1.96
Limestone Court	SWM Pond	PU17	Abrams Creek	18.3
Linden Medical Center	Detention Pond	PU17	Abrams Creek	4.4
Lowes	SWM Pond	PU17	Abrams Creek	13.5
Lowes	SWM Pond	PU17	Abrams Creek	19.7



Facility	Type	HUC	Impaired receiving waters	Acres Treated
Madison Center	Rain Garden, Underground Storage	PU17	Abrams Creek	2.6
Madison Place I	Detention Pond	PU16	Opequon Creek-Buffalo Lick Run	5.53
McDonald's-Berryville Ave	Underground Detention	PU17	Abrams Creek	0.6
McKinley Office Building	SWM Pond	PU17	Abrams Creek	3.2
Medical Circle Imaging	Filterras, Underground Detention	PU17	Abrams Creek	0.57
Morlyn Hills Subdivision	Wetlands, Retention Pond	PU17	Abrams Creek	
Northside Station	Infiltration Gallery	PU18	Redbud Run	1.6
Omps Pet Crematory	Vegetated Filter Strip, Rain Garden	PU17	Abrams Creek	4.57
Orchard Terrace	SWM Pond	PU18	Opequon Creek-Redbud Run	6.4
Our Health-Phase II	Porous Pavement	PU17	Abrams Creek	0.08
Panera	Filterra Units & Water Quality Basins	PU16	Opequon Creek-Buffalo Lick Run	1.5
Park Place	SWM Pond	PU17	Abrams Creek	33.1
Patriot Collision Center	SWM Pond	PU16	Opequon Creek-Hoge Creek	1.2
Pine-Burke Apartments Phase I	Underground Detention	PU17	Abrams Creek	0.47
Popeye's	Underground Detention	PU17	Opequon Creek-Buffalo Lick Run	0.93
Robinson School	SWM Pond	PU17	Abrams Creek	25.2
Rolling Hills Park	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	4.5
Rolling Hills Subdivision	Detention Pond	PU16	Opequon Creek-Buffalo Lick Run	54.7
Rubbermaid Pallet Storage	Grass Filter Strip	PU16	Opequon Creek-Hoge Run	3.2
Saturn of Winchester	SWM Pond	PU16	Opequon Creek-Hoge Run	3.8
Selma Medical	SWM Pond	PU17	Abrams Creek	7.5
Shawnee Fire Department	SWM Pond	PU17	Abrams Creek	20.3

Facility	Type	HUC	Impaired receiving waters	Acres Treated
Sorrel Court	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	4.8
Spencer Square	Detention Pond	PU16	Abrams Creek	1.5
Stonecrest Village	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	87.0
Stutzman Body Shop	Infiltration Gallery	PU16	Opequon Creek-Buffalo Lick Run	1.1
Summerfield Apartments	SWM Pond	PU17	Abrams Creek	5.4
SU Student Center Addendum	Pervious Pavement	PU17	Abrams Creek	0.4
Sun Trust Bank	Underground Detention	PU17	Abrams Creek	1.0
TGI Friday's & Glaize PVR	Downstream Defenders & Infiltration Ponds	PU16	Opequon Creek-Buffalo Lick Run	2.9
The Corners I and II	Infiltration Gallery	PU17	Abrams Creek	3.1
Timberlake Office Building	Filtrerra Units	PU17	Abrams Creek	0.5
Trinity Express Lube	SWM Pond	PU17	Abrams Creek	0.81
Valley Ave. Food Lion	SWM Pond	PU17	Abrams Creek	20.7
Valley Mortgage	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	58.0
Valor Drive Site Plan	SWM Pond	PU17	Abrams Creek	3.44
Valor View Shopping Center	Underground Detention, Rain Garden	PU17	Abrams Creek	1.48
Wal-Mart	SWM Pond	PU17	Abrams Creek	19.4
Walnut Street Extension Subdivision	Grass Swale	PU17	Opequon Creek	1.24
War Memorial Building	Rain Garden	PU17	Abrams Creek	0.5
Westridge Section 1	SWM Pond	PU17	Abrams Creek	9.2
Westridge Section 2	SWM Pond	PU17	Abrams Creek	15.1
Whittier Ponding Basin	SWM Pond	PU17	Abrams Creek	124.7
Winchester Medical Center	SWM Pond	PU17	Abrams Creek	171

**Table 13- Stormwater Management Facilities Under Construction**

<b>Facility</b>	<b>Type</b>	<b>HUC</b>	<b>Impaired receiving waters</b>	<b>Acres Treated</b>
812 Amherst Street	Pervious Pavement	PU17	Abrams Creek	0.19
830 Amherst Street	Pervious Pavement	PU17	Abrams Creek	0.19
BSW Investments	Rain garden	PU17	Abrams Creek	0.16
Commercial Street Used Cars	Underground Detention	PU17	Abrams Creek	0.7
Commonwealth Plaza - Phase 3	Filtterra	PU17	Abrams Creek	0.17
Craun Property	Filtterra	PU17	Abrams Creek	NA
East Tevis Street Extension	WQ Ponds	PU17	Abrams Creek	76.0
Elite Settlements	Pervious Pavement	PU17	Abrams Creek	0.1
FCPS Admin Building Addition	Filtterra Units	PU17	Abrams Creek	0.2
Featherbed Lane-Lot 3	Filtterra, Rain Garden	PU17	Abrams Creek	1.14
Five Star Auto Spa	Filtterra	PU17	Abrams Creek	0.11
G&M Music	Rain Garden	PU17	Abrams Creek	0.15
Glaize Pleasant Valley Commercial	Filtterra Units	NA	NA	NA
Harvest Drive Medical	Filtterra Units & Infiltration Pavers	PU17	Abrams Creek	7.1
Hope Drive Site Plan	SWM Pond	PU16	Opequon Creek-Buffalo Lick Run	2.69
JD Byrider	SWM Pond	PU 17	Abrams Creek	1.41
Jenkins-Cooper	Detention Pond	PU16	Opequon Creek-Hoge Run	0.66
Linden Drive Office Park	Detention Pond	PU 17	Abrams Creek	2.13
Linden Heights Animal Hospital	Rain Garden	PU 17	Abrams Creek	1.34
Meddent Center	Rain Garden	PU17	Abrams Creek	0.4
Rubbermaid Building Expansion	StormFilters, SWM Pond	PU17	Abrams Creek	1.4, 2.28, 35.67
Rubbermaid Storage Area	2Grass Swales	PU17	Abrams Creek	0.76
Shawnee Drive	SWM Pond	NA	NA	NA

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Facility	Type	HUC	Impaired receiving waters	Acres Treated
Business Park				
South Valley Plaza	Filtterra Units	PU16	Opequon Creek-Sulphur Spring Run	3.1
Spanish United Pentecostal Church	Pervious Pavement, Infiltration Ditches	PU16	Abrams Creek	0.23
St. James Place	Rain Garden	PU17	Abrams Creek	0.4
Star Beauty School	Rain Garden	PU17	Abrams Creek	0.37
Trinity Auto Center	Bioretention	PU17	Abrams Creek	0.67
Whitacre Property	Filtterra Unit	PU17	Abrams Creek	NA

## 12.0 Reliance on Any Applicable Third Parties

The City of Winchester does not rely on third parties to meet the requirements of the VSMP MS4 General Permit.

## 13.0 Public Comment Period for MS4 Program

A formal Public Comment Period for the Program was not initiated by the City. The Program is available on the City's website and comments are welcome at any time from the public. To date, no written comments have been received.

The City of Winchester believes the BMPs set forth in the current MS4 Program Plan are effective and fulfill the requirements of the MS4 Permit for the City.

**Appendix A. MS4 Program (revised January 5, 2010)**

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# CITY OF WINCHESTER, VIRGINIA



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January 7, 2010

J. Douglas Fritz  
MS4 Program Manager  
Commonwealth of Virginia  
Department of Conservation and Recreation  
203 Governor Street  
Richmond, Virginia 23219-2010

Re: City of Winchester Updated Program Plan  
VSMP General Permit for Small MS4s  
VAR040053

Dear Mr. Fritz:

Enclosed you will find the required information for the City of Winchester to comply with requirements to update our Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4). This submission is in fulfillment of the requirements outlined in the letter from you, dated July 15, 2008, which established key dates for the necessary changes to the approved MS4 Program Plan based on the recently adopted changes to the state regulations (4VAC50-60). Enclosed you will find:

- Attachment 1 – Registration Statement (DCR 199-148) (07/08)
- Attachment 2 – Map of Drainage Areas to Impaired Waters
- Attachment 3 – Updated City of Winchester Program Plan (BMPs to Comply with Minimum Control Measures)

If you have any questions or require additional information, please do not hesitate to call me at (540) 667-1815 extension 1407 (email: [peisenach@ci.winchester.va.us](mailto:peisenach@ci.winchester.va.us)) or the City Engineer, Kelly Henshaw at (540) 667-1815 extension 1481 (email: [khenshaw@ci.winchester.va.us](mailto:khenshaw@ci.winchester.va.us)).

Sincerely,

Perry Eisenach, PE  
Public Services Director

cc: Michele Monde, PE, Michael Baker Jr., Inc.  
File



**VSMP GENERAL PERMIT REGISTRATION STATEMENT FOR STORMWATER DISCHARGES  
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS [VAR04]**

(Please Type or Print All Information)

(The applicable fee specified in Form DCR 199-145 must additionally be submitted to the address given in that form to obtain coverage)

**1. Regulated Small MS4**

Name: City of Winchester, VA MS4

Type: ☒ City ☐ County ☐ Incorporated Town ☐ Unincorporated Town ☐ College or University  
☐ Local School Board ☐ Military Installation ☐ Transport System ☐ Federal or State Facility ☐ Other

Location (County or City): Winchester, Virginia

**2. Regulated Small MS4 Operator**

Name: The City of Winchester

Address: Rouss City Hall, 15 North Cameron Street

City: Winchester State: VA Zip: 22601

**3. Hydrologic Unit Code(s) as identified in the most recent version of Virginia's 6th Order National Watershed Boundary Dataset currently receiving discharges or that have potential to receive discharges from the regulated small MS4:**

HUCs: Hoge Run-PU16; Buffalo Lick Run-PU16; Abrams Creek-PU17;  
Town Run-PU17; Redbud Run-PU18

**4. Attach a description of the estimated drainage area, in acres, served by the regulated small MS4 discharging to any impaired receiving surface waters listed in the most recent Virginia 305(b)/303(d) Water Quality Assessment Integrated Report, and a description of the land use of each such drainage area.**

**5. Any TMDL waste loads allocated to the regulated small MS4 (this information may be found at <http://www.deq.state.va.us/tmdl/develop.html>):** TMDLs indicate 443 t/y Sediment to Abrams, 269.2 t/y Sediment to L. Opequon, and 19.4x10<sup>12</sup> cfu/y bacteria to Abrams.

**6. The name(s) of any regulated physically interconnected MS4s to which the regulated small MS4 discharges.**  
N/A

**7. A copy of the MS4 Program Plan that includes:**

**a. A list of BMPs that the operator proposes to implement for each of the stormwater minimum control measures and their associated measurable goals pursuant to 4VAC50-60-1240, Section II B; that includes:**

- i. A list of the existing policies, ordinances, schedules, inspection forms, written procedures, and other documents necessary for BMP implementation; and
- ii. The individual, department, division, or unit responsible for implementing the BMP;

**b. The objective and expected results of each BMP in meeting the measurable goals of the stormwater minimum control measures;**

**c. The implementation schedule including any interim milestones for the implementation of a proposed new BMP; and**

d. The method that will be utilized to determine the effectiveness of each BMP and the program as a whole.

8. List all existing signed agreements between the operator and any applicable third parties where the operator has entered into an agreement in order to implement minimum control measures or portions of minimum control measures.

N/A

9. The name, address, telephone number and e-mail address of either the principal executive officer or ranking elected official as defined in 4VAC50-60-370.

Robert Noe, Interim City Manager 540-667-1815  
Rouss City Hall, 15 North Cameron Street  
Winchester, Virginia 22601 citymanager@ci.winchester.va.us

10. The name, position title, address, telephone number and e-mail address of any duly authorized representative as defined in 4VAC50-60-370.

Perry Eisenach, Public Services Director or Kelly Henshaw, City Engineer  
utilities@ci.winchester.va.us engineering@ci.winchester.va.us  
See Item 9 for Address and Phone Number

11. **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."

Print Name: Robert Noe Title: Interim City Manager

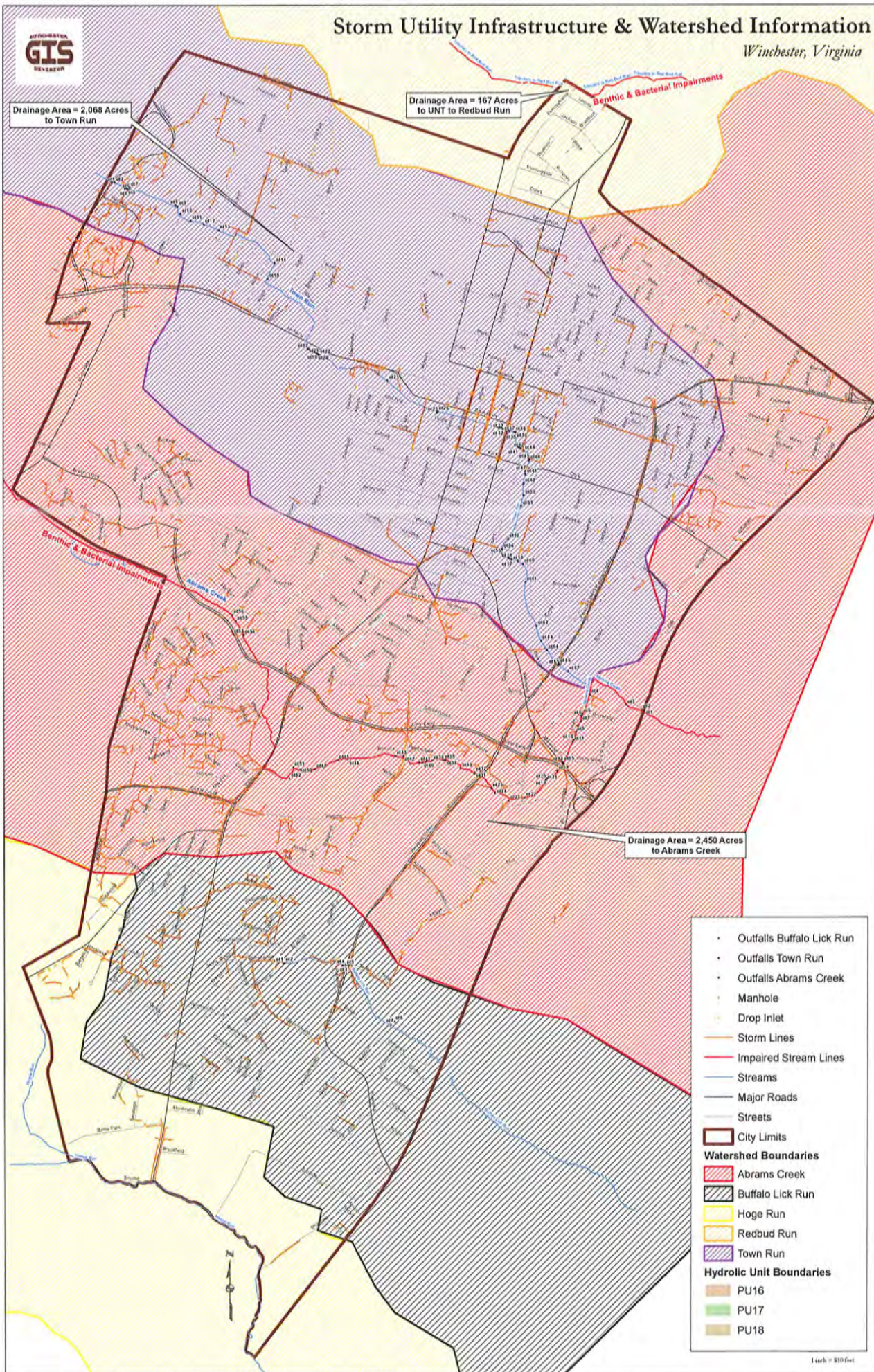
Signature: [Handwritten Signature] Date: 1/5/10

**For Department of Conservation and Recreation Use Only**

Accepted/Not Accepted by: \_\_\_\_\_ Date: \_\_\_\_\_

Basin \_\_\_\_\_ Stream Class \_\_\_\_\_ Section \_\_\_\_\_ Special Standards \_\_\_\_\_







**BMP-Admin**

The City of Winchester will update and provide additional schedules to implement its MS4 program in order to meet the requirements of the VSMP General Permit for Stormwater Discharges from Small MS4s. The City of Winchester understands that it may, at any time, choose to apply for and obtain coverage under an individual VSMP permit instead of meeting the conditions of the General Permit.

The City of Winchester defines its MS4 Program Plan as its Registration Statement for Coverage under the General Permit for Discharges from Small MS4s dated December 6, 2007, and all documents, policies, and procedures specified directly and those documents, policies, procedures necessary to implement all specified programs listed in the registration statement, as amended by annual updates.

**Responsible Party:** The MS4 Program is administered through the Public Services Department. The Public Services Director is responsible for developing the updated MS4 Plan and providing the appropriate certification to any documents. Additional responsible parties for whom the authority to oversee individual BMPs associated with the Minimum Control Measures have been delegated and are indicated with each individual BMP in this document.

