



# CITY OF FALLS CHURCH

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October 1, 2014

Ms. Susan Mackert  
Water Permit Writer, Senior II  
Regional Industrial Storm Water Coordinator  
Virginia Department of Environmental Quality  
Northern Regional Office  
13901 Crown Court  
Woodbridge, VA 22193

Subject: Small MS4 Program Plan – Annual Report – Program Year 1

Dear Ms. Mackert:

The City of Falls Church, Virginia is submitting the enclosed Annual Report for Program Year One (PY1) in accordance with the Department of Environmental Quality approved MS4 Program Plan requirements dated July 1, 2013.

The City's PY1 Annual Report provides a summary of activities performed between July 1, 2013 and June 30, 2014, as required by the MS4 Program. Additionally, the City has included an update to the MS4 Program to address the requirements shown in Table 1 of 9VAC25-890-40. A few of the updates to the program are highlighted below:

- **Public Education Outreach Plan** – The City worked with engineering consultant GK Y to develop a plan to reach 20% of target audiences for three high-priority water quality issues. A copy of the report is provided in Appendix F. Additional outreach and public participation activities were added to the program.
- **Illicit Discharge Procedures** – The City reviewed the existing Illicit Discharge Detection and Elimination Manual and determined it will require updating based on changes within the organization and with the adoption of the new stormwater management ordinance. This will be performed in PY2. The City also worked with GK Y to develop an Standard Operating Procedure for City responses to illicit discharges. A draft of the document is provided in the Appendix I.
- **Identification of Locations Requiring Storm Water Pollution Prevention Plans (SWPPP)** – The City identified the Property Yard and Remote Storage Area as facilities requiring a SWPPP. Site inspection were performed and a draft SWPPP was put together for both sites. A copy of the report and SWPPP is included in Appendix Q.

- Nutrient Management Plan (NMP) Locations – The City identified the Thomas Jefferson Elementary School playing field as the only site requiring a NMP. We tasked engineering consultant to develop a NMP for the 11.5 acre site. A copy of the draft plan is included in Appendix R.
- Training Schedule and Program – The City has developed a draft document that outlines the training program. Six training modules were also developed to specifically address potential pollutants based on our current operations. A copy of the plan is provided in Appendix P.

As the duly authorized representative for the City 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.

If you have any questions please feel free to contact me at (703) 248-5026 or by email at [jwidstrom@fallschurchva.gov](mailto:jwidstrom@fallschurchva.gov).

Sincerely,



Jason Widstrom, P.E.  
Civil Engineer



Municipal Separate Storm Sewer System  
Program Plan  
Permit Number VAR040065

Annual Report  
Permit Year One

October 1, 2014

Performed for compliance with the  
Authorization to Discharge Under the  
Virginia Pollutant Discharge Elimination System  
and the Virginia State Water Control Law  
Clean Water Act

# CITY OF FALLS CHURCH

## CITY COUNCIL MEMBERS

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Marybeth Connelly

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**TABLE OF CONTENTS**

I. INTRODUCTION .....2  
II. ADMINISTRATION .....2  
III. PUBLIC EDUCATION AND OUTREACH..... 3  
IV. PUBLIC INVOLVEMENT / PARTICIPATION .....5  
V. ILLICIT DISCHARGE DETECTION / ELIMINATION .....7  
VI. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL..... 10  
VII. POST-CONSTRUCTION STORMWATER MANAGEMENT..... 11  
VIII. POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS ..... 12

**LIST OF APPENDICES**

- A. MS4 Program Plan
- B. Chapter 35, Stormwater
- C. Regional Meetings
- D. Outreach Materials
- E. Mayor’s Proclamation
- F. Outreach Program Study
- G. City Council Meetings
- H. ESC Meeting Minutes
- I. IDDE Study and SOP
- J. Hazardous Waste
- K. Outfall Characterizations
- L. Land Disturbance Reports
- M. BMP Database and BMP Inspection Memorandum
- N. BMP and Credit Manual Studies
- O. Street Sweeping
- P. Training Log and Materials
- Q. Property Yard
- R. Nutrient Management Plan

## I. INTRODUCTION

On July 8, 2013, the City of Falls Church received authorization to operate its small municipal separate storm sewer system (MS4) under a Virginia Pollutant Discharge Elimination System (VPDES) general permit. The general permit, which expires June 30, 2018, requires the City to adhere to an approved MS4 Program Plan. The July 2013 authorization was based on a continuance of the City of Falls Church's 2012 MS4 Program Plan that was in compliance with prior Storm Water Management Program Permit Regulations. This report covers the requirements of that Program Plan and gives a look forward to a new MS4 Program Plan, which is included as Appendix A.

