
Municipal Separate Storm Sewer System (MS4) 2016-2017 Annual Report for Permit No. VAR040104

In Compliance with the General VPDES Permit for Discharges of
Stormwater from Small Municipal Separate Storm Sewer Systems

September 30, 2017



Fairfax County Public Schools
Department of Facilities Management
Sideburn Support Center
5025 Sideburn Road
Fairfax, Virginia 22032



**General VPDES Permit for
Small Municipal Separate Storm Sewer Systems
Permit No. VAR040104**

Year 4 Annual Report
July 1, 2016 – June 30, 2017

Fairfax County Public Schools

Submitted by:

Fairfax County Public Schools
Department of Facilities Management
Sideburn Support Center
5025 Sideburn Road
Fairfax, Virginia 22032

**General VPDES Permit for
Small Municipal Separate Storm Sewer Systems
Permit No. VAR040104**

**Year 4 Annual Report
July 1, 2016 – June 30, 2017 Reporting Period
Fairfax County Public Schools**

TABLE OF CONTENTS

1. INTRODUCTION	1
2. BACKGROUND INFORMATION	2
3. STATUS OF COMPLIANCE WITH PERMIT YEAR 3 CONDITIONS	4
3.1 PUBLIC EDUCATION AND OUTREACH (MCM #1)	5
BMP 1.A – Watersheds: Local Water Quality and Volume Management	6
BMP 1.B – Chesapeake Bay Nutrients.....	6
BMP 1.C – Nonpoint Source Pollution Prevention: Impacts of Polluted Stormwater on Streams.....	7
BMP 1.D – General Education and Outreach	7
3.2 PUBLIC INVOLVEMENT/PARTICIPATION (MCM #2).....	8
BMP 2.A – Public Notice and Participation	8
BMP 2.B – Promote and Support Student Volunteer Activities	8
3.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION (MCM #3)	10
BMP 3.A – Storm Sewer Infrastructure Map	11
BMP 3.B – Prohibition on Illicit Discharges	11
BMP 3.C – Written Procedures for Suspected Illicit Discharges and Illegal Dumping, and Complaint Response Tracking and Reporting.....	11
BMP 3.D – Dry Weather Outfall Screening and Tracking	12
BMP 3.E – Storm Drain Marking Program.....	12
BMP 3.F – Promote Recycling to Reduce Trash.....	12
3.4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (MCM #4)	13
BMP 4.A – Legal Authorities Utilized to Ensure Compliance.....	13
BMP 4.B – Plan Review and Approval Procedures	14
BMP 4.C – Inspection and Enforcement Procedures.....	14
BMP 4.D – Public Complaint Reporting Mechanism.....	14

BMP 4.E – Land Disturbing Activities Tracking System	14
3.5 POST-CONSTRUCTION STORMWATER MANAGEMENT (MCM #5)	16
BMP 5.A – Long Term Operation and Maintenance of BMP Facilities.....	16
BMP 5.B – Stormwater Facility BMP Tracking Database	17
3.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (MCM #6)	18
BMP 6.A – Sweeping Projects	19
BMP 6.B – Good Housekeeping Standard Operating Procedures for Daily Operations.....	19
BMP 6.C – Stormwater Pollution Prevention Plans for High-Priority Facilities.....	20
BMP 6.D – Turf and Landscape Nutrient Management Plans.....	20
BMP 6.E – Training on Recognition and Reporting of Illicit Discharges by Field Personnel	21
BMP 6.F – Training on Good Housekeeping and Pollution Prevention for Maintenance, Public Works, and Recreation Facility Staff	21
BMP 6.G – Certification for Pesticide and Herbicide Applicators.....	22
BMP 6.H – Proper State Certification for Erosion and Sediment Control.....	22
BMP 6.I – Spill Response Training for Emergency Personnel	22
BMP 6.J – Contractor Oversight Procedures	22
4. RESULTS OF INFORMATION COLLECTED AND ANALYZED	23
5. SUMMARY OF YEAR 4 PLANNED ACTIVITIES.....	23
6. CHANGES IN IDENTIFIED BMPS OR MEASURABLE GOALS	23
7. RELIANCE ON OTHER GOVERNMENT ENTITIES.....	23
8. APPROVAL STATUS OF QUALIFYING LOCAL PROGRAMS	24
9. SPECIAL CONDITIONS ASSOCIATED WITH APPROVED TMDLS.....	24
10. EVALUATION AND ASSESSMENT OF BMPS	25

APPENDICES

Appendix A

Summary of School Curriculum
NVRC Clean Water Partners Reports

Appendix B

MS4 Webpage Screen Capture
Schoolyard Stewardship Mini Grants
Get2Green Webpage Screen Capture and List of Events
Summary of FCPS Events
VA School Boards Association Recognition Press Release
Paradigm Challenge, Glasgow MS Press Release
School Environmental Action Showcase Press Release

Appendix C

MS4 Outfall Information Table
Unauthorized Discharge Reporting Form – Sideburn Center
Dry Weather Outfall Screening Results
Storm Drain Marking Information
Get2Green Recycling Webpage and Dashboard Example
Recycling Program Totals

Appendix D

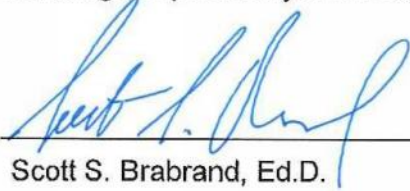
Stormwater Management Facilities Brought Online

Appendix E

Parking Lot Sweeping Tracking
Nutrient Management Plan Locations and Planning Status
PCB Recognition and Reporting Training Tracking Sheet
MS4 Education and Spill Recognition and Reporting Training Tracking Sheet
Pesticide applicator certifications
Spill Response Training Materials

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."



Scott S. Brabrand, Ed.D.

Division Superintendent

9/28/2017

Date

1. Introduction

This 2016-2017 MS4 Permit Annual Report (annual report) has been prepared by Fairfax County Public Schools (FCPS) Office of Facilities Management (OFM) in accordance with the requirements of the General Permit for Discharges of Stormwater from Municipal Separate Storm Sewer Systems (general permit). FCPS was originally issued General Permit Number VAR040104 on July 8, 2003. The Virginia Department of Environmental Quality (DEQ) re-issued the current five-year permit effective July 1, 2013.

Under the terms of the general permit, FCPS has developed a Municipal Separate Storm Sewer System (MS4) Program Plan (program plan) to implement six minimum control measures (MCMs) aimed at reducing the discharge of pollutants to the maximum extent practicable (MEP). Minimum control measures include:

MCM #1 Public Education and Outreach	MCM #4 Construction Site Runoff Control
MCM #2 Public Involvement / Participation	MCM #5 Post-Construction Stormwater Management
MCM #3 Illicit Discharge Detection and Elimination	MCM #6 Pollution Prevention / Good Housekeeping

This annual report is organized to address required elements as stated in Section II E of the permit. In addition, each MCM contains specific annual reporting requirements. The following is a summary of key annual reporting items that are addressed in this annual report:

- A list of the education and outreach activities conducted during the reporting period for each high-priority water quality issue, the estimated number of people reached, and an estimated percentage of the target audience or audiences reached.
- A list of the education and outreach activities that will be conducted during the next reporting period for each high-priority water quality issue, the estimated number of people that will be reached, and an estimated percentage of the target audience or audiences that will be reached.
- A web link to the program plan and annual report and documentation of compliance with public participation requirements.
- A list of any written notifications of physical interconnection given to other MS4 operators.
- The number of illicit discharges identified during the reporting period and a narrative of how they were controlled or eliminated.
- The total number of outfalls screened, the screening results, and detail of any necessary follow up actions.
- Regulated land-disturbing activities data tracked under Section II 4, including total regulated activities, number of acres disturbed, and inspections conducted.
- A summary of enforcement actions taken, including the total number and type of enforcement actions taken during the reporting period for land-disturbing activities.
- All known permanent stormwater management facility data tracked under Section II B 5 b (6) submitted in a database format to be prescribed by DEQ.

- The total number of stormwater management facility inspections completed.
- A summary report on the development and implementation of daily operating procedures, required stormwater pollution prevention plans (SWPPPs), turf and landscape nutrient management plans (NMPs), and training plans.

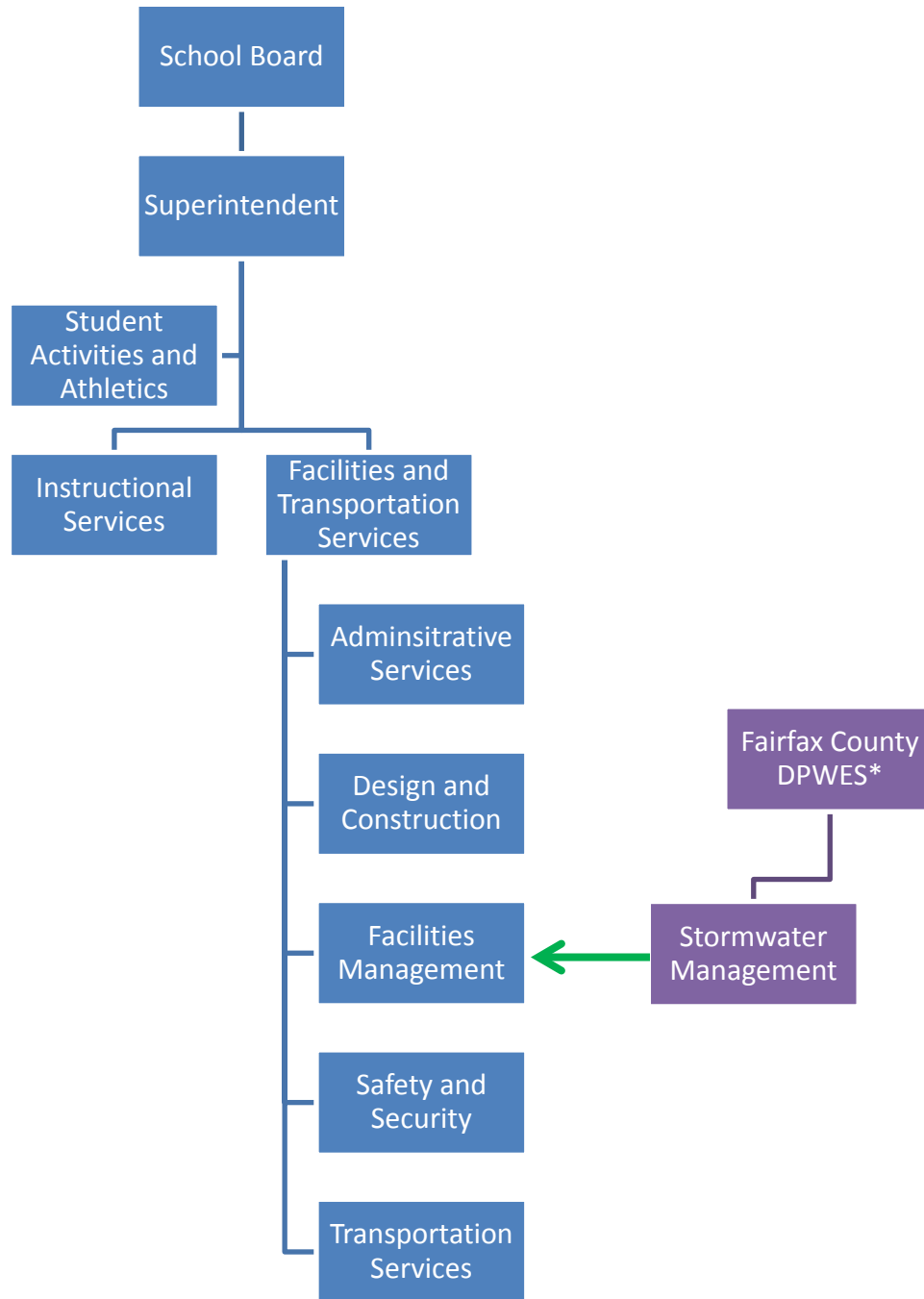
2. Background Information

This section provides background information as required by Part II E 3.a of the General Permit. The signed certification is located at the front of this document.

Name of Operator:	Reporting Period:	Permit Number:
Fairfax County Public Schools	Permit Year 4 (July 1, 2016 – June 30, 2017)	VAR040104
Modifications to Roles and Responsibilities: None		
New MS4 Outfalls: The MS4 outfall map was updated in accordance with the requirements in MCM #3. As a result of this update there were minor adjustments in outfall responsibility and drainage areas but no new MS4 outfalls were constructed during the reporting period.		

The organizational chart on the following page outlines FCPS departments and agencies with major stormwater management functions or responsibilities that are referenced in this annual report. The Office of Facilities Management is the primary lead on MS4 compliance activities. Support is also provided by Fairfax County through the Department of Public Works and Environmental Services, Stormwater Management. There have been no changes to FCPS departments or agencies that affect the program plan. Additional information about each department is found in the program plan.

Stormwater Management Organizational Chart



**DPWES – Department of Public Works and Environmental Services*

3. Status of Compliance with Permit Year 4 Conditions

The following sections provide the status of best management practices (BMPs) implemented during Permit Year 4 (PY4) for each of the six MCMs as provided in the program plan. FCPS has updated the program plan according to the schedule provided in general permit Table 1.

Each MCM has its own section, which begins with a summary table describing the task, the implementation year, the measurable goal as described in the program plan, and task status. Following the summary table is a more detailed discussion of the implementation status of each task and a description of the measure of effectiveness. BMPs to be implemented in subsequent permit years are not included in this section. However, Section 5 provides a summary report of BMPs that will be implemented in PY5 as required in Section II E 3 d of the general permit.

3.1 Public Education and Outreach (MCM #1)

The following table is a summary of ongoing activities and new activities performed during the 2016 –2017 reporting period for MCM #1 and their completion status.

BMP/Task	Year	Measurable Goal	Status
1.A – Watersheds: Local Water Quality and Volume Management			
Implement the “Ecosystems” unit in the curriculum for all 4 th and the “Fields of Science” unit in all 5 th grade classrooms.	All	The estimated number of individuals reached by all efforts will be compared to the size of the target audience of approximately 28,645 4 th and 5 th grade students and a percentage reached will be reported.	Complete
1.B – Chesapeake Bay Nutrients			
Implement “Investigations in Environmental Science” course for all 7 th grade students.	All	The estimated number of individuals reached by all efforts will be compared to the size of the target audience of approximately 13,971 7 th grade students and a percentage reached will be reported.	Complete
Participate in the NVRC Clean Water Partners program regional efforts.	2-5	FCPS will provide the summary of results of program efforts conducted by the NVRC Clean Water Partners and a summary of any survey results that measure the effectiveness of campaign.	Complete
BMP 1.C – Nonpoint Source Pollution Prevention: Impacts of Polluted Stormwater on Streams			
Implement AP and IB Geosystems and Oceanography courses for 11 th and 12 th grade students.	All	The estimated number of individuals reached by all efforts will be compared to the size of the target audience of approximately 25,439 11 th and 12 th grade students and a percentage reached will be reported.	Complete
BMP 1.D – General Education and Outreach			
Provide general education for students through participation in the NVRC Clean Water Partners program regional efforts.	2-5	FCPS will provide the summary of results of program efforts conducted by the NVRC Clean Water Partners and a summary of any survey results that measure the effectiveness of campaign.	Complete

For the next permit year (July 1, 2017 – June 30, 2018), FCPS will continue to offer the same curriculum to reach the target audience as outlined in the MS4 Program Plan. The number of students enrolled in each grade varies slightly from year to year but is not expected to change substantially from 2016-2017: 28,645 4th and 5th graders, 13,971 7th graders and 25,439 11th and 12th graders. The percentage reached through this curriculum is anticipated to remain consistent; it is estimated that 100% of 4th, 5th and 7th graders and 25% of 11th and 12th graders will participate in the course offerings presented in the MS4 Program Plan.

FCPS will also continue to support the NVRC Clean Water Partners education campaign that is structured to reach 20% of the identified target audience annually. The anticipated number of people to be reached is estimated to remain similar to the number reached in the 2015 - 2016 campaign: 415,000 through the TV and Cox.com/Xfinity.com campaign for dog owners.

BMP 1.A – Watersheds: Local Water Quality and Volume Management

FCPS identified 4th and 5th grade students as the target audience for education and outreach efforts and provides the following science curriculum that focuses on this high-priority water quality issue:

- FCPS will continue to implement the Ecosystems unit in the curriculum for all 4th grade classrooms and the Fields of Science unit for all 5th grade classrooms. In these units, students investigate the Earth's natural resources and how to protect them, research the Potomac River watershed and its water resources, and examine public policy decisions related to the environment.



Measure of Effectiveness

All of the 28,645 (approximate total) 4th and 5th grade FCPS students (100%) participated in the Ecosystems and Fields of Science units during the 2016-2017 school year. Appendix A provides a summary of the curriculum for these classes.

BMP 1.B – Chesapeake Bay Nutrients

FCPS identified middle school students as the target audience for education and outreach efforts on this high-priority water quality issue and provides the following science curriculum and regional efforts:

- Seventh grade students participated in the Investigations in Environmental Science course. This course builds upon the science curriculum introduced in upper-elementary grades. Students study basic ecological concepts and how excess nutrients from over-fertilizing can be washed into the storm sewer during a rain event and impact the ecology of local waterways and the Chesapeake Bay. Process skills related to scientific investigation, reasoning, and logic are integrated throughout the course as students carry out investigations, collect and analyze data, and formulate conclusions.
- FCPS participated in the NVRC Clean Water Partners program to provide outreach about the water quality impacts of nutrients in fertilizers. See BMP 1.D for information on FCPS participation in this program.

Measure of Effectiveness

All of the 13,971 (approximate total) 7th grade FCPS students (100%) participated in the Investigations in Environmental Science unit during the 2016-2017 school year. Appendix A provides a summary of the curriculum for these classes.

BMP 1.C – Nonpoint Source Pollution Prevention: Impacts of Polluted Stormwater on Streams

FCPS identified 11th and 12th grade students as the target audience for this BMP. At least 20 percent of all 11th and 12th graders are enrolled in Advanced Placement (AP) Environmental Science, International Baccalaureate (IB) Environmental Systems and Society, and Geosystems. Reaching students at this level continues to build on stormwater quality concepts introduced in previous grade levels. Through participation at these high school grade levels, after the majority of students have progressed through the elementary school and middle school courses, student knowledge of stormwater quality issues will be enhanced even further.

- There were approximately 1,800 11th and 12th grade FCPS students in AP and IB environmental study course offerings and geosystems that cover topics including non-point source pollution and stormwater studies. Geosystems integrates content from geology, astronomy, oceanography, and meteorology with various forms of technology, social and environmental issues, and hands-on experiments.

Measure of Effectiveness

There were 25,439 (approximate total) 11th and 12th grade FCPS students in 2015-2016. Students were registered in the following environmental course offerings:

- Approximately 5,700 in Geosystems
- Approximately 1,800 in AP and IB Environmental Studies

An approximate total of 7,500, or 29 percent, of 11th and 12th grade students participated in the AP and IB Environmental studies and Geosystems units during the 2016-2017 school year. The Geosystems curriculum follows state standards and the AP and IB courses follow standards set forth by those organizations.

BMP 1.D – General Education and Outreach

FCPS participated in the NVRC Clean Water Partners program. This program focuses on nutrients (see BMP 1.B) as well as other pollutants, including bacteria. Specifically, the program is designed to reach pet owners on the proper disposal of pet waste. The program uses radio, TV, print and online media to reach pet owners across the region. FCPS will also continue to maintain the MS4 Program webpage at <https://www.fcps.edu/node/27814>.

Measure of Effectiveness

A summary of the Clean Water Partners survey summary results is provided in Appendix A.

3.2 Public Involvement/Participation (MCM #2)

The following table is a summary of ongoing activities and new activities performed during the – 2016-2017 reporting period for MCM #2 and their completion status.

BMP/Task	Year	Measurable Goal	Status
BMP 2.A – Public Notice and Participation			
Update MS4 Program Plan annually in conjunction with preparation of the annual report.	All	Updated program plan attached to annual report.	Complete
Post MS4 Program Plan within 30 days of submittal to DEQ.	All	Weblink to program plan.	Complete
Post annual report and retain copies of each annual report online for duration of the permit.	All	Weblink to annual reports.	Complete
BMP 2.B – Promote and Support Student Volunteer Activities			
Sponsor a minimum of four student activities annually.	All	Summary of at least four local activities that are promoted, supported, sponsored, and/or publicized by FCPS. The summary will include the name of the activity, the date, the number of students participating, and a measure of the activity (e.g., number of storm drains marked), if applicable.	Complete

BMP 2.A – Public Notice and Participation

No changes have been made to the program plan during this reporting period. As required in the general permit, the program plan and the PY4 annual report will be posted on the MS4 Program webpage on the FCPS website within 30 days of submittal to DEQ at <https://www.fcps.edu/node/27814>.

Measure of Effectiveness

The PY4 annual report and program plan will be posted to the MS4 Program webpage within 30 days of submittal to DEQ as required.

BMP 2.B – Promote and Support Student Volunteer Activities

FCPS continues to support and promote volunteer activities to improve water quality through the Get2Green program. Get2Green was started as a FCPS project in December 2010 to further FCPS's goal to graduate environmental stewards, with more than 60% of schools registered as Eco-Schools under the program. More information on the FCPS Get2Green program is provided in Appendix B and can be accessed on the FCPS webpage <http://get2green.fcps.edu/index.html>.

Additional activities are offered to students through the Schoolyard Stewardship Mini Grant

(SSMG) program, which facilitates projects that engage students in environmental stewardship activities. The mini grants provide up to \$3,000 per school for one project during the fiscal year.

FCPS also participates in the NoVA Outside School Environmental Action Showcase (SEAS). The SEAS program is an exhibition and celebration of the environmental stewardship efforts of students, teachers, schools and non-profits. FCPS participated on April 25, 2017.

Measure of Effectiveness

During this reporting period, nearly 1,000 students and over 280 adults participated in Get2Green and other environmental activities, which included planting projects, water testing and learning activities. A spreadsheet summary of the activities is provided in Appendix B.

In PY4, 23 schools were awarded SSMG funding to implement projects that include outdoor classrooms, water bottle refill stations, composting systems, rain barrels, gardens, wildlife habitats, and others. A summary of the projects and schools receiving awards is provided in Appendix B.

Over 500 students, 125 parents and teachers, 50 environmental professionals, and 30 volunteers/staff attended the SEAS event this year on April 25, 2017. More information is provided in Appendix B.



Additional activities held during PY17 included:

1. Trout in the Classroom. During the 2016-17 school year, participants raised brook trout, supported by the local Trout Unlimited (TU) chapter. TU provided equipment & trout eggs, and then students raised the trout and released them into local streams. Students at several schools including Madison High, Dogwood ES, Centreville ES, Lemon Road ES, and Belvedere ES participated in the program. This involved over 250 students, and 40 parents and teachers.
2. Watershed Education. From January to May 2017, with funding provided by the Chesapeake Bay Restoration Fund, participants learned about the Envirosapes Watershed Model from NVSWCD. Fourth graders learned about how different types of pollutants move through a watershed, and some of the tools they can use as ecologically minded citizens to help improve water quality. In another instance, a representative from NVSWCD conducted soil infiltration tests with 3rd grade students in preparation for planting a rain garden. This involved 180 students and 12 teachers.
3. Storm Drain Planting Project. During the spring and fall of 2017, Earth Sangha worked with Hunters Woods Elementary students to install a native garden around storm drains experiencing excessive sediment influx. This involved 40 students and 12 adults.
4. Get2Green Academy Course. During the spring of 2017, experts taught FCPS teachers about methods for integrating the environment into the classroom. Topics included waste reduction, energy conservation, edible gardening, and wildlife habitat. There were 20 FCPS teachers enrolled in the academy.

3.3 Illicit Discharge Detection and Elimination (MCM #3)

The following table is a summary of ongoing activities and new activities performed during the 2016 - 2017 reporting period for MCM #3 and their completion status.

BMP/Task	Year	Measurable Goal	Status
3.A - Storm Sewer Infrastructure Map			
Maintain an updated storm sewer system map.	All	Summarize any changes to the database and map.	Complete
Identify any new physical interconnections and notify the connected MS4.	2-5	Summarize notifications of interconnections during the requisite annual report.	Complete
3.B - Prohibition on Illicit Discharges			
Implement prohibition on illicit discharges.	All	Document any changes to policies, notices, and directives in the appropriate annual report.	Complete
3.C – Written Procedures for Suspected Illicit Discharges and Illegal Dumping, and Complaint Response Tracking and Reporting			
Develop and implement written suspected illicit discharge procedures.	All	Document any changes to the written procedures.	Complete
Operate a public complaint system.	All	Document the 24-hour emergency response hotline operated by FCPS during the reporting period.	Complete
3.D - Dry Weather Outfall Screening and Tracking			
Develop and implement written dry weather screening procedures.	All	Document any changes to the written procedures.	Complete
Perform annual dry weather screening of 50 outfalls.	All	Summarize all dry weather screening activities and follow-up investigations.	Complete
Maintain tracking database.	All	Document the follow up activities from the tracking database.	Complete
3.E - Storm Drain Marking Program			
Implement storm drain marking program.	All	Report the number of storm drains marked and the number of volunteers participating in the marking program.	Complete
3.F - Promote Recycling to Reduce Trash			
Promote and facilitate recycling.	All	Document recycling promotion efforts and the amount of recycling collected during each school year.	Complete

BMP 3.A – Storm Sewer Infrastructure Map

Fairfax County DPWES continues to maintain and update the storm sewer and outfall map for FCPS. FCPS has access to the storm sewer and outfall map and utilizes it to better understand the system.

No new interconnections with a downstream MS4 were identified. As a result, no written notifications were required

Measure of Effectiveness

As required by the permit, FCPS updated its storm sewer system map and information table by June 30, 2017. This updated map was prepared in coordination with Fairfax County to ensure that MS4 outfall responsibility was clearly defined.

BMP 3.B – Prohibition on Illicit Discharges

FCPS continues to use policies, notices, and regulations (directives) to effectively prohibit illicit discharges to the storm sewer system and to conduct necessary enforcement in the case of an illicit discharge. FCPS is also subject to local ordinances in the respective jurisdiction regarding stormwater pollution and the prohibition on illicit discharges.