**Measurable Goals:** The updated copy of this MS4 Program Plan must be completed and submitted to DCR by January 10, 2010, in compliance with the schedule included in the reissued General Permit, and specified in the letter from DCR to the City, dated July 15, 2008.

**Items Needed for the Annual Report:** An annual report must be submitted for each permit year in compliance with the time frame included in the reissued General Permit.

**To Be Completed as Part of the MS4 Program Plan Update Required By the New Permit:**

1. Update the permit requirements for the Six Minimum Control Measures.
2. Are any additional BMPs required to meet the new permit requirements?
3. Provide a description of the BMP, responsible party, and schedule including interim goals to implement the additional BMPs that is consistent with the new permit.
4. For each existing BMP included in the MS4 Program Plan, review and complete the following:
  - a. Does this BMP comply with the new General Permit or are modifications required?
  - b. If no modifications are required, then BMP remains the same.
  - c. If modifications are required, what modifications are required?
  - d. What is my proposed schedule for implementation of the modifications?
  - e. Include the proposed schedule in the Schedule and Evaluation Section.
  - f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?
  - g. Which TMDL wasteload allocation?
  - h. How does the BMP address the pollutant identified in a TMDL wasteload allocation?
  - i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation?
  - j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation.



<b>Minimum Control Measure (1): public education and outreach on stormwater impacts</b>
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*Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.*

*The operator shall identify, schedule, implement, evaluate and modify, as necessary, BMPs to meet the following public education and outreach measurable goals:*

- a. Increased individual and household knowledge about the steps that they can take to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;*
- b. Increased public employee, business, and general public knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications;*
- c. Increased individual and group involvement in local water quality improvement initiatives including the promotion of local restoration and clean up projects, programs, groups, meetings and other opportunities for public involvement;*
- d. Diverse strategies to target audiences specific to the area serviced by the regulated small MS4;*
- e. Improved outreach program to address viewpoints and concerns of target audiences, with a recommended focus on minorities, disadvantaged audiences and minors; and*
- f. Targeted strategies towards local groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts.*

**BMP 1.1 – Broadcast programs focused on stormwater**

The City will initiate web access to programs focused on stormwater in the early part of 2010. The City will incorporate the release of the public announcement of the "After the Storm" onto the City's stormwater website ([www.winchesterva.gov/engineering/stormwater](http://www.winchesterva.gov/engineering/stormwater)). The program provides information to the general public on stormwater issues and more specifically actions they can take to reduce stormwater pollution. The change from broadcasting this program on TV to the website is required because the public access channel was eliminated by City Council. The website provides free information to the City's individuals, households, public employees, and businesses.

**Schedule and Evaluation:** Winchester plans to have the website link available at all times. This is an increase in accessibility from the TV broadcast of "After the Storm" show which was limited to 4 times a year. The City will evaluate the effectiveness of the broadcast by asking citizens that call the stormwater complaint hotline if they have seen the video or if they are aware of the website link, and also by tracking the number of visitors to the website. If citizens who call the stormwater complaint hotline are not familiar with the website link, information regarding the link to the website will be provided to them.

**Responsible Party:** City Engineer

**Necessary Documents:** "After the Storm" EPA/Weather Channel Show

**Measurable Goals:** The City will add the program to the stormwater website and it will be available all the time.

**Items to be Reported in the Annual Report:** The annual report will include information on the number of times that visitors went to the "After the Storm" website.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. If no modifications are required, then BMP remains the same. **N/A***



Minimum Control Measure (1): public education and outreach on stormwater impacts
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- c. *If modifications are required, what modifications are required?* **N/A**
- d. *What is my proposed schedule for implementation of the modifications?* **N/A**
- e. *Include the proposed schedule in the Schedule and Evaluation Section.* **N/A**
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation?*  
**No**
- g. *Which TMDL wasteload allocation?* **N/A**
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation?* **N/A**
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation?* **N/A**
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation.* **N/A**

### **BMP 1.2 Continue disseminating information to the general public**

The City participates in several annual activities aimed at disseminating information to the general public. These include the Wellness Festival (located at the Apple Blossom Mall and occurring in February) and Earth Day Activities (located at the Jim Barnett Park and occurring in April). Participation in these activities allows the City to focus the water quality improvement initiatives toward specific target audiences that include those served by the MS4, allows for the interactive exchange of viewpoints and concerns and those who are considered likely to affect pollution reduction in the MS4.

**Schedule and Evaluation:** The City will participate in the Wellness Festival and the Earth Day Activities in February and April of each year of the permit cycle. The effectiveness of this BMP will be evaluated based on the estimated number of brochures distributed at these events.

**Responsible Party:** City Engineer

**Necessary Documents:** Informational brochures to be distributed at the events will address the City's Stormwater complaint hotline and the City's Adopt-A-Stream program as well as EPA's general customizable brochure on stormwater pollution (available from EPA's website).

**Measurable Goals:** Effectiveness of this BMP will be measured based on the estimated number of brochures distributed at these events.

**Items to be Reported in the Annual Report:** The annual report will include information on the estimated number of brochures distributed at the public events.

### **Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required?* **Yes. No modifications required for compliance.**
- b. *If no modifications are required, then BMP remains the same.* **N/A**
- c. *If modifications are required, what modifications are required?* **N/A**
- d. *What is my proposed schedule for implementation of the modifications?* **N/A**
- e. *Include the proposed schedule in the Schedule and Evaluation Section.* **N/A**
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation?*  
**No**
- g. *Which TMDL wasteload allocation?* **N/A**



Minimum Control Measure (1): public education and outreach on stormwater impacts
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- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? N/A*
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? N/A*
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. N/A*

**BMP 1.3 Continue administering stormwater complaint hotline**

The City has established a stormwater complaint hotline. A brochure for the hotline is posted on the City's stormwater website at <http://www.winchesterva.gov/engineering/stormwater.php>. In addition, utility bill inserts providing information on the stormwater hotline were included in the December 2007 to January 2008 utility bills. This BMP provides communication to the vast majority of individuals, businesses and groups (including minority and disadvantaged audiences), and provides a forum for concerns and fosters community involvement.

**Schedule and Evaluation:** The City's schedule for this BMP is an ongoing process. The City will evaluate the effectiveness of this BMP based on the number of calls received to report problems. In addition, the City will evaluate the need to distribute another utility bill insert based on the response received to the initial distribution as well as response well beyond the initial distribution.

**Responsible Party:** City Engineer

**Necessary Documents:** Flyer on stormwater complaint hotline and utility bill inserts advertising the stormwater complaint hotline

**Measurable Goals:** The City will evaluate the effectiveness of this BMP based on the number of calls received to report problems as well as the number of problems resolved, unresolved based on constraints, etc.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the number of calls received, the number of unresolved complaints, etc. on an annual basis and include in the annual report.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. If no modifications are required, then BMP remains the same. N/A*
- c. If modifications are required, what modifications are required? N/A*
- d. What is my proposed schedule for implementation of the modifications? N/A*
- e. Include the proposed schedule in the Schedule and Evaluation Section. N/A*
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation? **Yes***
- g. Which TMDL wasteload allocation? **"Bacteria TMDL for Abrams Creek and Upper and Lower Opequon Creek Located in Frederick and Clarke County, Virginia"***
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **It provides a mechanism for observed sources of bacterial contamination to be reported and addressed by the MS4 staff.***



Minimum Control Measure (1): public education and outreach on stormwater impacts
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- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? N/A*
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. N/A*

**BMP 1.4 Update and maintain stormwater information posted on City's website**

The City has added information to the City's website at <http://www.winchesterva.gov/engineering/stormwater.php> on the City's stormwater complaint hotline as well as the City's Adopt-A-Stream program (including a flyer to request participation, the 6-Step Process to adopt a segment of Stream in Winchester and pictures from a recent event). In addition the City's website will include general information defining a watershed and an MS4 as well as explaining why stormwater runoff is important to the community.

**Schedule and Evaluation.** The City will continue posting updated information on the City's stormwater complaint hotline and Adopt-A-Stream Program, as needed. The City will evaluate the effectiveness of this BMP based on the response to the posting (including calls to the hotline number and participation in the Adopt-A-Stream program) and will track the number of "hits" to the stormwater website per year.

**Responsible Party:** City Engineer

**Necessary Documents:** Flyer on stormwater complaint hotline and flyers on Adopt-A-Stream Program (including invitation to participate and the 6-Step Process for adopting a segment of stream in Winchester)

**Measurable Goals:** The City will evaluate the effectiveness of this BMP based on the response to the posting (including calls to the hotline number and participation in the Adopt-A-Stream program) and will track the number of "hits" to the stormwater website per year.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the number of calls received on the stormwater complaint hotline (including calls to the hotline number and participation in the Adopt-A-Stream program) and the number of "hits" to the stormwater website per year.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? Yes. No modifications required for compliance.*
- b. *If no modifications are required, then BMP remains the same. N/A*
- c. *If modifications are required, what modifications are required? N/A*
- d. *What is my proposed schedule for implementation of the modifications? N/A*
- e. *Include the proposed schedule in the Schedule and Evaluation Section. N/A*
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? Yes*
- g. *Which TMDL wasteload allocation? "Bacteria TMDL for Abrams Creek and Upper and Lower Opequon Creek Located in Frederick and Clarke County, Virginia"*
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? It provides a mechanism for observed sources of bacterial contamination to be reported and addressed by the MS4 staff.*



Minimum Control Measure (1): public education and outreach on stormwater impacts
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- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? N/A*
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. N/A*

**BMP 1.5 Initiate formal program for presentations at elementary and high schools**

Although the City has previously visited schools to present information on preventing stormwater pollution, the City would like to create a more formalized program to conduct school presentations. This program will be summarized in a letter (including a description of the type of information to be presented, the objective of the presentation, the length of presentation, the format of presentation – whether PowerPoint or field work or model such as Enviroscope, etc.). The City will then distribute the letter to target schools requesting that the City Engineer be invited to the school to make a presentation.

**Schedule and Evaluation:** The City will start this program within the first two years of the current permit cycle. The City will evaluate the effectiveness of the program based on the response to the letters distributed to target schools.

**Responsible Party:** City Engineer

**Necessary Documents:** Letter describing school program for stormwater pollution prevention education

**Measurable Goals:** The City will evaluate the effectiveness of the program based on the response to the letters distributed to target schools and the number of schools that elect to participate in the program by requesting the City Engineer to provide a presentation.

**Items to be Reported in the Annual Report:** The annual report will include information on the number of schools that elect to participate in the program, including the number of presentations provided each year and an approximate number of students who witnessed the presentation.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? Yes. No modifications required for compliance.*
- b. *If no modifications are required, then BMP remains the same. N/A*
- c. *If modifications are required, what modifications are required? N/A*
- d. *What is my proposed schedule for implementation of the modifications? N/A*
- e. *Include the proposed schedule in the Schedule and Evaluation Section. N/A*
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? Yes*
- g. *Which TMDL wasteload allocation? All existing and future TMDL wasteloads.*
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? By reaching out to students while they are young and impressionable, the MS4 can develop a consciousness about the issues surrounding stormwater runoff pollution and water quality.*
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? N/A*
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. N/A*

Minimum Control Measure (2): public involvement/participation
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*The operator shall identify, schedule, implement, evaluate and modify, as necessary, BMPs to meet the following public involvement/participation goals:*

- a. Promote the availability of the operator's MS4 Program Plan for public review and comment. Provide access to or copies of the MS4 Program Plan upon request of interested parties in compliance with all applicable freedom of information regulations;*
- b. Provide access to or copies of the annual report upon request of interested parties in compliance with all applicable freedom of information regulations; and*
- c. Participate, through promotion, sponsorship, or other involvement, in local activities aimed at increasing public participation to reduce stormwater pollutant loads and improve water quality.*

**BMP 2.1 Continue encouraging participation in Adopt-A-Stream Program**

The City has formalized an Adopt-A-Stream Program. A flyer has been distributed inviting participation and a second flyer was developed outlining the 6-Step Process for adopting a segment of stream in Winchester (including links to DCRs website). The City will continue encouraging participation in the program so that more streams are adopted in Winchester, and the participants will develop an enhanced appreciation for the need to reduce stormwater pollution and improve water quality.

**Schedule and Evaluation:** The City has posted information about the program on the City's website and also distributes details at public meetings. If participation does not increase over the years (based on the number of streams adopted each year of the permit cycle), the City will evaluate other means for advertising the program and inviting participation.

**Responsible Party:** City Engineer

**Necessary Documents:** Flyers on Adopt-A-Stream Program (including invitation to participate and the 6-Step Process for adopting a segment of stream in Winchester)

**Measurable Goals:** The City's goal for this BMP involves the adoption of at least 5 more stream segments in the five year permit cycle (to provide a total of 7 stream segments adopted).

**Items to be Reported in the Annual Report:** Information to be reported in the City's Annual report includes information on the streams adopted, the organizations participating in the program, the dates of cleanup events and a narrative description of the litter and debris removed from the stream and stream banks (either the number of bags collected and/or weight of material collected).

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. If no modifications are required, then BMP remains the same. **N/A***
- c. If modifications are required, what modifications are required? **N/A***
- d. What is my proposed schedule for implementation of the modifications? **N/A***
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation? **Yes***
- g. Which TMDL wasteload allocation? **All existing and future TMDL wasteloads.***
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **It provides an opportunity to educate and engage the public in understanding the issues that exist with watershed pollution. Through this***



Minimum Control Measure (2): public involvement/participation
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**engagement, the MS4 is developing an educated population who will be less likely to contribute to sediment and bacterial pollution and more likely to report incidents that are observed.**

- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

**BMP 2.2 Post the MS4 Permit and Subsequent Revisions to the City's Website**

The City has developed a website with significant information regarding issues related to the MS4 General Permit. The City will post the permit and subsequent revisions to the program plan in a conspicuous location in the stormwater area of the City's website at <http://www.winchesterva.gov/engineering/stormwater.php> so that it may be reviewed and commented on by all interested parties. This posting complies with all applicable freedom of information regulations for both the MS4 Program Plan and the annual reports.

**Schedule and Evaluation:** The City will accomplish this BMP during the second year of the current permit cycle and will maintain this for all subsequent years.

**Responsible Party:** City Engineer

**Necessary Documents:** Current MS4 Program Plan and all related documents.

**Measurable Goals:** The City will evaluate the effectiveness of this BMP based on its being accomplished and updated for the Annual Reports from years 2, 3, 4 and 5.

**Items to be Reported in the Annual Report:** The Annual report shall report the date that new information is posted in each year of the permit cycle.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**Yes**
- g. Which TMDL wasteload allocation? **All existing and future TMDL wasteloads.**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **By making the public aware of existing (and future) impairments within the MS4s jurisdiction.**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

Minimum Control Measure (3): illicit discharge detection and elimination
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*The MS4 Program shall:*

- a. Develop, implement and enforce a program to detect and eliminate illicit discharges, as defined at 4 VAC50-60-1200, into the small MS4.*
- b. Develop, if not already completed, a storm sewer system map, showing the location of all known outfalls of the regulated small MS4 including those physically interconnected to a regulated MS4, the associated HUCs, and the names and locations of all impaired surface waters that receive discharges from those outfalls. The operator shall also estimate the acreage within the regulated small MS4 discharging to each HUC and impaired water;*
- c. To the extent allowable under state, tribal or local law or other regulatory mechanism, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions;*

*The following categories of nonstormwater discharges or flows (i.e. illicit discharges) must be addressed only if they are identified by the operator, the State Water Control Board, or by the board as significant contributors of pollutants to the regulated small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltrations, uncontaminated pumped ground water, discharges from potable water sources, foundations drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, discharges or flows from fire fighting activities, and flows that have been identified in writing by the Department of Environmental Quality as de minimus discharges that are not significant sources of pollutants to state waters and not requiring and VPDES permit;*
- d. Develop and implement procedures to detect and address non-stormwater discharges, including illegal dumping, to the regulated small MS4;*
- e. Prevent or minimize to the maximum extent practicable, the discharge of hazardous substances or oil in the stormwater discharge(s) from the regulated small MS4. In addition, the MS4 Program must be reviewed to identify measures to prevent the recurrence of such releases and to respond to such releases, and the program must be modified where appropriate. This permit does not relieve the operator of the responsible part(ies) of any reporting requirements of 40 CFR Part 110 (2001), 40 CFR Part 117 (2001) and 40 CFR Part 302 (2001) or §62.1-44.34:19 of the Code of Virginia;*
- f. Track the number of illicit discharges identified, provide narrative on how they were eliminated, and submit the information in accordance with the evaluation and assessment requirements of this permit; and*
- g. Notify, in writing, any downstream regulated MS4 to which the small regulated MS4 is physically interconnected of the small regulated MS4s connection to that system.*



**BMP 3.1 Continue hazardous spill response program and household hazardous waste collection**

The City is continuing to coordinate with Frederick County on a joint hazardous spill response program and a household hazardous waste collection program. Household hazardous waste is collected at the Regional Landfill, with two household hazardous waste collection days each month. The days are publicized in the local newspapers, radio and cable TV. The City plans to continue these programs through the current permit cycle.

**Schedule and Evaluation:** The City plans to continue this program with the two collection periods per month. The City will evaluate the need for increasing the number of days that the collections are needed based on the participation in the program.