The City of Falls Church is required to submit an annual report to remain in compliance with the VPDES general permit. The report describes the City's collective efforts in storm water management and updates the progress toward meeting the Best Management Practices (BMPs) for each of the six Minimum Control Measures (MCM) identified in the City's MS4 Program Plan. Tasks required by the permit in Permit Year One (PY1) and contained in this annual report are annotated with a BMP shown in italics, for example (*BMP A*), and each corresponds with the MS4 Program Plan. This report places an emphasis on the accomplishments made in PY1, other actions undertaken by the City to meet the stated goals, and a look forward to new general permit requirements. Supporting documentation is provided in the appendices.

## II. ADMINISTRATION

The administration of the City's MS4 Program Plan is an important aspect of the plan itself. Throughout the life of the current permit, the plan will remain a dynamic document. The City will update and, where necessary, provide additional schedules to implement best management practices. The process is ongoing from one permit year to the next. In 2013, the City was required to revise its current MS4 Program Plan to meet the requirements of 9VAC25-890-40 and submit changes as part of the annual report for PY1.

Program Administration – (*BMP A*) In PY1, the City amended the MS4 Program Plan to address 9VAC25-890-40 General permit, Section II, Part B. This was done to incorporate items contained in Table 1 of the VAC, and specifically for the items identified as required by the first 12 and 24 months after permit coverage. The City also looked forward to items required in future years and drafted BMPs for those as well so DEQ can evaluate them.

Authoritative Review – (*BMP B*) In PY1 the City adopted Chapter 35, Stormwater, which was based on the state's model ordinance. See Appendix B for a copy of the ordinance. Since the adoption was mandated, the City

took the opportunity to incorporate solutions to outstanding issues identified by the 2012 Watershed Management Plan. The most relevant to the MS4 Program Plan is the incorporation of new definitions and penalties for illicit discharge.

Regional Planning – (*BMP C*) This past year the City continued to take part in regional planning with local jurisdictions by participating in stormwater discussions with the Virginia Municipal Stormwater Association, Northern Virginia Regional Commission's Clean Water Partners, and Northern Virginia Regional Commission's MS4 Workgroup. Appendix C – Regional Meetings Attended is provided for documentation purposes and includes the agendas for each meeting.

Evaluation – (*BMP D*) In PY1 the City was focused on developing programs that will meet the expectations of the new permit requirements. In future permit years the City will focus on the effectiveness of these BMPs (e.g. meeting the 20% target population) and update the MS4 Program Plan appropriately.

Annual Report – (*BMP E*) The submission of this report addresses this requirement.

Record Keeping – (*BMP F*) In PY1 the City's staff enhanced the existing stormwater page on the City website by including additional outreach education information. Throughout PY1 the website was updated with the latest materials, which are available for download in Adobe Acrobat format. A screenshot of the website is provided in Appendix D – Outreach Materials. The information, including this report, can also be viewed on the Department of Public Works page at:

<http://www.fallschurchva.gov/Stormwater>

### **III. PUBLIC EDUCATION AND OUTREACH (MCM#1)**

Each year the City of Fall Church performs education and outreach activities related to stormwater and water quality. As part of the MS4 Program Plan our city distributes educational materials to the community and conducts 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 City of Falls Church, Department of Public Works (DPW), working in partnership with the State, citizen volunteers, local/regional non-profit groups, and neighboring jurisdictions, has conducted a variety of education and outreach activities during PY1. Among these are the following:

Watershed and Floodplain Awareness Month – The City Mayor proclaimed May 2014 "Watershed Awareness Month". The Director of Public Works read an announcement outlining the importance of watershed protection and outlining various activities sponsored by the City in celebration of Watershed Awareness Month. The Mayor's proclamation is provided in Appendix E.

Local Newspapers (*BMP A*) – DPW staff placed three separate articles on watershed protection in the *Falls Church News-Press* (total circulation of 10,000 in the greater Falls Church area), in PY1. Each article is provided in Appendix D.

Local Newsletters (*BMP B*) – DPW publishes a semi-annual online newsletter, *The Falls Church Environment*, to highlight environmental issues that impact Falls Church City residents. It is distributed to 1,200 households in the spring and fall of each year. The Environment is distributed through an email listserv, the Library, Community Center and other public offices. Each publication contains articles related to watershed protection and water quality. A copy of the article can be found in Appendix D.