Measure of Effectiveness

No changes to FCPS policies, notices, and regulations were required during the reporting period to address illicit discharges. These prohibitions are contained in Fairfax County's Stormwater Management Ordinance, which can be found at https://www.municode.com/library/va/fairfax_county/codes/code_of_ordinances?nodeId=THCOCOFVI1976_CH124STMAOR. Town of Herndon Code addressing illicit discharges can be found at https://www.municode.com/library/va/herndon/codes/code_of_ordinances?nodeId=PTIICOOR_CH26EN_ARTVIIIITMA and Town of Vienna Code addressing illicit discharges can be found at https://www.municode.com/library/va/vienna/codes/code_of_ordinances?nodeId=PTIICOOR_C_H16STSI. The current FCPS Student Rights and Responsibilities, which can be used to enforce prohibitions on illicit discharges, can be found at <https://www.fcps.edu/about-fcps/policies-regulations-and-notices/student-rights-and-responsibilities>.

BMP 3.C – Written Procedures for Suspected Illicit Discharges and Illegal Dumping, and Complaint Response Tracking and Reporting

FCPS has standardized its response to suspected illicit discharges and illegal dumping so that proper data is collected and the appropriate staff is contacted for follow up if needed.

Measure of Effectiveness

- FCPS developed written standard operating procedures (SOPs) for "Suspected Illicit Discharges" and a standardized field form during PY1 as part of the update to the program plan.
- FCPS continues to operate the 24-hour emergency response telephone hotline.
- There was a single reportable discharge during FY 2017 at the parking area of the Sideburn Support Center. The reporting form for this incident can be found in Appendix C.

BMP 3.D – Dry Weather Outfall Screening and Tracking

FCPS developed written procedures and began outfall screening for this permit cycle in accordance with the MS4 Program Plan.

- FCPS developed a written SOP for dry weather screening during PY1.
- Dry weather screening was conducted at 51 outfalls during the reporting period.

Measure of Effectiveness

Dry weather flow was observed at three outfalls however, there was no dry weather flow at these outfalls during follow-up visits. These outfalls will be prioritized for future inspections. . Track down evaluations are continuing at one outfall at Oakton High School. A summary of the dry weather screening results is provided in Appendix C.

BMP 3.E – Storm Drain Marking Program

FCPS continued to promote its storm drain marking program in an effort to engage volunteers and reduce the incidence of direct dumping of materials down storm drains.

Measure of Effectiveness

During the reporting period, 233 storm drains were marked by 17 volunteers.

BMP 3.F – Promote Recycling to Reduce Trash

FCPS continued to encourage recycling by students through the Get2Green program to reduce trash generation. The Get2Green website (<http://get2green.fcps.edu/recycle.html>) showcases FCPS efforts to encourage recycling through posters and dashboards for each school that track recycling efforts by percent of trash and pounds collected.

Measure of Effectiveness

During the 2016-2017 school year, FCPS recycled 5,895,480 pounds of material. Screen shots of the Get2Green Recycling webpage and a recycling dashboard example are included in Appendix C.



3.4 Construction Site Stormwater Runoff Control (MCM #4)

The following table is a summary of ongoing activities and new activities performed during the 2016 - 2017 reporting period for MCM #4 and their completion status.

BMP/Task	Year	Measurable Goal	Status
4.A - Legal Authorities Utilized to Ensure Compliance			
Comply with all local legal authorities.	All	Comply with all local legal authorities, as applicable.	Complete
BMP 4.B – Plan Review and Approval Procedures			
Comply with all local plan review and approval procedures.	All	Locality where project is occurring is responsible for plan review and approval.	Complete
BMP 4.C – Inspection and Enforcement Procedures			
Comply all local inspection and enforcement procedures.	All	Locality where project is occurring is responsible for inspecting projects.	Complete
BMP 4.D – Public Complaint Reporting Mechanism			
Post permit and contact information as required by regulation and assist with reported complaints.	All	Complaints of land disturbing activities are received and tracked by the locality in which the activity takes place.	Complete
BMP 4.E – Land Disturbing Activities Tracking System			
Provide information about land disturbing activities to the appropriate local government for their annual reports.	All	Land disturbing activities are regulated and tracked by the locality where the activities occur.	Complete

BMP 4.A – Legal Authorities Utilized to Ensure Compliance

Land-disturbing activities performed by FCPS are treated the same way as a private entity by the locality in which the activity is occurring. This includes reviewing all FCPS erosion and sediment control plans, inspecting construction projects, and enforcement action against non-compliant construction and land disturbing activities. FCPS includes language in bid specifications requiring the onsite contractor to provide adequate erosion and sediment control measures and meet applicable regulatory requirements.

Measure of Effectiveness

FCPS complied with all local legal authorities, as applicable, and included language in bid specifications as a legal requirement. A sample bid specifications document is provided in the program plan.

BMP 4.B – Plan Review and Approval Procedures

Localities consider FCPS as a private entity for the purpose of reviewing and approving construction site stormwater runoff controls. FCPS plan submission and review must adhere to the same plan review and approval procedures as private developers.

Measure of Effectiveness

FCPS site development plans are reviewed and approved by the locality where the project is occurring.

BMP 4.C – Inspection and Enforcement Procedures

Localities inspect FCPS projects for compliance with local ordinance requirements. Inspection reports are provided to the onsite contractor. FCPS designates the onsite contractor as the responsible land disturber for capital projects in accordance with Title 62.1, Chapter 3.1, Article 2.4 of the Code of Virginia.

Measure of Effectiveness

FCPS staff performs random inspections of construction projects as part of contract oversight; however, they do not conduct inspections to meet construction general permit, Virginia Erosion and Sediment Control Program (VESCP), Virginia Stormwater Management Program (VSMP), or MS4 requirements. The locality where the project occurs is responsible for inspecting FCPS projects for compliance with state and local erosion and sediment control and VSMP regulations and provides reports to the onsite contractor.

BMP 4.D – Public Complaint Reporting Mechanism

FCPS complies with public notice requirements in Part II C of the construction general permit by conspicuously posting a copy of the notice of coverage letter near the main entrance of the construction activity upon commencement of land disturbance. In addition, many localities maintain a public complaint reporting mechanism that the public can use to report erosion and sediment control or pollution prevention issues originating from land-disturbing activities.

Measure of Effectiveness

Complaints for land-disturbing activities are maintained by the locality where the project is occurring.

BMP 4.E – Land Disturbing Activities Tracking System

As with private developers, information regarding land-disturbing activities associated with FCPS projects are tracked by the locality where they occur.

Measure of Effectiveness

FCPS projects are regulated and tracked by the locality in which the land-disturbing activity occurs. These land disturbing activities have not been reported in previous annual reports to avoid double-counting. DEQ requested this information be submitted in the PY2 annual report in a comment letter dated February 5, 2016.

While DEQ has requested this information from FCPS, it is important to note that FCPS is not a VESCP or VSMP authority and therefore, does not administer a VESCP or VSMP. FCPS complies with the construction requirements of the VESCP/VSMP authority in which a FCPS construction project occurs. Therefore, the VESCP/VSMP authorities (Fairfax County, Towns of

Herndon and Vienna, etc.) include the data for FCPS construction projects in their VESCP, VSMP and MS4 annual reports.

The numbers reported below are based on Fairfax County records and will also be included in the numbers reported in the County's MS4 annual report. No land disturbing activities took place during the reporting period in other VESCP/VSMP authorities.

Total number of regulated land-disturbing activities (per administering authority):	Fairfax County: 27
Total number of acres disturbed (per administering authority):	Fairfax County: 276.06
Total number of inspections conducted (per administering authority):	Fairfax County: 852
Number and type of enforcement actions taken (per administering authority):	Fairfax County: <ul style="list-style-type: none"> ○ 14 E&S Inspection Reports with specific items to correct ○ 6 E&S Violations ○ 29 VPDES Inspection Reports with specific items to correct ○ 0 VPDES Violations

3.5 Post-Construction Stormwater Management (MCM #5)

The following table is a summary of ongoing activities and new activities performed during the 2016 - 2017 reporting period for MCM #5 and their completion status

BMP/Task	Year	Measurable Goal	Status
5.A - Long Term Operation and Maintenance of BMP Facilities			
Implement Fairfax County SOP for long-term operation and maintenance of stormwater facilities.	2-5	Review and implement the SOP.	Complete
Inspect all stormwater facilities in accordance with Fairfax County requirements.	2-5	Report the number of stormwater facilities inspected each year and the number and type of facilities maintained, if applicable.	Complete
5.B - Stormwater Facility BMP Tracking Database			
Maintain the stormwater facility tracking database.	All	Provide a list of new stormwater facilities brought online during the reporting period.	Complete
Update the stormwater facility database to include new information required by the permit.	2-5	Report on progress of updating existing facility information.	Complete

BMP 5.A – Long Term Operation and Maintenance of BMP Facilities

Fairfax County DPWES inspects FCPS ponds every two years and non-ponds annually per the Maintenance and Stormwater Management Division (MSMD) SOP provided in the updated program provided with this submittal under separate cover, which captures this “Alternative Schedule”. The County performs maintenance of stormwater facilities, which includes removing trash, sediment, and debris from the trash rack, control structures, and all inflow channels leading to control structures.

Measure of Effectiveness

This table provides the number of stormwater facilities inspected and maintained. Since Fairfax County DPWES inspects and ensures that FCPS stormwater management facilities are properly maintained, no enforcement actions were taken.

Number of facilities inspected:	249
Number and type of facilities maintained (routine maintenance):	199 (34 ponds, 34 bioretention facilities, 110 Filterra/Treebox Filter facilities, 5 vegetated swales and 16 permeable pavement facilities)
Number and type of facilities maintained (non-routine maintenance):	8 (2 bioretention facilities, 2 permeable pavement facilities, 1 cistern system, 1 Filterra/ Treebox Filter facilities, 1 manufactured BMP facility, and

	1 vegetated swale)
--	--------------------

BMP 5.B – Stormwater Facility BMP Tracking Database

Fairfax County STW maintains the tracking database on behalf of FCPS. The County’s database was developed to track all permanent stormwater facilities and collects necessary information for inspecting and reporting.

Measure of Effectiveness

A table providing the stormwater facilities that FCPS implemented during the current reporting period is provided in Appendix D. This spreadsheet will also be provided to the Department electronically as required by Section II.B.5.e of the General Permit (Stormwater management facility tracking and reporting requirements).

3.6 Pollution Prevention/Good Housekeeping for Municipal Operations (MCM #6)

The following table is a summary of ongoing activities and new activities performed during the 2016 - 2017 reporting period for MCM #6 and their completion status

BMP/Task	Year	Measurable Goal	Status
6.A - Sweeping Projects			
Annual parking lot sweeping.	All	Provide an estimate of total material collected during the reporting period.	Complete
6.B – Good Housekeeping Standard Operating Procedures for Daily Operations			
Develop daily operations SOPs.	2	Include written SOPs in the PY3 annual report.	Complete
6.C – Stormwater Pollution Prevention Plans for High-Priority Facilities			
Develop list of high-priority facilities requiring SWPPPs.	1	Provide list and status of SWPPP development.	Complete
6.D - Turf and Landscape Nutrient Management Plans			
Develop list of locations requirement NMPs.	1	Provide list of NMP locations.	Complete
Develop and implement NMPs.	2-5	Summary report on the development and implementation of NMPs, including the total acreage of land requiring NMPs and acreage upon which NMPs have been implemented.	In progress
6.E - Training on Recognition and Reporting Illicit Discharges			
Provide training on illicit discharges.	2 and 4	List of training events, dates, number of staff attending and objectives.	Complete
6.F - Training on Good Housekeeping and Pollution Prevention			
Provide training on pollution prevention and good housekeeping.	3 and 5	List of training events, dates, number of staff attending and objectives.	Not applicable this reporting period
6.G - Certification for Pesticide and Herbicide Applicators			
Ensure proper training or certification for pesticides and herbicides.	All	Provide list of staff and associated certification(s), as applicable.	Complete

Contract language or written certification for contractors.	2-5	Provide revised Friends of the Field agreements	Complete
6.H - Proper State Certification for Erosion and Sediment Control			
Ensure designation of Registered Land Disturber for projects.	All	Confirm compliance with erosion and sediment control program requirements and designation of an RLD for all FCPS projects.	Confirm
6.I - Spill Response Training for Emergency Personnel			
Ensure applicable spill training or certification for emergency response staff.	All	List of training events held, the training date, and the number of employees attending or certification program completed.	Complete
6.J – Contractor Oversight Procedures			
Revise contractor language for SOPs.	3-5	Following development of SOPs for Daily Operations (PY3 program plan update), document revised contractual language.	Complete

BMP 6.A – Sweeping Projects

FCPS continued to implement sweeping using a Fairfax County DPWES contract on FCPS properties as an effective way to remove trash and particulates from impervious surfaces that could enter the storm sewer system.

Measure of Effectiveness

During PY4, approximately 137.5 cubic yards were collected through sweeping operations at FCPS facilities. Using an estimated conversion factor of 0.34 ton per cubic yard based on an analysis of Arlington County’s street sweeping program, the 137.5 cubic yards is approximately equivalent to 46.75 tons of debris recovered.

BMP 6.B – Good Housekeeping Standard Operating Procedures for Daily Operations

FCPS developed SOPs for daily operations during PY 2. These SOPs will be implemented in PY3 – PY5 and training will be incorporated into the biennial pollution prevention and good housekeeping training (BMP 6.F).

Measure of Effectiveness

During PY2, SOPs were developed for the following:

- Outdoor Storage
- Equipment Maintenance
- Landscape and Grounds

These SOPs are included in the program plan.

BMP 6.C – Stormwater Pollution Prevention Plans for High-Priority Facilities

FCPS has identified one high-priority facility that requires the development and implementation of a SWPPP.

Measure of Effectiveness

A SWPPP was developed and implemented on the Woodson Complex in accordance with the schedule provided in the program plan. SWPPP training was held on January 25, 2017.

BMP 6.D – Turf and Landscape Nutrient Management Plans

FCPS has developed a list of turf and landscape areas greater than one contiguous acre that receive nutrients and for which nutrient management plans (NMPs) will be developed. This list is provided in the program plan. During this permit year, FCPS has continued to refine the list of locations and acreage where NMPs are required through field mapping and tracking of FCPA and Friends of the Field nutrient applications. The list has also been revised to remove turf fields when they are replaced with new synthetic fields. The latest version of the list is more detailed, with the required information tracked for each playing field greater than one acre where nutrients are applied. This allows for better tracking of changes in nutrient application status for each field.

The following changes were made to the list in this reporting period:

- Removed fields:
 - Daniels Run Elementary – this field is included in the City of Fairfax's MS4 reporting
 - Vienna Elementary – changed to synthetic field
 - Jefferson High School, Stadium and RF #1 – changed to synthetic fields
 - Lake Braddock Secondary School RF#2 – no nutrients applied
 - Langley High School Fields 2 and RF#1 – under renovation no nutrients applied
 - Lee High School RF#1 – no nutrients applied
 - Marshall High School RF#3 – no nutrients applied
 - McLean High School RF#1 – no nutrients applied this year
 - Mt. Vernon High School RF#1 – changed to synthetic field
 - Oakton High School RF#2 – no nutrients applied this year
 - Robinson Secondary School Fields 2 and RF#2 – no nutrients applied this year
 - South County rectangular fields – RF#1 changed to synthetic field, others have no nutrients applied this year
 - Stuart High School BB#1 – changed to synthetic field
 - West Potomac High School rectangular field – no nutrients applied this year
 - West Springfield High School RF #1 – no nutrients applied
 - Westfield High School rectangular fields - no nutrients applied this year
 - Woodson High School: RF#2 (no nutrients applied); RF#3 & #4 (no nutrients applied this year)

- Added Fields:
 - Fort Hunt Elementary rectangular field
 - Virginia Hills Center rectangular field
 - Wilton Wood Center multi-purpose field

Measure of Effectiveness

FCPS is continuing to develop and implement NMPs. In PY4, the permit requires that NMPs must be developed for no less than 75% of identified acres. As shown in the summary table below, FCPS is currently at 65% completion. FCPS is currently developing NMPs for the fourteen remaining high school baseball fields and the Stone Middle School rectangular field and will complete 100% of its required NMPs by June 30, 2018. This is in compliance with the permit statement that the operator shall not fail to meet the measurable goals for two consecutive years. A list of the FCPS facilities where NMPs have been completed is included in Appendix E.

School Type	Total Identified Acreage by School Type	Completed NMP Acreage by School Type	Percent complete
Elementary	27.77	27.77	100%
Middle	9.05	7.78	86%
High/Secondary	54.74	21.82	40%
Other	6.84	6.84	100%
Total	98.40	64.21	65%

BMP 6.E – Training on Recognition and Reporting of Illicit Discharges by Field Personnel

FCPS provides information on illicit discharges to bus drivers and custodians through the distribution of posters around the workplace. Training on Recognition and Reporting of Illicit Discharges is conducted biennially in PY2 and PY4.

Measure of Effectiveness

FCPS trained 36 staff in good housekeeping and pollution prevention, and another 36 staff PCB recognition and reporting through on-line courses. Documentation of the staff enrollment and completion is provided in Appendix E.

BMP 6.F – Training on Good Housekeeping and Pollution Prevention for Maintenance, Public Works, and Recreation Facility Staff

FCPS provides training on good housekeeping and pollution prevention through an on-line video course for maintenance, public works and recreation facility staff. This training is biennial and provided in PY3 and PY5.

Measure of Effectiveness

This training was not performed in PY4.BMP 6.G –

Certification for Pesticide and Herbicide Applicators

FCPS ensures that staff, as well as community groups and contractors that may apply pesticides and herbicides receive the proper state certification through the Virginia Department of Agriculture and Consumer Services (VDACS).

Measure of Effectiveness

FCPS has met this requirement. There are four FCPS staff with Pesticide Applicator Certification. Pesticide applicator certifications are provided in Appendix E.

BMP 6.H – Proper State Certification for Erosion and Sediment Control

FCPS ensures that applicable staff and site contractors hold the proper erosion and sediment control certifications from the state. A responsible land disturber must be designated for all FCPS projects in order for a site permit to be issued by the locality in which the project is located. Contractors submit paperwork with the appropriate locality to become the responsible land disturber once they are under contract.

Measure of Effectiveness

Certifications for applicable FCPS staff are maintained on file and available to DEQ for inspection.

BMP 6.I – Spill Response Training for Emergency Personnel

FCPS provides spill response training to staff with the Office of Safety and Security annually.

Measure of Effectiveness

Training was conducted on June 20, 2017 for two staff. The training material is provided in Appendix E.

BMP 6.J – Contractor Oversight Procedures

FCPS will ensure that contractors performing work on behalf of FCPS use appropriate pollution prevention and good housekeeping measures.

Measure of Effectiveness

FCPS developed good housekeeping SOPs in PY2 (see BMP 6.B). FCPS provides the SOPs to contractors that perform work related to outdoor storage, equipment maintenance and landscape and grounds maintenance. FCPS reviewed its bid documents and determined that the current wording is sufficient to ensure that contractors follow state and local regulations. The bid document wording is as follows: ““This solicitation is subject to all state and local laws, policies, resolutions, regulations, and all accepted rules, regulations and limitations imposed by legislation of the Federal Government.”

4. Results of Information Collected and Analyzed

No information, including monitoring data, was required to be collected or analyzed under the FCPS PY4 requirements.

5. Summary of Year 5 Planned Activities

Part II E 3 of the general permit requires a summary of the stormwater activities that FCPS plans to undertake during the next reporting cycle to meet PY5 measurable goals. The following table summarizes by MCM the new planned activities to meet PY5 requirements. FCPS will also continue to implement all ongoing activities as described in this annual report and the updated MS4 program plan.

Permit Requirement	Year	BMP/Task
Minimum Control Measure #1 – Public Education and Outreach		
Permit Section II B.1.	5	<ul style="list-style-type: none"> Continue to implement ongoing activities.
Minimum Control Measure #2 – Public Involvement / Participation		
Permit Section II B.2.	5	<ul style="list-style-type: none"> Continue to implement ongoing activities.
Minimum Control Measure #3 – Illicit Discharge Detection and Elimination		
Permit Section II B.3.	5	<ul style="list-style-type: none"> Continue to implement ongoing activities.
Minimum Control Measure #4 – Construction Site Stormwater Runoff		
Permit Section II B.4.	5	<ul style="list-style-type: none"> Continue to implement ongoing activities.
Minimum Control Measure #5 – Post Construction Stormwater Management		
Permit Section II B 5	5	<ul style="list-style-type: none"> Continue to implement ongoing activities.
Minimum Control Measure #6 – Pollution Prevention and Good Housekeeping		
Permit Section II B 6.	5	<ul style="list-style-type: none"> Continue to implement ongoing activities. Conduct biennial training on good housekeeping and pollution prevention Conduct annual spill response training
Special Conditions – Chesapeake Bay TMDL and Other Approved TMDLs		
Permit Section I B.	5	<ul style="list-style-type: none"> Implement TMDL action plans.

6. Changes in Identified BMPs or Measurable Goals

No updates to the program plan were implemented in this reporting period.

7. Reliance On Other Government Entities

FCPS participates with local governments and other public entities through the Northern Virginia Regional Commission (NVRC) Clean Water Partners program to conduct regional educational and outreach. This effort is discussed in Section 3 under BMP 1.A. FCPS relies on the assistance of Fairfax County DPWES to perform dry weather outfall screening discussed in Section 3 under BMP 3.C. Additionally, FCPS relies on Fairfax County STW for stormwater management facility inspections and database management, and to access a contract to conduct sweeping projects

discussed in Section 3 under BMP 5.A and BMP 6.A, respectively.

FCPS and Fairfax County executed a Memorandum of Understanding on August 8, 2017 to define the roles and responsibilities for implementation of a joint MS4 program. FCPS submitted a letter to DEQ requesting termination of its MS4 permit on September 20, 2017.

8. Approval Status of Qualifying Local Programs

Unlike a locality, FCPS does not have state enabling authority to regulate land-disturbing activities, administer an erosion and sediment control program, or adopt ordinances and other enforcement mechanisms. FCPS is regulated in the same manner as a private developer by the locality where the land-disturbing activity is taking place and must comply with all local codes and ordinances. Therefore the locality where the project is taking place administers local erosion and sediment control and VSMP requirements for land disturbing activities through review of required plan elements, along with inspection and enforcement of a site-specific stormwater pollution prevention plan (SWPPP) for the project.

9. Special Conditions Associated with Approved TMDLs

Section I of the MS4 permit requires FCPS to develop action plans to address TMDLs where a wasteload allocation (WLA) has been assigned to the FCPS MS4. The Chesapeake Bay TMDL Action Plan and TMDL Action Plans for sediment, bacteria and PCBs are in the FCPS MS4 program plan.

FCPS addressed comments from DEQ on their PY3 Annual Report in a letter dated April 7, 2017 and provided a status update for all local and Chesapeake Bay TMDL action plans. An update on the status of implementation of the action plans in PY4 is provided below:

Chesapeake Bay TMDL: The permeable pavement projects at Terraset Elementary School were substantially completed on December 15, 2015. With completion of this project, FCPS has completed all structural projects proposed in the action plan.

Sediment TMDLs: The permeable pavement projects at Terraset Elementary School were substantially completed on December 15, 2015. With completion of this project, FCPS has completed all structural projects proposed in the action plan. For other implementation items in section 2K of the action plan, FCPS continues to implement its MS4 program, ensures that all FCPS land disturbing projects comply with local VSMP requirements, and continues its good housekeeping/pollution prevention measures and training as documented in this annual report.

Bacteria TMDLs: FCPS continues to implement its MS4 program per the Program Plan schedule. The Safety and Security Fact Sheets on the Pooper Scooper Ordinance and Canada Geese were reviewed by June 30, 2017. Proposed revisions to clarify specific actions that school facilities can take will be implemented by June 30, 2018.

PCB TMDL: Training on PCB recognition and reporting was conducted on April 28, 2017 and documentation of the training is included in Appendix E.

10. Evaluation and Assessment of BMPs

In accordance with Section II E.3.b of the MS4 permit, FCPS has reviewed and assessed the BMPs established to meet the requirements of the permit and program plan for this reporting period and have found them to be appropriate and effective.

APPENDIX A

Summary of School Curriculum

NVRC Clean Water Partners Reports

Fourth Grade Science

Year at a Glance

Living Systems

Plants

- Physical Characteristics.
- Life Needs.
- Life Cycle.

Photosynthesis Pollination

- Flower Structure.

Germination

- Seed Structure.
- Dormancy.

Ecosystem

- Adaptations.
- Community.
- Food Web.

Earth and Space

Weather

- Forecast.
- Instruments.
- Clouds.
- Storms.
- Water cycle.

Earth patterns, cycles and changes

- Revolution.
- Rotation.
- Seasons.
- Phases of the moon.

Virginia's Natural Resources

- Watershed.
- Animals and plants.
- Forests.
- Rocks, soils, and minerals.

Physical

Electricity

- Circuits.
- Conductors.
- Insulators.
- Magnets.
- Electromagnets.

Objects in Motion

- Direction and speed.
- Force.
- Friction.

Investigation

Observation

- Tools.

Experimentation

- Hypothesis.
- Variables.
- Constant.
- Control.
- Repeated trial.

Prediction Data Collection

- Classification.
- Graphing.
- Note-taking.
- Inference and conclusion.

Measurement

Nonstandard Standard

- Metric system.
- English system.

Temperature

- Celsius.
- Fahrenheit.

Time

- Second.
- Minute.
- Hour.
- Day.
- Month.
- Year.

Fifth Grade Science

Year at a Glance

Living Systems

Plant Cell

- Structure.
- Function.

Animal Cell

- Structure.
- Function.

Kingdoms

- Eubacteria.
- Archaeobacteria.
- Protista.
- Fungi.
- Plantae.
- Animalia.

Earth and Space

Earth

- Layers.
- Pangaea.
- Fossils.
- Plate tectonics.
- Earthquakes.
- Volcanoes.
- Rock cycle.