**Responsible Party:** City Refuse and Recycling Coordinator

**Necessary Documents:** Local newspaper advertisement of household hazardous waste collection

**Measurable Goals:** The City will measure the effectiveness of this BMP based on the participation in the program and amount of waste collected during these events.

**Items to be Reported in the Annual Report:** The annual report will include information on the dates of the collection days as well as a narrative description on the type and general amount of materials collected (the number cans of discarded paint, the number and type of batteries collected, etc.)

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**No**
- g. Which TMDL wasteload allocation? **N/A**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

Minimum Control Measure (3): illicit discharge detection and elimination
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**BMP 3.2 Implement inspections of storm sewers within the City's five subwatersheds**

In the previous permit cycle, the City completed a prioritization of subwatersheds based on the methodology presented in the Center for Watershed Protection (CWP) and EPA document on Illicit Discharge Detection and Elimination. The prioritization was based on a map of the City's subwatersheds, including locations of outfalls and impaired waters along with other available data. The City plans to implement inspections of the major outfalls within the City's subwatersheds.

**Schedule and Evaluation:** Based on the prioritization developed in the previous permit cycle, the City plans to conduct dry weather inspections of the major outfalls contained in these subwatersheds based on the following schedule:

Year 1 - Abrams Creek  
Year 2 - Town Run  
Year 3 - Buffalo Lick Run  
Year 4 - Redbud Run  
Year 5 - Hoge Run

**Responsible Party:** City Engineer

**Necessary Documents:** Outfall Reconnaissance Inventory (ORI) Form from CWP/EPA IDDE Manual

**Measurable Goals:** The City plans to inspect the major outfalls in one subwatershed per year, completing all five subwatersheds within the five year permit cycle in accordance with the schedule outlined above.

**Items to be Reported in the Annual Report:** The City's annual report will present the findings of the inspections for each year in the applicable annual reports, including information on any illicit connections identified as well as follow-up actions completed or planned.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**No**
- g. Which TMDL wasteload allocation? **N/A**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**



Minimum Control Measure (3): illicit discharge detection and elimination
--

**BMP 3.3 Continue enforcement of illicit connections, as needed, according to the City's Water Protection Ordinance**

The City has an established Water Protection Ordinance that provides for the prohibition of illicit connections and includes enforcement mechanisms. Advertisement of the City's stormwater complaint hotline (described previously) would be expected to provide the City with information on the existence of illicit connections.

**Schedule and Evaluation.** The City will continue the enforcement of illicit connections as needed and will evaluate the effectiveness of the ordinance enforcement based on the City's experiences with enforcing the illicit connection portion of the ordinance.

**Responsible Party:** City Engineer

**Necessary Documents:** The City's Water Protection Ordinance and flyer on the City's Stormwater Complaint Hotline

**Measurable Goals:** The City will track the number of calls into the stormwater complaint hotline (and/or emergency number) that address illicit connections as well as information on the number of illicit connections investigated and follow-up actions completed or planned.

**Items to be Reported in the Annual Report:** The City's annual report will report on the number of calls into the stormwater complaint hotline (and/or emergency number) that address illicit connections as well as information on the number of illicit connections investigated and follow-up actions completed or planned.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. **N/A***
- c. *If modifications are required, what modifications are required? **N/A***
- d. *What is my proposed schedule for implementation of the modifications? **N/A***
- e. *Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **No***
- g. *Which TMDL wasteload allocation? **N/A***
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A***
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A***
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A***

Minimum Control Measure (3): illicit discharge detection and elimination
--

**BMP 3.4 Continue administering stormwater complaint hotline to identify illicit connections**

As previously mentioned in other BMP measures, the City has an established stormwater complaint hotline. The flyer advertising the hotline also includes an emergency number to contact to report on illegal dumping of materials. The flyer is posted on the website and a utility bill insert was developed and planned for release with the water/wastewater utility bills in the December 2007 to January 2008 timeframe.

**Schedule and Evaluation:** The City will implement this BMP on an ongoing basis and will evaluate the need to make any revisions to the format of the hotline based on the response.

**Responsible Party:** City Engineer

**Necessary Documents:** Flyer and utility bill insert advertising stormwater complaint hotline

**Measurable Goals:** The City will track the response to the stormwater complaint hotline, including information on the number of calls received, number of illicit connections identified and follow-up actions.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the response to the stormwater complaint hotline, including information on the number of calls received, number of illicit connections identified and follow-up actions.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. **N/A***
- c. *If modifications are required, what modifications are required? **N/A***
- d. *What is my proposed schedule for implementation of the modifications? **N/A***
- e. *Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **Yes***
- g. *Which TMDL wasteload allocation? **"Bacteria TMDL for Abrams Creek and Upper and Lower Opequon Creek Located in Frederick and Clarke County, Virginia" (VT BSE, 2003)***
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? **By providing a mechanism for the public to report observed odor or visually identified incidences of potential illicit connections, the City can address potential sources of raw sewage that is entering the receiving waters.***
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A***
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A***



Minimum Control Measure (3): illicit discharge detection and elimination
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**BMP 3.5 Household Waste Reduction**

The City has an established schedule for household trash and recycling pickup service for residents. This is a weekly service free to all residents and the City provides recycling bins for residents. By providing a recycling service, the City reduces the amount of material that would be placed in a landfill or disposed of improperly. In addition, the City provides weekly pick up service of yard waste from March through January. This service also reduces the amount of material that would be placed in a landfill.

**Schedule and Evaluation:** The City will implement this BMP on an ongoing basis. The City will evaluate the program by measuring the tonnage of garbage and recycling materials collected on an annual basis. The City will also track the number of recycling bins distributed to residents to estimate the percentage of residents who recycle.

**Responsible Party:** City Refuse and Recycling Coordinator

**Necessary Documents:** Volume of trash and recyclables collected per year.

**Measurable Goals:** The City will track the tonnage of garbage and recyclables collected on an annual basis.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the tonnage of recyclables and trash collected on an annual basis.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**Yes**
- g. Which TMDL wasteload allocation? **"Bacteria TMDL for Abrams Creek and Upper and Lower Opequon Creek Located in Frederick and Clarke County, Virginia" (VT BSE, 2003)**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **By collecting residential waste and transporting it to a sanitary landfill facility, the City reduces sources of bacteria and refuse, thus eliminating potential breeding grounds for wildlife that may also contribute bacteria to receiving waters. Yard waste is also collected on a regular basis, thus preventing the waste from being deposited in low lying riparian areas or in storm drains. The collection of yard waste eliminates potential hydraulic impediments that could destabilize streams and contribute to the sediment that has been determined to be the most significant stressor to benthic organisms in the streams of the Opequon watershed.**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

Minimum Control Measure (3): illicit discharge detection and elimination
--

**BMP 3.6 Illicit Discharge Elimination**

The City has an established inflow and infiltration abatement program to replace or slipline sanitary sewers and manholes, thus preventing illicit discharge into the groundwater and streams.

**Schedule and Evaluation:** The City will implement this BMP on an ongoing basis and will replace or slipline an average of 5,000 linear feet of sanitary sewer per year. The City will evaluate the linear footage of sewer lined each year.

**Responsible Party:** City Engineer

**Necessary Documents:** As-built documentation of the linear footage of sanitary sewer replacement and repairs per year.

**Measurable Goals:** The City will track the linear footage of sanitary sewer replacement and repairs, and manhole replacement.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the linear footage of sanitary sewer replacement and repair, and manhole replacements.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required?* **Yes. No modifications required for compliance.**
- b. *If no modifications are required, then BMP remains the same.* **N/A**
- c. *If modifications are required, what modifications are required?* **N/A**
- d. *What is my proposed schedule for implementation of the modifications?* **N/A**
- e. *Include the proposed schedule in the Schedule and Evaluation Section.* **N/A**
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation?*  
**Yes**
- g. *Which TMDL wasteload allocation?* **"Bacteria TMDL for Abrams Creek and Upper and Lower Opequon Creek Located in Frederick and Clarke County, Virginia" (VT BSE, 2003)**
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation?* **By providing a mechanism to reduce and prevent raw sewage from entering the receiving waters.**
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation?* **N/A**
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation.* **N/A**



Minimum Control Measure (4): construction site stormwater runoff control
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*a. The operator shall develop,, implement, and enforce procedures to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or equal to or greater than 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act. Additionally, reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.*

*The procedures must include the development and implementation of, at a minimum:*

*(1) An ordinance or other mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance with the Erosion and Sediment Control Law and attendant regulations, to the extent allowable under state, tribal, or local law. Such ordinances and other mechanisms shall be updated as necessary;*

*(2) Requirements for construction site owners and operators to implement appropriate erosion and sediment control best management practices as part of an erosion and sediment control plan that is consistent with the Erosion and Sediment Control Law and attendant regulations and other applicable requirements of state, tribal or local law. Where determined appropriate by the operator, the operator shall encourage the use of structural and non structural design techniques to create a design that has the goal of maintaining or replicating predevelopment runoff characteristics and site hydrology;*

*(3) Requirements for construction site owners and operators to secure authorization to discharge stormwater from construction activities under a VSMP permit for construction activities that result in a land disturbance of greater than or equal to one acre or equal to or greater than 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act. Additionally, stormwater discharges from construction activities disturbing less than one acre must secure authorization discharge under a VSMP permit if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more;*

*(4) Procedures for receipt and consideration of information submitted by the public; and*

*(5) Procedures for site inspection and enforcement of control measures.*

*b. The operator shall ensure that plan reviewers, inspectors, program administrators and construction site owners and operators obtain the appropriate certifications as required under the Erosion and Sediment Control Law;*

*c. The operator shall track regulated land-disturbing activities and submit the following information in accordance with Section II E 2:*

*(1) Total number of regulated land-disturbing activities; and*

*(2) Total disturbed acreage.*

Minimum Control Measure (4): construction site stormwater runoff control
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**BMP 4.1 Continue program to require construction site operators to control waste**

The City of Winchester's Water Protection Ordinance provides requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality, or procedures to ensure that construction site operators have secured or will secure a VPDES construction permit.

**Schedule and Evaluation:** The program is implemented. A construction plan approval process and site inspections during construction are used to evaluate and check on compliance with City ordinance.

**Responsible Party:** City Engineer

**Necessary Documents:** Responsible Land Developer (RLD) Name must be placed on the approved plans

**Measurable Goals:** Approval of the plan is granted by the program's authority. The measurable goal for this BMP is the percentage and number of constructions sites that meet compliance requirements first and follow-up, as needed, with site inspections.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the percentage and number of construction sites that comply with the Water Protection Ordinance requirements.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. **N/A***
- c. *If modifications are required, what modifications are required? **N/A***
- d. *What is my proposed schedule for implementation of the modifications? **N/A***
- e. *Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **No***
- g. *Which TMDL wasteload allocation? **N/A***
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A***
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A***
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A***



Minimum Control Measure (4): construction site stormwater runoff control
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**BMP 4.2 Continue maintaining DCR E&S plan review, inspection and administration certification for a minimum of 2 City employees.**

The City has two employees that have DCR E&S plan, inspection and administration certification and will maintain that certification. Should staff changes result in less than two certified employees, the City will have another employee certified to ensure that two trained and certified employees are on staff at all times.

**Schedule and Evaluation:** The City will maintain two employee certifications and promptly certify new employees should this number drop below two.

**Responsible Party:** City Engineer

**Necessary Documents:** N/A

**Measurable Goals:** The measurable goal for this BMP will be for the City to maintain two employees with DCR E&S plan, inspection and administration certification.

**Items to be Reported in the Annual Report:** The annual report will include information on the number of employees who are certified or a description of the action is taken if the number drops below two.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. **N/A***
- c. *If modifications are required, what modifications are required? **N/A***
- d. *What is my proposed schedule for implementation of the modifications? **N/A***
- e. *Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **No***
- g. *Which TMDL wasteload allocation? **N/A***
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A***
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A***
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A***

**BMP 4.3 Continue enforcement of erosion and sediment control as well as stormwater management and water quality**

The City of Winchester monitors all construction activities occurring within the City limits and relies on its erosion and sediment control program as regulated under the Virginia Erosion and Sediment Control Law (ESCL) and attendant regulations and on its stormwater management program as regulated under the Stormwater Management Act. The City is not within the Chesapeake Bay Watershed Preservation Area. The ESCL requires the protection of water quality through procedures that include plan review, inspection and enforcement down to projects disturbing areas greater than 1 acre. Plan review, inspection, enforcement requirements of this program are specified under this law. The City requires that all plans include the minimum standards outlined in the ESC Regulations. The requirements of the Erosion and Sediment Control, Stormwater Management and Quality, Plan Protection: Water Quantity and Water Quality, Stream Buffers, and Storm Sewer Discharges programs are provided in the City's Water Protection Ordinance. The City ordinance adopts the Virginia Erosion and Sediment Control Handbook and Stormwater Management Handbook as the standards and specifications for erosion and sediment control and stormwater management. Updates to the ordinance and the handbooks are completed as the City becomes aware of the changes.

**Schedule and Evaluation:** The City relies on the Department of Conservation and Recreation's Local Program review to determine the consistency and compliance with the VA ESC Law and attendant regulations. If the City fails to be found consistent, the City will work with DCR to develop a Corrective Action Agreement (CAA) suitable to both the City and DCR. The City will implement the CAA in accordance to the schedule included in the agreement.

**Responsible Party:** City Engineer

**Necessary Documents:** Chapter 9 (Water Protection) of the Winchester Code, State Erosion and Sediment Control Law (Virginia Code § 10.1-560 et seq.), Approved plans

**Measurable Goals:** Applications must provide the name of a certified Responsible Land Disturber (RLD). Land disturbance permits are not released for sites greater than or equal to one acre of disturbed area unless a Notice of Intent to apply for a VPDES permit is provided.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the number of plans reviewed, number approved, and number requiring a VPDES permit.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required?* **Yes. No modifications required for compliance.**
- b. *If no modifications are required, then BMP remains the same.* **N/A**
- c. *If modifications are required, what modifications are required?* **N/A**
- d. *What is my proposed schedule for implementation of the modifications?* **N/A**
- e. *Include the proposed schedule in the Schedule and Evaluation Section.* **N/A**
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation?*  
**Yes**
- g. *Which TMDL wasteload allocation?* **"Opequon Watershed TMDLs for Benthic Impairments: Abrams Creek and Lower Opequon Creek, Frederick and Clarke Counties, Virginia" (VT BSE, 2003)**



Minimum Control Measure (4): construction site stormwater runoff control
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- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **The City takes an active role in reducing and managing the sediment loads associated with significant construction activities**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

**BMP 4.4 Continue administering stormwater complaint hotline to identify problems at construction sites**

As previously mentioned in other BMP measures, the City has an established stormwater complaint hotline. The flyer advertising the hotline also includes an emergency number to contact to report on illegal dumping of materials. The flyer is posted on the website and a utility bill insert was developed and planned for release with the water/wastewater utility bills in the December 2007 to January 2008 timeframe.

**Schedule and Evaluation:** The stormwater complaint hotline is advertised on website as well as in utility bill inserts in the December 2007 to January 2008 timeframe.

**Responsible Party:** City Engineer

**Necessary Documents:** Flyer on stormwater complaint hotline and utility bill inserts advertising the stormwater complaint hotline

**Measurable Goals:** The measurable goal for this BMP involves the number of complaints received from the stormwater complaint hotline that are associated with construction site problems.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the number of complaints per year.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation? **Yes**
- g. Which TMDL wasteload allocation? **"Opequon Watershed TMDLs for Benthic Impairments: Abrams Creek and Lower Opequon Creek, Frederick and Clarke Counties, Virginia" (VT BSE, 2003)**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **The City's complaint hotline allows residents to become the eyes and ears of the City to aid in the reduction of significant sediment loads to surface waters that are deemed to be impaired by excessive sediment loads.**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**

Minimum Control Measure (4): construction site stormwater runoff control
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- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. N/A*

**BMP 4.5 Continue tracking regulated land disturbing activities**

The City has an existing program by which land disturbing activities are tracked. This provides the necessary information to perform inspections, as-built inspections and surveys and develop and understanding of which areas may be most likely to incur heavier than normal sediment loading.

**Schedule and Evaluation:** The land disturbing activities are tracked as plans and notification are received. The total number of land disturbing activities and total disturbed acreage for the reporting period will be provided in the annual report.