Stormwater Website (*BMP C, BMP E*) – In May of PY1 the City of Falls Church launched a brand new website. This allowed DPW and the Office of Communications staff to update and freshen up the stormwater webpages. The new webpages list information on stormwater pollution, stormwater projects, the MS4 program, the updated stormwater ordinance, and the new Stormwater Utility Program. The stormwater section also has information about different BMPs and credit programs for the Stormwater Utility. Select material is provided in Spanish. All of the materials can be found using our shortcut link, <http://www.fallschurchva.gov/Stormwater>.

Public Access Television (*BMP D*) – Power Point slides featuring six primary sources of contamination were run on the City's public access station. In addition, several films related to water quality in our region were presented, including: "Four Mile Run", "Reclaiming Our Water", "Reining in the Storm", "Tripps Run" and "We are all Smith Islanders". The films are shown on a monthly rotation with at least one film shown each month, as confirmed with the Cable TV Coordinator (exact air times are not available). A water quality slide show featuring seasonal messages is also shown.

Regional Partnership – In PY1, Falls Church continued the partnership with the Northern Virginia Regional Commission (NVRC) and Northern Virginia Clean Water Partners (NVCWP) to produce regional educational materials targeting the most prevalent and controllable forms of contamination in local waterways, including pet waste, household chemicals, and disposal of waste oil. The NVCWP funded a campaign aimed at storm water pollution awareness. It centered around the distribution of pet waste bag dispensers in order to educate the public on the importance of keeping pet waste out of the

waterways. 480 dispensers were distributed at the City's Memorial Day Festival and in baskets at two high-traffic areas in City Hall. The NVCWP also funded an "Only Rain Down the Drain" advertising campaign through Comcast Spotlight and covered the topics of pet waste, lawn care, and auto care. Through this campaign the NVCWP commercial received 3,193,924 household impressions (as of 8/17/14), resulting in 20% of our target audience being reached.

**Storm Drain Markers** – The Storm Drain Marking Program was initiated by the City in 2003 and has continued through PY1. DPW continues to install/replace markers as needed.

**Pet Waste Outreach (BMP F)** – DPW developed a mailer specifically targeting pet owners to educate them on proper management of pet waste for the protection of water quality. It was mailed to all 697 citizens who hold a dog license. The same publication continued to be made available throughout City Hall and on the City's website in PY1. In partnership with and funded by the Northern Virginia Regional Commission (NVRC) the City was also able to distribute 480 pet waste bag dispensers at the City's Memorial Day Festival and in baskets at two high-traffic areas in City Hall. A copy of the mailer is included in Appendix B.

In PY1, the City partnered with GKY and Associates to:

- Identify a minimum of three high-priority water quality issues that contribute to the stormwater pollution and provide rationale for their selection.
- Identify target audience(s) that are most likely to have significant impacts for each high-priority water quality issue and estimate each target audience population size
- Perform a gap analysis between what the City is doing currently for outreach and what is required to meet the goal of reaching 20% of the target population.

The study informed the base of the Public Education and Outreach Plan and the modifications to the MS4 Program Plan in Appendix A. A copy of the GKY study is provided in Appendix F. In PY2 the City will take the study and Public Education and Outreach Plan to the City's Environmental Service Council for review and input.

#### **IV. PUBLIC INVOLVEMENT / PARTICIPATION (MCM#2)**

The City promotes public involvement in stormwater related matters whenever possible, as it is viewed as another component of the City's education and outreach activities. Each year the City of Falls Church provides opportunities for the public to be involved with implementation of the

stormwater management program and to report possible stormwater pollution incidents. Among these are the following:

City Council (*BMP A*) – In PY1 the City Council discussed stormwater quality issues over several work session and regular meetings prior to the adoption of the City’s new Stormwater Ordinance. Additional topics discussed include Stormwater Utility Fund Credit Program, the updated stormwater ordinance, and stormwater projects. A list of the City Council’s meetings is provided in Appendix G.