Oceans

- Geological characteristics.
- Physical characteristics.
- Ecosystems.

Weathering

- Acid rain.
- Erosion.

Physical

Light

- Visible spectrum.
- Refraction
- Reflection
- Opaque
- Transparent
- Translucent
- Optical Tools

Sound

- Frequency
- Waves
- Vibration

Matter

- Solid, liquid, and gas.
- Mixture.
- Solution.
- Compound.

Investigation

Observation

- Tools.

Experimentation

- Hypothesis.
- Variables.
- Constant.
- Control.
- Repeated trial.

Prediction Data Collection

- Classification.
- Graphing.
- Note-taking.
- Inference and conclusion.

Measurement

Nonstandard

Standard

- Metric system.
- English system.

Temperature

- Celsius.
- Fahrenheit.

Time

- Second.
- Minute.
- Hour.
- Day.
- Month.
- Year.

Middle School Science

Middle school science requirements.

Courses:

Grade 7 ([State Standards](#))

[<http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml>](http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml)

Grade 8 ([State Standards](#))

[<http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml>](http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml)

Focus Science

Laboratory Requirements

Central to the design of the curriculum is the philosophy that the middle school science student should be engaged in laboratory work during at least fifty percent of class time. This time frame includes pre-laboratory preparation and post-laboratory analysis. Laboratory work is the vehicle by which students come to understand life science concepts, learn and apply the skills of inquiry, and acquire an enthusiasm for learning science. While important in developing student understanding, demonstrations, audiovisual presentations, reinforcement and practice activities, and supplemental reading cannot be considered a substitute for laboratory experiences. These kinds of activities should not be counted within the science laboratory time.

A science laboratory experience is characterized by the following:

- An individual student or small group of students manipulating science equipment for the purpose of conducting an investigation requiring an interpretation of observations and data.
- An individual or small group of students engaged in experimental design that involves defining a problem, formulating hypotheses, and establishing procedures for the collection of verifiable data.
- An individual or small group of students conducting an investigation which involves making observations, recording data from the observations, analyzing the data collected, formulating conclusions, and preparing a final report.

An individual or small group of students engaged in computer-based laboratory investigations. For a computer-assisted laboratory investigation to be considered as a laboratory activity, the program should include some of the following:

- The development of scientific skills, such as making observations, collecting data, organizing and analyzing data, predicting, and inferring.
- The opportunity to change the parameters of the results to observe and predict the effect upon the system being investigated.
- Experimental investigations that generate or access appropriate data, display the data, and require students to analyze the data to form valid conclusions.

Field studies in which individual students participate in observations, data collection, and analysis of samples of materials.

Technology

As stated in the Science Standards of Learning for Virginia Public Schools, the use of current and emerging technologies is essential to the K-12 science instructional program.

Computer/Technology standards to be achieved by the end of Grade 8 have been developed in the Virginia Standards of Learning and are the shared responsibility of teachers of all disciplines. Middle science school students are expected to become

adept at using the compound microscope, triple beam balance, computer, printer, digital camera, probeware, LabQuest, and other forms of hardware.

In addition, students should become competent using software designed for the following applications: word processing, graphing, manipulating databases, simulations, Geographic Information Systems (GIS), telecommunications, and multimedia presentations. The most common configuration is a networked science classroom consisting of 15 student stations and one teacher presentation station. All middle school science students use technology during each unit throughout the year.

Classroom Assessment Methods

Instruction can be effective only if classroom assessments accurately reflect student achievement. For this reason, those concerned with the quality of instruction must also be concerned with the quality of assessment. Assessment should be a systematic, multi-step process involving the collection and interpretation of educational data on student progress. Student performance guides what teachers should teach, reflects what students have learned, and indicates what students need to learn.

In the past, many instructors evaluated their students' understanding of a scientific concept with a traditional, multiple-choice, pencil and paper test. Today, teachers use a variety of classroom assessment methods to probe the extent and organization of their students' knowledge. The choice of specific assessment methods should match the kind of knowledge – conceptual or procedural – we are assessing. Conceptual knowledge refers to what we want students to understand (concepts, principles) and procedural knowledge refers to what we want students to be able to do (skills, processes, strategies.)

Classroom assessment methods in science include the following:

1. Selected Response

Student selects either the correct or best answer from among the options given. This method can assess mastery of conceptual or procedural knowledge.

Examples of selected response include multiple choice, true-false, and matching.

2. Constructed Response

Student communicates a brief response, usually written, to questions, problems, or prompts. This method can assess big concepts, generalizations, and relationships among elements of conceptual knowledge. It can provide insight into a student's reasoning ability. A performance check list or rubric can be used to "score" the response.

Examples of constructed response include asking students to graph experimental data and describe the pattern or trend that is evident, create a concept map or web of a science topic, or make a labeled diagram to illustrate and explain the role of green plants in the process of photosynthesis, asking students to "show and explain their work" on a density calculation problem, or make a labeled diagram to illustrate and explain the three ways thermal energy is transferred.

3. Performance-Based Assessments

A. Performance Task

Student creates a product or performs a demonstration that illustrates how he or she can apply conceptual knowledge and procedural skills to carry out steps in the development of the specified product or task. It can assess both conceptual and procedural knowledge. Evaluations of student products are based on judgments guided by criteria. Rubrics and performance checklists are often used as scoring tools.

Examples of a performance task include having students write a newspaper editorial defending a position on curtailing harvesting of the Chesapeake Bay blue crab; design an experiment to determine the limiting factors on the germination of a particular kind of seed; create a trade book on using the microscope to compare a plant and a animal cell for a fifth grade student; create a multimedia presentation for Earth Day on the interdependence with the biosphere, write a newspaper editorial defending a position on the use of nuclear energy for generating electricity; design an experiment to determine the effect of different kinds of insulating materials on thermal energy loss; create a trade book on "atoms and elements" for sixth grade students; conduct an experiment to identify an unknown substance based on its

properties; create a multimedia presentation for National Science and Technology Week on the interdependence of science, technology, and society in some aspect of the nanotechnology program.

B. Portfolio

Representative samples of student work are purposefully collected over time. This can be used to show student effort, progress or achievement in a given area.

Example of a portfolio includes asking students to keep a record of different investigations or lab reports over time to see progress in ability to make qualitative and quantitative observations, organize and analyze information, and communicate results of an investigation.

C. Teacher Observations, Questioning, and Conferencing

The teacher observes the student during an activity or asks questions to learn about a student's thinking process relevant to conceptual or procedural knowledge. These provide valuable feedback information to teachers and to students so that adjustments to instruction can be made.

Examples of teacher observations, questioning, and conferencing include observing students in a lab situation to determine their ability to follow a written procedure, the use of the "think aloud" technique to evaluate a student's ability to make a wet mount slide and focus the image under a microscope or to use a triple beam balance to find the mass of an object, posing oral questions to assess a student's understanding of a difficult section in the science textbook, or conferencing with a student to learn what they know about a particular concept and what questions they might still have.

D. Student Self-Assessment

The student self-assesses the quality of a performance, product, or process he or she used. This method allows students to keep track of their own progress through criteria established by the student and teacher. This also enables students to be part of the learning experience, and take ownership in understanding the goals and criteria for success related to conceptual and procedural learning goals.

Examples of student self-assessment include allowing students to use a check list for assessing the quality of a graph they produced: or after completing a series of lessons on heredity, asking students to write in a learning log the concepts which they found most understandable and those which they still do not understand completely.

Student Resources

General Science

- [U.S. Metric Association <http://lamar.colostate.edu/~hillger/>](http://lamar.colostate.edu/~hillger/)

7th Grade Science

Cells

- [Cells alive <http://www.cellsalive.com/>](http://www.cellsalive.com/)

Exploring Heredity and Diversity

- [DNA and Genetics <http://www.amnh.org/ology/?channel=genetics#>](http://www.amnh.org/ology/?channel=genetics#>)

Understanding Populations and Ecosystems

- [Biomes <http://mbgnet.mobot.org/sets/index.htm>](http://mbgnet.mobot.org/sets/index.htm)
- [More about biomes <http://www.blueplanetbiomes.org/world_biomes.htm>](http://www.blueplanetbiomes.org/world_biomes.htm)

Chesapeake Bay

- [The Chesapeake Bay Foundation <http://cbf.org/>](http://cbf.org/)
- [Chesapeake Bay Program <http://www.chesapeakebay.net/>](http://www.chesapeakebay.net/)
- [The Bay Journal <http://www.bayjournal.com/>](http://www.bayjournal.com/)

Eighth Grade Science

Matter and Energy

- [Matter, Water Cycle, Energy](http://www.nhusd.k12.ca.us/alve/media/virtual_science2.htm)

Periodic Table

- [Chemicool Periodic Table](http://www.chemicool.com/chemicool/)

Atoms

- [Ernest Rutherford's Gold Foil Experiment](http://micro.magnet.fsu.edu/electromag/java/rutherford/)
- [Scanning Tunneling Microscopic Images of Atoms](http://physics.nist.gov/genint/stm/stm.html)

Chemical Reactions--Acids and Bases

- [More about acids and bases](http://www.visionlearning.com/library/science/chemistry-2/che2.2-acid_base.htm)

Investigating Matter and Temperature

- [Heat and Thermal Energy](http://www.physics4kids.com/files/thermo_intro.html)

Investigating Motion, Forces, and Energy

- [Newton's Laws and airplanes](http://www.grc.nasa.gov/www/k-12/airplane/newton.html)

High School Science

High school science students spend approximately 50 percent of their time in laboratory or research-based activities.

About High School Science

The high school science program is experientially based with a minimum of 50 percent of class time spent in laboratory or research-related activities. The integration of technology throughout high school science courses allows students to collect, organize, analyze, and interpret real-time data; conduct research; design science experiments; and explore science concepts through simulation and application software.

Our Programs of Study are based on the Standards of Learning for Public Schools in the Commonwealth of Virginia

http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml and the National Science Education Standards http://www.nap.edu/openbook.php?record_id=4962.

GRADUATION REQUIREMENTS AND COURSE PLANNING

Find out what courses are needed to graduate.

View Graduation Requirements </academics/graduation-requirements-and-course-planning>

HIGH SCHOOL SCIENCE COURSE SEQUENCE

Learn more about the course sequence for high school science.

Learn More </academics/graduation-requirements-and-course-planning/high-school-course-sequencing/science>

Courses:

- Chemistry (State Standards
<http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml>)
- Physics (State Standards
<http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml>)
- Active Physics
- Biology (State Standards
<http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml>)
- Concepts
- Geosystems (State Standards
<http://www.doe.virginia.gov/testing/sol/standards_docs/science/index.shtml>)
- Human Anatomy and Physiology
- Astronomy
- Oceanography
- Geospatial Analysis
- Genetics and Biotechnology
- AP Environmental Science (AP Information
<http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2128.html>)
- AP Biology (AP Information
<http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2117.html>)
- AP Chemistry (AP Information
<http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2119.html>)
- AP Physics C (AP Information
<http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2263.html>)
- AP Physics B (AP Information
<http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2262.html>)

- IB Chemistry (IB Information [<http://www.ibo.org/diploma/curriculum/>](http://www.ibo.org/diploma/curriculum/))
- IB Physics (IB Information [<http://www.ibo.org/diploma/curriculum/>](http://www.ibo.org/diploma/curriculum/))
- IB Environment Systems and Society (IB Information [<http://www.ibo.org/diploma/curriculum/>](http://www.ibo.org/diploma/curriculum/))
- IB Biology (IB Information [<http://www.ibo.org/diploma/curriculum/>](http://www.ibo.org/diploma/curriculum/))

Northern Virginia Regional Commission
2017 Only Rain NVRC Survey

Summary Report of Findings

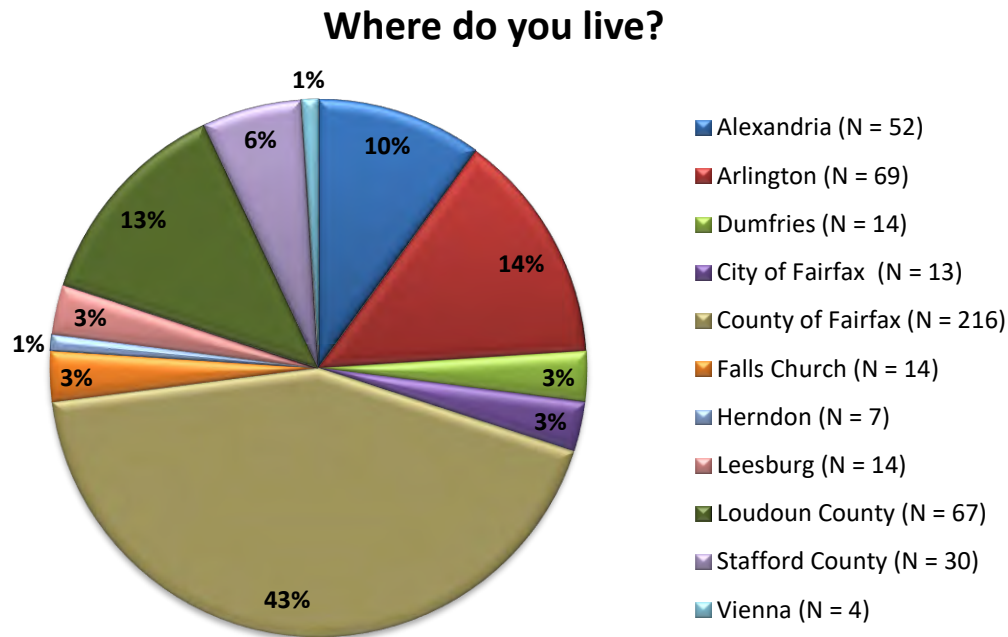
7/13/2017

Amplitude Research, Inc.

Study Methodology & Respondent Characteristics

The Northern Virginia Regional Commission (NVRC) hired Amplitude Research, Inc. to conduct a survey of residents of northern Virginia to measure beliefs and attitudes related to pollution of the Potomac River and Chesapeake Bay.

Amplitude Research administered the study online beginning on June 5, 2017. In the end, 500 surveys were completed by web panelists who live in one of the areas of Virginia shown in the chart below. (In the legend, “N =” indicates the number of respondents in each city, county, or town.)



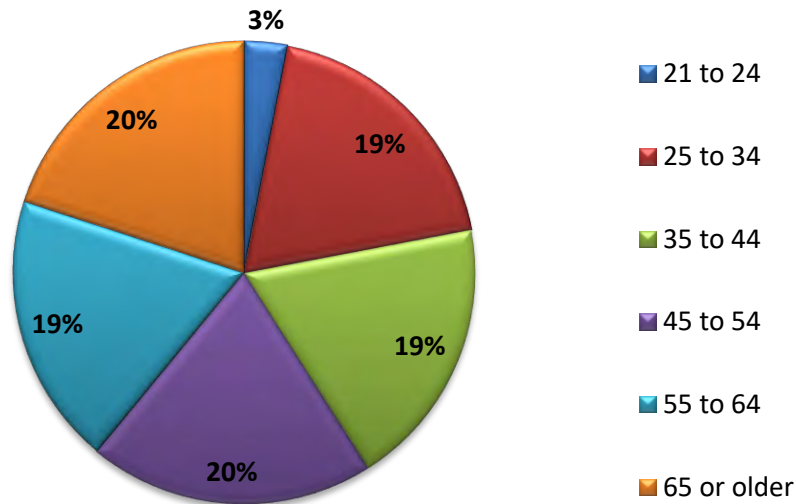
Later in this report, the results for some of the questions are “broken out” by area, in addition to presenting the results for the total sample. However, the specific areas listed above were grouped together into larger areas so that each larger area used for analysis had a reasonable number of respondents.

Residents from Leesburg and Loudoun County were combined into a single category labeled “**Leesburg / Loudoun**,” since the town of Leesburg lies within Loudoun County. Another category used for analysis was “**Dumfries / Stafford**,” since Dumfries lies just north of Stafford County. Although Dumfries is not located within Stafford County, it is closer to Stafford than to the other counties covered in the survey. (There were too few survey respondents living in Dumfries to examine the results for Dumfries separately.) The City of Fairfax, Falls Church, Herndon, and Vienna were combined with Fairfax County to create the category “**Fairfax Inclusive**,” since these cities and towns lie within the Fairfax County area. Although the City of Fairfax and City of Falls Church are distinct areas, their location falls within the larger area circumscribed by Fairfax County.

Alexandria and Arlington each had a sufficient number of respondents so that each of these areas can be examined separately.

The minimum age to participate in the survey was 21. As shown in the chart below, each age group was well represented in the survey. Although a small proportion were age 21 to 24, this category has fewer years than the other categories shown. For analysis purposes later in this report, the categories “21 to 24” and “25 to 34” were combined into the broader category of “21 to 34.”

Which category includes your age?



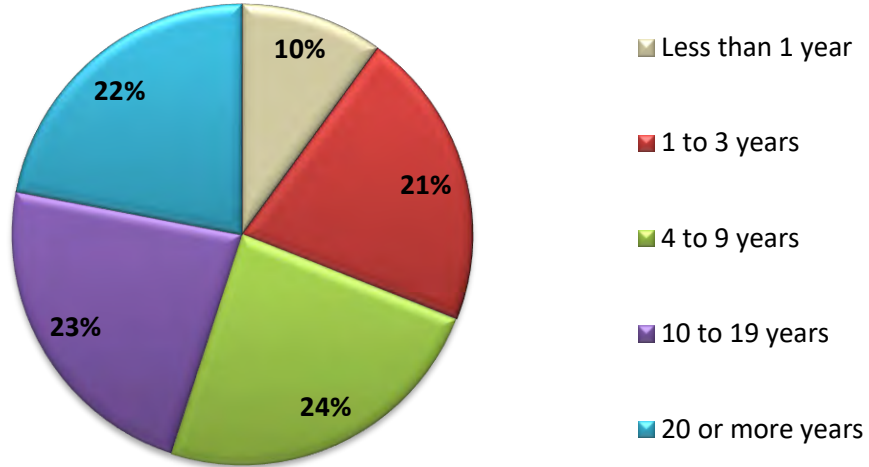
The survey respondents were split between males (48%) and females (52%), while approximately three-fourths (75%) indicated that they own their residence, and 25% reported renting.

The first chart on the next page shows how long respondents have lived in their current residence, and the second chart shows how long they have lived in northern Virginia. On the page after that, results are shown for the type of residence.

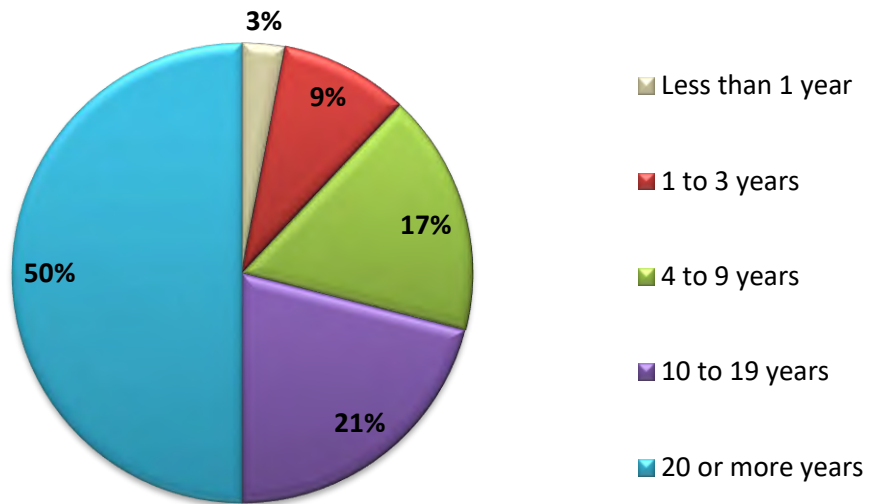
A survey was conducted in each year between 2011 and 2016 that included many of the same or similar questions, targeted the same geographic area, and had a similar demographic mix as in this 2017 study. Later in this report, comparisons between years are shown where appropriate. Initially, the title used for the study was “NVRC Resident Survey.” Starting in 2013, the study title was changed to “Only Rain NVRC Survey,” since a new question was added about awareness of the “Only Rain” logo.

In 2017, a minimum quota of 8% of the total sample was set for those who are of Hispanic heritage to ensure sufficient representation and to allow analysis of results specifically among Hispanic respondents.

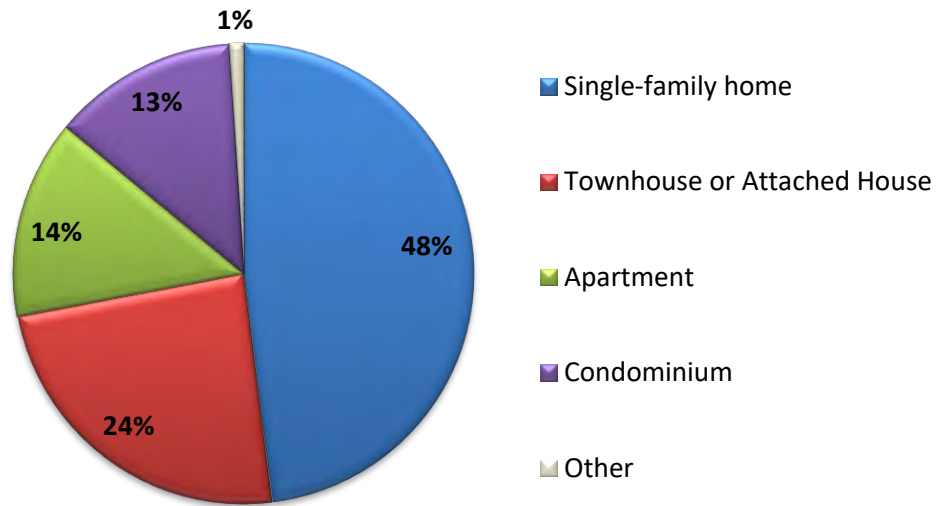
For how many years have you lived in your current residence?



For how many years have you lived in Northern Virginia?



Which of the following best classifies your current residence?



Sampling Variability

While examining the survey findings, it is helpful to keep in mind that the results are based on a sample and are therefore subject to sampling variability, often referred to as “sampling error.” The degree of uncertainty for an estimate (e.g., a particular percentage from the survey) arising from sampling variability is represented through the use of a margin of error. A sampling margin of error at the “95% confidence level” can be interpreted as providing a 95% probability that the interval created by the estimate plus and minus the margin of error contains the true value. (The “true” value would be known only if everyone in the target market was surveyed rather than just a sample.) In addition to sampling variability, results may be subject to various sources of non-sampling error (e.g., non-response bias, respondent misinterpretation of question wording, etc.). The degree of non-sampling error is not represented by the sampling margin of error and is usually unknown.

For a “sample size” of 500 survey respondents, the “maximum” margin of sampling error for percentages from the survey is +/- 4.4 percentage points at the 95% confidence level. Here, “maximum” refers to the margin of error being highest for proportions from the survey near 50%, while the margin of error declines as percentages get further from 50%. For example, given the same sample size of 500 respondents, a result from the survey near 10% or 90% would have a margin of sampling error of +/- 2.6 percentage points.

The margin of sampling error increases as the sample size decreases. Thus, when a question is asked of only a subset of the total sample, the associated margin of sampling error is larger than that quoted above. Also, even if a question is asked of all respondents, when examining results for a particular subgroup, the margin of sampling error depends on the number of respondents in that subgroup. For example, the “maximum” margin of sampling error would be +/- 9.8 percentage points at the “95% confidence level” when based on a subgroup of 100 survey respondents. In some parts of this report, results are shown for subgroups that include a fairly small number of respondents, and caution is recommended when thinking about these findings.

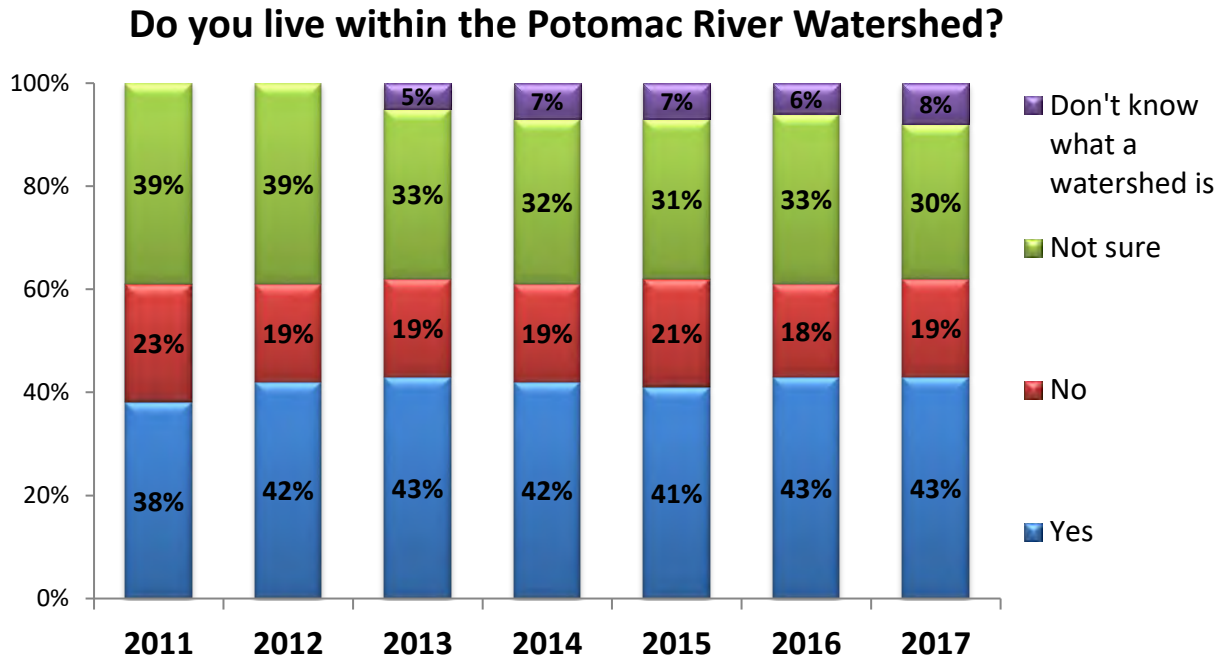
This suggests that results for different subgroups can be considered “similar” when the differences are small (i.e., small enough to be within the range of sampling error).