**Responsible Party:** City Engineer

**Necessary Documents:** Land development permit applications

**Measurable Goals:** The measurable goal for this BMP involves the total number of regulated disturbing activities and total disturbed acreage for the reporting period.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the total number of land disturbing activities and total disturbed acreage for the reporting period.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. N/A*
- c. *If modifications are required, what modifications are required? N/A*
- d. *What is my proposed schedule for implementation of the modifications? N/A*
- e. *Include the proposed schedule in the Schedule and Evaluation Section. N/A*
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **No***
- g. *Which TMDL wasteload allocation? N/A*
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? N/A*
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? N/A*
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. N/A*



Minimum Control Measure (5): post construction stormwater management in new development and redevelopment
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*a. The operator shall develop, implement, and enforce procedures to address stormwater runoff to the regulated small MS4 from new development and redevelopment projects that disturb greater than or equal to one acre or equal to or greater than 2500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.*

*b. The operator shall:*

*(1) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the operator's community. Where determined appropriate by the operator, the operator shall encourage the use of structural and nonstructural design techniques to create a design that has the goal of maintaining or replicating predevelopment runoff characteristics and site hydrology;*

*(2) Use an ordinance, regulation or other mechanism to address post-construction runoff from new development and redevelopment projects to ensure compliance with the Virginia Stormwater Management Act (§10.1-603.1 et seq. of the Code of Virginia) and attendant regulations, and to the extent allowable under state, tribal or local law. Such ordinances and other mechanisms shall be updated as necessary;*

*(3) Require construction site owners and operators to secure authorization to discharge stormwater from construction activities under a VSMP permit for new development and redevelopment projects that result in a land disturbance of greater than or equal to one acre or equal to or greater than 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act. Additionally, stormwater discharges from construction activity disturbing less than one acres must secure authorization to discharge under a VSMP permit if that construction activity is a part of a larger common plan of development or sale that would disturb one acre or more;*

*(4) Require adequate long-term operation and maintenance by the owner of structural stormwater management facilities through requiring the owner to develop a recorded inspection schedule and maintenance agreement to the extent allowable under state, tribal or local law or other legal mechanism. The operator shall additionally develop, through the maintenance agreement or other method, a mechanism for enforcement of maintenance responsibilities by the operator if they are neglected by the owner;*

*(5) Conduct site inspection and enforcement measures consistent with the Virginia Stormwater Management Act and attendant regulations; and*

*(6) Track all known permanent stormwater facilities that discharge to the regulated small MS4 and submit the following information in accordance with Evaluation and assessment requirements of this permit.*

*(a) Type of structural stormwater management facility installed as defined in the Virginia Stormwater Management Handbook:*

*(b) Geographic location (HUC);*

*(c) Where applicable, the impaired surface water that the stormwater management facility is discharging into; and*

*(d) Number of acres treated*



Minimum Control Measure (5): post construction stormwater management in new development and redevelopment

**BMP 5.1 Continue enforcement of erosion and sediment control as well as stormwater management and water quality**

All site plans are reviewed for water quality calculations and plans must show compliance with the State stormwater management regulations regarding the phosphorus reductions required for development and redevelopment projects. Water quality BMPs are evaluated for site-appropriateness on a case-by-case basis and designers are encouraged to use the Virginia Stormwater Management Handbook as a guide for design. The City's Water Protection Ordinance addresses post-construction runoff from new and redevelopment projects. Sections 9-56 through 9-70 provide the regulations by which new and redevelopment projects should handle stormwater quantity and quality.

**Schedule and Evaluation:** The City will implement its program during all years of this permit. The City reviews all applicable development projects to determine the consistency and compliance with the state and local stormwater management laws and attendant regulations.

**Responsible Party:** City Engineer

**Necessary Documents:** Chapter 9 (Water Protection) of the Winchester Code, State Erosion and Sediment Control Law (Virginia Code § 10.1-603.1 et seq.), Approved plans.

**Measurable Goals:** The measurable goal for this BMP involves the type and number of BMPs installed, geographic location (HUC) of the BMPs, waterbody the BMP discharges to, number of acres treated to the nearest tenth of an acre, and inspection and maintenance schedules.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the type and number of BMPs installed, geographic location (HUC) of the BMPs, waterbody the BMP discharges to, number of acres treated

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **No**
- c. If modifications are required, what modifications are required? **No**
- d. What is my proposed schedule for implementation of the modifications? **No**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **No**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation? **No**
- g. Which TMDL wasteload allocation? **N/A**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**



Minimum Control Measure (5): post construction stormwater management in new development and redevelopment
---

**BMP 5.2 Continue requiring BMP maintenance agreements for all privately owned water quality and quantity BMPs**

BMP maintenance agreements are required for all privately owned water quality and water quantity BMPs. The City maintains a log of executed maintenance agreements and notifies all property owners of required inspections on an annual basis (if a property owner does not submit an inspection, the City will perform the inspection and charge the property owner) as well as tracking of the available information on public and private permanent BMPs.

**Schedule and Evaluation:** The City's program is implemented. The City will continue the current program and adjust as necessary for BMP effectiveness

**Responsible Party:** City Engineer

**Necessary Documents:** Chapter 9 (Water Protection) of the Winchester Code, BMP design plans and the executed maintenance agreement.

**Measurable Goals:** The measurable goals for this BMP involves requiring BMP maintenance agreements on all new privately owned properties and receipt of annual inspection reports or private owner payment for the City to conduct the inspection.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the results of the total BMP inspection program regarding the number of BMPs inspected, the number in compliance with operation and maintenance requirements, and the number taking action to correct deficiencies.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**No**
- g. Which TMDL wasteload allocation? **N/A**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

Minimum Control Measure (6): pollution prevention/good housekeeping for municipal operations
--

*Develop and implement an operation and maintenance program consistent with the MS4 Program Plan that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials including those available from EPA, state, tribe, or other organizations, the program shall include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and MS4 maintenance.*

*The operator shall identify, implement, evaluate and modify, as necessary, BMPs to meet the following pollution prevention/good housekeeping for municipal operations measurable goals:*

- a. Operation and maintenance programs including activities, schedules and inspection procedures shall include provisions and controls to reduce pollutant discharges into the regulated small MS4 and receiving surface waters;*
- b. Illicit discharges shall be eliminated from storage yards, fleet or maintenance shops, outdoor storage areas, rest areas, waste transfer stations, and other municipal facilities;*
- c. Waste materials shall be disposed of properly;*
- d. Materials that are soluble or erodible shall be protected from exposure to precipitation;*
- e. Materials, including by not limited to fertilizers and pesticides, that have the potential to pollute receiving surface waters shall be applied according to manufacturer's recommendations; and*
- f. For state agencies with lands where nutrients are applied, nutrient management plans shall be developed and implemented in accordance with the requirements of §10.1-104.4 of the Code of Virginia.*

**BMP 6.1 Continue implementing City Yards SWP3 and update every 3 years**

The City Yards has a Stormwater Pollution Prevention Plan (SWP3) in place. The plan outlines planned improvements to the City yards that will eliminate potential sources of pollution and provides recommendations to improve the water quality of runoff from the site. Standard Operating Procedures (SOPs) are a part of the SWP3. The SWP3 is reviewed and updated annually.

**Schedule and Evaluation:** The SWPPP makes reference to VPDES Permit No. VAR050822, which requires quarterly visual monitoring as well as annual facility inspections. Both of these evaluations have documentation requirements that will be carried out in accordance with the SWP3, dated March 2005.

**Responsible Party:** City Engineer

**Necessary Documents:** SWP3 and SOPs as necessary.

**Measurable Goals:** The measurable goal for this BMP involves compliance with the schedule and SOPs in the SWP3.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the annual updates and additional SOPs, if any, that are added to the SWP3.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. If no modifications are required, then BMP remains the same. **N/A***
- c. If modifications are required, what modifications are required? **N/A***



Minimum Control Measure (6): pollution prevention/good housekeeping for municipal operations

- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**No**
- g. Which TMDL wasteload allocation? **N/A**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

**BMP 6.2 Continue use of salt storage building and vehicle washing facility at City Yards**

The City operates and maintains salt storage and vehicle washing at facilities recently constructed at the City Yards site.

**Schedule and Evaluation:** The facilities are completed and all salt and City vehicle washing is to occur within the facilities.

**Responsible Party:** Public Works Operations Superintendent

**Necessary Documents:** N/A

**Measurable Goals:** The measurable goal for this BMP involves the monthly City Yard inspection by the City Engineer or designate to observe that salt and vehicle washing are contained with the respective facilities.

**Items to be Reported in the Annual Report:** The City's annual report will include information on corrective measures taken if inspection finds that the facilities are not being used as designed and planned.

**Modifications per Required BMP-Admin Update:**

- a. Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.**
- b. If no modifications are required, then BMP remains the same. **N/A**
- c. If modifications are required, what modifications are required? **N/A**
- d. What is my proposed schedule for implementation of the modifications? **N/A**
- e. Include the proposed schedule in the Schedule and Evaluation Section. **N/A**
- f. Does the BMP address the pollutant identified in a TMDL wasteload allocation?  
**No**
- g. Which TMDL wasteload allocation? **N/A**
- h. How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A**
- i. How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A**
- j. When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A**

Minimum Control Measure (6): pollution prevention/good housekeeping for municipal operations
--

**BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)**

The City requires all employees to attend a short training session on Environmental Management Systems to raise the awareness among employees of environmental impacts around them.

**Schedule and Evaluation:** Employees are scheduled for mandatory EMS training when they are hired.

**Responsible Party:** City Engineer

**Necessary Documents:** EMS training documents

**Measurable Goals:** The measurable goal for this BMP involves the training of all employees.

**Items to be Reported in the Annual Report:** The City's annual report will include information on compliance with the City EMS training requirement of all employees.

**Modifications per Required BMP-Admin Update:**

- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. **N/A***
- c. *If modifications are required, what modifications are required? **N/A***
- d. *What is my proposed schedule for implementation of the modifications? **N/A***
- e. *Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **No***
- g. *Which TMDL wasteload allocation? **N/A***
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? **N/A***
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A***
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A***



Minimum Control Measure (6): pollution prevention/good housekeeping for municipal operations
--

**BMP 6.4 Continue street sweeping program and track amount of litter and debris removed**

City streets are swept on a regular basis to remove pollutants and improve appearance. This program removes significant amounts of sediment and debris that would otherwise be washed into the storm drain system.

**Schedule and Evaluation:** Downtown streets are swept twice weekly, primary streets once weekly, and side streets once a month on average.

**Responsible Party:** Public Works Operations Superintendent

**Necessary Documents:** Logs of sweeping activities

**Measurable Goals:** The measurable goal for this BMP involves the miles of streets swept annually during the reporting period.

**Items to be Reported in the Annual Report:** The City's annual report will include information on the number of miles of streets swept annually during the reporting period.

**Modifications per Required BMP-Admin Update:**

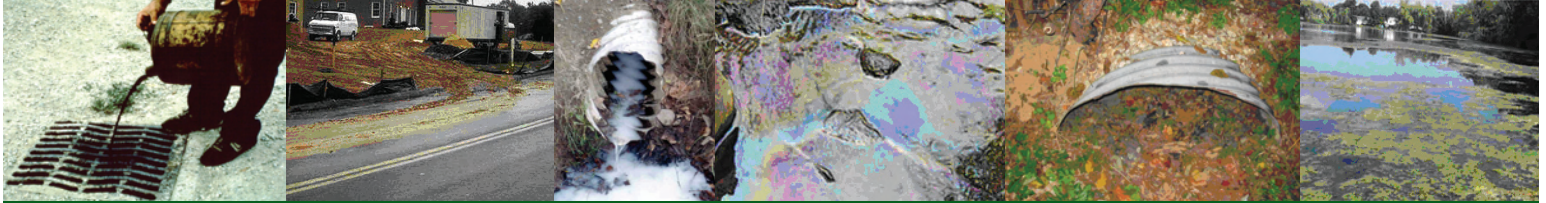
- a. *Does this BMP comply with the new General Permit or are modifications required? **Yes. No modifications required for compliance.***
- b. *If no modifications are required, then BMP remains the same. **N/A***
- c. *If modifications are required, what modifications are required? **N/A***
- d. *What is my proposed schedule for implementation of the modifications? **N/A***
- e. *Include the proposed schedule in the Schedule and Evaluation Section. **N/A***
- f. *Does the BMP address the pollutant identified in a TMDL wasteload allocation? **Yes***
- g. *Which TMDL wasteload allocation? **All existing and future wasteloads***
- h. *How does the BMP address the pollutant identified in a TMDL wasteload allocation? **This BMP is a direct removal mechanism for a significant area of impervious cover that is associated with essentially every known pollutant including, but not limited to sediment, nutrients, bacteria, metals, etc.***
- i. *How can the BMP be modified to be more effective in addressing the pollutant identified in the TMDL wasteload allocation? **N/A***
- j. *When applicable, include a proposed schedule for BMP modification to more effectively address the TMDL wasteload allocation. **N/A***

## **Appendix B. Public Outreach Material**

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# REPORT ACTIVE ILLEGAL DUMPING OF HAZARDOUS MATERIALS INTO THE STORM DRAIN IMMEDIATELY!

## 540-662-4131 (FOR URGENT ISSUES ONLY)



## FOR LESS URGENT ISSUES, PLEASE CALL THE CITY OF WINCHESTER'S STORMWATER COMPLAINT HOTLINE

## 540-542-1346

### EROSION & SEDIMENT CONTROL

- Sediment in streams or ponds
- Mud on the road
- Dust from construction traffic
- Failing silt fences

### STORMWATER ISSUES

- Flooding and drainage problems
- Stream/lake pollution
  - Excessive foaming
  - Cloudy water
  - Colorful oil sheens
  - Odors, such as sewage, (rancid/sour), petroleum (gas), sulfide (rotten eggs)
  - Dead fish
  - Algae
  - Sewage (toilet paper)

### MAINTENANCE ISSUES

- Clogged inlets
- Problems at stormwater ponds



City of Winchester  
Public Services Department  
Rouss City Hall  
15 North Cameron St.  
Winchester, VA 22601

**The City greatly appreciates your help in  
protecting our precious water resources.**



*WANT TO KNOW WHAT YOUR ORGANIZATION CAN DO  
TO HELP KEEP THE CITY OF WINCHESTER'S STREAMS BEAUTIFUL?*

# ADOPT A STREAM SEGMENT!



- You will be awarded a sign advertising your organization's efforts!
- Each volunteer will receive a T-shirt with the City's Adopt-a-Stream program logo!
- The City of Winchester and the Virginia Department of Conservation and Recreation (DCR) provide all the necessary tools for a successful cleanup!
- All you have to do is contact Kelly Henshaw, City Engineer, to get a copy of the Easy 6-Step Process. Call **540-667-1815** or email [khenshaw@ci.winchester.va.us](mailto:khenshaw@ci.winchester.va.us).



More information is provided on DCR's Adopt-A-Stream program at  
[http://www.dcr.virginia.gov/soil\\_&\\_water/adopt.shtml](http://www.dcr.virginia.gov/soil_&_water/adopt.shtml)

# ADOPTING A STREAM IN WINCHESTER IS EASY!

## JUST COMPLETE THESE SIX STEPS

---

1

Contact the City of Winchester's **Adopt-A-Stream Coordinator** to notify her of your interest, to obtain necessary information, to select the stream segment to be adopted (permission must be granted if the land is not owned by your organization or by the City) and to coordinate for a trash pickup location.

**KELLY HENSHAW, PE**, CITY ENGINEER & ADOPT-A-STREAM PROGRAM COORDINATOR  
CITY OF WINCHESTER, VIRGINIA PUBLIC SERVICES DEPARTMENT  
ROUSS CITY HALL  
15 NORTH CAMERON STREET WINCHESTER, VA 22604  
(540) 667-1815 EXT 1481 KHENSHAW@CI.WINCHESTER.VA.US

2

Review the Virginia Department of Conservation and Recreation's (DCR's) **Adopt-A-Stream website** and "**How-to**" **Manual** for useful information.

[HTTP://WWW.DCR.VIRGINIA.GOV/SOIL\\_&\\_WATER/ADOPT.SHTML](http://WWW.DCR.VIRGINIA.GOV/SOIL_&_WATER/ADOPT.SHTML) (website information)  
[HTTP://WWW.DCR.VIRGINIA.GOV/SOIL\\_&\\_WATER/DOCUMENTS/AASMANUL.PDF](http://WWW.DCR.VIRGINIA.GOV/SOIL_&_WATER/DOCUMENTS/AASMANUL.PDF)  
(manual)

3

Complete DCR's Adopt-A-Stream **Application for Local Program Designation and Agreement** and forward it to DCR (address on form) with a copy to the City of Winchester's Adopt-A-Stream Coordinator (address above) via email or regular mail.

[HTTP://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-022.PDF](http://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-022.PDF)

4

Forward the completed **Cleanup Event Notification Form** to DCR and City of Winchester's Adopt-A-Stream Coordinator at least two weeks prior to the cleanup event.

[HTTP://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-023.PDF](http://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-023.PDF)

5

Request that volunteers in your group complete release forms prior to cleanup activities and keep copies for your records.

6

After the cleanup event, complete DCR's **Stream Cleanup Data Form** with a copy to the City's Adopt-A-Stream Coordinator.

[HTTP://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-025.PDF](http://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-025.PDF)

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### Optional:

If you are interested in stenciling storm drains, contact Kelly Henshaw at the address listed above for information and decals.

[HTTP://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-027.PDF](http://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-027.PDF)  
[HTTP://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-029.PDF](http://WWW.DCR.VIRGINIA.GOV/FORMS/DCR199-029.PDF) (for reporting after the event)



City of Winchester  
Public Services Department  
Rouss City Hall  
15 North Cameron St.  
Winchester, VA 22601





Image courtesy of Wikipedia.

The City of Winchester's streams and ponds are part of the Chesapeake Bay watershed, the largest estuary in the United States.

When it rains, pet waste, geese droppings, fertilizer, and other stormwater pollutants flow into the City's waterways and into the Chesapeake Bay system.

These pollutants are harmful to the thousands of species of plants and animals living in the Bay watershed (including fish, crabs and shellfish, birds, bay grasses, mammals, reptiles, and amphibians).

These pollutants are also harmful to people using the Bay system for recreational activities such as swimming, fishing, and tubing.

## the law

Winchester City Code  
Article I, Section 11-3(d):

*No person shall allow manure deposited by his/her animal to remain on any public highway, street, sidewalk, park, or other public property, or on private property without written consent...*

A violation of this section constitutes a class-1 misdemeanor.