Citizen Liaison Action and Suggestion System (CLASS) and Request Tracker (*BMP B*) – The CLASS continued to provide citizens with an opportunity to provide input on stormwater issues from flooding to illicit discharges until the City launched a new website on May 7. The City now utilizes Request Tracker through the website in place of the CLASS. Additionally, the DPW’s telephone number is listed as a contact point for solid waste code enforcement (including dumping into storm drains and waterways) and is also listed as a contact in each *The Falls Church Environment* issue. Reports related to the sanitary sewer system (including breaks) are directed to the Public Works Sewer Division, which provides the appropriate response. The system identifies the City’s Civil Engineer and Solid Waste Coordinator as the standard contacts for illicit discharges and possible violations of the City’s Erosion and Sediment Control ordinance. These staff members can also be contacted directly via e-mail, letter and office phone for citizen input or to report possible violations. While the CLASS system was widely available and the new Request Tracker is frequently used, no citizens took advantage of it for stormwater related complaints in PY1.

Rain Barrel Workshops – In cooperation with Arlington County, Arlingtonians for a Clean Environment, Fairfax County, and Northern Virginia Soil and Water Conservation District, City of Alexandria, and the Reston Association, the City participated in several “Build-your-own” workshops and distribution events.

Environmental Services Council (ESC) (*BMP C*) – The ESC, a citizen advisory board to City Council, lists watershed quality as one of its primary areas of focus. The group continues to have the opportunity to comment on large development projects and to make recommendations for development concessions such as green roofs, water retention features, green space, and landscaping improvements. The agendas for the three meetings held in PY1 that pertained to stormwater are provided in Appendix H – ESC Meetings.

Habitat restoration (*BMP D*) – The Falls Church Habitat Restoration Team, a subgroup of the ESC, along with the City’s Urban Forestry Division hosted six habitat restoration events in PY1. The volunteers engaged in removing non-native invasive plants as well as planting native plants. The task group also

hosted a native plant sale to promote the importance of planting native trees and shrubs. Approximately 3,000 square feet of invasive species (English Ivy, Bush Honeysuckle, Wineberry, Multi-flora Rose, Garlic Mustard, and Bamboo) were removed in three City parks. At two of the locations Joe Pye Weed, New York Ironweed, cardinal flower and native ferns, were planted to replace those plants removed.

Neighborhood Tree Program (NTP) – The NTP was initiated by the Village Preservation and Improvement Society (VPIS) in 2000 as a response to the decreasing number of City street trees. The NTP is a collaboration between citizen volunteers (through VPIS) working in partnership with the City’s Urban Forestry Division. Its goals are to increase the number of trees in the City and educate the community about the importance of trees, which help to slow down runoff, thereby reducing erosion, and improve water and air quality by removing pollutants. Trees also provide shade thereby reducing air temperature; they act as sound barriers to traffic noise and beautify the City. Since its foundation in 2000, the program has planted more than 700 street trees in the City.

Youth Programs – The Operation EarthWatch program provides elementary students in the City of Falls Church with an opportunity to participate in environmental education and action. The program is sponsored by the City of Falls Church and the Environmental Services Council. The twenty-first year of the program included many activities related to water quality, water conservation and watershed protection. Over 220 students in three elementary schools participated in the program.

Adopt-a-Spot – The “Adopt-a-Spot” program provides an opportunity for residents, businesses and civic groups to pick up litter in their adopted spot in the City. The adopting groups agree to pick up litter four times a year for two years in selected spots throughout the City. The program is administered by the City’s Solid Waste Programs Coordinator and provides an ongoing opportunity to address the impact of litter on waterways and water quality. The program had thirty-five groups/active sites in PY1. In addition, two City-wide cleanup events provide residents an opportunity to clean-up litter throughout the city. Each cleanup attracts about 150 participants.

## **V. ILLICIT DISCHARGE DETECTION / ELIMINATION (MCM#3)**

The City currently takes a proactive stance when dealing with illicit discharges. In PY1 the City adopted Chapter 35, Stormwater, which contains a section for the definition and enforcement of Illicit Discharges. The Code gives the City clear authority to investigate complaints and address issues quickly.

The City currently has an Illicit Discharge Detection and Elimination (IDDE) Program. In PY1 the City began reviewing the document with an eye to comply with the new General Permit requirements. The City's engineering consultant GKY and Associates found the document needed to be updated and recommended a complete revision to streamline it. A copy of the expanded scope of work is included in Appendix I. The City also undertook the development of an IDDE SOP for staff. A draft of the SOP is included in Appendix I. The City will finish the IDDE Manual and SOP in PY2. Additionally, by the end of PY2 the City intends on combining the elements of the construction site stormwater runoff control program, post-construction, and illicit discharge program into a single document called the Falls Church Stormwater Management Handbook

In an effort to limit illicit discharges, each year the City of Falls Church proactively performs activities to target specific audiences. During PY1 the City did so in the following ways:

Citizen Liaison Action and Suggestion System (CLASS) and Request Tracker (*BMP A*) – As previously mentioned the CLASS system and now the Request Tracker continues to provide citizens with an opportunity to provide input on stormwater issues from flooding to illicit discharges. Citizens have the opportunity to log into the City's website, click on "Report a Concern," and then fill out an online form to report illicit discharges to DPW.

