

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

**Permit Year 3 Annual Report  
Reporting Period: July 1, 2010-June 30, 2011**



Submitted October 1, 2011

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.

Craig Gerhart  
**Name**

City Manager  
**Title**

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

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

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A CD with the stormwater management facilities database is included at the end of Appendix E.

## 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 new permit, the City of Winchester reviewed its existing MS4 Program and revised the Program on January 8, 2009, to meet the conditions in the new 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, 2010 through June 30, 2011.

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 3. 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.

No new MS4 outfalls were added in the City during this reporting year.

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

## 2.0 Status of Compliance with Year 3 Permit Conditions (July 1, 2010-June 30, 2011)

As part of the City’s Program, BMPs, implementation schedules, and measurements of the effectiveness towards the goal in reducing pollutants were identified. 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 their Program. Table 1 provides a summary of the BMPs that are conducted on an annual basis during this permit cycle, and those that were initiated and/or completed within this reporting period. In the following sections, detailed information on the goals of each minimum control measure and progress made towards achieving the designated goals can be found.

**Table 1- Permit Year 3 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; Buffalo Lick Run for Permit Year 3
<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 (SWP3) 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 outreach activities to the community to teach them 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 3
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 3; 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 3; 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 3; 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 3; ongoing activity

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

explains simple things people can do to protect their local watershed. The change from broadcasting the program from the public access television station to the City's website was necessary 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. Changing the media for this information from a limited broadcast schedule of four times per year to the City's website provides more accessibility to the information.

The City's stormwater website recorded 286 page views during this permit period with 232 of those being unique. During this permit period, no calls were received on the stormwater complaint hotline; therefore no information was obtained from this source regarding the awareness of citizens of the video information available on the website.

**2.1.2 BMP 1.2:** The City participated in the Wellness Festival on February 27, 2011. 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 has established a stormwater complaint hotline. The hotline is promoted to the public by being posted 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. An evaluation of the need to distribute another utility bill insert advertising the stormwater complaint hotline was conducted by the City during this permit year. A decision was made that an additional mailing was not warranted at this time and the option for an additional mailer will be made next fiscal year. The City will continue to support the hotline because it provides a way to address any stormwater issues from the public. In addition, in Permit Year 4, the City will consider 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. Outreach material to promote the stormwater complaint hotline is included in Appendix B.

**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 286 page views to the stormwater website.

**2.1.5 BMP 1.5:** The City Engineer contacted all of the City's elementary schools and introduced the Watershed and Stormwater Educational Opportunities Program that is available to them as part of the City's formal program for stormwater presentations at schools. The letter offered educational talks on stormwater and related issues, including water pollution, water conservation, the water cycle and watersheds.

There were no responses from the elementary schools within the reporting period. However, the City Engineer did deliver a Non-Point Source Pollution presentation to eight classes of 6<sup>th</sup> graders at the Daniel Morgan Middle School on November 23, 2010. 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 schools to promote stormwater management and related issues. A copy of the letter sent to the schools is included in Appendix C.

**2.2 Public Involvement/Participation**

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

The City continues to encourage public involvement/participation in stormwater management activities through its formal Adopt-A-Stream Program. Twenty flyers on this program were distributed at workshops and events throughout the permit year. Three organizations participated in this program during this permit year.

A pet waste flyer was also distributed by the City of Winchester. This tri-fold brochure described the impacts pet waste can have on waterbodies, the city code pertaining to pet waste, and how pet owners can lessen pet waste impacts. The citizens can also contact the 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 task, measurable goal, 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 3; ongoing program
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. The MS4 Permit will be posted in Permit Year 4

**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>. Included on this website is an invitation to join the Program and a flyer detailing the steps to join the Program. During the reporting period for Permit Year 3, three organizations participated in the Adopt-A-Stream Program as noted in Table 4. Two segments of Abrams Creek and one segment of Town Run were adopted, with 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
Spiritual Life at Shenandoah University	Abrams Creek between I-81 and Millwood Avenue	August 21, 2010	20 bags of trash were collected at these three events
Virginia Department of Health (Environmental Unit)	Abrams Creek between Meadow Branch and Jubal Early Drive	December 22, 2010	
Farris Family	Town Run at Whittier Park	May 14, 2011	

**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 4. Posting the information on the website provides an opportunity for the information to be reviewed and commented on by all interested parties. The posting complies with all applicable freedom of information regulations for both the MS4 Program Plan and the annual reports.

### **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 regulated small MS4s. To meet this goal, operators of a regulated 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 regulated 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” plans. A copy of the most recent storm sewer map is included in Appendix D.