Results from different years can be considered similar when differences between the years are small. If the difference between two years is referred to as “statistically significant,” this essentially means that the difference in the survey results is large enough to be highly confident (i.e., at the “95% confidence level”) that there has been a real change. That is, a “statistically significant” difference in the survey results from one year to the next is larger than what would usually be expected from sampling error alone.

In this report, when a result from 2017 is described as “significantly” higher (or lower) than the result from a previous year, this means that the difference between these years is “statistically significant.” Also, when one subgroup is described as “more likely” (or “less likely”) than another subgroup to answer in a particular way, this is based on a statistically significant difference.

Potomac River Watershed

- Early in the survey, respondents were asked if they lived within the “Potomac River Watershed.” As shown in the chart below, slightly more than four-in-ten (43%) in 2017 believed that they did in fact live within the Potomac River Watershed. Similar proportions held this belief in previous years.



- Nearly four-in-ten each year were not sure if they lived within the Potomac River Watershed or did not know what a watershed is. (The response option “I do not know what a watershed is” was first added in the 2013 survey.)
- When breaking the results out by area, as shown in the table below, Arlington had a significantly higher proportion answering “Yes” than Fairfax Inclusive and Dumfries / Stafford.

Live Within Potomac River Watershed	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	46%	59%	38%	48%	34%
No	11%	10%	22%	19%	27%
Not sure	35%	28%	31%	26%	32%
Don't know what a watershed is	8%	3%	9%	7%	7%

N = number of respondents

52

69

254

81

44

- As shown in the next table, those who have lived in northern Virginia for less than 4 years were less likely than others to say they live within the Potomac River Watershed.

Live Within Potomac River Watershed	Have Lived in Northern Virginia < 4 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Yes	29%	41%	47%	46%
No	23%	25%	14%	18%
Not sure	38%	27%	33%	28%
Don't know what a watershed is	10%	7%	6%	8%
<i>N = number of respondents</i>	61	83	103	253

- Those age 45 or older were more likely than others to believe that they live in the Potomac River Watershed.

Live Within Potomac River Watershed	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Yes	29%	31%	54%	46%	56%
No	26%	24%	18%	12%	15%
Not sure	34%	37%	19%	37%	25%
Don't know what a watershed is	11%	8%	9%	5%	4%
<i>N = number of respondents</i>	109	96	99	95	101

- When examining the results by other subgroups, males were more likely than females and homeowners were more likely than renters to believe that they live within the Potomac River Watershed. Those of Hispanic heritage were less likely than others to hold this belief.

Live Within Potomac River Watershed	Male	Female	Homeowners	Renters	Hispanic Respondents
Yes	53%	34%	47%	31%	28%
No	18%	20%	18%	22%	25%
Not sure	23%	37%	29%	35%	32%
Don't know what a watershed is	6%	9%	6%	12%	15%
<i>N = number of respondents</i>	242	258	376	124	40

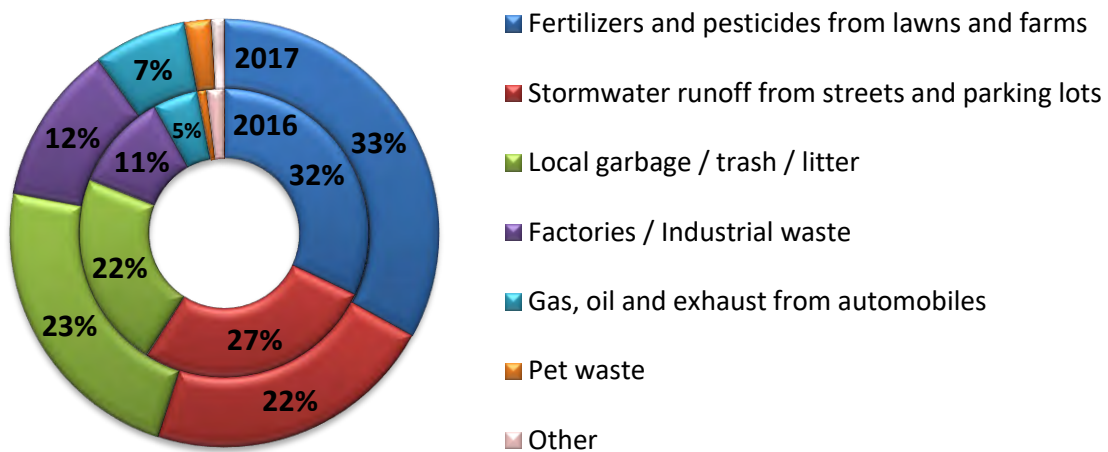
- Those living in an apartment were less likely than others to indicate that they live within the Potomac River Watershed.

<i>Live Within Potomac River Watershed</i>	Single- family Home	Townhouse	Apartment	Condo
Yes	47%	41%	30%	49%
No	20%	16%	25%	17%
Not sure	27%	35%	35%	26%
Don't know what a watershed is	6%	8%	10%	8%
<i>N = number of respondents</i>	242	118	71	65

Beliefs About Local Water Pollution

- When asked what they thought was the “Number one” cause of pollution in local streams, the Potomac River, and the Chesapeake Bay, the most frequently selected response option was “Fertilizers and pesticides from lawns and farms.” A similar question was asked in past years, but there were several wording changes to the response options in the 2016 survey. (However, “Fertilizers and pesticides from lawns and farms” was still the option selected most often in previous years.)

What do you think is the number one cause of pollution in local streams, the Potomac River, and the Chesapeake Bay?



- The proportion selecting “Stormwater runoff from streets and parking lots” was lower in 2017 than in 2016, but the difference was not quite large enough to be statistically significant.
- Tables on the next page (and following pages) show the results broken out by various subgroups of the total sample. For example, the proportion selecting fertilizers and pesticides from lawns and farms increased with time living in the area and age. Also, males and homeowners were more likely than others to select this item.

**Believed #1 Cause
of Local Water
Pollution**

	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Fertilizers and pesticides from lawns and farms	23%	31%	34%	40%	25%
Stormwater runoff from streets and parking lots	25%	36%	22%	15%	11%
Local garbage / trash / litter	19%	17%	24%	23%	32%
Factories / Industrial waste	21%	9%	11%	11%	14%
Gas, oil and exhaust from automobiles	12%	4%	6%	6%	11%
Pet waste	0%	3%	1%	4%	7%
Other	0%	0%	2%	1%	0%

N = number of respondents

52

69

254

81

44

**Believed #1 Cause
of Local Water
Pollution**

**Have Lived
in Northern
Virginia
< 4 Years**

4 to 9 Years

**10 to 19
Years**

**20 or More
Years**

Fertilizers and pesticides from lawns and farms	21%	24%	31%	38%
Stormwater runoff from streets and parking lots	23%	23%	22%	21%
Local garbage / trash / litter	26%	18%	25%	23%
Factories / Industrial waste	15%	18%	12%	10%
Gas, oil and exhaust from automobiles	10%	15%	5%	5%
Pet waste	3%	2%	3%	1%
Other	2%	0%	2%	2%

N = number of respondents

61

83

103

253

**Believed #1 Cause
of Local Water
Pollution**

	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Fertilizers and pesticides from lawns and farms	15%	23%	33%	41%	52%
Stormwater runoff from streets and parking lots	20%	17%	24%	22%	27%
Local garbage / trash / litter	29%	32%	26%	17%	10%
Factories / Industrial waste	16%	19%	9%	8%	9%
Gas, oil and exhaust from automobiles	15%	7%	7%	5%	0%
Pet waste	4%	1%	0%	3%	2%
Other	1%	1%	1%	4%	0%

N = number of respondents 109 96 99 95 101

**Believed #1 Cause
of Local Water
Pollution**

	Male	Female	Homeowners	Renters	Hispanic Respondents
Fertilizers and pesticides from lawns and farms	40%	26%	37%	19%	22%
Stormwater runoff from streets and parking lots	25%	19%	22%	23%	18%
Local garbage / trash / litter	18%	27%	20%	30%	30%
Factories / Industrial waste	9%	15%	12%	14%	22%
Gas, oil and exhaust from automobiles	4%	10%	6%	10%	5%
Pet waste	2%	2%	2%	2%	3%
Other	2%	1%	1%	2%	0%

N = number of respondents 242 258 376 124 40

**Believed #1 Cause
of Local Water
Pollution**

**Single-
family
Home**

Townhouse

Apartment

Condo

Fertilizers and pesticides from lawns and farms	36%	35%	21%	28%
Stormwater runoff from streets and parking lots	19%	24%	22%	26%
Local garbage / trash / litter	20%	21%	34%	24%
Factories / Industrial waste	15%	8%	14%	9%
Gas, oil and exhaust from automobiles	7%	7%	6%	8%
Pet waste	1%	3%	3%	3%
Other	2%	2%	0%	2%

N = number of respondents

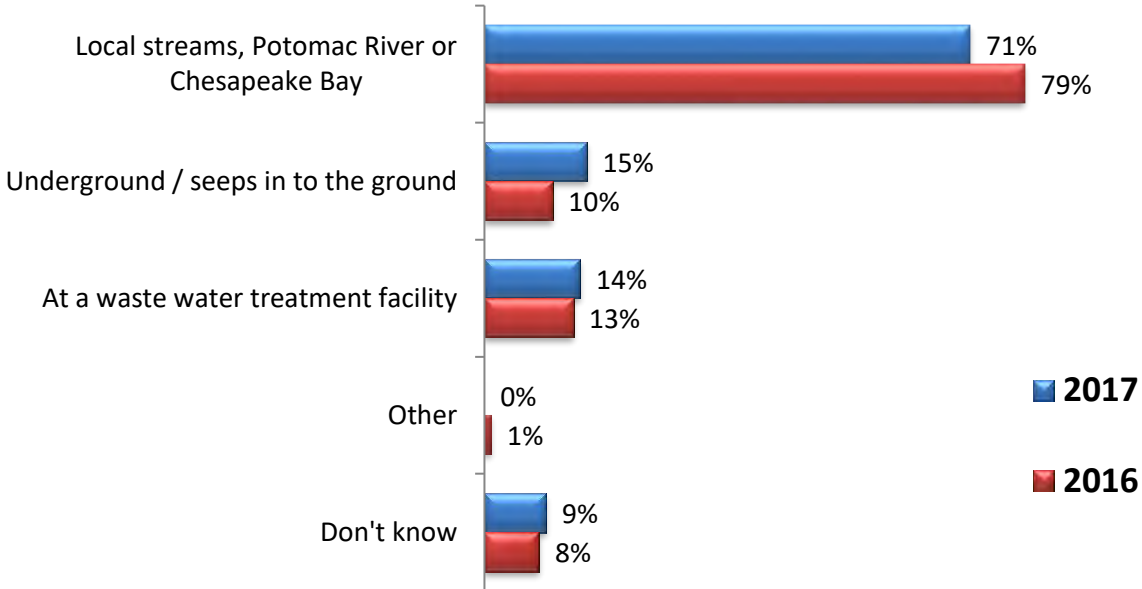
242

118

71

65

"Stormwater" runoff is rain or other water that flows into the street, along the gutter and into the storm drain. To the best of your knowledge, where do you believe storm water eventually ends up?



- “Local streams, Potomac River or Chesapeake Bay” was selected most often as where stormwater is believed to end up. Prior to 2016, this response option was shown as two options with “Local streams” separate, so the 2016 and 2017 results are not comparable to the past for this question. Results by various subgroups are shown below and on the next page. For example, those from Arlington were more likely than others to select local streams, Potomac River or Chesapeake Bay. Males were also more likely than females to select that response, while females and renters were more likely than others to select underground / seeps in to the ground. Those of Hispanic heritage were more likely than others to select waste water treatment facility.

Believed Destination of Stormwater	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Local streams, Potomac River or Chesapeake Bay	60%	91%	70%	69%	61%
Underground / seeps in to the ground	15%	9%	17%	11%	14%
At a waste water treatment facility	21%	13%	11%	16%	25%
Don't know	8%	0%	13%	9%	9%
<i>N = number of respondents</i>	52	69	254	81	44

Believed Destination of Stormwater	Have Lived in Northern Virginia			
	< 4 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Local streams, Potomac River or Chesapeake Bay	67%	65%	72%	73%
Underground / seeps in to the ground	21%	19%	13%	12%
At a waste water treatment facility	25%	13%	17%	11%
Don't know	10%	13%	6%	9%
<i>N = number of respondents</i>	61	83	103	253

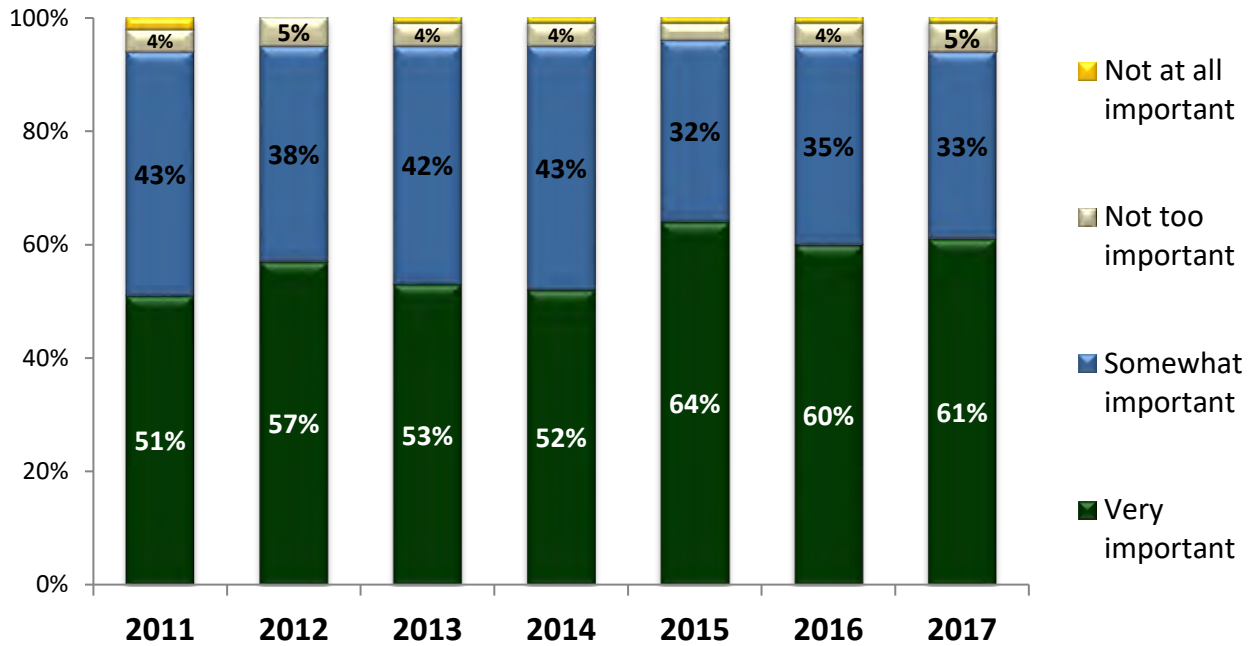
Believed Destination of Stormwater	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Local streams, Potomac River or Chesapeake Bay	65%	68%	71%	73%	78%
Underground / seeps in to the ground	28%	17%	11%	11%	6%
At a waste water treatment facility	21%	16%	18%	9%	6%
Don't know	9%	11%	8%	7%	11%
<i>N = number of respondents</i>	109	96	99	95	101

Believed Destination of Stormwater	Gender		Homeownership		Ethnicity
	Male	Female	Homeowners	Renters	Hispanic
Local streams, Potomac River or Chesapeake Bay	79%	63%	72%	69%	63%
Underground / seeps in to the ground	9%	20%	11%	24%	18%
At a waste water treatment facility	12%	17%	14%	15%	28%
Don't know	7%	11%	8%	14%	8%
<i>N = number of respondents</i>	242	258	376	124	40

<i>Believed Destination of Stormwater</i>	Single- family Home	Townhouse	Apartment	Condo
Local streams, Potomac River or Chesapeake Bay	69%	77%	66%	74%
Underground / seeps in to the ground	14%	10%	27%	11%
At a waste water treatment facility	14%	11%	21%	14%
Don't know	10%	6%	11%	9%
<i>N = number of respondents</i>	242	118	71	65

- When asked the question below, the proportion rating “Very important” in 2017 did not differ significantly from 2015 and 2016, but it was significantly higher than in 2011, 2013, and 2014.

How important do you think it is for local governments to spend more money on protecting water quality?



- The majority from each area felt it was “Very important” for local governments to spend more money on protecting water quality.

Importance of Local Water Quality Spending	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Not at all important	4%	0%	1%	1%	0%
Not too important	6%	1%	4%	9%	2%
Somewhat important	17%	45%	34%	30%	36%
Very important	73%	54%	61%	60%	62%
<i>N = number of respondents</i>	52	69	254	81	44

- In each of the subgroups covered in the tables on the next page, a majority gave a rating of “Very important.”

Importance of Local Water Quality Spending	Have Lived in Northern Virginia < 4 Years			
	4 to 9 Years	10 to 19 Years	20 or More Years	
Not at all important	2%	2%	0%	1%
Not too important	6%	8%	1%	5%
Somewhat important	36%	30%	38%	31%
Very important	56%	60%	61%	63%
<i>N = number of respondents</i>	61	83	103	253

Importance of Local Water Quality Spending	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Not at all important	2%	0%	2%	1%	0%
Not too important	4%	5%	3%	7%	4%
Somewhat important	36%	41%	32%	28%	29%
Very important	58%	54%	63%	64%	67%
<i>N = number of respondents</i>	109	96	99	95	101

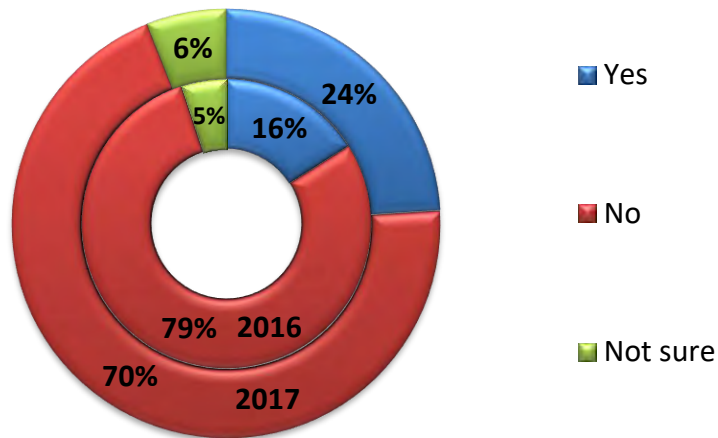
Importance of Local Water Quality Spending	Gender		Homeownership		Hispanic Respondents
	Male	Female	Homeowners	Renters	
Not at all important	1%	1%	1%	1%	3%
Not too important	8%	1%	5%	2%	5%
Somewhat important	37%	30%	33%	33%	22%
Very important	54%	68%	61%	64%	70%
<i>N = number of respondents</i>	242	258	376	124	40

Importance of Local Water Quality Spending	Home Type			
	Single- family Home	Townhouse	Apartment	Condo
Not at all important	1%	1%	3%	0%
Not too important	6%	3%	2%	3%
Somewhat important	36%	27%	32%	35%
Very important	57%	69%	63%	62%
<i>N = number of respondents</i>	242	118	71	65

Advertising

- In 2016 and 2017, a video of an advertisement featuring “rubber duckies” was presented in the survey, and respondents were asked if they had seen it on TV or the Internet. The proportion recalling it in 2017 (24%) was significantly higher than in 2016 (16%).

Please view the video above. Have you seen this ad, or a similar one on TV or the Internet about reducing water pollution?



- The proportion recalling the ad by area ranged from 12% to 32%, with Leesburg / Loudoun having a significantly higher result than Arlington. As shown on the next page, the proportion recalling the ad was sizeable for each subgroup, although males were more likely than females to report recall.

Saw TV / Internet Ads on Reducing Water Pollution	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	17%	12%	25%	32%	25%
No	73%	85%	68%	61%	73%
Not sure	10%	3%	7%	7%	2%
<i>N = number of respondents</i>	52	69	254	81	44

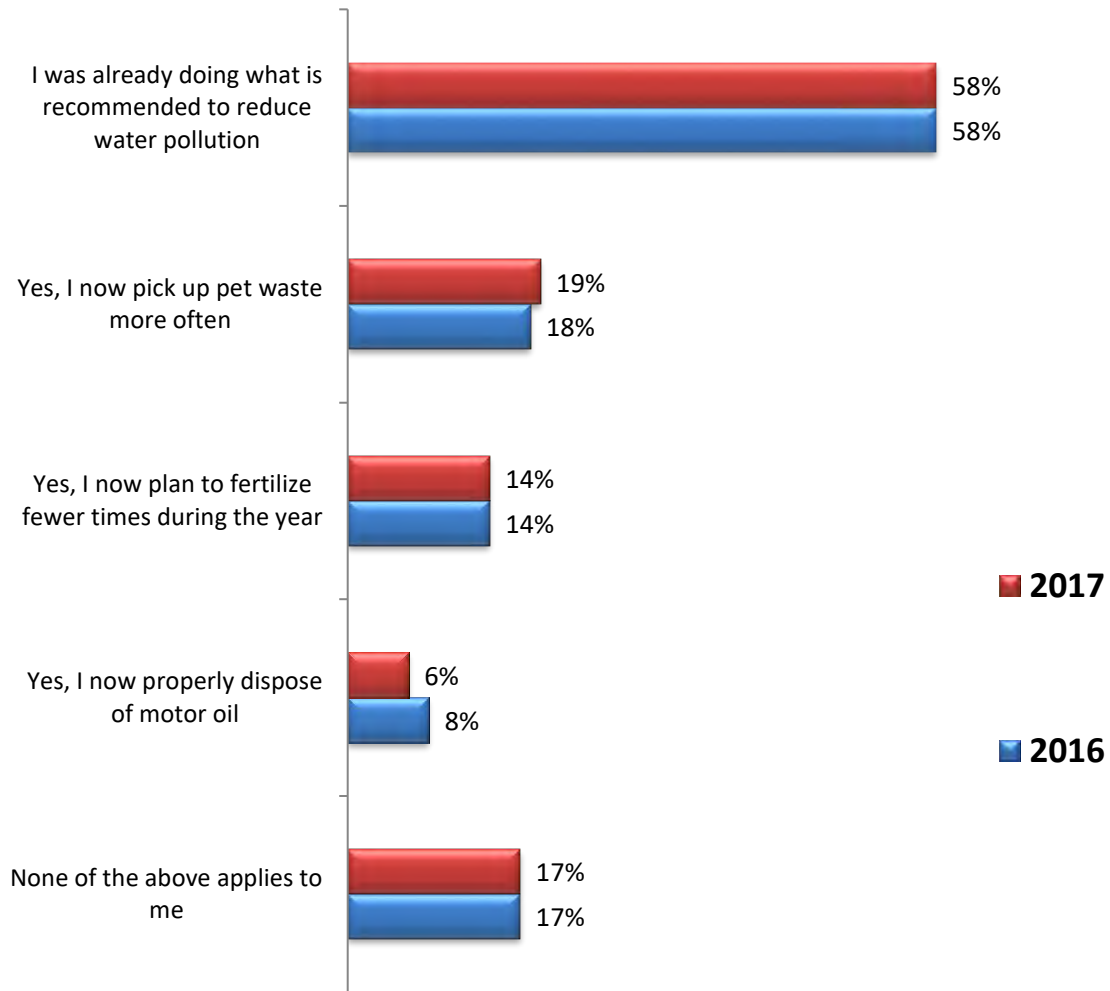
Saw TV / Internet Ads on Reducing Water Pollution	Have Lived in Northern Virginia < 4 Years			
		4 to 9 Years	10 to 19 Years	20 or More Years
Yes	20%	28%	17%	26%
No	77%	64%	75%	68%
Not sure	3%	8%	8%	6%
<i>N = number of respondents</i>	61	83	103	253

Saw TV / Internet Ads on Reducing Water Pollution	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Yes	31%	22%	22%	21%	21%
No	63%	73%	76%	72%	68%
Not sure	6%	5%	2%	7%	11%
<i>N = number of respondents</i>	109	96	99	95	101

Saw TV / Internet Ads on Reducing Water Pollution	Gender		Homeownership		Hispanic Respondents
	Male	Female	Homeowners	Renters	
Yes	29%	18%	23%	26%	32%
No	66%	74%	72%	64%	50%
Not sure	5%	8%	5%	10%	18%
<i>N = number of respondents</i>	242	258	376	124	40

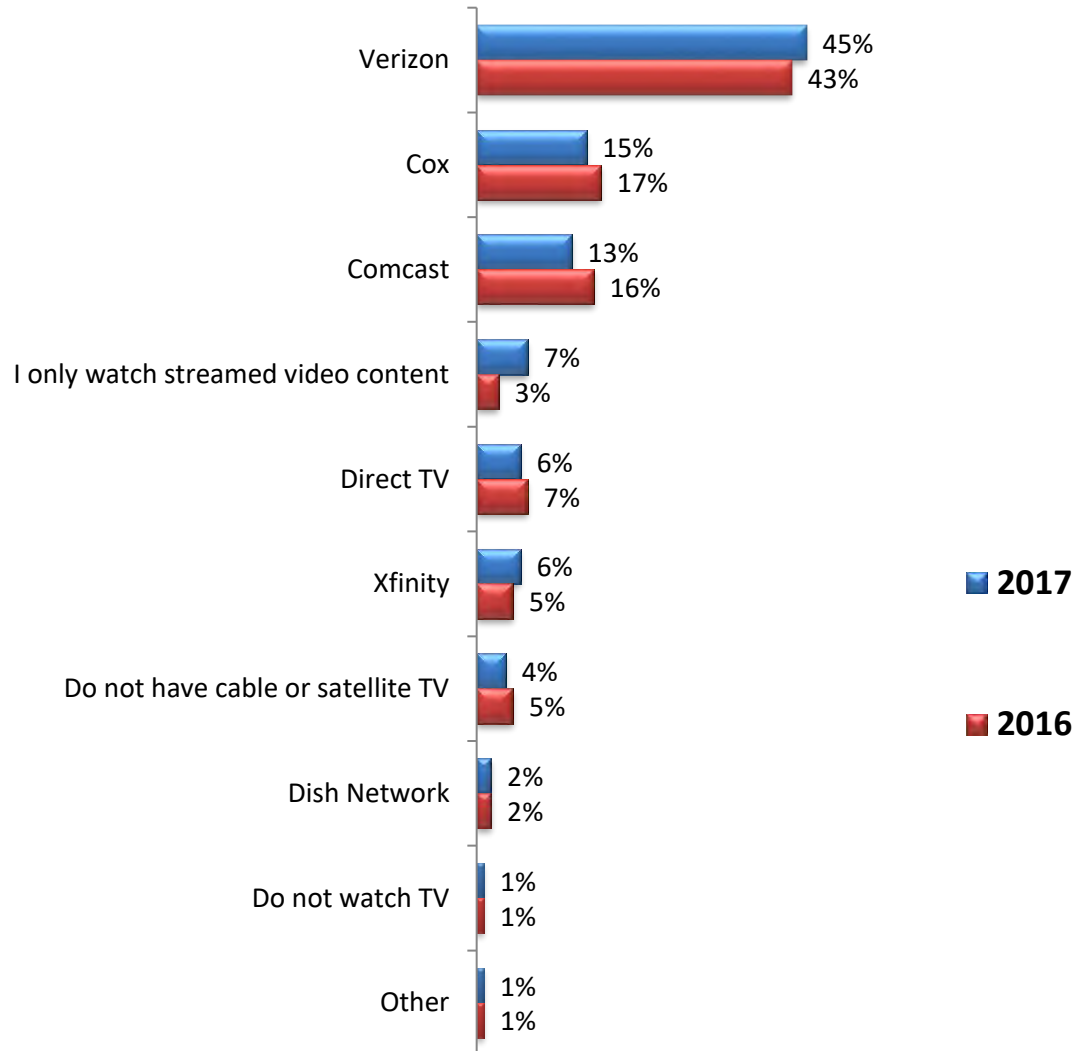
Saw TV / Internet Ads on Reducing Water Pollution	Home Type			
	Single- family Home	Townhouse	Apartment	Condo
Yes	27%	25%	24%	9%
No	68%	68%	68%	85%
Not sure	5%	7%	8%	6%
<i>N = number of respondents</i>	242	118	71	65

Did seeing this ad make you take action on your property to prevent water pollution?