IDDE Outreach (*BMP B*) – The City continued its education and outreach programs and provided guides for the proper disposal of hazardous waste in the Solid Waste Services Guide, Solid Waste Hotline, articles in the *Falls Church News-Press*, *Falls Church Environment*, and through the City's web site. The program provides a scheduled collection at a convenient point within the City for residents to drop-off HHW. The City held one Hazardous Household Waste (HHW) event in September 2013 during PY1 and served nearly 200 cars. Outside of the scheduled events, city residents can utilize the nearby HHW drop-off in Fairfax County. The Solid Waste Coordinator regularly provides information to residents about this service. A copy of the HHW announcement and handout are provided in Appendix J.

Additionally, the City provides two recycling / reuse collection events per year for household electronic waste (e-waste), printer cartridges, cell phones, rechargeable batteries, and other items. Electronic equipment contains a variety of hazardous substances that require special disposal. Cathode ray tubes, and the glass found in monitors and TVs contain a large amount of lead. Circuit boards and electronic wiring contain lead, chrome and other metals; relays and switches can contain mercury; and PCBs can be present in older, larger equipment.

Storm drain map updates (*BMP C*) – In PY1, the City continued to use the storm drain mapping provided by the United States Army Corps of Engineers, as noted in the last annual report. The map, which covers the entire city, exists in a GIS format created from a comprehensive physical survey of the City's storm system. It identifies sub-drainage areas within the city limits that either drain into Tripp's Run or Four Mile Run. As DPW staff performs general maintenance to the storm drainage system they are flagging inconsistencies in the mapping. Our engineering inspectors then locate the structures with a handheld GPS data collector that has sub-meter accuracy.

In PY2 City staff will update the mapping to include the additional attributes required in the new general permit.

Streamwalk (*BMP D*) – Each year DPW staff performs a streamwalk to locate, inspect and characterize the outfalls in the City's streams. The process was first performed in 2007 as a pilot program to monitor, investigate and correct illicit discharges in the City. The methodology used in the initial baseline and outlined in the manual, "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments" by the Center for Watershed Protection (CWP), was used during the PY1 assessment.

Of the 32 outfalls located and characterized in the June 2014 streamwalk 8 demonstrated potential and 2 suspected illicit discharges. 22 outfalls were unlikely to have an illicit discharge. In PY2 DPW staff will follow the IDDE Program on file and work to eliminate the illicit discharges. A summary outfall report is provided in Appendix K – Outfall Characterizations.

In PY1 the City conducted annual outfall investigations and continued our illicit discharge detection and elimination program. IDDE violation notices were delivered to three businesses during PY1 as follow-up to testing performed in 2013 and our annual outfall monitoring.

Targeted Outreach (*BMP E*) – In PY1, DPW staff distributed a letter to local automotive businesses. The purpose was to educate them about possible/common sources of pollution stemming from the automotive industry. Included with the letter was a flier entitled "Automotive Shop Stormwater Pollution Prevention" for each employee to read over. The flier was provided in both English and Spanish. Copies of the letter and flier can be viewed in Appendix J. The City will develop at least one additional outreach material in PY2.

Notification of Interconnection (*BMP F*) – This was not performed in PY1 because there were no changes to outfalls in the City's stormwater conveyance system. The City will notify interconnected localities in PY2 regardless of any changes or lack of them.

Know Toxics (*BMP G*) – The City has continued its partnership with the Northern Virginia Regional Commission’s Waste Management Board in PY1 to develop outreach tools and information for the proper disposal of toxic materials. The Know Toxics Campaign (Knowtoxics.com) has produced literature and web content in PY1 to help educate businesses and homeowners in the proper recycling of fluorescent tubes, e-waste, and rechargeable batteries. Currently, the Solid Waste Coordinator is a member of the Know Toxics subcommittee. Unfortunately there is no MOU for this program. Two staff members attended their Universal Waste & Used Electronics training on March 6, 2014.

Illicit Discharge Code (*BMP H*) – In PY1 City staff worked to update City Code for illicit discharges while also incorporating the new state water quality and quantity standards. At this time the new stormwater ordinance has been before City Council and adopted on March 24, 2014. A copy of the adopted ordinance is provided in Appendix B.