FOR MORE INFORMATION, CONTACT:



City of Winchester  
Public Services Department  
Rouss City Hall  
15 North Cameron St.  
Winchester, VA 22601  
(540) 667-1815

**The City greatly appreciates your help in protecting our precious water resources.**

# PICK IT UP



# IT'S YOUR DOODIE!



## AND IT'S THE LAW!

Winchester City Code, Article I, Section 11-3(d)



# the problem

Pet waste is more than smelly and unsightly; it is a health risk to pets, people, and water bodies.

Poop left on the street or on lawns does not go away or fertilize the ground. Instead, it is flushed into the nearest water way when it rains.

Pet waste contains harmful bacteria such as E. coli and fecal coliform, making the waters unfit for irrigation, recreation, or other uses. In addition, the nutrients contained in poop are harmful because they disrupt the water's natural ecology when in excess.

Five stream segments in the Opequon Creek Watershed are listed on Virginia's 303(d) list of impaired (polluted) waters due to benthic (aquatic organisms) impairment and fecal coliform bacteria. This includes Abrams Creek, which flows through Winchester.



When pet waste is not properly disposed of, it can wash into nearby streams or be carried by runoff into storm drains. These storm drains do not connect to treatment facilities. Instead, they drain directly into our streams and ponds which are part of the Chesapeake Bay watershed.

# the facts

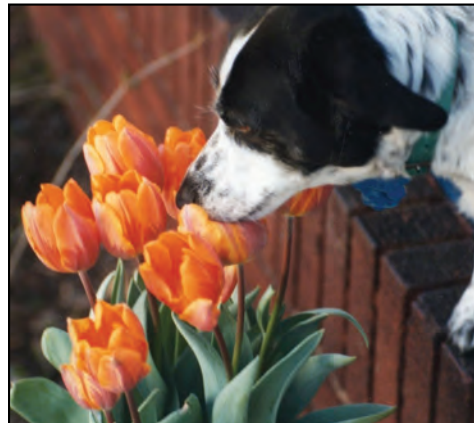
In the City of Winchester, there are approximately 700 pet dogs.  
(Source: City of Winchester Treasurer, Oct. 2008)

If each dog produces an average of 3/4 pound of poop per day, that is approximately 525 pounds total per day, or over 80 metric tons per year in Winchester alone.

A single gram of pet waste contains an average of **23 million** fecal coliform bacteria, some of which can cause disease in humans.

It is estimated that 2 to 3 days of poop from a population of 100 dogs would contribute enough bacteria and nutrients to temporarily close a bay for swimming and shellfishing.

(Source: EPA, 1993)



# the solution

Be responsible and clean up after your pets. It's as easy as 1-2-3!

1. Bring a bag.



2. Use the bag to pick up the pet waste.



3. Dispose of the bag properly in trash.



## **Appendix C. Storm Sewer Map**

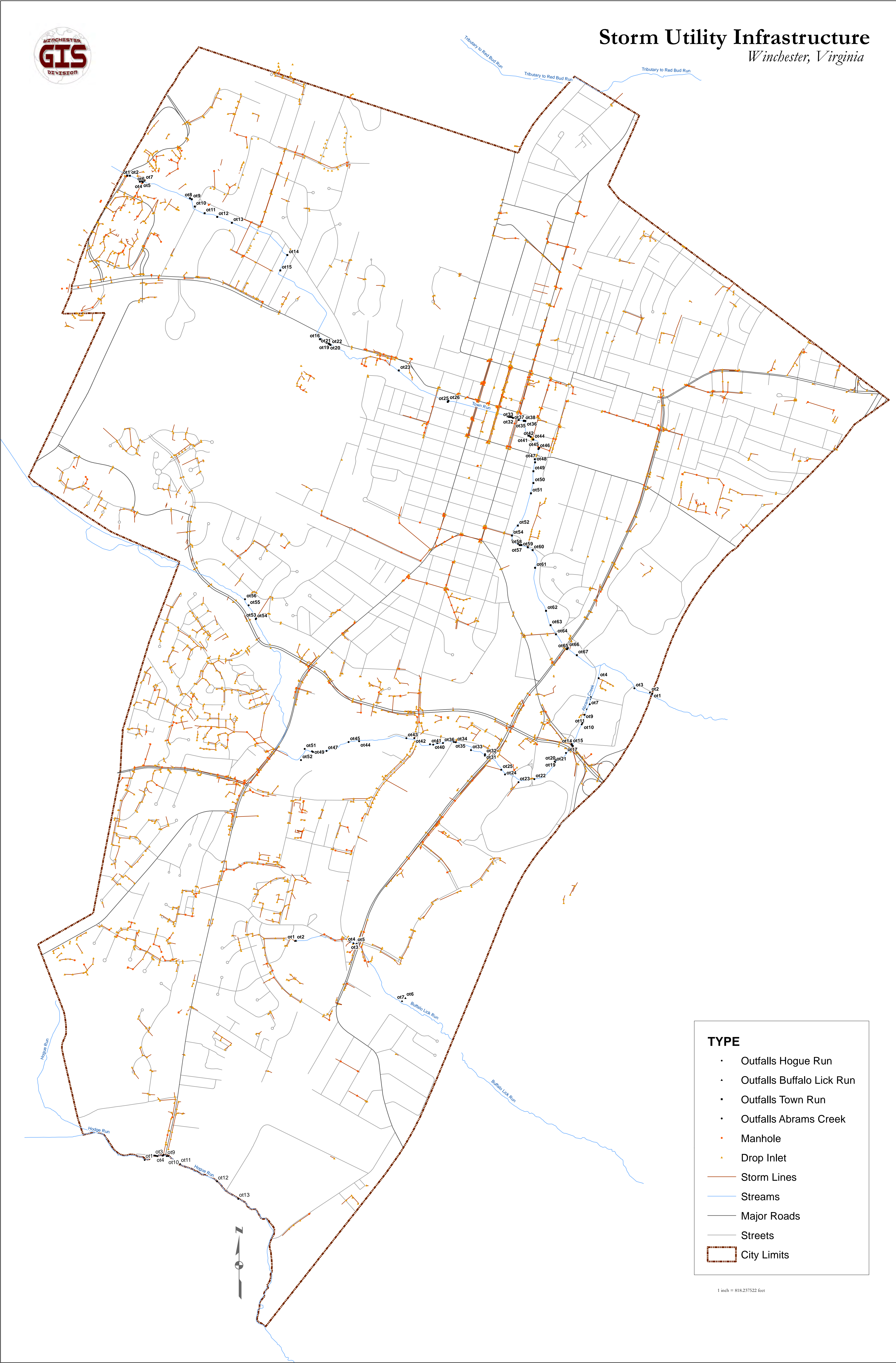
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# Storm Utility Infrastructure

Winchester, Virginia



**TYPE**

- Outfalls Hogue Run
- Outfalls Buffalo Lick Run
- Outfalls Town Run
- Outfalls Abrams Creek
- Manhole
- ▲ Drop Inlet
- Storm Lines
- Streams
- Major Roads
- Streets
- ▭ City Limits

1 inch = 818.237522 feet



## **Appendix D. Stormwater Management Facilities Database, Inspection, and Maintenance Summary**

---

City of Winchester, VA  
As-Built BMPs Added During PY4  
Permit No. VAR040053

Project	Applicant	Public/ Private	Tax Map #	ID Number	Date Received	Date Signed by Engineer	Date Signed by City Attorney	Date Recorded	BMP Type(Number)	HU Code	Waterbody	Acres Treated	Last Inspection Date	Maintenance Schedule
Trinity Auto Center	Stowe Engineering	Private	270-3--13	SP-12-18	3/14/2012	3/22/2012	4/4/2012		Bioretention	PU17	Abrams Creek	0.67	N/A	As Needed

**City of Winchester, VA**  
**BMPs with Signed Maintenance Agreements**  
**Permit No. VAR040053**

<b>Project</b>	<b>Property Address</b>	<b>Date Received</b>	<b>Date Signed by Engineer</b>	<b>Date Signed by City Attorney</b>	<b>Date Recorded</b>
804 Amherst Street	804 Amherst Street	4/28/2010	4/29/2010	5/27/2010	
812 Amherst Street	812 Amherst Street	8/31/2010	9/8/2010	10/11/2010	12/30/2010
830 Amherst Street	830 Amherst Street	8/31/2010	9/8/2010	10/11/2010	12/30/2010
American Woodmark	3102 Shawnee Dr.	9/20/2010	10/1/2010	10/3/2010	8/3/2011
Amherst St. CVS	1725 Amherst Street	10/7/2005			10/7/2005
Bank of Clarke County	2555 S. Pleasant Valley Road	10/31/2009	11/17/2009	12/16/2009	
BSW Investments	2264 Papermill Rd.	8/13/2009	8/19/2009	9/16/2009	
Cedar Creek Grade (a)	817 Cedar Creek Grade	2/19/2007	3/16/2007	3/13/2007	
Cedar Creek Grade (b)	905 Cedar Creek Grade	2/19/2007	3/16/2007	3/13/2007	
Commonwealth Plaza - Phase 3	2001-2031 South Loudoun St	2/7/2011	2/8/2011	2/18/2011	
Craun Property	220 E. Pal Mall Street	10/28/2008	11/3/2008	11/19/2008	
East Tevis Street Extension	201-240 E. Tevis St.	10/3/2007	10/3/2007	10/8/2007	10/16/2007
Elite Settlements	802 South Braddock Street	11/9/2007	11/12/2007	11/14/2007	11/27/2007
FCPS Admin Annex	1415 Amherst Street	4/7/2008	4/7/2008	4/8/2008	4/28/2008
FCPS Admin Building Addition	1415 Amherst Street	4/7/2008	4/7/2008	4/8/2008	4/28/2008
Five Star Auto Spa	555 & 565 Adams Drive	2/3/2011	2/8/2011	2/18/2011	
G&M Music	1817 S. Loudoun St.	7/10/2009	7/10/2009	8/10/2009	8/19/2009
George Washington Autopark	131 North Kent Street	4/4/2008	4/7/2008	4/8/2008	
Harvest Drive Medical	501-519 West Jubal Early Drive	2/4/2008	2/8/2008	2/12/2008	
High End Automotive	2970 Valley Avenue	3/5/2007	3/22/2007	4/2/2007	4/16/2007
Hilton Garden Inn	120 Wingate Drive	1/19/2009	1/19/2009	2/9/2009	
HN Funkhouser	2150 S. Loudoun Street	11/1/2007	11/9/2007	11/14/2007	3/27/2009
Hope Drive Site Plan	321 Hope Drive	10/29/2009	11/17/2009	12/16/2009	
Islamic Society of Winchester	601 Woodstock Lane	11/1/2008	11/10/2008	11/20/2008	11/17/2009
JD Byrider	1930 S. Loudoun Street	9/10/2010	5/27/2011	6/9/2011	9/10/2010
John Handley High School	425 Handley Boulevard	5/14/2009	6/23/2009	8/10/2009	2/10/2011
Linden Heights Animal Hospital	274 Linden Drive	10/3/2007	10/3/2007	10/8/2007	10/26/2007
Madison Center	320 Hope Drive	10/7/2009	10/7/2009	11/3/2009	
Meddent Center	1002 Amherst Street	8/13/2007	8/15/2007	8/15/2007	
Medical Circle Imaging	125 Medical Circle	12/2/2010	12/3/2010	1/6/2011	2/14/2011
Omps Pet Crematory	1560 Amherst Street	6/16/2011	6/16/2011	7/8/2011	8/3/2011
Our Health - Phase II	10 Baker St.	3/31/2010	3/23/2010	4/5/2010	5/26/2010
Panera	2608 & 2620 Papermill Road	4/2/2007	4/2/2007	4/13/2007	4/25/2007
Rubbermaid Pallet Storage	3124 Valley Avenue	1/3/2008	1/7/2008	1/21/2008	2/26/2008
Rubbermaid Storage Area	3124 Valley Avenue	12/16/2010	12/23/2010	1/6/2011	
Shawnee Drive Business Park	2900 Shawnee Drive	1/6/2009	1/6/2009	2/9/2009	
South Valley Plaza	2725 S. Pleasant Valley Road	12/10/2007	12/10/2007	12/19/2007	
Spanish United Pentecostal Church	672 Virginia Avenue	4/22/2011	5/16/2011	6/8/2011	
St. James Place	118-124 East James Street	2/8/2007	2/9/2007	2/14/2007	
Star Beauty School	219 Millwood Avenue	9/28/2010	10/1/2010	10/3/2010	
Stutzman Body Shop	2725 Valley Avenue	1/3/2008	1/3/2008	1/21/2008	8/19/2009
SU Student Center Addendum	1460 University Drive	5/26/2008	5/28/2008	6/23/2008	
TGI Friday's & Glaze PVR	111 East Tevis Street	4/2/2007	4/2/2007	4/13/2007	4/25/2007
The Corners I and II	2270 & 2310 Valor Drive	2/5/2007	2/9/2007	2/9/2007	
Timberlake Office Building	900 South Pleasant Valley Road	3/9/2007	3/19/2007	3/21/2007	3/27/2007
Trinity Auto Center	2425 Valley Ave.	3/14/2012	3/22/2012	4/4/2012	
Whitacre Property	1726 Valley Avenue	11/1/2008	11/5/2008	11/20/2008	



**City of Winchester, VA**  
**BMPs with No Maintenance Agreements**  
**Permit No. VAR040053**

<b>Project</b>	<b>Property Address</b>
3D Cleaning	2133 Valley Avenue
804 Amherst Street	804 Amherst Street
812 Amherst Street	812 Amherst Street
830 Amherst Street	830 Amherst Street
Aiken Strip Mall	2820-2834 Valley Avenue
All Points Warehouse	3090 Shawnee Drive
Allston Mews	500-552 Allston Circle, 500-520 Mews Ln.
American Woodmark	3102 Shawnee Dr.
Amherst St. CVS	1725 Amherst Street
Bank of Clarke County	2555 S. Pleasant Valley Road
Battle Park Estates	3055 Saratoga Drive
Berryville Ave. CVS	840 Berryville Avenue
BSW Investments	2264 Papermill Rd.
Burke Center	2 Weems Lane
Byrd Office Building	2909-2919 Valley Avenue
Castleman Subdivision	Mosby Street ROW
Cedar Creek Grade (a)	817 Cedar Creek Grade
Cedar Creek Grade (b)	905 Cedar Creek Grade
Centre at Winchester - Home Depot, Target	2320 Legge Boulevard
Commercial Street Used Cars	154 Commercial Street
Commonwealth Plaza - Phase 3	2001-2031 South Loudoun St
Cottages at Willow Lawn	Corner of Sterling and Harvest Drives
Craun Property	220 E. Pall Mall Street
Dermatology Associates	1514 Amherst Street
Drissi Plaza	29-35 E. Jubal Early Drive
East Tevis Street Extension	201-240 E. Tevis St.
Elite Settlements	802 South Braddock Street
FCPS Admin Annex	1415 Amherst Street
FCPS Admin Building Addition	1415 Amherst Street
Featherbed Lane - Lot 3	80 Featherbed Lane
Fern Adams Building	303-307 South Loudoun Street
Five Star Auto Spa	555 & 565 Adams Drive
Frederick Douglas School	100 West Cedarmeade Avenue
Friendship Fire Hall	627 North Pleasant Valley Road
Ft. Collier Rd. Food Lion	699 Fort Collier Road
G&M Music	1817 S. Loudoun St.
George Washington Autopark	131 North Kent Street
Glaize Pleasant Valley Commercial	2600 S. Pleasant Valley Road
Harvest Drive Medical	501-519 West Jubal Early Drive
Henkel-Harris	2987 South Pleasant Valley Road
High End Automotive	2970 Valley Avenue
Hilton Garden Inn	120 Wingate Drive
Hirschberg Office Building	1818 Amherst Street
History and Tourism Center	1400 S. Pleasant Valley Rd.
HN Funkhouser	2150 S. Loudoun Street
Home Depot	2350 Legge Boulevard
Hope Drive Site Plan	321 Hope Drive
Hope Drive Subdivision	230 Hope Drive
Islamic Society of Winchester	601 Woodstock Lane
JD Byrider	1930 S. Loudoun Street
Jenkins - Cooper	2944-2950 Valley Ave.