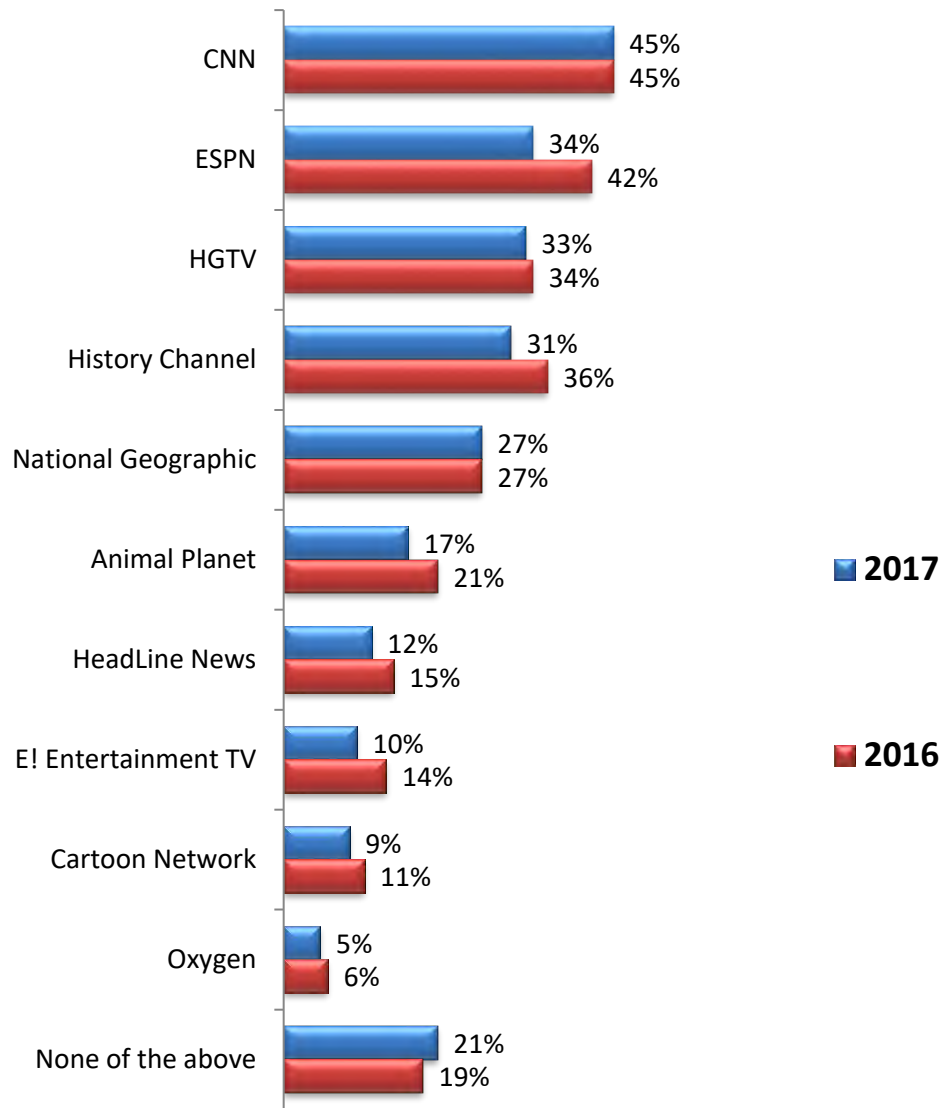
- The results for the question above were similar in 2016 and 2017. However, this question was asked only of those who recalled the advertising. Since the proportion recalling the ad was higher in 2017 than in 2016, the results above apply to larger number of respondents in 2017.

What TV service provider do you use?



- Verizon was selected most often (by 45% in 2017) as their TV service provider.
- Based on a separate analysis (not shown in chart), Verizon had the highest share in four out of five of the areas: 56% in Leesburg / Loudoun, 52% in Fairfax Inclusive, 44% in Arlington, and 30% in Dumfries / Stafford. However, Comcast had the largest share (40%) in Alexandria.
- One reason for adding the question above to the 2016 survey was to determine if recall of the ad differed by TV provider. Based on a separate analysis (not shown in chart), it turns out that TV recall was similar across providers. When looking at the providers with at least 30 respondents using the provider, the proportion recalling the ad was 29% among Verizon customers, 26% among Direct TV customers, 25% among Comcast customers, and 20% among Cox customers.

Which channels have you watched in the past 30 days?

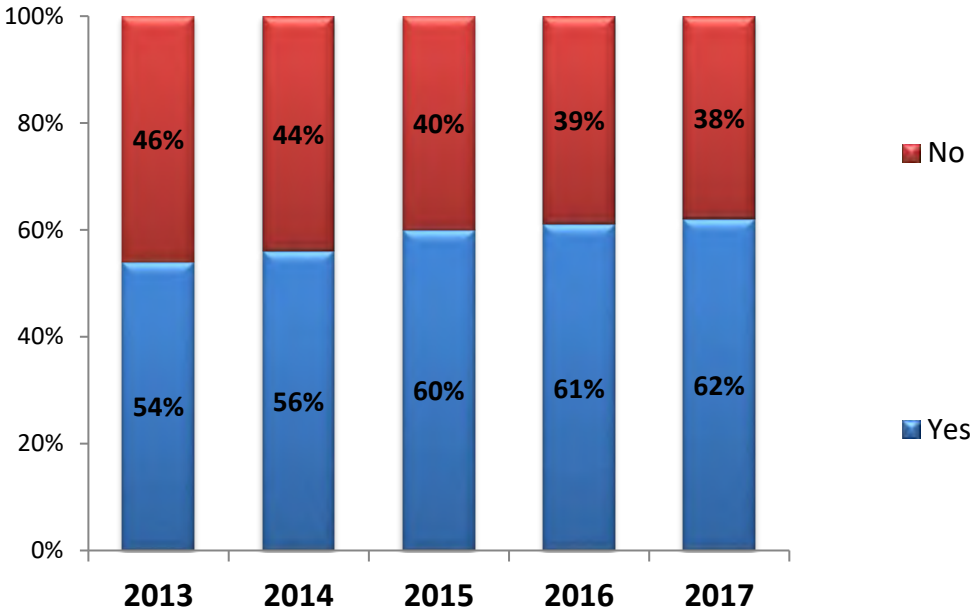


- CNN (45%) was selected most often as a channel watched within the past 30 days.
- One reason for adding the question above to the 2016 survey was to determine if recall of the ad differed by channels watched. Based on a separate analysis (not shown in chart), for four of the channels, their viewers were significantly more likely than others to recall the ad that was shown in the survey: Cartoon Network (43% of those who watched this channel recalled the ad), Animal Planet (36%), History Channel (34%), and National Geographic (32%).
- Among those who watched *none* of the channels above, only 13% recalled the ad.

- The logo below was shown to all respondents regardless of whether they had seen advertising or not, and more than half of the total sample recognized the logo. The difference between 62% in 2017 and 54% in 2013 was statistically significant. However, the 2017 result did not differ significantly compared to the results in 2014 through 2016.



Have you seen the logo above anywhere?



- Results for the question above in 2017 by subgroup are shown on the next page. Interestingly, awareness was significantly lower in Dumfries / Stafford. This was the case last year as well, and this suggests that there is room for increasing awareness in this area.

Have Seen Logo	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	73%	81%	62%	59%	27%
No	27%	19%	38%	41%	73%
<i>N = number of respondents</i>	52	69	254	81	44

Have Seen Logo	Have Lived in Northern Virginia < 4 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Yes	54%	69%	68%	60%
No	46%	31%	32%	40%
<i>N = number of respondents</i>	61	83	103	253

Have Seen Logo	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Yes	66%	65%	57%	67%	57%
No	34%	35%	43%	33%	43%
<i>N = number of respondents</i>	109	96	99	95	101

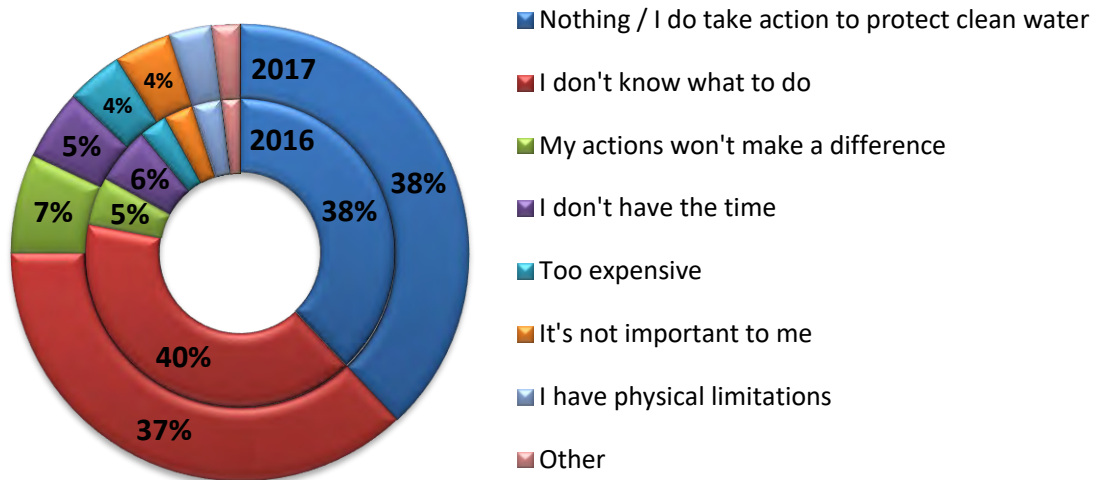
Have Seen Logo	Male	Female	Homeowners	Renters	Hispanic Respondents
Yes	68%	57%	64%	59%	63%
No	32%	43%	36%	41%	38%
<i>N = number of respondents</i>	242	258	376	124	40

Have Seen Logo	Single-family Home	Townhouse	Apartment	Condo
Yes	60%	67%	61%	65%
No	40%	33%	39%	35%
<i>N = number of respondents</i>	242	118	71	65

Protecting Clean Water

- In 2017 and 2016, nearly four-in-ten (38%) felt nothing prevents them from taking action to protect clean water.

What most prevents you from taking action to protect clean water?



- Females and renters were more likely than others to select “I don’t know what to do.” The proportion selecting “Nothing / I do take action to protect clean water” increased with age.

Most Prevents Action	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Nothing	34%	47%	39%	36%	32%
I don't know what to do	29%	42%	38%	33%	36%
Won't make a difference	9%	7%	7%	1%	9%
I don't have the time	4%	3%	6%	6%	9%
Too expensive	6%	0%	4%	6%	7%
It's not important to me	8%	0%	2%	8%	5%
Physical limitations	8%	0%	3%	6%	2%
Other	2%	1%	1%	4%	0%

N = number of respondents

52

69

254

81

44

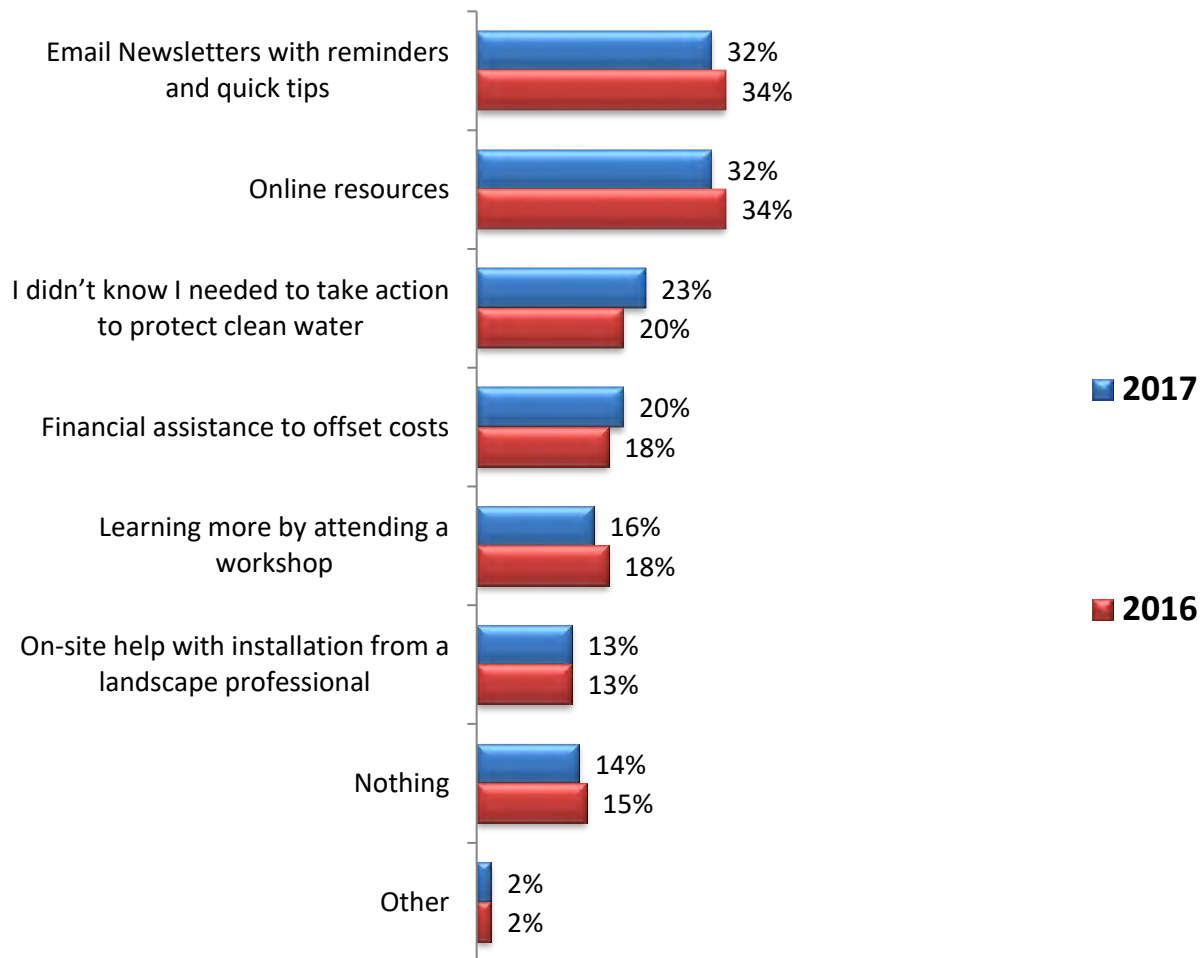
Most Prevents Action	Have Lived in Northern Virginia < 4 Years			
		4 to 9 Years	10 to 19 Years	20 or More Years
Nothing	28%	36%	38%	42%
I don't know what to do	39%	35%	39%	36%
Won't make a difference	10%	7%	6%	6%
I don't have the time	5%	7%	7%	4%
Too expensive	3%	6%	6%	3%
It's not important to me	8%	4%	2%	3%
Physical limitations	5%	5%	1%	4%
Other	2%	0%	1%	2%
<i>N = number of respondents</i>	61	83	103	253

Most Prevents Action	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Nothing	23%	26%	39%	51%	53%
I don't know what to do	45%	37%	43%	33%	26%
Won't make a difference	10%	10%	5%	3%	6%
I don't have the time	9%	7%	4%	4%	2%
Too expensive	5%	7%	5%	3%	1%
It's not important to me	4%	5%	2%	2%	5%
Physical limitations	4%	5%	1%	2%	4%
Other	0%	3%	1%	2%	3%
<i>N = number of respondents</i>	109	96	99	95	101

Most Prevents Action	Gender		Homeownership		Hispanic Respondents
	Male	Female	Homeowners	Renters	
Nothing	41%	36%	42%	25%	25%
I don't know what to do	32%	41%	33%	47%	32%
Won't make a difference	8%	6%	7%	6%	8%
I don't have the time	6%	5%	6%	5%	12%
Too expensive	4%	5%	4%	4%	10%
It's not important to me	4%	3%	4%	3%	5%
Physical limitations	3%	3%	2%	8%	5%
Other	2%	1%	2%	2%	3%
<i>N = number of respondents</i>	242	258	376	124	40

Most Prevents Action	Single-family Home	Townhouse	Apartment	Condo
Nothing	40%	47%	20%	37%
I don't know what to do	35%	33%	45%	43%
Won't make a difference	6%	5%	11%	8%
I don't have the time	5%	4%	7%	8%
Too expensive	5%	3%	4%	2%
It's not important to me	4%	5%	1%	0%
Physical limitations	3%	3%	9%	0%
Other	2%	0%	3%	2%
<i>N = number of respondents</i>	242	118	71	65

What would help you to take action to protect clean water?



- In 2017 and 2016, approximately one-third indicated that email newsletters with reminders and quick tips and/or online resources would help them take action to protect clean water.
- Results by subgroup are shown on the following pages.

Help Take Action	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Email Newsletters with reminders and quick tips	33%	32%	34%	30%	25%
Online resources	37%	32%	31%	33%	34%
I didn't know I needed to take action to protect clean water	21%	19%	25%	22%	23%
Financial assistance to offset costs	25%	22%	20%	12%	20%
Learning more by attending a workshop	12%	13%	18%	17%	11%
On-site help with installation from a landscape professional	17%	12%	14%	10%	7%
Other	4%	1%	2%	1%	5%
Nothing	13%	13%	13%	16%	16%
<i>N = number of respondents</i>	52	69	254	81	44

Help Take Action	Have Lived in Northern Virginia < 4 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Email Newsletters with reminders and quick tips	26%	33%	30%	34%
Online resources	41%	36%	40%	26%
I didn't know I needed to take action to protect clean water	34%	17%	24%	22%
Financial assistance to offset costs	26%	25%	19%	16%
Learning more by attending a workshop	20%	20%	14%	15%
On-site help with installation from a landscape professional	23%	18%	17%	6%
Other	3%	1%	2%	2%
Nothing	8%	8%	12%	18%
<i>N = number of respondents</i>	61	83	103	253

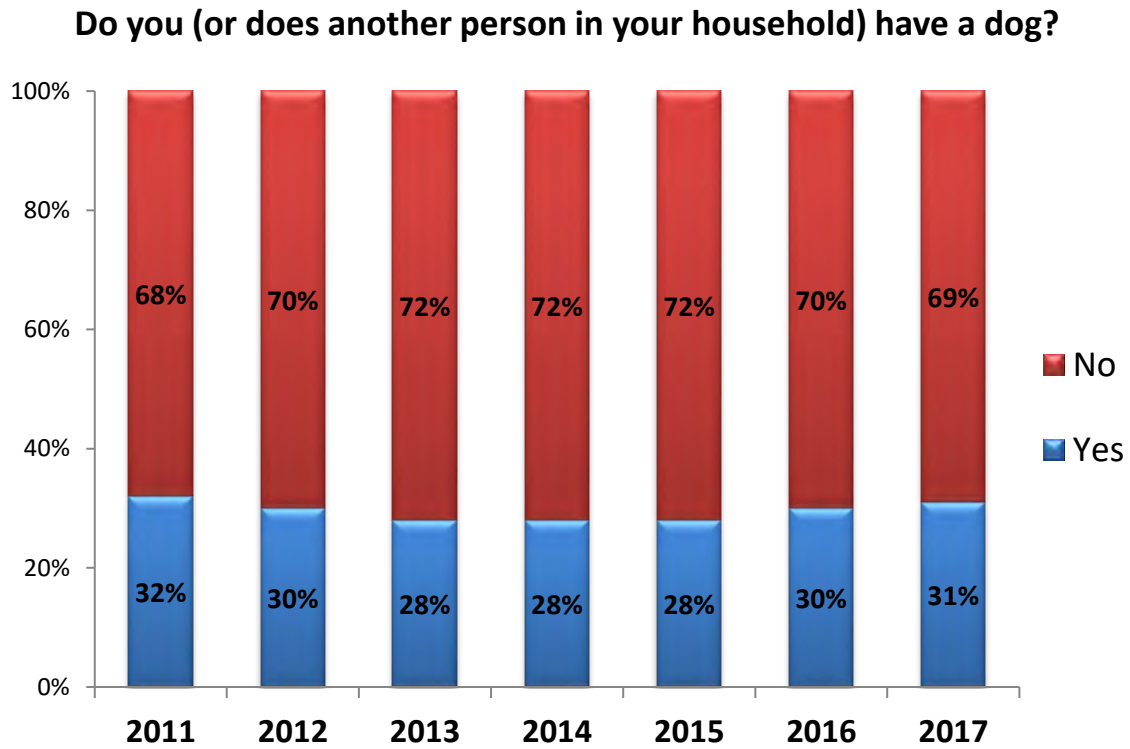
Help Take Action	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Email Newsletters with reminders and quick tips	31%	20%	34%	41%	34%
Online resources	37%	30%	37%	33%	24%
I didn't know I needed to take action to protect clean water	27%	32%	21%	19%	16%
Financial assistance to offset costs	29%	25%	21%	9%	12%
Learning more by attending a workshop	20%	19%	14%	14%	13%
On-site help with installation from a landscape professional	17%	20%	12%	11%	3%
Other	2%	1%	3%	3%	1%
Nothing	7%	6%	13%	14%	29%
<i>N = number of respondents</i>	109	96	99	95	101

Help Take Action	Male	Female	Homeowners	Renters	Hispanic Respondents
Email Newsletters with reminders and quick tips	30%	34%	33%	29%	28%
Online resources	31%	34%	32%	32%	48%
I didn't know I needed to take action to protect clean water	19%	27%	22%	27%	20%
Financial assistance to offset costs	17%	22%	19%	22%	25%
Learning more by attending a workshop	13%	19%	16%	17%	13%
On-site help with installation from a landscape professional	10%	15%	13%	13%	18%
Other	2%	2%	2%	2%	0%
Nothing	19%	9%	13%	15%	8%
<i>N = number of respondents</i>	242	258	376	124	40

Help Take Action	Single-family Home	Townhouse	Apartment	Condo
Email Newsletters with reminders and quick tips	29%	40%	30%	31%
Online resources	30%	40%	37%	22%
I didn't know I needed to take action to protect clean water	22%	19%	28%	28%
Financial assistance to offset costs	19%	19%	20%	22%
Learning more by attending a workshop	15%	18%	15%	18%
On-site help with installation from a landscape professional	16%	8%	14%	6%
Other	2%	3%	1%	2%
Nothing	15%	10%	14%	14%
<i>N = number of respondents</i>	242	118	71	65

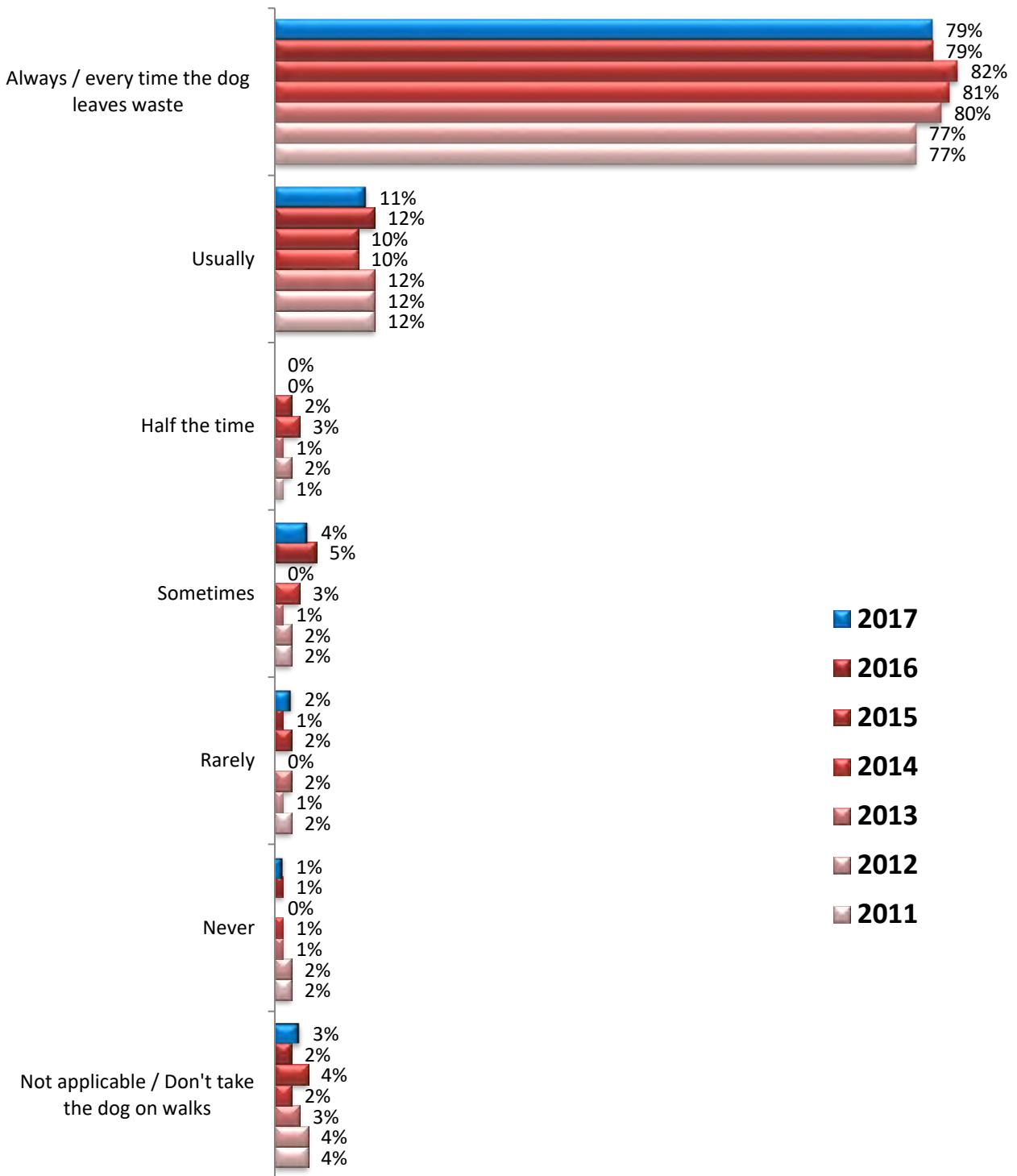
Behavior Among Dog Owners

- More than one-fourth each year indicated that they have a dog (or someone else in their household has a dog).