**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 3; ongoing program
3.2	Implement inspections of storm sewers within the City's Buffalo Lick Run sub-watershed	Inspect Buffalo Lick Run and present findings, including information on any illicit connections identified and follow-up actions completed or planned	Completed for Permit Year 3; 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 3; 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 3; 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 3; ongoing program
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 3; 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 had not been calculated by Frederick County at the time 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 Buffalo Lick Run during Permit Year 3. The inspection found 7 outfalls, and 7 stream crossings. No illicit discharges were found along Buffalo Lick Run. There was no follow-up necessary from dry weather inspections of Town Run performed in Permit year 2 as there were no major issues identified at the time.

**2.3.3 BMP 3.3:** There were no illicit connection related calls to the stormwater complaint hotline, or by other means during this reporting cycle. Therefore, no illicit connections were investigated and there are no follow-up actions completed or planned.



**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 (such as failing silt fences at construction sites). It was also developed for people to call in suspected stormwater abuses, such as the illegal dumping of materials. There were no illicit connection related calls to the stormwater complaint hotline during this reporting cycle. Therefore, no illicit connections were investigated and there are no follow-up actions completed or planned.

**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 free to all residents with the City providing recycling bins for residents. By providing the 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 pickup of yard waste from March through January. This service also reduces the amount of material that would go to a landfill.

In this permit year, approximately 6,430 tons of household waste and 2,931 tons of recycled materials (includes yard waste & scrap metal) were collected. 1449 recycling bins were distributed to residents and businesses, not including the downtown recycling bins or those that are distributed for special events.

**2.3.6 BMP 3.6:** 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. 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 per year. During Permit Year 3, the City replaced approximately 45 linear feet of sanitary sewer mains.

## **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 any stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre. 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 3; ongoing program



<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
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 3; 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 3; 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 3; 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 3; ongoing program

**2.4.1 BMP 4.1:** The City’s Water Protection Ordinance provides 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, as needed, site inspections. For this reporting cycle, 98% of construction sites inspected met the City’s requirement for controlling waste upon their first inspection. 100% of construction sites inspected met the City’s requirement for controlling waste upon their second inspection.

**2.4.2 BMP 4.2:** The City currently has one program administrator, one combined administrator, and three inspectors on staff, all who maintain Virginia DCR Erosion and Sediment Control plan review, inspection, and administration certification, respectively. The City also has two Professional Engineers on staff that are therefore qualified as Plan Reviewers under the program.

**2.4.3 BMP 4.3:** The City 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 and attendant regulations, and on its stormwater management program as regulated under the Stormwater Management Act.

Within this reporting cycle:

- 27 construction plans were reviewed and 24 construction plans were approved by the City; and

- 6 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 associated with 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:

- 30 land disturbing activities were reported; and
- 10.45 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 3; 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 taking 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 re-development projects.

Appendix E contains an inventory of the known structural BMPs that discharge to the regulated small MS4. During this reporting period, 15 new BMPs on 10 sites were 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, 2010. A copy of the letter and BMP inspection form is included in Appendix E along with the log of executed maintenance agreements.

During this reporting period, 59 private BMPs on 41 sites were inspected through the City's BMP maintenance program. Thirty 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 29 BMPs were copied to the owners. The City will be performing follow-up inspections on these BMPs over the next six 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 SWP3s 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 SWP3 and update every 3 years	Quarterly visual monitoring, annual facility inspection, and updated SWP3	Completed for Permit Year 3; 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 3; ongoing program

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goal</b>	<b>Status</b>
6.3	Continue training of City employees on EMS	Train all employees	Completed for Permit Year 3; 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 3; ongoing program

**2.6.1 BMP 6.1:** The City Yards, the storage and maintenance facility for heavy equipment and materials for the Public Works Department, has a SWP3 in place. The plan outlines planned improvements that will eliminate potential sources of pollution and provides recommendations to improve the water quality of runoff from the site. Standard Operating Procedures are included as part of the SWP3. The SWP3 is reviewed and updated every three years. The SWPP was modified in 2010 to include corrective measures needed as a result of site inspections. A copy of the SWP3 is included in Appendix F.

As required in VPDES Permit No. VAR050822 issued for this facility, quarterly visual monitoring was conducted on October 27, 2011, and February 15, 2011. The annual facility inspection was performed in conjunction the visual monitoring on October 27, 2011. Because of a transition to new staff at the City Yards facility, no other inspections were performed during this permit year.

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 SWP3.

**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 City Yard occurred on October 27, 2011 and February 15, 2011.

**2.6.3 BMP 6.3:** The City requires all employees to attend a short training session on EMS to raise the awareness among employees of environmental impacts around them. During this reporting period, 27 employees participated in EMS training. A copy of the presentation given to employees is contained in Appendix G.