## **VI. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (MCM#4)**

Erosion and Sediment Control Program (*BMP A*) – In January 2007, the Virginia Department of Conservation and Recreation (DCR) conducted a review of the City’s Erosion and Sediment Control (ESC) program to gauge compliance with Virginia DCR standards. The review found that the City met the minimum standards of effectiveness in controlling erosion, sediment deposition, and nonagricultural runoff and is “consistent” with Virginia Erosion and Sediment Control Law and Regulations.

In PY1, DEQ approved the City’s Virginia Stormwater Management Program (VSMP). As part of the application process the City had to demonstrate different aspects of its program as it relates to this MCM. A copy of the VSMP application package can be made available if needed. By the end of PY2 the City intends on combining the elements of the construction site stormwater runoff control program, post-construction, and illicit discharge program into a single document called the Falls Church Stormwater Management Handbook.

Citizen Input (*BMP B*) – As previously mentioned in detail, the City continued to use the web-based CLASS and now the Request Tracker to provide citizens a method to give input on ESC issues. The City also continues to hold public Stormwater Management Review Team (SMRT) meetings, previously called CBIRT, to review water quality impacts for proposed development projects disturbing more than 2,500 square feet or inside the Resource Protection Area. Citizens are provided a detailed description of the project and how water quality is addressed through ESCs and BMPs.

Land Disturbance Tracking (*BMP C*) – The City continues to track and report the number of regulated land disturbing activities and total disturbed acreage. The information is reported via email to DEQ on a monthly basis. A summary report for PY1 is included in Appendix L – Land Disturbance Reports.

## **VII. POST-CONSTRUCTION STORMWATER MANAGEMENT (MCM#5)**

Chesapeake Bay Preservation Ordinance (*BMP A*) – The City of Falls Church continues to implement the provisions of the Chesapeake Bay Preservation Overlay District (CBPOD) Ordinance, specifically as they relate to the MS4 Program Plan post-construction stormwater management. The City also maintains a highly rated, consistent Chesapeake Bay Preservation Ordinance as required under the Virginia Chesapeake Bay Preservation Area Designation and Management Regulations.

In PY1, DEQ approved the City's VSMP. As part of the application process the City had to demonstrate different aspects of its program as it relates to this MCM. A copy of the VSMP application package can be made available if needed. By the end of PY2 the City intends on combining the elements of the construction site stormwater runoff control program, post-construction, and illicit discharge program into a single document called the Falls Church Stormwater Management Handbook.

Stormwater Facilities (*BMP B, C*) – The review process for new developments and redevelopments remains integrated into the building permit process but is now permitted under the City's Stormwater Management Permit. As before a permit is required as part of a grading plan or a site plan when land disturbance exceeds 2,500 square feet or is located in the Resource Protection Area. Where required by City Code, Best Management Practice (BMP) facilities are installed and approved by City staff. Prior to construction, the City requires a signed and recorded maintenance agreement for these facilities. A Microsoft Access database is used to track pertinent information about these facilities, such as the type of facility, location, watershed, and area treated. A list of the BMPs are provided in Appendix M – BMP Database.

In PY1, City staff oversaw 33 new land disturbance plans, which was a total of approximately 16.63 acres of land disturbance. 8 new BMPs came online during PY1. 1 BMP treating 1.3 acres discharges to the Four Mile Run (PL-25) watershed. 7 new BMPs treating 0.67 acres discharge into the Tripp's Run (PL-26) watershed. There are now 106 BMPs tracked and inspected by the City.

Stormwater Facility Inspections (*BMP D*) – In PY1 the City continued inspections of stormwater BMP/facility assessments and enforcement actions. The inspection team, comprised of two City inspectors, conducted 14 BMP

inspections during the past year. A memo from the lead inspector is provided in Appendix M. In PY2 the City will begin annually inspecting City-owned and operated facilities.

In PY1, DEQ approved the City's Virginia Stormwater Management Program (VSMP). As part of the application process the City had to demonstrate different aspects of its program as it relates to this MCM. However, additionally in PY1, the City investigated using the City's Stormwater BMP/Facility Assessment Program Policy Consideration as a base document for the new general permit requirements. The City's engineering consultant found the document would need to be revised since it contains mostly recommendations on how to operate. It is not a "written policy and procedure." As noted above, the City will incorporate these elements into the Falls Church Stormwater Management Handbook in PY2. A copy of GKY's findings is provided in Appendix N.