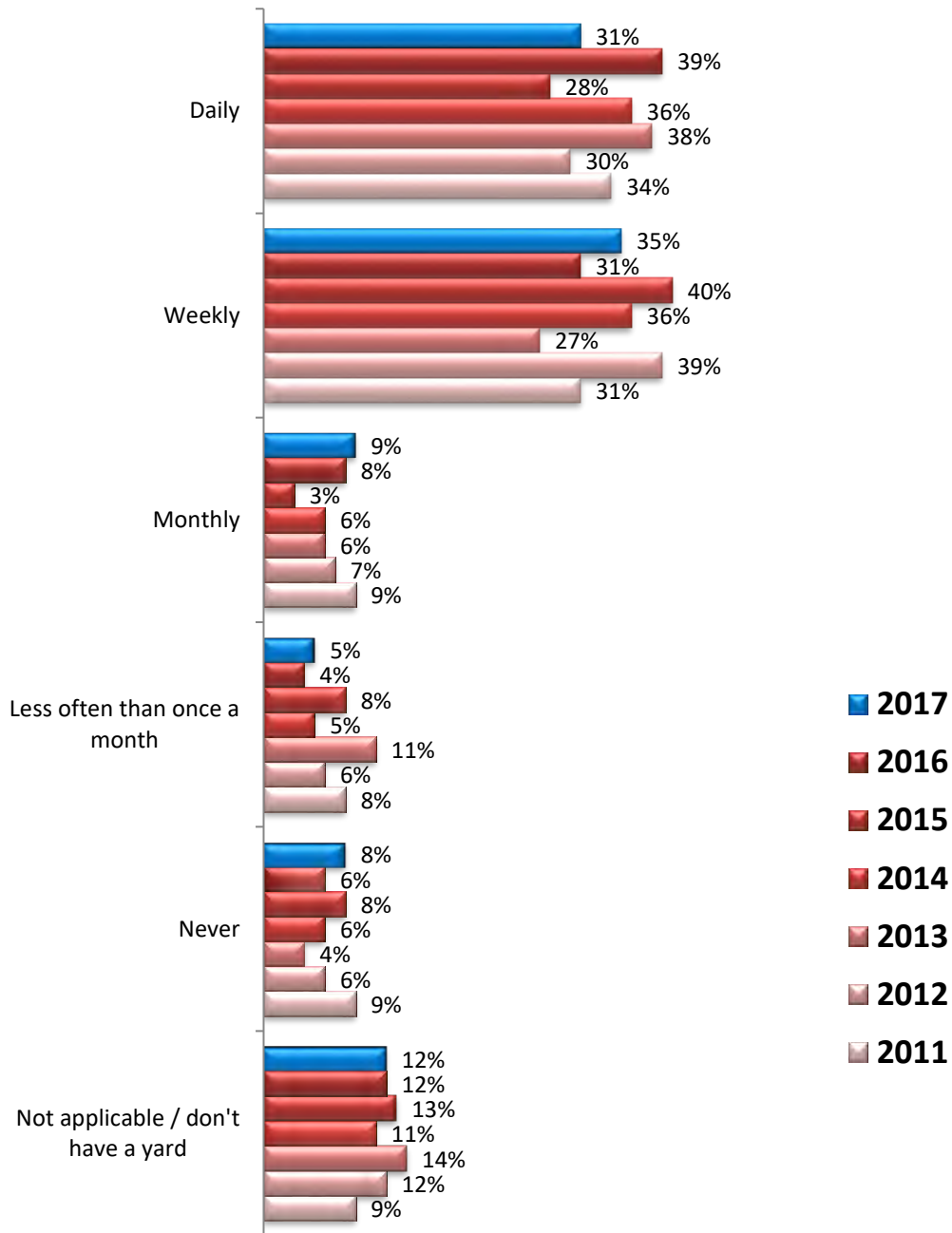
- On the following pages, results are shown for questions about how often dog owners pick up after their dogs and what motivates them to do so.

When taking your dog(s) for a walk, how often do you pick up after your dog(s)?



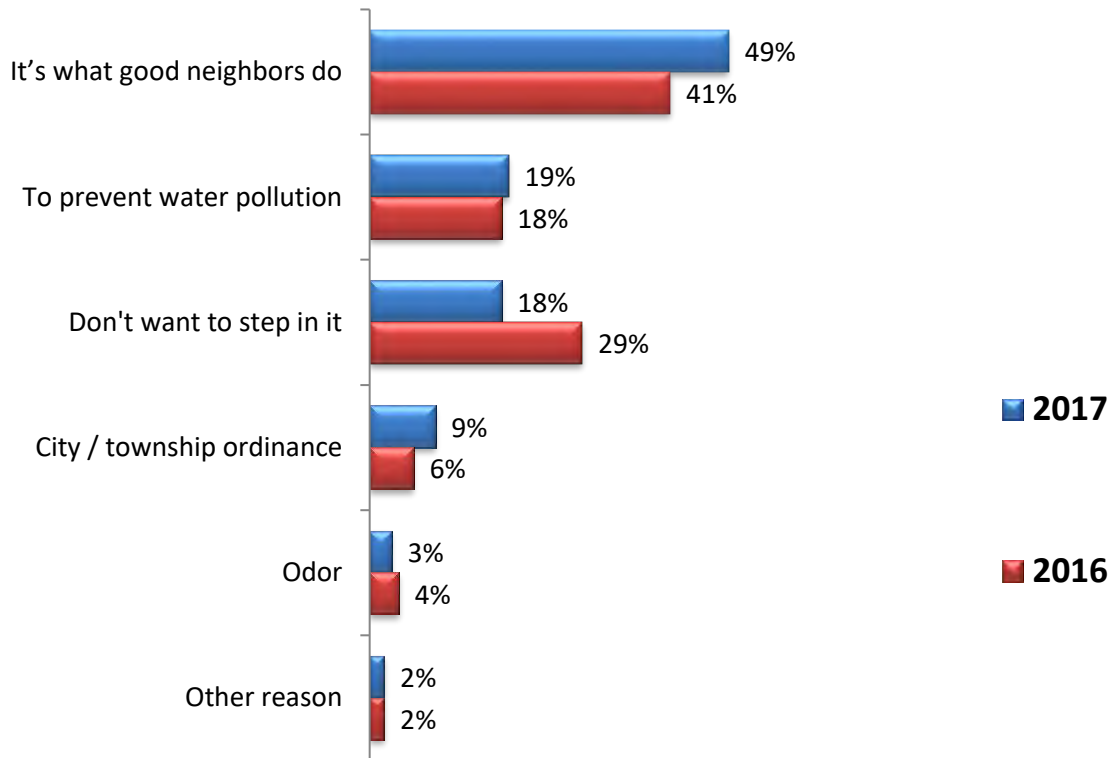
- Nearly eight-in-ten (79%) in 2017 indicated that they *always* pick up after their dog(s) when taking the dog(s) for a walk.

How often do you (or does someone else from your household) remove dog waste from your yard?



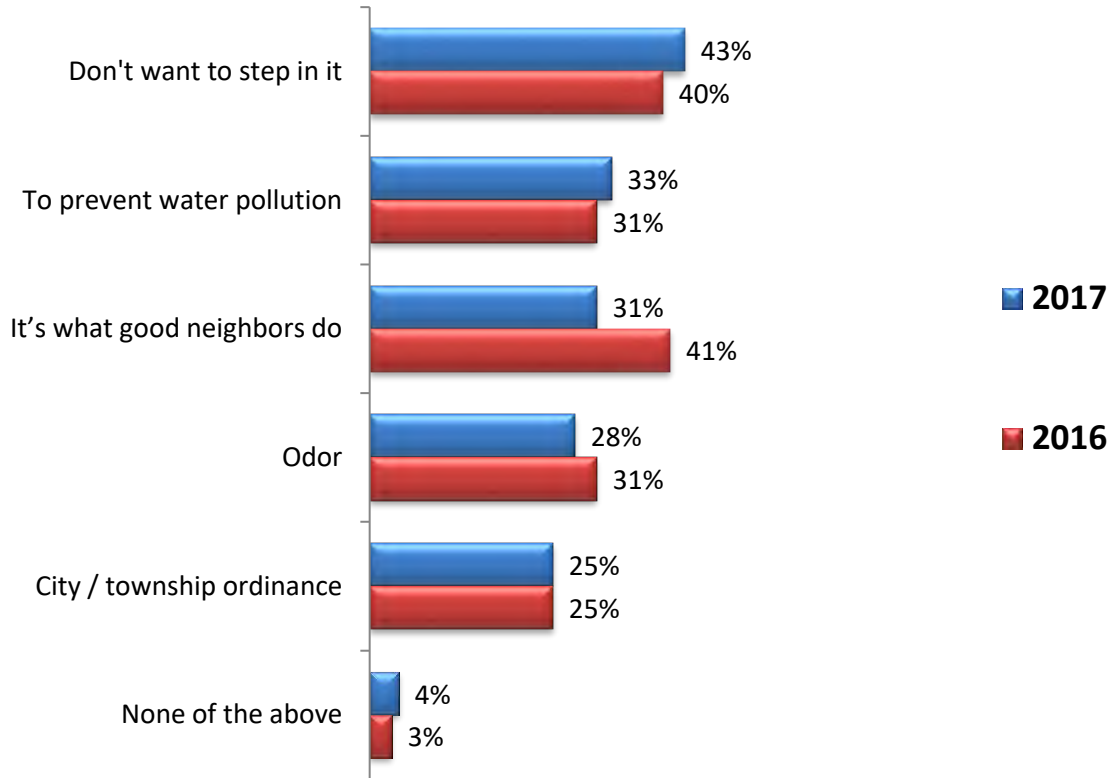
- In their own yard, the majority removed pet waste daily or weekly.
- There was some fluctuation from year to year in the proportions reporting daily and weekly removal of dog waste from their yard, but recall that this question was asked only of dog owners, and the sample size of dog owners is lower than the total sample size, while the margin of error is higher for a lower sample size.

What is the most important reason to pick up after your dog(s)?



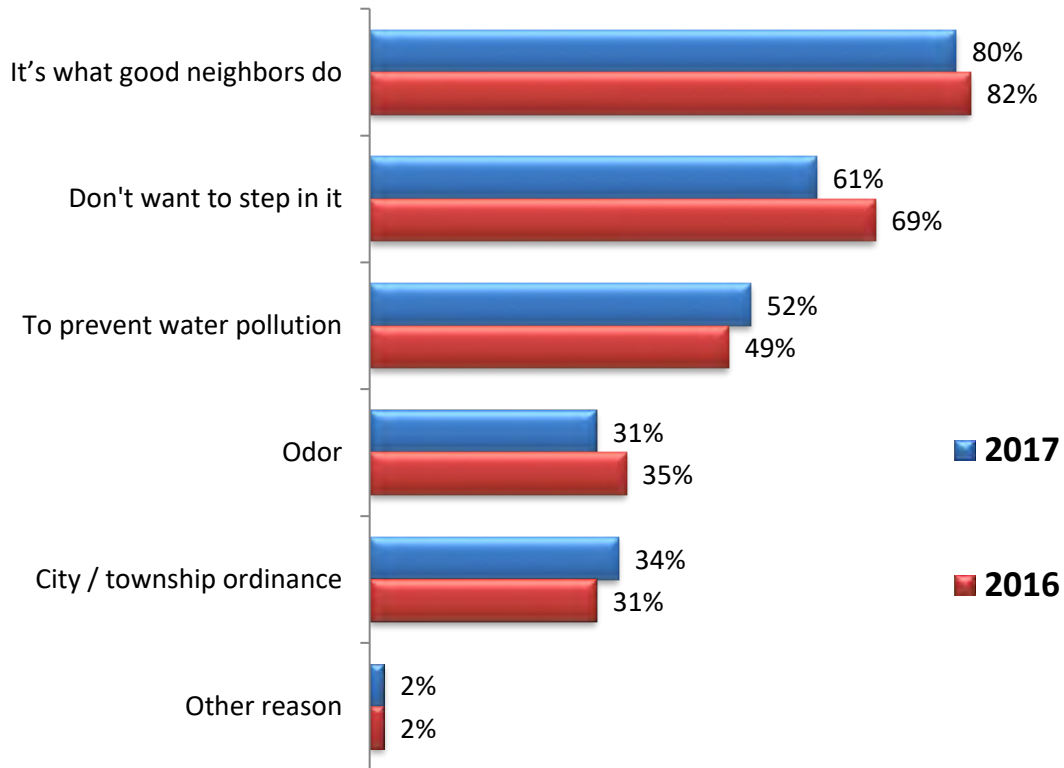
- When asked about the “Most important reason” for picking up after their dog(s), nearly half (49%) selected “It's what good neighbors do.”
- Nearly one-in-five (19% in 2017 and 18% in 2016) selected “To prevent water pollution” as the most important reason for picking up after their dog.

What other reasons (if any) have motivated you to pick up after your dog(s)?



- In addition to the *most* important reason for picking up after their dog(s) as shown on the previous page, respondents were also asked to select any other reasons that motivate them. As shown in the chart above, an additional 33% selected “To prevent water pollution” as a motivation. When combining results in the chart above with the chart on the previous page, a total of 52% in 2017 were motivated to pick up after their dog(s) in order “To prevent water pollution,” as shown on the next page.

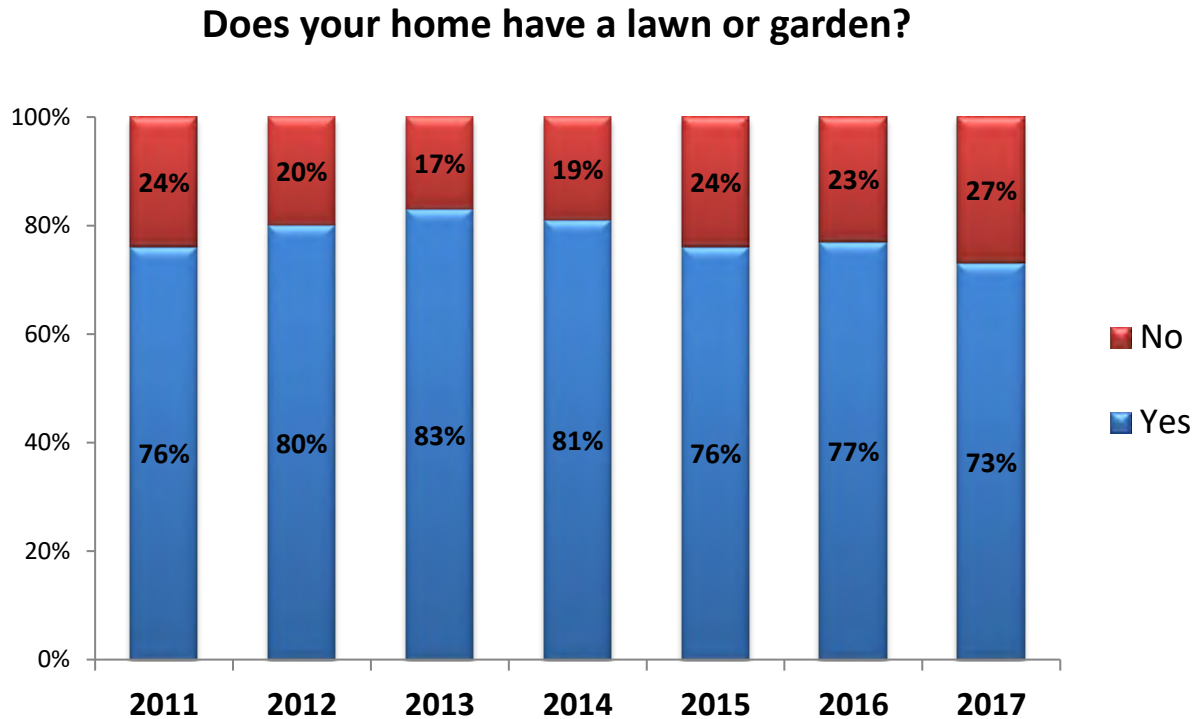
Most important + other reasons motivating dog owners to pick up after your dog(s):



- While it is encouraging to see that approximately half (52%) were motivated to pick up after their dog by wanting to prevent water pollution, this also means that approximately half were not thinking about water pollution in this context.

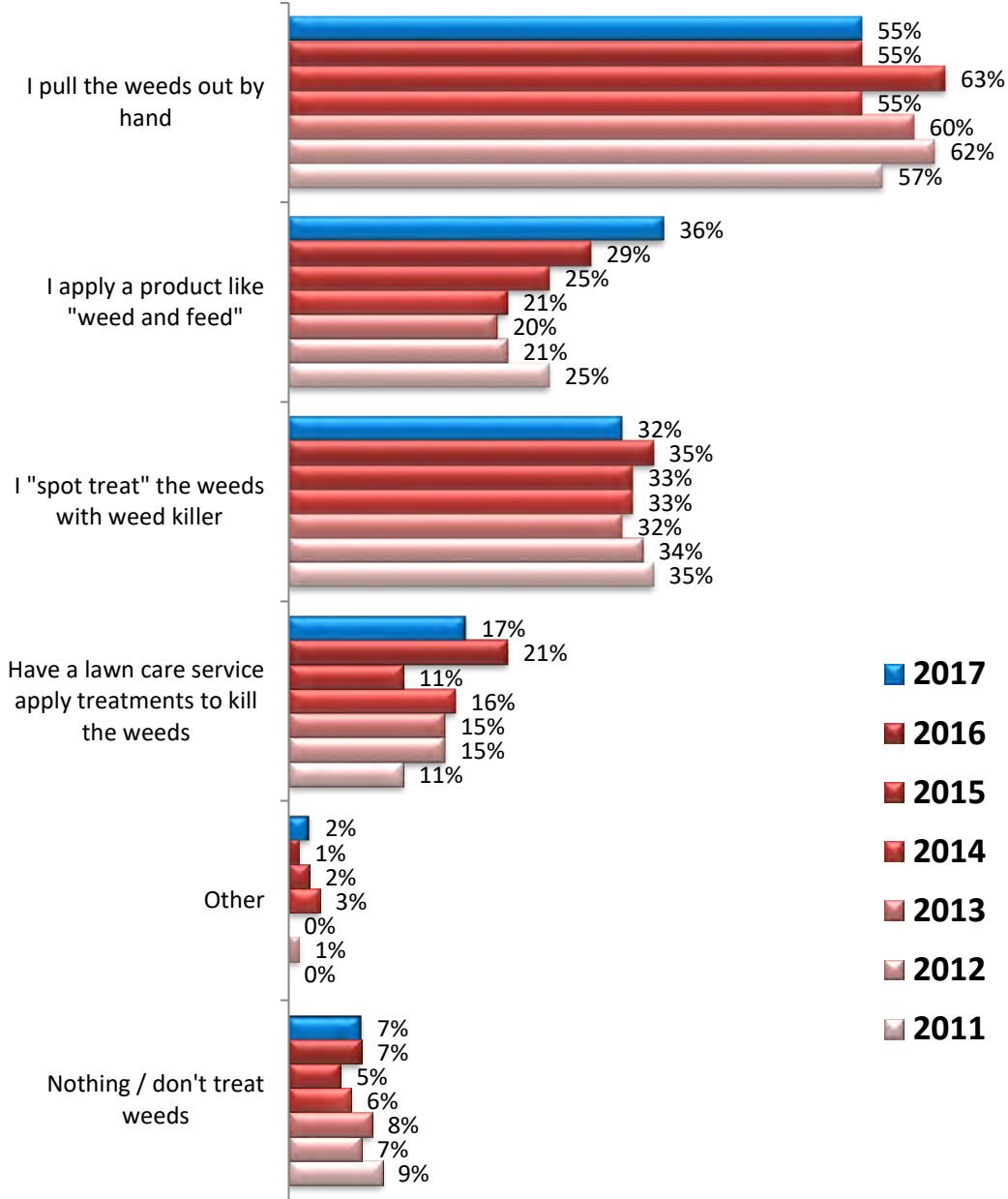
Behavior Related to Lawns & Gardens

- Nearly three-fourths (73%) of the survey respondents in 2017 indicated that their current home has a lawn or garden.



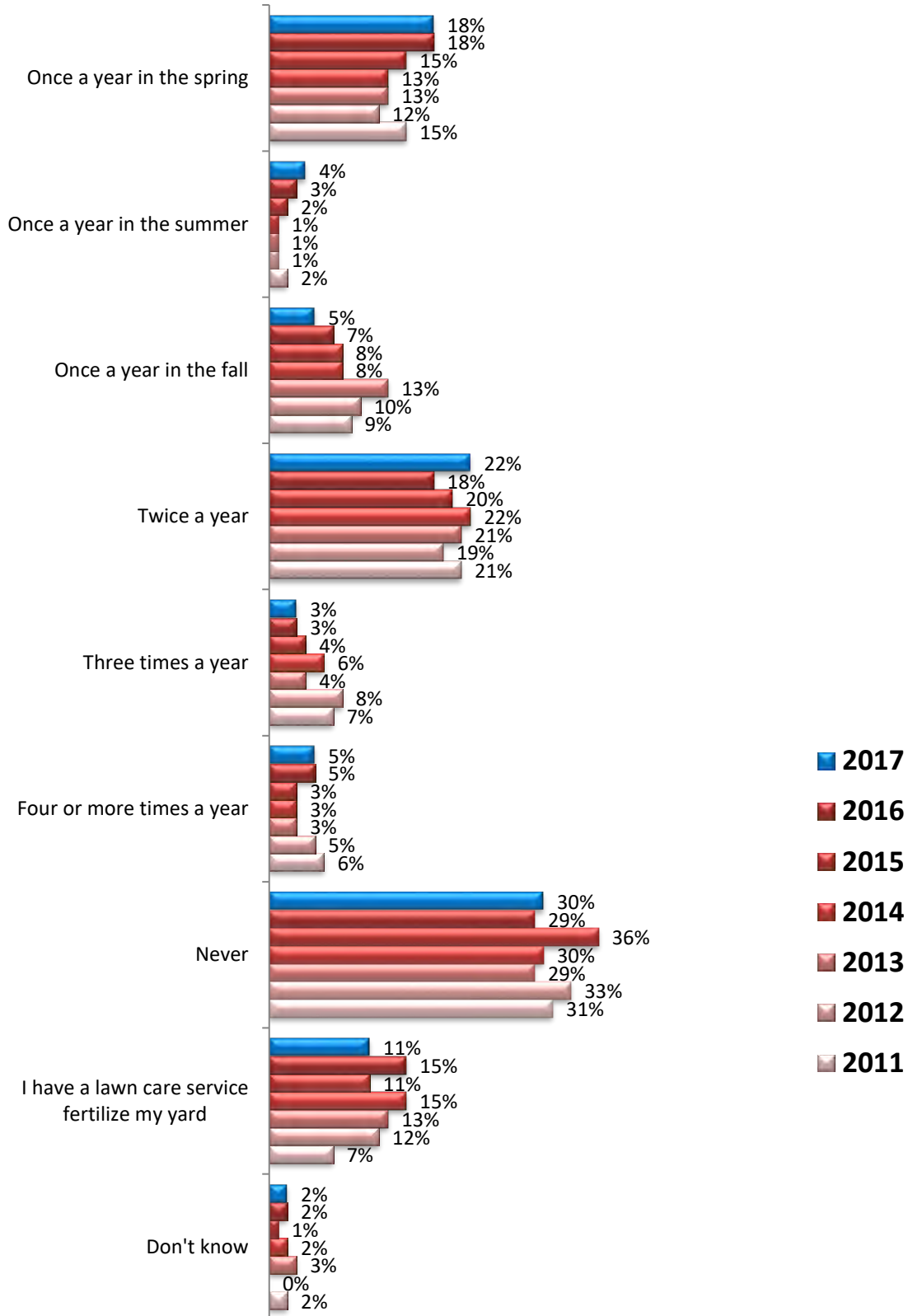
- In a separate question, of the respondents who have a lawn or garden, two-thirds (66%) in 2017 identified themselves as the primary person taking care of the lawn or garden. Several questions about lawns and gardens were then asked only of these respondents (i.e., primary person in the household who takes care of the lawn or garden).