**City of Winchester, VA**  
**BMPs with No Maintenance Agreements**  
**Permit No. VAR040053**

John Handley High School	425 Handley Boulevard
Jubal Early Plaza I - Lot 2	21-29 W. Jubal Early Dr.
Jubal Early Plaza II - Lot 9	1820 Plaza Dr.
KSR LLC	210 E. Clifford St.
Landing at Park Heights	650 Cedar Creek Grade
Limestone Court	2610 Hockman Ave.
Linden Drive Office Park	132 Linden Dr.
Linden Heights Animal Hospital	274 Linden Drive
Linden Medical Center	172 Linden Dr.
Lowes	2230 Pleasant Valley Road 2210 Legge Blvd.
Madison Center	320 Hope Drive
Madison Place I	3018 Shawnee Dr.
McDonald's - Berryville Ave.	1124 Berryville Ave.
McKinley Office Building	700 Fort Collier Road
Meddent Center	1002 Amherst Street
Medical Circle Imaging	125 Medical Circle
Morlyn Hills Subdivision	1511 Stone House Ct.
Northside Station	821 North Loudoun Street
Omps Pet Crematory	1560 Amherst Street
Orchard Terrace	282 Green Street
Our Health - Phase II	10 Baker St.
Panera	2608 & 2620 Papermill Road
Park Place	760 Beehive Way
Patriot Collision Center	3066 Shawnee Drive
Pine-Burke Apartments - Phase I	2-14 Taft Ave.
Popeye's	2659 Valley Ave.
Robinson School	2400 Roosevelt Boulevard
Rolling Hills Park	702 Kennedy Drive
Rolling Hills Subdivision	612 Lake Dr.
Rubbermaid Building Expansion	3124 Valley Avenue
Rubbermaid Pallet Storage	3124 Valley Avenue
Rubbermaid Storage Area	3124 Valley Avenue
Saturn of Winchester	3019 Valley Ave.
Selma Medical	104 Selma Drive
Shawnee Drive Business Park	2900 Shawnee Drive
Shawnee Fire Department	2210 Valor Drive
Sorrell Court	2946 Sorrel Ct.
South Valley Plaza	2725 S. Pleasant Valley Road
Spanish United Pentecostal Church	672 Virginia Avenue
Spencer Square	2850 Spencer Square
St. James Place	118-124 East James Street
Star Beauty School	219 Millwood Avenue
Stonecrest Village	415 Russlecroft Rd.
Stutzman Body Shop	2725 Valley Avenue
SU Student Center Addendum	1460 University Drive
Summerfield Apartments	909 Summerfield Place
Sun Trust Bank	1738 Amherst Street
TGI Friday's & Glaize PVR	111 East Tevis Street
The Corners I and II	2270 & 2310 Valor Drive
Timberlake Office Building	900 South Pleasant Valley Road
Trinity Auto Center	2425 Valley Ave.

**City of Winchester, VA**  
**BMPs with No Maintenance Agreements**  
**Permit No. VAR040053**

Trinity Express Lube	2425 Valley Ave.
Valley Ave. Food Lion	2584 Valley Avenue
Valley Mortgage	2654 Valley Avenue
Valor Drive Site Plan	2215-2265 Valor Drive
Valor View Shopping Center	2275 Valor Dr
Walmart	2350 South Pleasant Valley Road
Walnut Street Extension Subdivision	400 - 408 Walnut Street
War Memorial Building	1001 East Cork Street
Westridge Section 1	2505 Goldenfield Lane
Westridge Section 2	2653 Windwood Drive
Whitacre Property	1726 Valley Avenue
Whittier Ponding Basin	206 Walker Street
Winchester Medical Center	1840 Amherst Street





## CITY OF WINCHESTER, VIRGINIA

Rouss City Hall  
15 North Cameron Street  
Winchester, VA 22601  
540-667-1815  
TDD 540-722-0782

June 23, 2010

Bank of Clarke County  
P.O. Box 391, Berryville, VA 22611

Subject: Stormwater Management Facility at 2555 S. Pleasant Valley Road

Dear Property Owner:

In 2003, the City of Winchester was classified as a Municipal Separate Stormwater System (MS4) by the Virginia Department of Conservation and Recreation under the National Pollutant Discharge Elimination System (NPDES) Program, which is administered by the US Environmental Protection Agency (EPA). This designation sets specific criteria for the City regarding stormwater quantity and quality.

The City is currently in the second five-year cycle of the NPDES permit. A requirement of the City's permit is to create an inspection program for all stormwater management facilities, also known as Best Management Practices (BMPs). It has been determined that there is at least one stormwater management facility on your property.

Enclosed with this letter is a copy of the City's BMP inspection form. Please have one of these forms completed for each BMP located on your property. The inspections must be performed by a **licensed professional engineer** and returned to the City no later than **July 31, 2010.**

If you feel you have received this letter in error, please contact the Robert Brown in the Engineering Department at 540-667-1815 or pass this letter on to the correct property owner. If you should have any questions regarding the City's stormwater program or permit, please do not hesitate to call.

Sincerely,

Kelly B. Henshaw, P.E.  
City Engineer – Public Services



## CITY OF WINCHESTER, VIRGINIA

Rouss City Hall  
15 North Cameron Street  
Winchester, VA 22601  
540-667-1815  
www.winchesterva.gov

### Standard Stormwater Treatment BMP Inspection Data Collection Form

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Inspector: \_\_\_\_\_

#### PROJECT INFORMATION:

1. Parcel ID Number: \_\_\_\_\_
2. BMP ID Number: \_\_\_\_\_
3. Year of BMP Installation: \_\_\_\_\_
4. Project Type: ☐ Residential ☐ Commercial ☐ Industrial ☐ Multi-Use ☐ Road ☐ Other: \_\_\_\_\_
5. Facility Name: \_\_\_\_\_  
Site Address: \_\_\_\_\_  
Contact Name: \_\_\_\_\_ Phone: \_\_\_\_\_
6. If the property owner is different than the contact name, fill out information below:  
Owner Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Owner's Address: \_\_\_\_\_ Phone: \_\_\_\_\_
7. Maintenance Documentation: ☐ Reviewed ☐ Not Reviewed ☐ Not Available ☐ Other: \_\_\_\_\_

#### BMP TYPE:

##### **Ponds**

- ☐ Detention Basin (Dry Pond)
- ☐ Extended Detention Basin
- ☐ Retention Basin (Wet Pond)

##### **Biofiltration**

- ☐ Vegetated Swale
- ☐ Vegetated Buffer Strip
- ☐ Bioretention (Rain Garden)
- ☐ Constructed Wetland
- ☐ Roof Garden
- ☐ Planter Boxes

##### **Detention**

- ☐ Underground Detention
- ☐ Level Spreader

##### **Structural**

- ☐ Drain Insert
- ☐ Media Filter
- ☐ Hydrodynamic Separator
- ☐ Water Quality Inlet (e.g. Filterra®)

##### **Infiltration**

- ☐ Porous Pavement
- ☐ Infiltration Basin
- ☐ Infiltration Trench
- ☐ Exfiltration Trench
- ☐ Retention/Irrigation

☐ Other: \_\_\_\_\_

	Checked		Maintenance		Comments
	Yes	No	Reqd.	Not Reqd.	
<b>Open Channel and Embankments</b>					
Does the structure show signs of settling, cracking, bulging, or other structural deterioration?					
Do embankments, spillways, side slopes, or inlet/outlet structures show signs of erosion?					
Is there evidence of animal burrows?					
Is there woody vegetation growth that may interfere with the flow or operation of the facility?					
Do vegetated areas need mowing or is there a buildup of clippings that could clog the facility?					
Are there bare areas that need seeding or sodding?					
Is there standing water in inappropriate areas?					
Is there an accumulation of sediment, debris, or trash?					
Is there evidence of oil or other pollutant spills?					
<b>Stormwater Ponds (see also Open Channel and Embankments)</b>					
Is the emergency spillway clear of obstructions, debris, and woody vegetation?					
Is the outlet structure and pipe free of debris and sediment, undamaged, and in working order?					
(For dry detention ponds) Is there standing water in the pond?					
(For wet ponds) Is there excessive algae growth or other vegetation?					
Do any safety devices, fences, gates, or locks need repair?					
<b>Other BMPs (Infiltration, Filters, Manufactured Structures)</b>					
Is there sediment, debris, litter, oil, or trash that would affect the functioning of the BMP?					
Is there standing water where there should not be?					
Is there structural damage to the device?					
Are there signs of erosion at entrance or exit points?					
Are valves, sluice gates, baffles, and other mechanical devices operational?					
Does mulch, soil mixture, vegetation, or filter media need to be replaced?					

\_\_\_\_\_  
*Inspector Seal, Signature, Date*



## **Appendix E. City Yards Stormwater Pollution Prevention Plan**

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# **Stormwater Pollution Prevention Plan**

**for:**

## **Winchester City Yards**

301 E. Cork St.  
Winchester, VA 22601  
(540) 667-1815 ext. 1451

### **SWPPP Contact(s):**

Winchester Public Works Department  
15 N. Cameron Street  
Winchester, VA 22601  
(540) 667-1815 ext. 1451

Jason Didawick, Superintendant  
(540) 667-1815 ext. 1451

Kelly Henshaw, City Engineer  
(540) 667-1815 ext. 1481

Robert Brown, Engineer  
(540) 667-1815 ext. 1476

### **SWPPP Preparation Date:**

**September 25, 2009**

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## SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

### 1.1 Facility Information

#### Facility Information

Name of Facility: Winchester City Yards

Street: 301 E. Cork Street

City: Winchester State: VA ZIP Code: 22601

County or Similar Subdivision: City of Winchester

Permit Tracking Number: VAR050822 (if covered under a previous permit)

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:

Longitude:

1.    °    '    " N (degrees, minutes, seconds)

1.    °    '    " W (degrees, minutes, seconds)

2.    °    '    " N (degrees, minutes, decimal)

2.    °    '    " W (degrees, minutes, decimal)

3. 39.1779° N (decimal)

3. 78.1624° W (decimal)

Method for determining latitude/longitude (check one):

☐ USGS topographic map (specify scale:                     )

☐ EPA Web site

☐ GPS

☒ Other (please specify): City of Winchester GIS data

Is this facility considered a Federal Facility?

☐ Yes

☒ No

Estimated area of industrial activity at site exposed to stormwater:                      (acres)

#### Discharge Information

Does this facility discharge stormwater into an MS4? ☒ Yes ☐ No

If yes, name of MS4 operator: City of Winchester

Name(s) of water(s) that receive stormwater from your facility Town Run

Are any of your discharges directly into any segment of an "impaired" water? ☐ Yes ☒ No

If Yes, identify name of the impaired water (and segment, if applicable):                     

Identify the pollutant(s) causing the impairment:                     

For pollutants identified, which do you have reason to believe will be present in your discharge?                     

For pollutants identified, which have a completed TMDL?

Primary SIC Code or 2-letter Activity Code: 41

Identify your applicable sector and subsector: Sector P

## **1.2 Contact Information/Responsible Parties**

### **Facility Operator (s):**

Name: [Public Works Department](#)  
Address: [301 E. Cork St.](#)  
City, State, Zip Code: [Winchester, VA 22601](#)  
Telephone Number: [\(540\) 667-1815 ext. 1474](#)  
Email address: [publicworks@ci.winchester.va.us](mailto:publicworks@ci.winchester.va.us)

### **Facility Owner (s):**

Name: [City of Winchester](#)  
Address: [15 N. Cameron Street](#)  
City, State, Zip Code: [Winchester, VA 22601](#)  
Telephone Number: [\(540\) 667-1815](#)

### **SWPPP Contact:**

Name: [Jason Didawick](#)  
Telephone number: [\(540\) 667-1815 ext. 1451](#)  
Email address: [jdidawick@ci.winchester.va.us](mailto:jdidawick@ci.winchester.va.us)

Name: [Kelly Henshaw](#)  
Telephone number: [\(540\) 667-1815 ext. 1481](#)  
Email address: [khenshaw@ci.winchester.va.us](mailto:khenshaw@ci.winchester.va.us)

Name: [Robert Brown](#)  
Telephone number: [\(540\) 667-1815 ext. 1476](#)  
Email address: [rbrown@ci.winchester.va.us](mailto:rbrown@ci.winchester.va.us)

## **1.3 Stormwater Pollution Prevention Team**

<b>Staff Names</b>	<b>Individual Responsibilities</b>
<a href="#">Jason Didawick</a>	<a href="#">Superintendant of Operations for Public Works Department – Responsible for day to day operations of City Yards and continuous monitoring to ensure compliance with SWPPP. Also responsible for participating in</a>

	inspections and water quality monitoring.
Kelly Henshaw	City Engineer – Responsible for overseeing City’s storm water management program enforcing local regulations and ensuring compliance with state and federal regulations. City Engineer will also participate in quarterly and annual inspections as well as visual and benchmark monitoring.
Robert Brown	Engineer – Responsible for updating SWPPP for new term of Industrial Storm Water General Permit. Also responsible for assisting City Engineer in ensuring City compliance with state and federal storm water regulations. Engineer will participate in quarterly and annual inspections as well as visual and benchmark monitoring.

## **1.4 Site Description**

The site is approximately 11.2 total acres, 2.4 acres of which are leased. The remainder of the land is owned by the City of Winchester. To the west, the site is bordered by the CSX railroad. To the east is a parcel of property that is owned by Stuart M. Perry and is currently leased by the City of Winchester. The leased property is considered part of the overall site covered under this SWPPP. Further east is single family residential housing. Pall Mall Street borders the southern end of the site and Town Run (a tributary to Abrams Creek) is just south of Pall Mall Street. To the north of the site is Cork Street. The site is zoned M-1, Limited Industrial District.

A portion of the leased Perry property is used for school bus parking by the City of Winchester, and another portion is sometimes used as a staging yard by contractors working for the City. The school bus parking activity is covered under this SWPPP, but outside contractors are responsible for their own pollution control measures.

There are two main outfalls from the site: one at the southwest corner of the site where the storm sewer system empties into Town Run, and one near the southeast corner of the site where runoff not collected in the storm system sheet flows into a ditch and then into a culvert under Pall Mall Street. Given the size of the drainage area and lack of a defined channel, no runoff can be sampled at this outfall before it comeslingles with the street runoff along Pall Mall Street. There is a small area at the northeastern edge of the leased property that appears to sheet flow off site toward the residential area to the east. This drainage area is very small and is not subject to industrial activity that could impact the water quality, so no monitoring will be performed at this outfall.

## **1.5 Activities at the Facility**

- Administration. The administration building houses offices for the Department of Public Works.
- Sign shop/Signals/Pavement Markings. The Public Works Department paints curb and pavement markings in the city. Water based paint is stored inside the building; about 125 gallons of water based paint are on hand at any given time. Approximately 1,000 gallons of paint are used each year.



- **Fleet Maintenance.** The garages provide maintenance services for the public transportation buses, the street and sanitation vehicles and other City vehicles. This service includes oil changes, as well as minor vehicle repairs. One bay of the garage is a wash bay, used for washing large city vehicles.
- **Snow Removal.** The Public Works Department is responsible for snow removal on city streets. Salt and gravel are stored under cover in the three sided salt barn building.
- **Street Sweeping.** The Public Works Department is responsible for street sweeping operations in the city. Refuse from the street sweeping vehicles is stored temporarily on the City Yards site. It is disposed of at the Frederick County landfill on a monthly basis.
- **Leaf Collection.** In the fall season, leaves are collected and stored at the City Yards site for approximately three to four weeks. The partially composted leaves are then disposed of off site.
- **Fueling Station.** The fueling station for city vehicles is located on the City Yards site. The fueling area is covered by a permanent canopy structure and the fuel pumps are surrounded by a concrete apron for vehicle parking.
- **Refuse Collection and Recycling.** Refuse collection and recycling vehicles are parked at the site. Refuse is disposed of at the Frederick County landfill; recyclable materials are taken to the appropriate recycling processors.
- **School Bus Parking Area.** Winchester City School buses are parked on the site.
- **Police Impound Lot.** The Winchester Police Department vehicle impound lot is located on the City Yards site. Vehicles that are impounded by the City Police are temporarily stored in a secured area of the site.

## **1.6    *General Location Map***

A general location map for this facility is included in Attachment A.

## **1.7    *Site Map***

A site map for this facility is included in Attachment B.

## SECTION 2: POTENTIAL POLLUTANT SOURCES

### 2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
Salt Storage	Sodium Chloride
Aggregate Storage	Stone Dust, Sediment
Road Sand Storage	Sediment
Street Sweeping Debris Storage	Sodium Chloride, Sediment, Plastics
Vehicle Maintenance	Hydrocarbons, Ethylene Glycol, Grease, Solvents
Fueling Facility	Hydrocarbons
Vehicle Washing	Hydrocarbons, Sediment, Detergents
Parking Areas	Hydrocarbons, Ethylene Glycol
Road Marking Paint Storage	VOC's

### 2.2 Spills and Leaks

#### Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Vehicle Parking Area	1,2
Fueling Facility	1
Salt Barn	1

#### Description of Past Spills/Leaks

Date	Description	Outfalls
	None	

## **2.3 Non-Stormwater Discharges Documentation**

- Date of evaluation:  
*8/26/09*
- Description of the evaluation criteria used:  
*A walking site visit was conducted during business hours to look for any authorized and unauthorized non-stormwater discharges.*
- List of the outfalls or onsite drainage points that were directly observed during the evaluation:  
*No non-stormwater discharges were observed.*
- Different types of non-stormwater discharge(s) and source locations:  
*None.*
- Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. (For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge):  
*None.*
- Date of evaluation:  
*6/18/10*
- Description of the evaluation criteria used:  
*A technical inspection was performed by Lisa Kelly of the Virginia DEQ.*
- List of the outfalls or onsite drainage points that were directly observed during the evaluation:  
*Evidence of past drainage was noted on the slope behind the fire hydrant.*
- Different types of non-stormwater discharge(s) and source locations:  
*Chlorinated potable water is released from a fire hydrant near the fuel pumps during the filling of street sweepers.*
- Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. (For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge):  
*Maintenance personnel will be instructed to eliminate excess flows and minimize spills of potable water.*

## **2.4 Salt Storage**

*Salt is stored under cover in the salt barn.*



## **2.5    *Sampling Data Summary***

No previous sampling was performed.

## SECTION 3: STORMWATER CONTROL MEASURES

### 3.1 *Minimize Exposure*

Salt Storage Barn – A three sided building is used to protect road salt, sand, and gravel from stormwater.