The City also investigated the potential use of the City's Stormwater Fees Credit Manual as an optional strategy to ensure long-term maintenance of single family residential stormwater management facilities. At this time the credit program does not align with the VSMP regulations and the City is not opting to implement an optional strategy. The City will continue to inspect private facilities at least once every 5 years and public facilities annually. A copy of the findings is provided in Appendix N.

#### **VIII. POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (MCM#6)**

The City continued to maintain and revise, as needed, the Operation and Maintenance Program in PY1. The ultimate goal of this program is to prevent/reduce pollutant runoff from municipal operations through education, specific training, and program analysis. The City performed the following activities in PY1 to achieve this goal:

**Street Sweeping (*BMP A*)** – The City continued its street-sweeping contract in PY1. Street sweeping was performed twice along streets in commercial and residential corridors as stipulated in the permit. The City also requested additional street sweeping on an as needed basis. Sweeping accounted for approximately 194.8 tons of sediment and debris being removed from the streets. A copy of the City's street sweeping logs is provided in Appendix O.

**Leaf Collection** – The Operations Division vacuums leaves from all residential streets within the City each year, from mid-October to the end of December. This practice is a cost-effective way of removing organic material that may otherwise accumulate on streets and wash into the storm drain system. The collected leaves are ground into leaf mulch and delivered back to residents

for use on their properties. The leaf mulch provides a beneficial way for residents to improve soil quality and reduce water use.

Herbicides and Pesticides Certification (*BMP B*) – The City of Falls Church made a decision to contract for pest control services when needed, and to switch to a safer method of controlling pests. The Urban Forestry division of the Department of Public Works (DPW) administers the contract with a company licensed to apply the herbicides and pesticides when necessary.

There is one certified pesticide applicator employed within DPW at this time but the City does not perform these practices. The City continues to use organic products to improve soil structure and fertility through the application of leaf mulch and wood chips. For the most part, the City replaced inorganic herbicides with physical methods (hand pulling of weeds), however, some herbicides are sparingly used when hand pulling is not possible or appropriate.

Training (*BMP C*) – Employees in the Operations Division and Urban Forestry Division received general storm water awareness training in June of 2014. A slide show about City Standard Operating Procedures and Good House Keeping in Municipal Operations was shown to staff and followed with discussion. A list of attendees is provided in Appendix P – Training Log.

Additionally, employees receive regular on-the-job training to prevent pollution or contamination from entering the storm water based on the job functions they are assigned. For example, crews responsible for sewer line breaks are trained to properly contain and cleanup the contaminated area.

The City has three employees trained to perform solid waste code inspections. These inspectors are responsible for the enforcement of the City's Solid Waste Code, Chapter 13. Operation's street crews and residents report potential code violations and inspectors are responsible for inspection, notifying the responsible party, and ensuring correction. A solid waste code log is used to track violations.

Fairfax County Health department is contracted by the City of Falls Church to respond to solid waste complaints that include a health component (such as rats or mosquitoes). The Arlington County Fire Department and the City of Falls Church Volunteer Fire Department respond to hazardous material spills.

In PY1, the City developed a Training Schedule and Program complete with a series of training modules as follows:

- Module 1: Illicit Discharge Recognition and Reporting
- Module 2: Fleet and Facility Operations
- Module 3: Street, Parking and Drainage Operations and Maintenance
- Module 4: Parks and Grounds Operations and Maintenance

Module 5: Land Disturbance  
Module 6: Spill Response Procedures

A copy of the draft Training Schedule and Program is provided in Appendix P. A copy of the new modules will follow in future annual reports as they are provided as part of the City's training program.

Facilities Assessment and SOPs (*BMP D, E, F*) – In PY1 the City investigated its facilities to document those considered high-priority as outlined by the new general permit. Our consultant identified two sites as potentially meeting the criteria: the City Property Yard and the City's Remote Storage Yard. The City's consultant GKY then further prepared a SWPPP for the two sites. A copy of the site visit report and draft SWPPP is provided in Appendix Q. While the City is ahead of the required timeline, the City will work on finalizing the SWPPP and implementing remedial actions beginning in PY2.

In PY1, DPW staff continued to work off the previous SWPPP for the Property Yard. In spring of 2014 the City completed a fueling station canopy designed to mitigate the impacts of stormwater runoff associated with vehicle fueling. The design uses the combination of a raised, concrete fueling slab and canopy to prevent stormwater from washing pollutants into the storm drain. A picture of the new canopy is provided in Appendix Q.