How do you treat weeds in your lawn or garden?



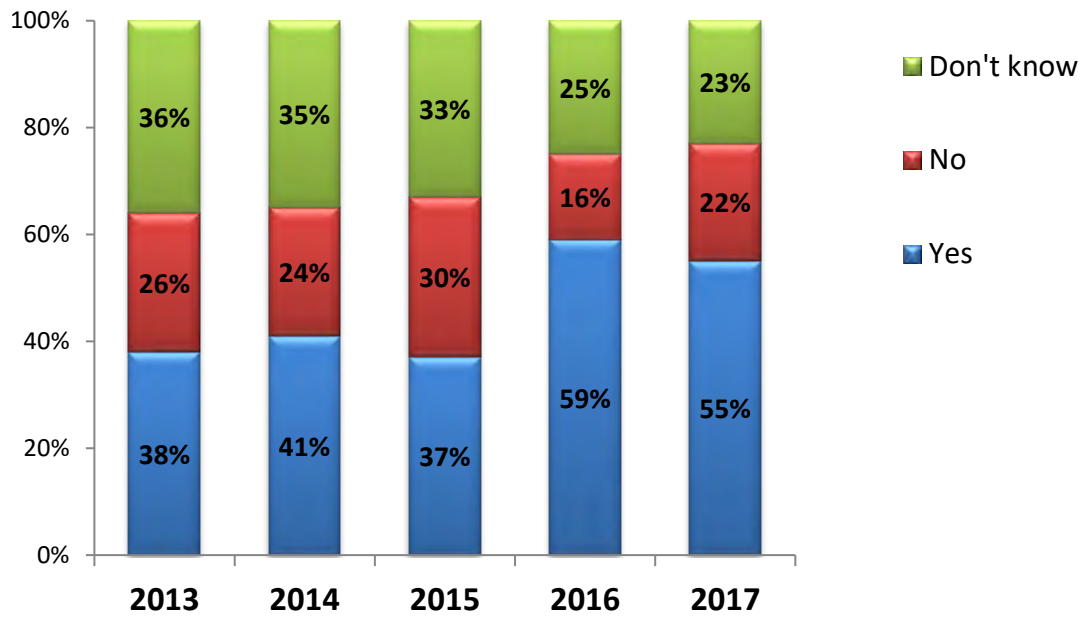
- When dealing with weeds, more than half (55%) in 2017 reported pulling them out by hand.
- However, it was possible to report more than one way of dealing with weeds. Slightly more than one-third (36%) in 2017 reported using “weed and feed.”
- On the next page, a chart shows how often northern Virginia residents fertilize their lawn.

Which of the following best describes how often you fertilize your lawn?

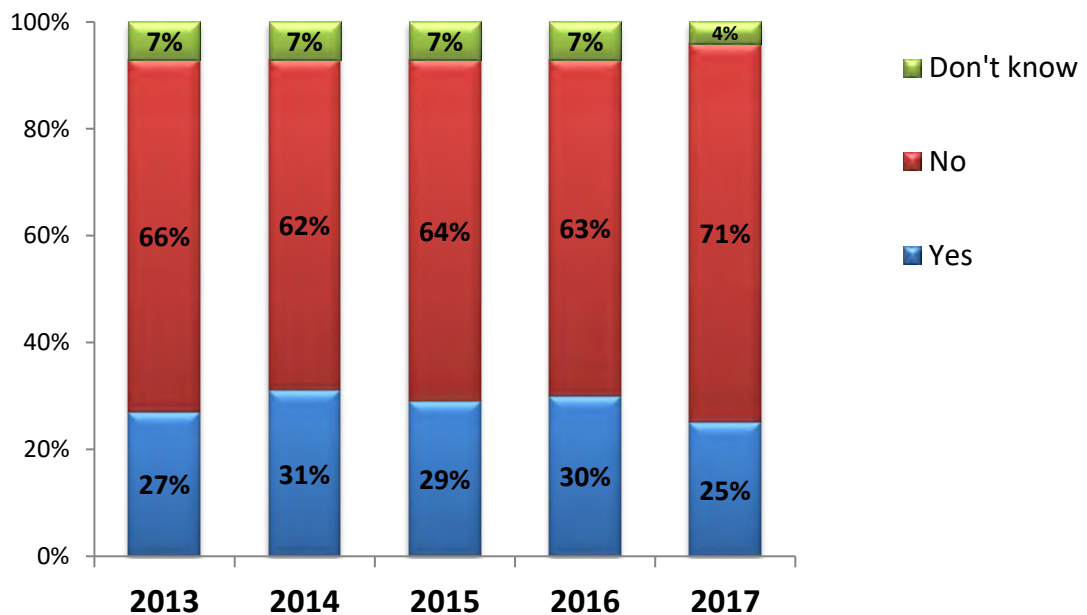


- The next two questions were first asked in the 2013 survey. These results are based only on those who fertilize their lawn (or have a lawn service fertilize their lawn) at least once a year. However, before 2016, the wording for the first question referred to “slow release N fertilizer.” In 2016, the “N” was removed, and this may have impacted the results.

Do you use a slow release fertilizer?



Have you ever had your soil tested for fertility or pH?



Behavior Related to Changing Vehicle Oil

- When asked about changing the oil in their car or truck, eight-in-ten or more each year reported that they use an oil change service, while 11% in 2017 reported taking old motor oil to a gas station or hazmat facility for recycling. A small number of respondents selected other response options. Because the number selecting some response options was very small, the results are shown in the tables below, with the frequency (number of respondents selecting each response) and the percentage.

2017: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	410	82.0%
Take the old motor oil to a gas station or hazmat facility for recycling	57	11.4%
Store it in my garage	10	2.0%
Put it in the trash	6	1.2%
Dump it in the gutter or down the storm sewer	2	.4%
Other	5	1.0%
Don't own a car or truck	10	2.0%
Total	500	100.0%

2016: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	399	79.8%
Take the old motor oil to a gas station or hazmat facility for recycling	65	13.0%
Store it in my garage	9	1.8%
Put it in the trash	8	1.6%
Other	2	0.4%
Don't own a car or truck	17	3.4%
Total	500	100.0%

2015: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	426	85.2%
Take the old motor oil to a gas station or hazmat facility for recycling	54	10.8%
Store it in my garage	4	0.8%
Put it in the trash	3	0.6%
Don't own a car or truck	13	2.6%
Total	500	100.0%

2014: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	426	85.2%
Take the old motor oil to a gas station or hazmat facility for recycling	50	10.0%
Put it in the trash	5	1.0%
Store it in my garage	4	0.8%
Other	1	0.2%
Don't own a car or truck	14	2.8%
Total	500	100.0%

2013: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	427	85.4%
Take the old motor oil to a gas station or hazmat facility for recycling	57	11.4%
Put it in the trash	3	0.6%
Dump it in the gutter or down the storm sewer	2	0.4%
Store it in my garage	1	0.2%
Don't own a car or truck	10	2.0%
Total	500	100.0%

2012: When you need to change the oil in your car or truck, what do you do with the old motor oil?

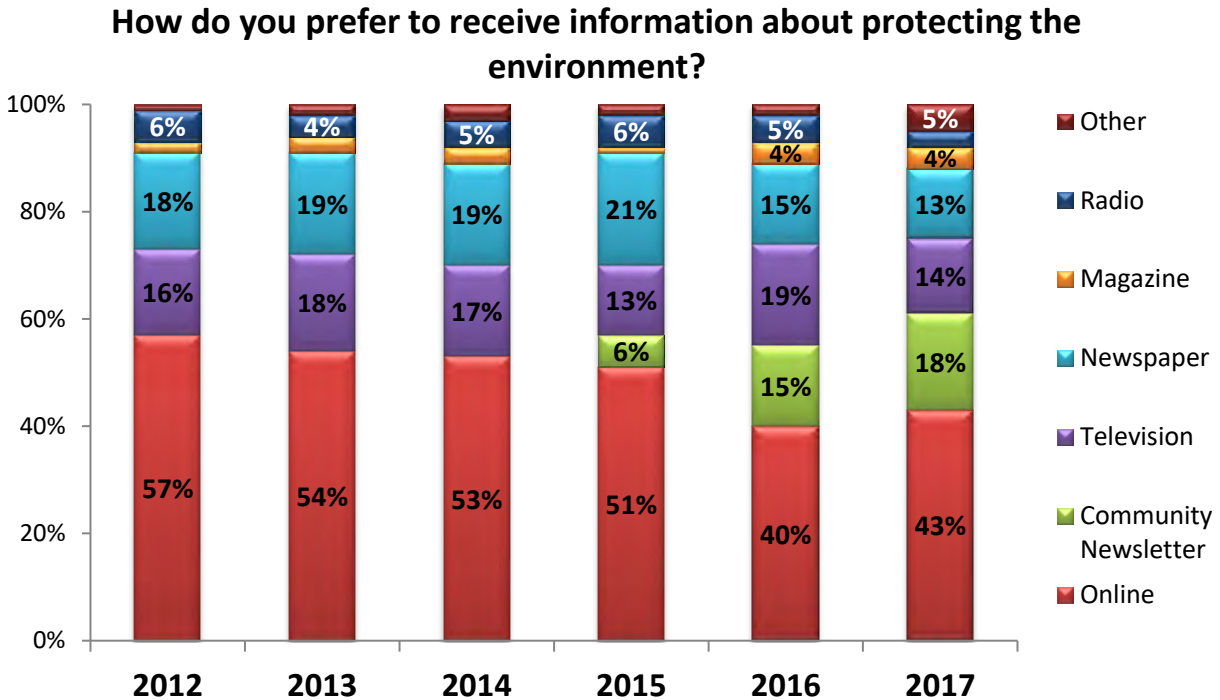
	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	426	85.2%
Take the old motor oil to a gas station or hazmat facility for recycling	49	9.8%
Store it in my garage	3	0.6%
Put it in the trash	2	0.4%
Other	2	0.4%
Don't own a car or truck	18	3.6%
Total	500	100.0%

2011: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<i>Frequency</i>	<i>Percent</i>
I don't change the oil myself / I take it to a garage / oil change service	413	82.6%
Take the old motor oil to a gas station or hazmat facility for recycling	60	12.0%
Put it in the trash	2	0.4%
Other	2	0.4%
Don't own a car or truck	23	4.6%
Total	500	100.0%

Preference for Receiving Information

- The wording for the question below was changed in the 2016 survey. In previous years, the question was, “How do you prefer to receive information?” without a reference to protecting the environment. (“Community Newsletter” was first added as an option in 2015.)



- In each of the areas included in the survey, more preferred to receive information online than preferred to receive information from other particular sources, as shown below. This was true for other subgroups as well.

Preference for Receiving Information	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Online	54%	48%	43%	32%	38%
Community Newsletter	17%	16%	17%	25%	23%
Television	8%	15%	16%	15%	14%
Newspaper	13%	17%	13%	9%	16%
Magazine	4%	1%	3%	7%	7%
Radio	0%	1%	5%	1%	0%
Other	4%	2%	3%	11%	2%
<i>N = number of respondents</i>	52	69	254	81	44

Preference for Receiving Information	Have Lived in Northern Virginia < 4 Years			
		4 to 9 Years	10 to 19 Years	20 or More Years
Online	46%	37%	50%	41%
Community Newsletter	28%	24%	16%	15%
Television	8%	16%	13%	16%
Newspaper	10%	11%	9%	17%
Magazine	6%	7%	4%	2%
Radio	0%	4%	2%	4%
Other	2%	1%	6%	5%
<i>N = number of respondents</i>	61	83	103	253

Preference for Receiving Information	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Online	51%	49%	41%	41%	33%
Community Newsletter	18%	21%	22%	17%	14%
Television	13%	15%	15%	13%	17%
Newspaper	6%	4%	9%	17%	30%
Magazine	8%	5%	2%	2%	2%
Radio	2%	3%	4%	4%	2%
Other	2%	3%	7%	6%	2%
<i>N = number of respondents</i>	109	96	99	95	101

Preference for Receiving Information	Gender		Homeownership		Hispanic Respondents
	Male	Female	Homeowners	Renters	
Online	43%	43%	41%	49%	47%
Community Newsletter	14%	22%	20%	15%	17%
Television	16%	13%	14%	16%	20%
Newspaper	16%	11%	14%	10%	3%
Magazine	4%	4%	4%	2%	8%
Radio	3%	3%	3%	3%	0%
Other	4%	4%	4%	5%	5%
<i>N = number of respondents</i>	242	258	376	124	40

Preference for Receiving Information	Single-family Home	Townhouse	Apartment	Condo
Online	43%	37%	48%	46%
Community Newsletter	15%	27%	10%	23%
Television	14%	17%	14%	13%
Newspaper	17%	9%	15%	6%
Magazine	5%	3%	4%	3%
Radio	2%	3%	3%	6%
Other	4%	4%	6%	3%
<i>N = number of respondents</i>	242	118	71	65

Appendix: Questionnaire

2017 Only Rain NVRC Survey

INTRODUCTION:

Welcome, and thank you for participating in this important research survey.

S1. Are you:

- Male
- Female

S2. Which of the following categories includes your age?

- Under 18 **[END SURVEY]**
- 18 to 20 **[END SURVEY]**
- 21 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

S3. Do you own or rent your home?

- I own my home
- I rent my home
- Neither **[END SURVEY]**

S4. Do you live in the state of Virginia?

- Yes
- No **[END SURVEY]**

S5. Which of the following best describes where you live (county or city or town)?

- Alexandria
- Arlington
- Dumfries
- City of Fairfax
- Fairfax County
- Falls Church
- Herndon
- Leesburg
- Loudoun County
- Stafford County
- Vienna
- None of the above **[END SURVEY]**

S6. Which of the following describes your ethnicity? (Please select all that apply)

- African American / Black
- American Indian / Alaska Native
- Asian
- Hispanic / Latino
- Native Hawaiian / Pacific Islander
- White / Caucasian
- Other

Q1. Which of the following best classifies your current residence?

- Single-family home
- Townhouse or attached house
- Apartment
- Condominium
- Mobile home or manufactured home
- Cooperative
- Other

Q2. For how many years have you lived in your current residence?

- Less than 1 year
- 1 to 3 years
- 4 to 9 years
- 10 to 19 years
- 20 or more years

Q3. For how many years have you lived in Northern Virginia?

- Less than 1 year
- 1 to 3 years
- 4 to 9 years
- 10 to 19 years
- 20 or more years

Q4. Do you live within the Potomac River Watershed?

- Yes
- No
- Not Sure
- I do not know what a "watershed" is

Q5. What do you think is the number one cause of pollution in local streams, the Potomac River, and the Chesapeake Bay? (Please select only one)

- Factories / Industrial waste
- Fertilizers and pesticides from lawns and farms
- Local Garbage / trash / litter
- Gas, oil and exhaust from automobiles
- Pet waste
- Stormwater runoff from streets and parking lots
- Other: _____

Q6. "Stormwater" runoff is rain or other water that flows into the street, along the gutter and into the storm drain. To the best of your knowledge, where do you believe storm water eventually ends up?

- At a waste water treatment facility
- Local streams, Potomac River or Chesapeake Bay
- Underground / seeps in to the ground
- Don't know
- Other: _____

Q7. Do you (or does another person in your household) have a dog?

- Yes **[CONTINUE WITH Q8]**
- No **[SKIP TO Q11]**

Q8. When taking your dog(s) for a walk, how often do you (or someone else from your household) pick up waste after your dog(s)?

- Always / every time the dog leaves waste
- Usually
- Sometimes
- Rarely
- Never
- Not applicable / I don't take the dog(s) on walks

Q9. How often do you (or does someone else from your household) remove dog waste from your yard?

- Daily
- Weekly
- Monthly
- Less often than once a month
- Never
- Not applicable / don't have a yard

[SKIP OVER Q10a/b IF NEVER OR NOT APPLICABLE IN BOTH Q8 AND Q9]

Q10a. What is the most important reason to pick up after your dog(s)? (Please select only one)

- City / township ordinance
- Don't want to step in it
- To prevent water pollution
- It's what good neighbors do
- Odor
- Other reason
- None / no reason to **[SKIP TO Q11]**

Q10b. What other reasons (if any) have motivated you to pick up after your dog(s)? [PROGRAMMING NOTE: DON'T SHOW WHAT WAS SELECTED IN Q10a]

- City / township ordinance
- Don't want to step in it
- To prevent water pollution
- It's what good neighbors do
- Odor
- None of the above

Q11. Does your home have a lawn or garden?

- Yes **[CONTINUE WITH Q12]**
- No **[SKIP TO Q17]**

Q12. Are you the primary person who takes care of the lawn or garden?

- Yes **[CONTINUE WITH Q13]**
- No **[SKIP TO Q17]**

Q13. How do you treat weeds in your lawn or garden? (Select all that apply)

- I apply a product like "weed and feed" that contains weed treatment and fertilizer
- I "spot treat" the weeds with weed killer
- I pull the weeds out by hand
- I have a lawn care service apply treatments to kill the weeds
- Other
- Nothing / I don't treat weeds / leave the weeds alone

Q14. Which of the following best describes how often you fertilize your lawn?

- Once a year in the spring
- Once a year in the summer
- Once a year in the fall
- Twice a year
- Three times a year
- Four or more times a year
- Never **[SKIP TO Q16]**
- I have a lawn care service fertilize my yard
- Don't know

Q15. Do you use a slow release fertilizer in your lawn or garden?

- Yes
- No
- I don't know

Q16. Have you ever had your soil tested for fertility or pH?

- Yes
- No
- I don't know

Q17. What most prevents you from taking action to protect clean water?

- It's not important to me
- I don't have the time
- Too expensive
- My actions won't make a difference
- I don't know what to do
- I have physical limitations
- Nothing / I do take action to protect clean water
- Other: _____

Q18. What would help you to take action to protect clean water? (Select all that apply)

- On-site help with installation from a landscape professional
- Learning more by attending a workshop
- Online resources
- Financial assistance to offset costs
- Email Newsletters with reminders and quick tips
- I didn't know I needed to take action to protect clean water
- Nothing
- Other: _____

Q19. When you need to change the oil in your car or truck, what do you do with the old motor oil?

- I don't change the oil myself / I take it to a garage / oil change service
- Take the old motor oil to a gas station or hazmat facility for recycling
- Store it in my garage
- Put it in the trash
- Dump it in the gutter or down the storm sewer
- Dump it down the sink
- I don't own a car or truck
- Other

Q20. How important do you think it is for local governments to spend more money on protecting water quality?

- Not at all important
- Not too important
- Somewhat important
- Very important

----- Page Break -----

Q21. What TV service provider do you use?

- Comcast
- Cox
- Direct TV
- Dish Network
- Verizon
- Xfinity
- Do not have cable or satellite TV
- Do not watch TV
- I only watch streamed Video Content (ex. Netflix, Hulu, YouTube, Chromecast, etc.)
- Other

Q22. Which of these channels have you watched in the past 30 days? (Select all that apply)

- Animal Planet
- Cartoon Network
- CNN
- E! Entertainment TV
- ESPN
- HeadLine News
- History Channel
- HGTV
- National Geographic
- Oxygen
- None of the above

----- Page Break -----

Q23. Please view the video above. Have you seen this ad, or a similar one on TV or the Internet about reducing water pollution?

- Yes [**CONTINUE WITH Q24**]
- No [**SKIP TO Q25**]
- Not sure [**SKIP TO Q25**]

Q24. Did seeing this ad make you take action on your property to prevent water pollution?
(Select all that apply)

- Yes, I now pick up pet waste more often
- Yes, I now plan to fertilize fewer times during the year
- Yes, I now properly dispose of motor oil
- I was already doing what is recommend to reduce water pollution
- None of the above applies to me



Q25. Have you seen the logo above anywhere? (Show Only Rain logo)

- Yes
- No

Q26. How do you prefer to receive information about protecting the environment? (Please select only one)

- Magazine
- Newspaper
- Community newsletter
- Online
- Radio
- Television
- Other: _____

APPENDIX B

MS4 Webpage Screen Capture

Schoolyard Stewardship Mini Grants

Get2Green Webpage Screen Capture

Summary of FCPS Events

VA School Boards Association Recognition Press

Release Paradigm Challenge, Glasgow MS Press

Release School Environmental Action Showcase Press

Release

Municipal Separate Storm Sewer System (MS4) Program

What Our Schools are Doing to Protect Our Waterways

About the Program

The objective of the Municipal Separate Storm Sewer System (MS4) is to reduce stormwater pollutants in the runoff by implementing certain programs and procedures. An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains). The program is part of the Virginia Pollutant Discharge Elimination System (VPDES) requirements and is regulated by the Virginia Department of Environmental Quality (DEQ).

DEQ requires FCPS to demonstrate that it is addressing the following six best management practices (BMPs) or minimum control measures (MCMs) in the implementation of the MS4 program:

1. Public education
2. Public involvement/participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post-construction storm water management in new development and redevelopment
6. Pollution prevention/good housekeeping for municipal operations

Rain Barrel Program

Find out how rain barrels benefit you and the environment

Fairfax County Rain Barrel Workshops

<http://www.fairfaxcounty.gov/nvswcd/rainbarrels.htm> | [View rain barrel artwork in the community](http://www.fairfaxcounty.gov/nvswcd/rainbarrelart.htm) <http://www.fairfaxcounty.gov/nvswcd/rainbarrelart.htm>

FCPS Schools and the Environment

Fairfax County students learn about the challenges facing our environment throughout their school years. In kindergarten, students observe and discuss how to protect the environment and conserve water and energy at home and at school.

Elementary students investigate the earth's natural resources and how to protect them, research the major Potomac River watershed and water resources, and examine public policy decisions related to the environment.

The emphasis on the environment is broadened for high school students in the geosystems curriculum, where students examine the interrelationship between the earth's physical environment and the biosphere.

MS4 Program Plan and Report

MS4 Program Plan /sites/default/files/media/pdf/programplan2015-2016_2.pdf
2015-2016

MS4 </sites/default/files/media/pdf/2015-2016%20annual%20report.pdf>
Annual Report 2015-2016

FCPS 2013 </sites/default/files/media/pdf/2013registrationstatment.pdf>
Registration Statement

External Links

The following web sites may provide additional information relating to the Municipal Separate Storm Sewer System (MS4) Program.

- [Clean Virginia Waterways <http://www.longwood.edu/cleanva>](http://www.longwood.edu/cleanva)
- [Fairfax County Municipal Separate Storm Sewer System \(MS4\)
<http://www.fairfaxcounty.gov/dpwes/stormwater/ms4permit.htm>](http://www.fairfaxcounty.gov/dpwes/stormwater/ms4permit.htm)
- [North American Association for Environmental Education <http://www.naaee.org/>](http://www.naaee.org/)
- [Northern Virginia Soil and Water Conservation District
<http://www.fairfaxcounty.gov/nvswcd/>](http://www.fairfaxcounty.gov/nvswcd/)

Contact Information

[David Bennett](#)

Coordinator Infrastructure &
Environmental Engineering
703-764-2477

[Holly Moran](#), Environmental Specialist

703-624-0337

Get2Green Partnerships

Environmental efforts with the schools.

[</get-involved/business-and-community-partnerships/ignite-partnerships/get2green-partnerships>](#)

Schoolyard Stewardship Mini Grants (2016-2017 School Year)

School	Project
Bailey's Elementary School (primary)	Enhance native wildlife garden in school courtyard and create sensory garden for use as outdoor classroom
North Springfield Elementary School	2 outdoor classrooms - courtyard with butterfly sanctuary and edible garden, student play area with woodlands garden, rain barrels
Herndon Middle School	10 indoor organic salad windowsill gardens with handmade drip irrigation system (project proposed by student)
Riverside Elementary School	Seeds for existing edible garden beds, plants for native wildlife garden, outdoor classroom seating space
West Potomac High School	Plants for outdoor classroom area
Braddock Elementary School	Raised beds for each grade level to build XSTREAM capacity, rain barrel to capture water for garden
Bull Run Elementary School □	Revitalize and expand native and butterfly gardens, add outdoor classroom seating
Herndon Elementary School	Plants to expand edible garden, start garden newsletter, bug hotel, compost experiment, garden calendar, weather station, bee curriculum
Little Run Elementary School	Native plants to address campus stormwater issues and create native habitat, educational signs
Quander Road School	Enhance existing native/edible gardens - finish greenhouse construction, deer fencing, bird feeding area, pathway, additional plants, seating area
Rose Hill Elementary School	Enhance existing native garden with additional plants, pavers
Stuart High School	Expand existing garden with greenhouse, more raised beds, more plants to facilitate involvement of more students
Freedom Hill Elementary	Pollinator garden in raised beds with rain barrel
Frost Middle School	2 Water bottle refill stations in support of goal to eliminate disposal plastic bottles in school
Twain Middle School	Constructing three-bin composting system
Clearview Elementary School	Metal educational signs for native habitat
Fort Belvoir Elementary School	Soil amendment and native plants for rain garden to catch runoff, raised bed for edible garden
Lake Anne Elementary School	Water bottle refill station
Woodson High School	Native garden in one of library courtyards (project developed by environmental club students)
Hunters Woods Elementary School	Native plant garden to reduce runoff and erosion near storm drain □
Annandale High School	Native wildlife garden in school courtyard
Fairfax High School	Native plants for existing native/edible garden, educational signs about garden and plants
Wakefield Forest Elementary School	Raised beds for each grade level built to support specific grade-level curriculum, rain barrel, shed

WELCOME!

FCPS Get2Green is the environmental stewardship program for Fairfax County Public Schools. This website was designed to share energy and recycling data, resources for implementing projects in schools and at home, and general information about the green initiatives underway in FCPS.

ENERGY STAR Recognition Partner of the Year (2017)

"Innovative student solutions for energy conservation."