Fueling Area – The fueling area is covered by a permanent canopy structure, and surrounded by a concrete pad.

Vehicle Washing Bay – Vehicle washing is performed inside one of the garage bays and wash water is collected in floor drains.

Vehicle Maintenance – All vehicle maintenance takes place inside the garage buildings. Used motor oil is stored in a 275-gallon tank and used antifreeze is stored in a similar 200-gallon tank. Both of these tanks are above ground tanks surrounded by secondary containment areas. Both tanks are covered to minimize the amount of stormwater that might enter the containment areas.

### 3.2 *Good Housekeeping*

Trash generated on-site is collected and in a lidded dumpster and collected weekly.

Street sweepings are collected weekly and hauled away to the county landfill.

Waste oil and antifreeze tanks are inspected for leaks and spills after each use.

Used batteries are stored inside and collected as needed for recycling by the battery vendor.

The general condition of the site shall be inspected on a monthly basis.

### 3.3 *Maintenance*

Vehicles stored on the City Yards site are to be given regular maintenance and inspected regularly for any fluid leaks.

Floor drains in the garages are to be kept clear and functioning at all times to prevent fluids from leaving the buildings.

Waste oil and antifreeze storage tanks are to be emptied on a monthly basis, or as needed, to prevent overfilling. Containment areas around the tanks are to be monitored and cleaned out if fluids are present.

Storm drain grates on site are to be inspected after storm events and kept clear of debris which could cause stormwater bypass.

### **3.4 Spill Prevention and Response**

#### Prevention

The used oil and antifreeze tanks are labeled with their contents and each is surrounded by a secondary containment area.

#### Response

Dry cleanup methods are used; absorbents such as "Stay-Dri" are applied to spills. After the spill has been absorbed, the absorbent is swept up and placed in a storage drum to be recycled.

In the event that a spill occurs and sewage, industrial waste, other wastes or any noxious or deleterious substance discharges into or upon state waters in violation of Part II F; or a discharge may reasonably be expected to enter state waters in violation of Part II F, notify the Virginia DEQ of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

#### **Contacts:**

**DEQ Valley Regional Office  
Pollution Response Coordinator – Nonna Good  
(540) 574-7860 or (540) 574-7800**

**Virginia Department of Emergency Management  
1-800-468-8892**

### **3.5    *Erosion and Sediment Controls***

Because material transfer and storage can prevent the establishment of permanent vegetation, the storm inlet in the Mulch / Waste Storage Area is surrounded by inlet protection to prevent sediment from entering the storm sewer system. All other areas of the site are stabilized, and no land disturbance activities are anticipated. If any construction occurs on site, erosion and sediment controls will be reviewed as part of the site plan approval process and implemented in accordance with the Virginia Erosion and Sediment Control Handbook.

### **3.6    *Management of Runoff***

Currently, there are no controls on site to reduce the amount of stormwater runoff beyond the maintenance of vegetated areas.

### **3.7    *Salt Storage Piles or Piles Containing Salt***

The salt stored on site is enclosed in the salt barn. Any salt that is spilled while material is added to or removed from the pile is swept back into the building.

### **3.8    *MSGP Sector-Specific Non-Numeric Effluent Limits***

Sector-specific controls for Sector P are included under general controls for this SWPPP.

### **3.9    *Employee Training***

All Winchester City employees, including those who work at City Yards, are required to attend a one-hour training session covering the city's Environmental Management System. The Environmental Management System includes the following procedures and policies:

- An audit of all municipal operations that may impact the environment;



- Adherence to all applicable environmental laws and regulations, as well as to our voluntary environmental commitments;
- Management of pollution sites and problems, including work with property owners, the Virginia Department of Environmental Quality (VDEQ) and the Environmental Protection Agency (EPA) to evaluate and rehabilitate Brownfield sites in the City;
- Preparation of a comprehensive stormwater management plan to ensure compliance with federal and state National Pollutant Discharge Elimination Systems (NPDES) requirements;
- Initiation of a proactive pollution prevention program through source reduction and where possible, elimination;
- Training for all City personnel on the safe handling, use and disposal of waste and materials in an environmentally sensitive manner; and
- Regular reassessment of municipal operations sites and procedures to reduce or eliminate adverse environmental impacts.

To date, 40 out of 45 City Yards employees have attended this training. The remaining five are new employees that must complete the training within their first two years of employment with the City.

### **3.10 *Non-Stormwater Discharges***

See Section 2.3 of this document.

### **3.11 *Waste, Garbage and Floatable Debris***

The site will be visually inspected on a continuous basis for any waste, garbage or floatable debris. Trash containers are available throughout the site to deposit any waste that is generated.

### **3.12 *Dust Generation and Vehicle Tracking of Industrial Materials***

The vehicle travel ways on the site are paved, and activities that generate dust are not anticipated. Waste material from street sweeping operations, which is temporarily stored on site, is stored outside of vehicle travel ways to eliminate tracking.

## SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

For benchmark monitoring:

1. **Sample Location(s).** One sample will be taken at Outfall 1, from the end of the stormwater pipe before it enters Town Run. ~~The other sample will be taken from Outfall 2, if possible, before the runoff mixes with water in the ditch at Outfall 2, which collects runoff from off-site areas.~~
2. **Pollutant Parameters to be Sampled.** Total Petroleum Hydrocarbons (TPH) and Total Suspended Solids (TSS) are to be sampled.
3. **Monitoring Schedules.** Benchmark monitoring shall be performed at least once during each of the first two monitoring periods after the facility is granted coverage under the permit. Depending on the results of those samples, more monitoring may be required.

Monitoring periods are as follows:

1. July 1, 2009 - December 31, 2009
  2. January 1, 2010 – December 31, 2010
  3. January 1, 2011 – December 31, 2011
  4. January 1, 2012 – December 31, 2012
  5. January 1, 2013 – December 31, 2013
4. **Numeric Limitations.** There are no numeric limitations for sector P.
  5. **Procedures.** A minimum of one grab sample shall be taken from the discharge locations noted in item 1 during a storm event which produces actual discharge from the site (measurable storm event), providing the interval from the preceding measurable storm event is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the site.

The grab sample shall be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first hour of discharge provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. This information shall be submitted on or with the Discharge Monitoring Report (DMR). If the sampled discharge commingles with process or non-process water, the permittee shall attempt to sample the storm water discharge before it mixes with the non-storm water.

For each monitoring event (except snowmelt monitoring), along with the monitoring results, the permittee shall identify the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event. For snowmelt monitoring, the permittee shall identify the date of the sampling event.

Documentation explaining a facility's inability to obtain a sample (including dates/times the outfalls were viewed and/or sampling was attempted), of no rain event, or of no "measurable" storm event shall be maintained with the SWPPP. Acceptable documentation includes, but is not limited to, NCDC weather station data, local weather station data, facility rainfall logs, and other appropriate supporting data.

When adverse weather conditions prevent the collection of samples, a substitute sample may be taken during a qualifying storm event in the next monitoring period. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such things as local flooding, high winds, electrical storms, or situations that otherwise make sampling impracticable, such as drought or extended frozen conditions. Unless specifically stated otherwise, this waiver may be applied to any monitoring required under this permit.

Reporting monitoring results:

Submit results to VDEQ on a DMR by January 10.

For quarterly visual monitoring:

1. **Sample Location(s).** One sample will be taken at Outfall 1, from the end of the stormwater pipe before it enters Town Run. ~~The other sample will be taken from Outfall 2, if possible, before the runoff mixes with water in the ditch at Outfall 2, which collects runoff from off-site areas.~~
2. **Documented Observations.** Color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.
3. **Monitoring Schedules.** Quarterly visual monitoring shall be performed at least once during each of the following three-month periods: January – March, April – June, July – September, and October - December.
4. **Procedures.** A minimum of one grab sample shall be taken from the discharge locations noted in item 1 during a storm event which produces actual discharge from the site (measurable storm event), providing the interval from the preceding measurable storm event is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the site.

Visual examinations shall be made of samples during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first hour of discharge provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. This information shall be maintained with the SWPPP. If the sampled discharge commingles with process or non-process water, the permittee shall attempt to sample the storm water discharge before it mixes with the non-storm water.

For each monitoring event (except snowmelt monitoring), along with the monitoring results, the permittee shall identify the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event. For snowmelt monitoring, the permittee shall identify the date and time of the sampling event.

Documentation explaining a facility's inability to obtain a sample (including dates/times the outfalls were viewed and/or sampling was attempted), of no rain event, or of no "measurable" storm event shall be maintained with the SWPPP. Acceptable documentation includes, but is not limited to, NCDC weather station data, local weather station data, facility rainfall logs, and other appropriate supporting data.

When adverse weather conditions prevent the collection of samples, a substitute sample may be taken during a qualifying storm event in the next monitoring period. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such things as local flooding, high winds, electrical storms, or situations that otherwise make sampling impracticable, such as drought or extended frozen conditions. Unless specifically stated otherwise, this waiver may be applied to any monitoring required under this permit.

Reporting monitoring results:

Retain results with the SWPPP.

## SECTION 5: INSPECTIONS

For the routine facility inspections to be performed:

- The names of the person(s), or the positions of the person(s), responsible for inspection: Superintendent of Operations, City Engineer, and Engineer
- Schedule: Routine facility inspections shall be conducted at least quarterly. At least one routine facility inspection per year should occur while runoff is discharging from the site.
- Specific areas of the facility to be inspected, including schedules for specific outfalls: Inspections must include all areas where industrial materials or activities are exposed to stormwater as identified in Sections 2.1 and 2.2 of this document. The following areas shall be included in all inspections: storage area for vehicles/equipment awaiting maintenance, fueling area, indoor and outdoor vehicle maintenance areas, and mulch/waste storage area.
- Scope: Ensure compliance with SWPPP in each area noted above.
- Non-Compliance: Any instances of non-compliance shall be brought into compliance within fourteen (14) days of the inspection. If the infraction cannot be brought into compliance within that time, the reason must be documented in the SWPPP and it must be brought into compliance as soon as possible.



For the comprehensive site inspections to be performed:

- The names of the person(s), or the positions of the person(s), responsible for inspection: Superintendant of Operations, City Engineer, Engineer, Director of Public Works, Director of Public Services, Traffic Crew Supervisor, and Streets Crew Supervisor
- The schedules to be used for conducting inspections: Comprehensive site inspections shall be conducted at least once per year.
- Specific areas of the facility to be inspected, including schedules for specific outfalls: Inspections must include all areas where industrial materials or activities are exposed to stormwater as identified in Sections 2.1 and 2.2 of this document. The following areas shall be included in all inspections: storage area for vehicles/equipment awaiting maintenance, fueling area, indoor and outdoor vehicle maintenance areas, and mulch/waste storage area.
- Scope: The following items shall be inspected:
  1. Industrial materials, residue or trash that may have or could come into contact with storm water;
  2. Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;
  3. Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
  4. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
  5. Evidence of, or the potential for, pollutants entering the drainage system;
  6. Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;
  7. Review of training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs
  8. Annual outfall evaluation for unauthorized discharges:
    - a. The SWPPP shall include documentation that all outfalls have been evaluated annually for the presence of unauthorized discharges (i.e., discharges other than: storm water; the authorized non-storm water discharges described in Part I B 1; or discharges covered under a separate VPDES permit, other than this permit.) The documentation shall include:
      - i. The date of the evaluation;
      - ii. A description of the evaluation criteria used;
      - iii. A list of the outfalls or on-site drainage points that were directly observed during the evaluation;
      - iv. A description of the results of the evaluation for the presence of unauthorized discharges; and

- v. The actions taken to eliminate unauthorized discharges, if any were identified (i.e., a floor drain was sealed, a sink drain was rerouted to sanitary, or a VPDES permit application was submitted for a cooling water discharge.)
  - b. The permittee may request in writing to the department that the facility be allowed to conduct annual outfall evaluations at 20% of the outfalls. If approved, the permittee shall evaluate at least 20% of the facility outfalls each year on a rotating basis such that all facility outfalls will be evaluated during the period of coverage under this permit.
- 9. Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.
- Results: A compliance evaluation report shall be written by a member of the Pollution Prevention Team in accordance with Part II, E.3. of the GPDIA.

## SECTION 6: SWPPP 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 gathered and evaluated 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.

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## SECTION 7: SWPPP MODIFICATIONS

**Instructions (see 2008 MSGP Part 5.2):**

- This SWPPP is a “living” document and is required to be modified and updated, as necessary, in response to corrective actions.
  - If you need to modify the SWPPP in response to a corrective action required by Part I A.5. of the GPDIA, then the certification statement in section 6 of this SWPPP template must be re-signed in accordance with Part II K. of the GPDIA.
  - For any other SWPPP modification, you should keep a log with a description of the modification, the name of the person making it, and the date and signature of that person. See GPDIA Part III F.1.

INSERT LOG HERE or REFERENCE ATTACHMENT



## **SWPPP APPENDICES**

***Appendix A – General Location Map***

***Appendix B – Site Map***

***Appendix C – General VPDES Permit for Discharge of Storm Water Associated  
with Industrial Activity (GPDIA)***

***Appendix D – Benchmark Monitoring Form***

***Appendix E – Quarterly Visual Monitoring Form***

***Appendix F – Routine Facility Inspection Form***

***Appendix A***  
***General Location Map***

## ***Appendix B***

### ***Site Map***

## ***Appendix C***

### ***General VPDES Permit for Discharge of Storm Water Associated with Industrial Activity (GPDIA)***



***Appendix D***  
***Benchmark Monitoring Form***

## Benchmark Monitoring Form

Date of Sampling: \_\_\_\_\_

Time: \_\_\_\_\_

Outfall #: \_\_\_\_\_

Sampler Name: \_\_\_\_\_

*FOR LAB USE:*

Sample Relinquished by:		Date:		Time:	
Sample Received by:		Date:		Time:	

Type of Analysis to be Performed:					
Lab Technician Name Performing Analysis:					
Analysis Start Date:		Time:			
Analysis Stop Date:		Time:			

Results:

Total Petroleum Hydrocarbons (TPH)		mg/L	Total Suspended Solids (TSS)		mg/L
------------------------------------	--	------	------------------------------	--	------

***Appendix E***  
***Quarterly Visual Monitoring Form***

## Quarterly Visual Monitoring Form

Date of Sampling: \_\_\_\_\_

Time: \_\_\_\_\_

Outfall #: \_\_\_\_\_

Sampler Name: \_\_\_\_\_

### Visual Monitoring Results

**Color:** ☐ No Color

☐ Other

**Describe:** \_\_\_\_\_

**Odor:** ☐ None

☐ Other

**Describe:** \_\_\_\_\_

**Color:** ☐ Clear

☐ Some Clouding

☐ Opaque

**Solids:** ☐ Floating

**Describe:** \_\_\_\_\_

☐ Suspended

**Describe:** \_\_\_\_\_

☐ Settled

**Describe:** \_\_\_\_\_

**Foam:** ☐ No

☐ Yes

**Oil Sheen:** ☐ No

☐ Yes



***Appendix F***  
***Routine Facility Inspection Form***

Routine Facility Inspection Form

Date of  
Inspection: \_\_\_\_\_

Time: \_\_\_\_\_

Inspectors: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Vehicle Storage Areas

Is area in full compliance with SWPPP? ☐ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Inspector Initials:

Fueling Area

Is area in full compliance with SWPPP? ☐ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Inspector Initials:

Salt Barn

Is area in full compliance with SWPPP? ☐ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Inspector Initials:

**Waste Oil / Antifreeze Tanks**Is area in full compliance with SWPPP? ☐ Yes☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials:

**Mulch / Waste Storage Area**Is area in full compliance with SWPPP? ☐ Yes☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials:

## SECTION 6: SWPPP 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 gathered and evaluated 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.

Name: Robert A. Brown Title: Engineer  
Signature: Robert A. Brown Date: 7/15/10



## Benchmark Monitoring Form

Date of Sampling: 12/2/09

Time: 1:30 pm

Outfall #: 2

Sampler Name: Robert Brown

### FOR LAB USE:

Sample Relinquished by:	<u>RAB</u>	Date:	<u>12/4/09</u>	Time:	<u>11:30 am</u>
Sample Received by:		Date:	<u>12/4/09</u>	Time:	<u>11:30 am</u>

Type of Analysis to be Performed:	<u>TSS</u>				
Lab Technician Name Performing Analysis:					
Analysis Start Date:	<u>12/4/09</u>	Time:			
Analysis Stop Date:	<u>12/4/09</u>	Time:	<u>2:30 pm</u>		

### Results:

Total Petroleum Hydrocarbons (TPH)		mg/L	Total Suspended Solids (TSS)	<u>423</u>	mg/L
------------------------------------	--	------	------------------------------	------------	------

## Quarterly Visual Monitoring Form

Date of Sampling: 12/2/09

Time: 1:30 pm

Outfall #: 1

Sampler Name: Robert Brown

### Visual Monitoring Results

Color: ☐ No Color

☒ Other

Describe: Brownish

Odor: ☒ None

☐ Other

Describe: \_\_\_\_\_

Color: ☐ Clear

☒ Some Clouding

☐ Opaque

Solids: ☐ Floating

Describe: \_\_\_\_\_

☒ Suspended

Describe: Small particles

☒ Settled

Describe: larger bits of debris

Foam: ☒ No

☐ Yes

Oil Sheen: ☒ No

☐ Yes

Routine Facility Inspection Form

COPY

Date of  
Inspection: 1-27-10

Time: 2 PM

Inspectors: Kelly Henshaw  
Robert Brown  
Jason Didawick

Vehicle Storage Areas

Is area in full compliance with SWPPP? ☒ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials: JD, KH, RB

Fueling Area

Is area in full compliance with SWPPP? ☒ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials: JD, KH, RB

Salt Barn

Is area in full compliance with SWPPP? ☒ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials: JD, KH, RB

**Waste Oil / Antifreeze Tanks**

Is area in full compliance with SWPPP?