Additionally, the City developed a master plan of the Property Yard due to the sale of the City's drinking water system to Fairfax Water. In 2014 the City began investigating moving all public works activities to one site. The outcome of this investigation has led the City to move forward with replacing the collapsed salt and sand storage building with a temporary structure due to the uncertainty of the potential sale of the property. We anticipate the new structure being completed by the end of PY2.

In PY1 the City partnered with Stantec, formerly known as Williamsburg Environmental Group, to investigate sites that may need a nutrient management plan (NMP). Stantec found that only the T.J. Elementary School 11.5 acre site fit the general permit requirement. The City then tasked Stantec to develop a NMP for the site and a NMP SOP. A copy of both documents is included in Appendix R.

APPENDIX A  
MS4 PROGRAM PLAN

APPENDIX B  
CHAPTER 35, STORMWATER

APPENDIX C  
REGIONAL MEETINGS ATTENDED

- VAMSA Meeting – July 18, 2013
- NVRC MS4 Workgroup Meeting – September 5, 2013
- VAMSA Meeting – October 24, 2013
- VLWA Conference – March 10-11, 2014
- VAMSA Meeting – April 30, 2014
- NVRC Clean Water Partners Meeting – May 13, 2014
- NVRC MS4 Workgroup Meeting – May 21, 2014

## APPENDIX D OUTREACH MATERIALS

- Falls Church News-Press – March 27, 2014
- Falls Church News-Press – April 17, 2014
- Falls Church News-Press – May 8, 2014
- The Environment – Spring 2014
- Pet Waste Postcard
- City of Falls Church Website [www.fallschurchva.gov/Stormwater](http://www.fallschurchva.gov/Stormwater)
  - MS4
  - After the Storm
  - After the Storm (Spanish)
  - Stormwater homepage
  - Stormwater homepage (Spanish)
- Downloadables found on the City of Falls Church Website
  - Cisterns
  - Conservation Landscapes
  - Downspout Disconnection
  - Downspout Redirection
  - Green Roofs
  - Homeowner Guide for a More Bay-Friendly Property
  - How Can I Make a Rain Barrel?
  - Infiltration Trench
  - Native Plants for City of Falls Church
  - Permeable Pavement Specifications – VA DEQ
  - Pervious Pavers
  - Rain Barrels
  - Rain Gardens
  - Rain Garden – Design & Construction

APPENDIX E  
MAYOR'S PROCLAMATION

APPENDIX F  
GKY OUTREACH PROGRAM STUDY

APPENDIX G  
CITY COUNCIL MEETINGS

- July 22, 2013 – Stormwater Ordinance
- October 28, 2013 – Stormwater Ordinance
- November 25, 2013 – Stormwater Ordinance
- December 9, 2013 – Stormwater Utility Credit Policy
- February 10, 2014 – Stormwater Ordinance
- February 24, 2014 – Stormwater Ordinance
- March 24, 2014 – Stormwater Ordinance
- April 16, 2014 – Stream Restoration Contract
- May 12, 2014 – Watershed Awareness Month Proclamation

APPENDIX H  
ESC MEETING MINUTES

- July 2013 – Stormwater Ordinance
- October 2013 – Stormwater Ordinance, Stormwater Utility Fund Credit Program
- November 2013 – Stormwater Ordinance, Stormwater Utility Fund Credit Program, Stream Restoration Projects

APPENDIX I  
GKY IDDE EXPANDED SCOPE OF WORK AND SOP

APPENDIX J  
HAZARDOUS WASTE

- Household Hazardous Waste Flyer
- Automotive Outreach Letter
- Automotive Shop Stormwater Pollution Prevention (English and Spanish)

APPENDIX K  
OUTFALL CHARACTERIZATIONS

APPENDIX L  
LAND DISTURBANCE REPORT

APPENDIX M  
BMP DATABASE  
BMP INSPECTION MEMORANDUM

APPENDIX N  
GKY BMP STUDY  
GKY CREDIT MANUAL STUDY

APPENDIX O  
STREET SWEEPING

APPENDIX P  
DRAFT TRAINING SCHEDULE  
TRAINING LOG AND MATERIALS

APPENDIX Q  
PROPERTY YARD

- GKY STUDY
- GKY DRAFT SWPPP
- FUEL CANOPY PHOTO

APPENDIX R  
NUTRIENT MANAGEMENT PLAN AND SOP