**2.6.4 BMP 6.4:** City streets are swept on a regular basis to remove pollutants and improve appearance. During this reporting period, 5,998 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 4

Table 9 outlines the BMPs planned for each of the minimum control measures for Permit Year 4 and their status.

**Table 9- New MS4 Stormwater Activities for Permit Year 4**

Minimum Control Measure	BMP	Planned Activity	Comment
Illicit Discharge Detection and Elimination	BMP 3.1 Inspections of storm sewers within City’s five watersheds	Inspection of Redbud Run	Will be conducted in Permit Year 4 as planned.

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

- 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 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 stormwater complaint hotline to identify illicit connections;
- BMP 3.5: Providing household trash and recycling services to residents;
- BMP 3.6: Conducting inflow and infiltration abatement program to replace or slipline sanitary sewer system;
- BMP 4.1: Conducting 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 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 4.

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 4.

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 the State of 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**

BMPs/Activities	Water Body/Reach	Pollutant(s) of Concern
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 the State 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 allocated 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 will examine the methodology used to determine the WLAs and may propose revised WLAs for the Winchester MS4 area.

The annual volume of stormwater was derived using the Simple Method approach for the five watersheds for which the City contributes as shown in Table 11. The volume of runoff represented in the table below uses readily available Geographic Information System 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, two incidents (reported on 3/15/2011 and 3/23/2011) were forwarded to the City from Nonna Good at Virginia DEQ. No follow up activity was needed per a subsequent notice from DEQ.

## 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 30 land-disturbing activities were recorded for a total disturbance of 10.45 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
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
804 Amherst Street	Pervious Pavement, Grass Swales	PU17	Abrams Creek	0.12
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 - Sulphur Spring 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
Cameron Street Parking Garage	Filtrerra Unit	PU17	Abrams Creek	0.2
Castleman Subdivision	Underground Detention	PU17	Abrams Creek	6.39

<b>Facility</b>	<b>Type</b>	<b>HUC</b>	<b>Impaired receiving waters</b>	<b>Acres Treated</b>
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
Chick-Fil-A	SWM Pond	PU17	Abrams Creek	11.6
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
FCPS Admin Plaza	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 - Sulphur Spring 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
Habitat Kent St/Freemont St Lois	Grass Swale	PU17	Abrams Creek	0.63
Henkel-Harris	SWM Pond	PU16	Opequon Creek – Buffalo Lick	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
Hope Drive Subdivision	SWM Pond	PU17	Abrams Creek	66.0
Islamic Society of Winchester	Pervious Pavement	PU17	Abrams Creek	

<b>Facility</b>	<b>Type</b>	<b>HUC</b>	<b>Impaired receiving waters</b>	<b>Acres Treated</b>
John Handley High School	Underground Detention	PU17	Abrams Creek	8.2
Jubal Early Plaza Lot I-Lot 2	Detention Plaza	PU17	Abrams Creek	4.22
Jubal Early Plaza II-Lot 9	Detention Plaza	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	11.6
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	2Filterras, 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

<b>Facility</b>	<b>Type</b>	<b>HUC</b>	<b>Impaired receiving waters</b>	<b>Acres Treated</b>
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
Shenandoah University TV Station	Grass Swale Detention	PU17	Abrams Creek	0.92
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
Sun Trust Bank	SWM Pond	PU17	Abrams Creek	11.6
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	Filtterra Units	PU17	Abrams Creek	0.5
Trinity Express	SWM Pond	PU17	Abrams Creek	0.81

Facility	Type	HUC	Impaired receiving waters	Acres Treated
Lube				
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**

Facility	Type	HUC	Impaired receiving waters	Acres Treated
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

<b>Facility</b>	<b>Type</b>	<b>HUC</b>	<b>Impaired receiving waters</b>	<b>Acres Treated</b>
Elite Settlements	Pervious Pavement	PU17	Abrams Creek	0.1
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 Storage Area	2Grass Swales	PU17	Abrams Creek	0.76
Shawnee Drive Business Park	SWM Pond	NA	NA	NA
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
Whitacre Property	Filtterra Unit	PU17	Abrams Creek	NA
YHB Driveway/Parking Addition	Grass Pavers	PU17	Abrams Creek	0.01

## **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 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 is of the opinion that 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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## **Appendix B. Public Outreach Material**

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**Appendix C. Educational Opportunities Letter**

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## **Appendix D. Storm Sewer Map**

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

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**Appendix F. City Yards Stormwater Pollution Prevention Plan**

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## **Appendix G. Training Materials**

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