☒ Yes

☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials:

KH, RB, JD

**Mulch / Waste Storage Area**

Is area in full compliance with SWPPP?

☐ Yes

☒ No

If no, list instances of non-compliance: \_\_\_\_\_

Southern inlet house

with debris.

1-28-2010 Clean inlet

Inspector Initials:

KH, RB, JD



## Quarterly Visual Monitoring Form

Date of Sampling: 1-27-2010

Time: 2 Pm

Outfall #: 1

Sampler Name: JASON DIDAWICK

### Visual Monitoring Results

Color: ☒ No Color

☐ Other

Describe: \_\_\_\_\_

Odor: ☒ None

☐ Other

Describe: \_\_\_\_\_

Color: ☒ Clear

☐ Some Clouding

☐ Opaque

Solids: ☐ Floating

Describe: \_\_\_\_\_

☐ Suspended

Describe: \_\_\_\_\_

☒ Settled

Describe: \_\_\_\_\_

Foam: ☒ No

☐ Yes

Oil Sheen: ☒ No

☐ Yes

Routine Facility Inspection Form

COPY

Date of  
Inspection: 4-28-2010

Time: 9:30 Am

Inspectors: Kelly Henshaw  
Robert Brown  
Jason Didawick

Vehicle Storage Areas

Is area in full compliance with SWPPP? ☒ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials: JD, KH, RB,

Fueling Area

Is area in full compliance with SWPPP? ☒ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials: JD, KH, RB

Salt Barn

Is area in full compliance with SWPPP? ☒ Yes  
☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials: JD, KH, RB

**Waste Oil / Antifreeze Tanks**

Is area in full compliance with SWPPP?

☒ Yes

☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials:

KH, RB, JD

**Mulch / Waste Storage Area**

Is area in full compliance with SWPPP?

☒ Yes

☐ No

If no, list instances of non-compliance: \_\_\_\_\_

Inspector Initials:

KH, RB, JD

## Quarterly Visual Monitoring Form

Date of Sampling: 4/28/10

Time: 10:00 am

Outfall #: 1

Sampler Name: Jason Didawick

### Visual Monitoring Results

Color: ☒ No Color  
☐ Other

Describe: \_\_\_\_\_

Odor: ☒ None  
☐ Other

Describe: \_\_\_\_\_

Color: ☒ Clear  
☐ Some Clouding  
☐ Opaque

Solids: ☐ Floating  
☐ Suspended

Describe: \_\_\_\_\_

Describe: \_\_\_\_\_

☒ Settled

Describe: \_\_\_\_\_

Foam: ☒ No  
☐ Yes

Oil Sheen: ☒ No  
☐ Yes

jet out pipe to outfall



## **Appendix F. Training Materials**

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# **Municipal Separate Storm Sewer System (MS4) Permit Program Overview**

**City of Winchester, Virginia**



**June 29, 2012**



# Topics



- 💧 What is the MS4 Permit Program?
- 💧 What is Required?
- 💧 Winchester's SWM Program Plan
- 💧 Why am I here?
- 💧 Responsibilities by Department
- 💧 Why is participation important?
- 💧 Questions?

federal register

Wednesday  
December 8, 1999

## Part II

### Environmental Protection Agency

40 CFR Parts 9, 122, 123, and 124  
National Pollutant Discharge Elimination  
System—Regulations for Revision of the  
Water Pollution Control Program  
Addressing Storm Water Discharges;  
Final Rule  
Report to Congress on the Phase II  
Storm Water Regulations; Notice



# What is the MS4 Permit Program?



- 💧 Originally authorized by the Clean Water Act (1972)
- 💧 Has been implemented in two phases:
  - Phase I – Large MS4s (serving separate storm sewer systems with populations greater than 100,000 as of 1980 Census)
  - Phase II – Medium and Small MS4s serving a 1990/2000 Census-designated urbanized area (Winchester, VA).
- 💧 Essentially regulates stormwater as a point source at the point of discharge to receiving waters (outfall).



# What is Required?



- Develop a Stormwater Management (SWM) Program Plan to address the Phase II MS4 Six **Minimum Control Measures** to the Maximum Extent Practicable (MEP):

1. Public Education & Outreach on Stormwater Impacts
2. Public Involvement & Participation
3. Illicit Discharge Detection & Elimination
4. Construction Site Stormwater Runoff Control
5. Post-construction Stormwater Management
6. Pollution Prevention/Good Housekeeping for Municipal Operations





# Winchester's SWM Program Plan



- 💧 Registration Statement for coverage submitted January 9, 2009
- 💧 Develop a **SWM Program Plan** to address each of the six minimum control measures for the current 5 year permit cycle (2008 – 2013)
- 💧 Plan designates **specific BMPs/Program Elements** to address the minimum control measures





# Winchester's SWM Program Plan



- Plan details **measurable goals** for each BMP/Program element listed in the plan
- Plan specifies **timelines** for implementation/execution of noted BMP/Program elements and designated **responsible parties**
- Provides for **annual reports** to the regulator before October 1<sup>st</sup> of each year





# Winchester's SWM Program Plan by Year



Summary of BMP/Program Elements by Program Year

		Program Year				
		Year 1 (7/1/2008 - 6/30/2009)	Year 2 (7/1/2009 - 6/30/2010)	Year 3 (7/1/2010 - 6/30/2011)	Year 4 (7/1/2011 - 6/30/2012)	Year 5 (7/1/2012 - 6/30/2013)
<b>Program Administration</b>						
Admin	Evaluate the effectiveness of the program BMP's	X	X	X	X	X
Admin	Perform a program self evaluation			X		
<b>1. Public Education and Outreach on Stormwater Impacts</b>						
BMP 1.1	Broadcast programs focused on stormwater		X			
BMP 1.2	Continue disseminating information to the general public	X	X	X	X	X
BMP 1.3	Continue administering stormwater complaint hotline	X	X	X	X	X
BMP 1.4	Update and maintain stormwater information posted on City's website	X	X	X	X	X
BMP 1.5	Initiate formal program for presentations at elementary and high schools	X	X	X	X	X
Future BMP 1.6?	Participate in NVRC Clean Water Partners regional stormwater education media campaign					X
<b>2. Public Involvement/Participation</b>						
BMP 2.1	Continue encouraging participation in Adopt-A-Stream Program	X	X	X	X	X
BMP 2.2	Post the MS4 Permit and Subsequent Revisions to the City's Website		X	X	X	X
<b>3. Illicit Discharge Detection and Elimination</b>						
BMP 3.1	Continue hazardous spill response program and household hazardous waste collection	X	X	X	X	X
BMP 3.2	Implement inspections of storm sewers within the City's five subwatersheds	X	X	X	X	X
BMP 3.3	Continue enforcement of illicit connections, as needed, according to the City's Water Protection Ordinance	X	X	X	X	X
BMP 3.4	Continue administering stormwater complaint hotline to identify illicit connections	X	X	X	X	X
BMP 3.5	Household Waste Reduction	X	X	X	X	X
BMP 3.6	Illicit Discharge Elimination	X	X	X	X	X
<b>4. Construction Site Stormwater Runoff Control</b>						
BMP 4.1	Continue program to require construction site operators to control waste	X	X	X	X	X
BMP 4.2	Continue maintaining DCR E&S plan review, inspection and administration certification for a minimum of 2 City employees	X	X	X	X	X
BMP 4.3	Continue enforcement of erosion and sediment control as well as stormwater management and water quality	X	X	X	X	X
BMP 4.4	Continue administering stormwater complaint hotline to identify problems at construction sites	X	X	X	X	X
BMP 4.5	Continue tracking regulated land disturbing activities	X	X	X	X	X
<b>5. Post-Construction Stormwater Management</b>						
BMP 5.1	Continue enforcement of erosion and sediment control as well as stormwater management and water quality	X	X	X	X	X
BMP 5.2	Continue requiring BMP maintenance agreements for all privately owned water quality and quantity BMP's	X	X	X	X	X
<b>6. Pollution Prevention/Good Housekeeping for Municipal Operations</b>						
BMP 6.1	Continue implementing City Yards SWP3 and update every 3 years	X	X	X	X	X
BMP 6.2	Continue use of salt storage building and vehicle washing facility at City Yards	X	X	X	X	X
BMP 6.3	Continue training of City employees on Environmental Management Systems (EMS)	X	X	X	X	X
BMP 6.4	Continue street sweeping program and track amount of litter and debris removed	X	X	X	X	X



See Page 1 of the Handouts



# Why am I here?



The City's SWM Program Plan must include:

***“The individuals, departments, divisions, or units responsible for implementing the Best Management Practices” (4VAC50-60-1230)***





# Why am I here?



- 💧 The Engineering Division has been the lead for development of the SWM Program Plan
- 💧 Implementation of the SWM Program Plan will require many other City divisions/departments to lead and/or assist with BMP/Program Element execution
- 💧 The City of Winchester's compliance with MS4 Permit Regulations requires your participation!







# Why am I here?



## Responsibilities by City Department:

		City Department/Division Responsible for Implementation*															
		Public Services Department								Other Departments							
<b>Program Administration</b>																	
Admin	Evaluate the effectiveness of the program BMPs	L															
Admin	Perform a program self evaluation	L		A													
<b>1. Public Education and Outreach on Stormwater Impacts</b>																	
BMP 11	Broadcast programs focused on stormwater	L								A						A	
BMP 12	Continue disseminating information to the general public	L								A							
BMP 13	Continue administering stormwater complaint hotline	L		A	A												
BMP 14	Update and maintain stormwater information posted on City's website	L														A	
BMP 15	Initiate formal program for presentations at elementary and high schools	L															
Future BMP 16?	Participate in NVRC Clean Water Partners regional stormwater education media campaign	L															
<b>2. Public Involvement/Participation</b>																	
BMP 2.1	Continue encouraging participation in Adopt-A-Stream Program	L								A							
BMP 2.2	Post the MS4 Permit and Subsequent Revisions to the City's Website	L														A	
<b>3. Illicit Discharge Detection and Elimination</b>																	
BMP 3.1	Continue hazardous spill response program and household hazardous waste collection	A		L					L								
BMP 3.2	Implement inspections of storm sewers within the City's five subwatersheds	L	A	A													
BMP 3.3	Continue enforcement of illicit connections, as needed, according to the City's Water Protection Ordinance	L		A													A
BMP 3.4	Continue administering stormwater complaint hotline to identify illicit connections	L		A	A												
BMP 3.5	Household Waste Reduction	A		L													
BMP 3.6	Illicit Discharge Elimination	L		A			A										
<b>4. Construction Site Stormwater Runoff Control</b>																	
BMP 4.1	Continue program to require construction site operators to control waste	L															
BMP 4.2	Continue maintaining DCR E&S plan review, inspection and administration certification for a minimum of 2 City employees	L															
BMP 4.3	Continue enforcement of erosion and sediment control as well as stormwater management and water quality	L															
BMP 4.4	Continue administering stormwater complaint hotline to identify problems at construction sites	L			A												
BMP 4.5	Continue tracking regulated land disturbing activities	L													A		
<b>5. Post-Construction Stormwater Management</b>																	
BMP 5.1	Continue enforcement of erosion and sediment control as well as stormwater management and water quality	L		A						A							
BMP 5.2	Continue requiring BMP maintenance agreements for all privately owned water quality and quantity BMPs	L													A		
<b>6. Pollution Prevention/Good Housekeeping for Municipal Operations</b>																	
BMP 6.1	Continue implementing City Yards SWP3 and update every 3 years	L		A													
BMP 6.2	Continue use of salt storage building and vehicle washing facility at City Yards	A		L													
BMP 6.3	Continue training of City employees on Environmental Management Systems (EMS)	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
BMP 6.4	Continue street sweeping program and track amount of litter and debris removed	A		L													

\* L = Lead Department A = Assisting Department

See Pages 2 and 3 of the Handouts



# Why am I here?



## Human Resources Department

Lead:

- VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)\*



\*Note: Human Resources Department takes the lead on scheduling and delivering the training, while all other departments assist by making sure staff is available for this training.



# Why am I here?



## GIS Division

Assist with:

- 💧 III. Illicit Discharge Detection and Elimination
  - BMP 3.2 Implement inspections of storm sewers in the City's five subwatersheds
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)





# Why am I here?



## Public Works Division

### Lead:



- 💧 III. Illicit Discharge Detection and Elimination
  - BMP 3.1 Continue hazardous spill response program and household hazardous waste collection\*\*
  - BMP 3.5 Continue household waste collection & recycling
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.2 Continue use of salt storage building & vehicle wash facility
  - BMP 6.4 Continue street sweeping program & track amounts of litter and debris removed

\*\*Note: Fire & Rescue does primary response for hazmat spills, while Public Works puts out the info on hazardous waste collection - actual collection is done by the County Landfill.



# Why am I here?



## Public Works Division

Assist with:

- 💧 Admin. Program Administration
  - Admin: Perform a program self-evaluation
- 💧 I. Public Education and Outreach on Stormwater Impacts
  - BMP 1.3 Continue administering stormwater complaint hotline
- 💧 III. Illicit Discharge Detection and Elimination
  - BMP 3.2 Implement inspections of storm sewers in the City's five subwatersheds
  - BMP 3.3 Continue enforcement of illicit connections, as needed, in accordance with the City's Water Protection Ordinance
  - BMP 3.4 Continue administering stormwater complaint hotline to identify illicit connections
  - BMP 3.6 Illicit Discharge Elimination







# Why am I here?



## Public Works Division

Assist with:

- 💧 V. Post-Construction Stormwater Management
  - BMP 5.1 Continue enforcement of E&SC, SWM, and water quality
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.1 Continue implementing City Yards SWP3 and update every three years
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)





# Why am I here?



## Facility Maintenance Division

Assist with:



- ◆ I. Public Education and Outreach on Stormwater Impacts
  - BMP 1.3 Continue administering stormwater complaint hotline
- ◆ III. Illicit Discharge Detection and Elimination
  - BMP 3.4 Continue administering stormwater complaint hotline to identify illicit connections
- ◆ IV. Construction Site Stormwater Runoff Control
  - BMP 4.4 Continue administering stormwater complaint hotline to identify problems at construction sites
- ◆ VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)



# Why am I here?



## Utilities Operations Division

Assist with:

- 💧 III. Illicit Discharge Detection and Elimination
  - BMP 3.6 Illicit Discharge Elimination
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)





# Why am I here?



## Fire & Rescue Department

### Lead:

- III. Illicit Discharge Detection and Elimination

- BMP 3.1 Continue hazardous spill response program and household hazardous waste collection\*\*



### Assist with:

- VI. Pollution Prevention/Good Housekeeping for Municipal Operations

- BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)

\*\*Note: Fire & Rescue does primary response for hazmat spills, while Public Works puts out the info on hazardous waste collection - actual collection is done by the County Landfill.



# Why am I here?



## Office of Public Information

Assist with:



- 💧 I. Public Education and Outreach on Stormwater Impacts
  - BMP 1.1 Broadcast programs focused on stormwater
  - BMP 1.2 Continue disseminating information to the general public
- 💧 II. Public Involvement/Participation
  - BMP 2.1 Continue encouraging participation in Adopt-A-Stream program
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)







# Why am I here?



## Parks & Recreation Department

Assist with:

- 💧 V. Post-Construction Stormwater Management
  - BMP 5.1 Continue enforcement of E&SC, SWM, and water quality
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)





# Why am I here?



## Planning & Zoning Department Assist with:



- ◆ IV. Construction Site Stormwater Runoff Control
  - BMP 4.5 Continue tracking regulated land disturbing activities
- ◆ V. Post-Construction Stormwater Management
  - BMP 5.2 Continue requiring BMP maintenance agreements for all privately owned water quality and quantity BMPs
- ◆ VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)





# Why am I here?



## Information Technology Department Assist with:



- 💧 I. Public Education and Outreach on Stormwater Impacts
  - BMP 1.1 Broadcast programs focused on stormwater
  - BMP 1.4 Update & maintain stormwater information posted on City's website
- 💧 II. Public Involvement/Participation
  - BMP 2.2 Post the MS4 Permit and subsequent revisions to the City's website
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)





# Why am I here?



## City Attorney's Office Assist with:



- 💧 III. Illicit Discharge Detection and Elimination
  - BMP 3.3 Continue enforcement of illicit connections, as needed, in accordance with the City's Water Protection Ordinance
- 💧 VI. Pollution Prevention/Good Housekeeping for Municipal Operations
  - BMP 6.3 Continue training of City employees on Environmental Management Systems (EMS)



# Your Participation is Important!



## 💧 Section 4VAC50-60-1220 of the MS4 Permit Regulations states:

- “The failure to provide adequate program funding, staffing, or equipment maintenance shall not be an acceptable explanation for failure to meet permit conditions.”



## 💧 Section 4VAC50-60-1240 of the MS4 Permit Regulations states:

- “Any permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act”







# Questions?



*Any questions regarding the MS4 Program?*