Across the District's 220 Facilities:

- 22% Reduction in Site Energy Use
- \$10.5 Million in Avoided Costs
- 153 Energy Certified Buildings

Check out our Interactive Dashboards!

Our interactive dashboards enable users to view resource use at all FCPS schools and centers. View Energy, Recycling, Greenhouse Gas

2016 Climate and Energy Leadership Award

Congratulations to FCPS on its 2016 Climate and Energy Leadership Award in the Educational Institution category for its Get2Green program!

As a result of Get2Green, FCPS has experienced an 11 percent reduction of greenhouse gases, a value in excess of 39,000 metric

or Eco-Schools information by location or district as a whole.
Click [here](#) to browse and view any of our interactive dashboards!

tons of CO₂e; with realized energy savings of more than \$8.5 million and an anticipated \$95 million dollars in energy savings by the year 2025.

Get2Green - In the News

[U.S. Department of Education Green Ribbon Schools, Districts, and Postsecondary Institutions Recognized; 2017 Green Strides Tour Announced](#) (July 19, 2017)

[Better Buildings Summit Showcase Tours: Marshall High School](#) (June 29, 2017)

[Washington D.C. named nation's top ENERGY STAR city for 3rd year in a row!](#) (June 26, 2017)

[FCPS Energy Competition Concludes with Big Savings](#) (June 21, 2017)

[FCPS Students Honored for Innovative Solutions at 2017 Environmental Action Showcase](#) (Apr. 28, 2017)

[FCPS Earns 2017 Energy Star® Partner of the Year Award](#) (Apr. 6, 2017)

[FCPS Recognized with Inaugural Virginia Energy Efficiency Awards](#) (Nov. 29, 2016)

[Congrats to FCPS on its Leadership Award - Fairfax Times](#) (Nov. 22, 2016)

[FCPS Recognized by VSBA for Environmental Initiatives](#) (Nov. 18, 2016)

[\(MWCOG\) Council of Governments honors region's climate and energy leaders](#) (Nov. 10, 2016)

[Fairfax joins other large school systems in environmental alliance](#) - Washington Post (Feb. 17, 2016)

**This web page contains links to one or more web pages that are outside the FCPS network. FCPS does not control the content or relevancy of these pages.*

[home](#) [dashboards](#) [eco-schools](#) [energy](#) [energy star](#) [recycling](#) [initiatives](#) [resources](#) [about](#)

Curator: Liz Hatcher get2green@fcps.edu
Department of Facilities & Transportation Services
© 2017 Fairfax County Public Schools, Fairfax County, Virginia

BMP 2.B

Event	Description	Date	Number of People
School Environmental Action Showcase	Five hundred grade 4-12 students went to George Mason University to share the environmental stewardship projects at their schools and to participate in the Caring for Our Watersheds competition, a recycled musical instrument festival, and hands-on experimentation using electronics to collect data and find solutions to environmental problems. Students also joined environmental professionals from 20 non-profit organizations, businesses, and all levels of government in conducting hands-on activities relating to the environment.	25-Apr-17	~500 students, 125 parents/teachers, 50 environmental professionals, 30 volunteers and staff
Trout in the Classroom	Trout in the Classroom - raising brook trout, supported by the local Trout Unlimited chapter. TU provides the equipment & eggs, students raise the trout then release them into local streams. Students at several schools including Madison High, Dogwood ES, Centreville ES, Lemon Road ES, and Belvedere ES participated in the program.	2016-17 school year	250+ students, 40+ parents/teachers
Watershed education	Funded by Chesapeake Bay Restoration Fund. Used the Enviroscapes Watershed Model from NVSWCD for a lesson to Fairhill Fourth Graders on how different types of pollutants run through a watershed, and some of the tools we can use as ecologically minded citizens to help improve the quality of our water. Also had Dan Schwartz from NVSWCD come to conduct soil infiltration tests with 3rd grade students in preparation for a rain garden.	January-May 2017	180 students, 12 teachers
Hunters Woods Storm Drain Planting Project	Earth Sangha worked with Hunters Woods Elementary on installing a native garden around storm drains surrounded by hillsides with erosion issues to improve the quality of water running off into the storm drains.	Spring-fall 2017	40 students, 12 adults
Get2Green Academy Course	Educators and other experts focused on bringing environmental stewardship into the classroom taught FCPS teachers about methods for integrating the environment into the classroom. Topics included waste reduction, energy conservation, edible gardening, and wildlife habitat.	Spring 2017	20 teachers

FCPS Recognized by VSBA for Environmental Initiatives

News Release | **NOVEMBER 18, 2016**

Fairfax County Public Schools (FCPS) has been named a Certified Green School Division by the Virginia School Boards Association (VSBA).

FCPS was one of sixteen districts statewide that earned platinum certification for implementing new actions and adopting new policies that earned green points as part of the VSBA Green Schools Challenge. The challenge was established to encourage implementation of specific environmental policies and practical actions that will reduce carbon pollution by school districts and their communities.

The district has an active Get2Green program that engages students in environmental action in more than 160 schools. Students learn about alternative energy sources and saving energy, growing food and composting food waste, wildlife habitats and biodiversity, and protecting local watersheds. The program involves partners such as the National Wildlife Federation, the Chesapeake Bay Foundation, Fairfax County Parks and Nature Centers, Plant Nova Natives, the Fairfax County Department of Public Works and Environmental Management, and the U.S. Fish and Wildlife Service.

The challenge is sponsored by Moseley Architects and ABM Building and Energy Solutions.

###

For more information, contact the FCPS Office of Communication and Community Relations at 571-423-1200.

Glasgow MS Students Develop Recycling App

School News | JUNE 12, 2017

Four students who participated in the fall session of Glasgow Middle's Capital One Coders group decided to use the Paradigm Challenge to continue to hone their coding skills while applying them to a real-world problem. The Paradigm Challenge, an annual competition that inspires students to use STEM (science, technology, engineering, and math) skills with kindness, creativity, and collaboration, challenged students to generate ideas to reduce waste in homes, schools, communities, and around the world. Building off of the success of the Virginia 30 in 30 grant <http://keepvirginiabeautiful.org/2016/06/24/glasgow-middle-nets-30-thirty/> that three Glasgow teachers won for creating a schoolwide recycling program, these students created a recycling app to teach people what to recycle in a fun way; a web page to keep people informed of their progress; a new solution for recycling food waste in the Family and Consumer Science (FACS) kitchens; and a food waste game, to get students interested in recycling food in the cafeteria. The team was named a finalist in the challenge. [More information about the team is available online.](#) <http://coding4solutions.weebly.com/> Contact Angela DeHart at adjeterjones@fcps.edu.

FCPS Students Honored for Innovative Solutions at 2017 Environmental Action Showcase

News Release | **APRIL 28, 2017**

Students from three Fairfax County public schools were honored for their innovative environmental solutions at the sixth annual School Environmental Action Showcase (SEAS) at George



Mason University's (GMU) Center for the Arts. More than 350 FCPS students from 25 schools attended SEAS.

Students from Fort Belvoir Upper Elementary, Carson Middle School, Lanier Middle School, and Stuart High School presented their watershed improvement plans in the Caring for Our Watersheds competition. Students from Carson Middle took first place in the competition for their food sharing program that captures uneaten food from the cafeteria and sends it to community shelters, and teams from Lanier Middle won second and third.

Students from Belvedere Elementary won the \$500 Dynamic Young Visionary award from the Fairfax County Federation of Teachers for their outstanding leadership, collaborative problem solving, and exemplary teamwork in their efforts to protect and improve the local environment.

Attendees shared the environmental stewardship initiatives they are leading at their schools; played upcycled musical instruments of their own creation; presented their ideas for watershed improvement in the Caring for Our Watersheds competition; experimented with computer engineering to collect environmental data; and engaged in hands-on STEAM activities hosted by nonprofits, government agencies, and businesses.

SEAS is hosted by NoVA Outside in partnership with GMU's Potomac Environmental Research and Education Center. Students had the unique opportunity to network and learn from students at other schools, to innovate new ways to enhance their green efforts, and to understand how their dedication and hard work contributes to regional and global efforts to ensure a sustainable future.

###

For more information, contact Elaine Tholen, program manager, environmental stewardship, at evtholen@fcps.edu.

APPENDIX C

MS4 Outfall Information Table

Unauthorized Discharge Reporting Form – Sideburn Center

Dry Weather Outfall Screening Results

Get2Green Recycling Webpage and Dashboard Example

FCPS MS4 Outfall Information Table

STORMNET_I	VAHUC	Watershed	Drainage Area (ac)	305B ID	305B Category	Receiving WB	Impairment Cause
STMN0401415533	PL24	Pimmit Run	4.069595	VAN-A12R_PIM02B06	5A	Pimmit Run	Escherichia coli
STMN0304412543	PL24	Pimmit Run	22.136269	VAN-A12R_ZZZ01A00	3A	Potomac River/Fourmile Run/Pimmit Run	
STMN0304413034	PL24	Pimmit Run	2.519308	VAN-A12R_ZZZ01A00	3A	Potomac River/Fourmile Run/Pimmit Run	
STMN0614072479	PL26	Cameron Run	3.239263	VAN-A13R_HOR01A00	5A	Holmes Run	Escherichia coli
STMN0614072481	PL26	Cameron Run	26.976878	VAN-A13R_HOR01A00	5A	Holmes Run	Escherichia coli
STMN0392024788	PL24	Pimmit Run	12.270815	VAN-A13R_HOR01B00	5A	Holmes Run	Benthic-Macroinvertebrate Bioassessments
STMN0392025018	PL24	Pimmit Run	1.677798	VAN-A13R_HOR01B00	5A	Holmes Run	Benthic-Macroinvertebrate Bioassessments
STMN0394025198	PL24	Pimmit Run	14.421945	VAN-A13R_HOR01B00	5A	Holmes Run	Benthic-Macroinvertebrate Bioassessments
STMN0494423246	PL26	Cameron Run	4.446879	VAN-A13R_HOR01B00	5A	Holmes Run	Benthic-Macroinvertebrate Bioassessments
STMN0603432679	PL26	Cameron Run	68.373037	VAN-A13R_HOR01B00	5A	Holmes Run	Benthic-Macroinvertebrate Bioassessments
STMN0833460478	PL26	Belle Haven	27.43265	VAN-A13R_ZZZ01A00	3A	Cameron Run	
STMN0924479404	PL28	Little Hunting Creek	2.980991	VAN-A14R_ZZZ01A00	3A	Potomac River/Dogue Creek/Little Hunting Creek	
STMN0924479476	PL28	Little Hunting Creek	3.773026	VAN-A14R_ZZZ01A00	3A	Potomac River/Dogue Creek/Little Hunting Creek	
STMN0932470298	PL28	Belle Haven	3.479429	VAN-A14R_ZZZ01A00	3A	Potomac River/Dogue Creek/Little Hunting Creek	
STMN0932470360	PL28	Belle Haven	5.621456	VAN-A14R_ZZZ01A00	3A	Potomac River/Dogue Creek/Little Hunting Creek	
STMN1111498142	PL28	Little Hunting Creek	2.887745	VAN-A14R_ZZZ28A00	NA	Potomac River/Little Hunting Creek	
STMN1111498151	PL28	Little Hunting Creek	3.702561	VAN-A14R_ZZZ28A00	NA	Potomac River/Little Hunting Creek	
STMN0584504757	PL30	Accotink Creek	8.484896	VAN-A15R_CRK01A02	3A	Crook Branch	
STMN0481035072	PL30	Accotink Creek	33.223819	VAN-A15R_XKY01A06	3C	Unnamed tributary to Accotink Creek	
STMN0481035304	PL30	Accotink Creek	5.314641	VAN-A15R_XKY01A06	3C	Unnamed tributary to Accotink Creek	
STMN0481035403	PL30	Accotink Creek	1.205794	VAN-A15R_XKY01A06	3C	Unnamed tributary to Accotink Creek	
STMN0481035606	PL30	Accotink Creek	0.792403	VAN-A15R_XKY01A06	3C	Unnamed tributary to Accotink Creek	
STMN0691441887	PL30	Accotink Creek	2.217114	VAN-A15R_ZZZ01A00	3A	Accotink Creek	
STMN0692441831	PL30	Accotink Creek	19.498179	VAN-A15R_ZZZ01A00	3A	Accotink Creek	
STMN1074052345	PL29	Pohick Creek	5.129914	VAN-A16R_POH01A00	5A	Pohick Creek	Escherichia coli
STMN0783468094	PL29	Pohick Creek	2.357204	VAN-A16R_POH03A04	5A	Pohick Creek	Escherichia coli
STMN0783468468	PL29	Pohick Creek	2.294171	VAN-A16R_POH03A04	5A	Pohick Creek	Escherichia coli

FCPS MS4 Outfall Information Table

STORMNET_I	VAHUC	Watershed	Drainage Area (ac)	305B ID	305B Category	Receiving WB	Impairment Cause
STMN0244515329	PL18	Horsepen Creek	24.868159	VAN-A09R_HPR01A00	2A	Horsepen Run	
STMN0154063580	PL18	Horsepen Creek	3.041768	VAN-A09R_ZZZ01A00	3A	Potomac River/Broad Run	
STMN0104403861	PL21	Sugarland Run	15.773446	VAN-A10R_ZZZ01A00	3A	Sugarland Run	
STMN0261515789	PL21	Sugarland Run	6.301273	VAN-A10R_ZZZ01A00	3A	Sugarland Run	
STMN0213406306	PL23	Dead Run	4.789842	VAN-A11R_SCO01A02	3C	Scott Run	
STMN0262508427	PL22	Difficult Run	1.165433	VAN-A11R_SNA03A02	3C	Snakeden Branch	
STMN0223405549	PL23	Turkey Run	11.485363	VAN-A11R_TUY01A06	3C	Turkey Run	
STMN0223405550	PL23	Turkey Run	14.388804	VAN-A11R_TUY01A06	3C	Turkey Run	
STMN0181053504	PL22	Difficult Run	2.399724	VAN-A11R_XJJ01A02	3C	Unnamed tributary to Colvin Run	
STMN0181057031	PL22	Difficult Run	0.188208	VAN-A11R_XJJ01A02	3C	Unnamed tributary to Colvin Run	
STMN0181057865	PL22	Difficult Run	0.180173	VAN-A11R_XJJ01A02	3C	Unnamed tributary to Colvin Run	
STMN0181058356	PL22	Difficult Run	1.896242	VAN-A11R_XJJ01A02	3C	Unnamed tributary to Colvin Run	
STMN0181058487	PL22	Difficult Run	2.132045	VAN-A11R_XJJ01A02	3C	Unnamed tributary to Colvin Run	
STMN0262012538	PL22	Difficult Run	0.734157	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262012668	PL22	Difficult Run	2.17699	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262012807	PL22	Difficult Run	1.034929	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262013273	PL22	Difficult Run	7.015483	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262013589	PL22	Difficult Run	6.826388	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262013685	PL22	Difficult Run	22.312493	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262013802	PL22	Difficult Run	6.646615	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0262014404	PL22	Difficult Run	1.459095	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0361021264	PL22	Difficult Run	1.386695	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0361021324	PL22	Difficult Run	0.797045	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0464036816	PL22	Difficult Run	12.722165	VAN-A11R_ZZZ01A00	3A	Potomac River/Difficult Run/Nichols Run	
STMN0411058225	PL24	Pimmit Run	6.026257	VAN-A12R_LIO01A10	3C	Little Pimmit Run	
STMN0304412905	PL24	Pimmit Run	105.783942	VAN-A12R_PIM02B06	5A	Pimmit Run	Escherichia coli

FCPS MS4 Outfall Information Table

STORMNET_I	VAHUC	Watershed	Drainage Area (ac)	305B ID	305B Category	Receiving WB	Impairment Cause
STMN0783468470	PL29	Pohick Creek	0.564896	VAN-A16R_POH03A04	5A	Pohick Creek	Escherichia coli
STMN0771459104	PL29	Pohick Creek	4.582499	VAN-A16R_ZZZ01A00	3A	Pohick Creek	
STMN0771459331	PL29	Pohick Creek	0.640402	VAN-A16R_ZZZ01A00	3A	Pohick Creek	
STMN0872477750	PL29	Pohick Creek	1.5411	VAN-A16R_ZZZ01A00	3A	Pohick Creek	
STMN1071081778	PL29	Pohick Creek	6.842694	VAN-A16R_ZZZ01A00	3A	Pohick Creek	
STMN1071081800	PL29	Pohick Creek	6.992629	VAN-A16R_ZZZ01A00	3A	Pohick Creek	
STMN1071500205	PL48	Mill Branch	8.829142	VAN-A16R_ZZZ01A00	3A	Pohick Creek	
STMN0453040240	PL45	Cub Run	0.444608	VAN-A22R_BIRO2A02	3C	Big Rocky Run	
STMN0453040632	PL45	Cub Run	2.441328	VAN-A22R_BIRO2A02	3C	Big Rocky Run	
STMN0453040866	PL45	Cub Run	2.295341	VAN-A22R_BIRO2A02	3C	Big Rocky Run	
STMN0432076044	PL45	Cub Run	31.822999	VAN-A22R_CUB02A02	2B	Cub Run	
STMN0432505985	PL45	Cub Run	48.697278	VAN-A22R_CUB02A02	2B	Cub Run	
STMN0342024596	PL45	Cub Run	4.29395	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0351022101	PL18	Horsepen Creek	0.158868	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0351022111	PL18	Horsepen Creek	1.273969	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0351022188	PL18	Horsepen Creek	2.424177	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0351022254	PL18	Horsepen Creek	2.182085	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0351510298	PL18	Horsepen Creek	17.284912	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0353030208	PL45	Cub Run	1.083188	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0353030249	PL45	Cub Run	1.169088	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0353030399	PL45	Cub Run	3.269509	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0541042653	PL45	Cub Run	1.165388	VAN-A22R_ZZZ01A00	3A	Cub Run	
STMN0652050341	PL46	Little Rocky Run	2.560923	VAN-A23R_LIP01A06	5D	Little Rocky Run	Benthic-Macroinvertebrate Bioassessments, Escherichia coli
STMN0654050472	PL46	Little Rocky Run	4.519763	VAN-A23R_LIP01A06	5D	Little Rocky Run	Benthic-Macroinvertebrate Bioassessments, Escherichia coli
STMN0754470099	PL46	Popes Head Creek	0.6628	VAN-A23R_POE01A00	4A	Popes Head Creek	Benthic-Macroinvertebrate Bioassessments, Escherichia coli
STMN0654450877	PL46	Little Rocky Run	0.017708	VAN-A23R_ZZZ01A00	3A	Lower Bull Run/Popes Head Creek	
STMN0661050406	PL46	Little Rocky Run	1.661791	VAN-A23R_ZZZ01A00	3A	Lower Bull Run/Popes Head Creek	
STMN1062500289	PL48	Mill Branch	9.481217	VAN-A25R_GIL01A04	4A	Giles Run	PCB in Water Column

Fairfax County Public Schools
Reporting Form for Unauthorized Discharge to Municipal Separate
Storm Sewer System (MS4)

Reference: MS4 General Permit Section III G. Reports of Unauthorized Discharges

1. Name and Title of Person(s) making report: Douglass T. O'Neill, Coordinator Safety and Environmental health, Fairfax County Schools Office of Safety and Security

2. Date and time staff became aware that the discharge occurred: On July 19, 2016 at 0858 OSS received an email from Holly Moran, OFM Facilities Services Environmental Specialist that a spill occurred in the rear parking area of Sideburn Support Center. Specifically, "a spill of water based floor stripper from the dumpsters by the back fence. The trail goes into the nearest catch basin, however, due to the small quantity, less than 3 gallons, we don't think the chemical left the first catch basin."

3. Description and nature of the discharge: Specifically, "a spill of water based floor stripper from the dumpsters by the back fence. The trail goes into the nearest catch basin, however, due to the small quantity, less than 3 gallons, we don't think the chemical left the first catch basin."

- 4.

5. Location: Sideburn Support Center, 5025 Sideburn Road Fairfax, VA 22032

6. Cause of the discharge: Employees dispose of water based stripper into open dumpster. There was product in the containers.

7. Estimated Date/Time Discharge Started: Unknown

8. Estimated Date/Time Discharge Ended: Unknown

9. Estimated Volume (gallons): 3 gallons

10. Corrective Action to reduce, eliminate and prevent a recurrence. Please describe:
OFM staff applied "stay dry" product and contained the spill to the first catch basin. FCPS staff does not believe that the spill went any further.

11. If the discharge is continuing, how long it is expected to continue: N/A

12. If the discharge is continuing, what is the expected total volume: N/A

13. Did discharge enter the storm system (MS4)? Most likely.

14. Did the discharge enter surface water? No.

15. Log #: _____

Dry Weather Screening Results

Stormnet ID	Watershed	Outfall Characterization	Date Inspected	Time Inspected	Investigators	Recorder	School Name	Facility Type	Land Use	Notes/Comments	Location	Pipe Material	Pipe Shape	Number of Pipes	Pipe Width	Pipe Height	Flow Observed	Flow Rate
STMN0872477750	Pohick Creek	Unlikely	05/23/2017	13:30	BG & JM	John Miller	Fairfax Baptist Temple Academy		Suburban Residential	Fairfax Baptist school. Roadside ditch.; Maintenance needed for sediment.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18		No	
STMN0614072481	Cameron Run	Unlikely	05/23/2017	13:56	BG & JM	John Miller	GLASGOW	Middle	Institutional	STMN0614430913 Glasgow middle school. Southern athletic field.; Connects to large culvert that is creating an enormous head cut. Mantle of culvert will collapse. Actual outfall headwall collapsing.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18		No	
STMN0261013935	Difficult Run	Unlikely	06/30/2017	11:33	BG & JM	John Miller	HUNTERS WOODS	Elementary	Institutional	STMN0261013935 hunters woods elementary. Drains parking lots and athletic fields.; Fence above outfall holding large volume of sediment. Likely to fail soon.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Double	27		No	
STMN0692441831	Accotink Creek	Unlikely	04/11/2017	16:49	BG & JM	John Miller	LITTLE RUN	Elementary	Institutional	Apron badly eroding; Significant downstream erosion.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24		No	
STMN0584504757	Accotink Creek	Unlikely	04/11/2017	16:31	BG & JM	Ben Green	MANTUA	Elementary	Suburban Residential	None	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24		No	
STMN0481035403	Accotink Creek	Unlikely	04/11/2017	10:11	BG & JM	Ben Green	OAKTON	High	Suburban Residential	Drains roadway, exclusively.; Channel excavation needed. Area appears to be marked for restoration.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15		No	
STMN0481035606	Accotink Creek	Unlikely	04/11/2017	10:20	BG & JM	Ben Green	OAKTON	High	Suburban Residential	Mainly drains parking lot on oak ton campus; Channel excavation needed. This has not been flagged for restoration, should make crew aware.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15		No	
STMN0481035304	Accotink Creek	Unlikely	04/11/2017	10:07	BG & JM	John Miller	OAKTON	High	Institutional	Origin from roadway; Lots of debris in ditch. Eroding underneath ditch where it connects to stream.	Open Drainage	Concrete	Trapezoid		54 top, 18 bottom	24.0	No	
STMN0603432679	Cameron Run	Unlikely	04/11/2017	17:18	BG & JM	Ben Green	MASON CREST	Elementary	Suburban Residential	Drains private properties but discharged from school property.; Ditch likely needing stabilization in the future, head cut developing leading to mass wasting into stream channel.	Open Drainage	Earthen	Parabolic		24 top, 5 bottom	12.0	No	
STMN0342024596	Cub Run	Unlikely	04/12/2017	11:01	BG & JM	Ben Green	FRANKLIN	Middle	Suburban Residential	School south lawn and parking lot.; Future channel excavation likely needed.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	28		No	
STMN0353030249	Cub Run	Unlikely	04/12/2017	15:48	BG & JM	Ben Green	LEES CORNER	Elementary	Suburban Residential	Southern parking lot and eastern field, as well as building rooftop.; Additional spillway armoring may be needed.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24		No	
STMN0353030399	Cub Run	Unlikely	04/12/2017	16:13	BG & JM	John Miller	LEES CORNER	Elementary	Institutional	Drains roadside ditch and grass field; 1 stream	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15		No	
STMN0353030208	Cub Run	Unlikely	04/12/2017	16:04	BG & JM	Ben Green	LEES CORNER	Elementary	Suburban Residential	Athletic fields; StormNet placement apparently incorrect.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24		No	
STMN0453040866	Cub Run	Unlikely	06/29/2017	19:10	BG	Ben Green	POPLAR	Elementary	Suburban Residential	Side of elementary school, parking lot, drainage from Melville Ln.; None	Closed Pipe	CMP - Corrugated Metal Pipe	Circular	Single	24		No	
STMN0453040240	Cub Run	Unlikely	06/29/2017	19:05	BG	Ben Green	POPLAR	Elementary	Suburban Residential	North parking lot, trail area direct drainage.; Outfall is ~66% full with sediment.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15		No	
STMN0453040632	Cub Run	Unlikely	06/30/2017	19:15	BG	Ben Green	POPLAR	Elementary	Suburban Residential	School playground area, turf grass, blacktop area; Trash evident within grate at top of riser. Pool at base consisting of stagnant water. Difficult direct access. Riser dimensions are 38inx84inx76in.	Closed Pipe	CMP - Corrugated Metal Pipe	Circular	Double	24		No	
STMN0361021264	Difficult Run	Unlikely	04/12/2017	9:20	BG & JM	Ben Green	CROSSFIELD	Elementary	Suburban Residential	Parking lot to west of school.; Channel may need future regrading, with more immediate clearance of spillway of leaves and debris.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24		No	
STMN0361021324	Difficult Run	Unlikely	04/12/2017	9:15	BG & JM	Ben Green	CROSSFIELD	Elementary	Suburban Residential	Playground and field to South of school.; Some future repair may be needed.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24		No	
STMN0181058356	Difficult Run	Unlikely	04/12/2017	10:18	BG & JM	Ben Green	FOREST EDGE	Elementary	Suburban Residential	NW corner of building.; Accretion in front of outfall that could lead to inefficient drainage.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15		No	

Dry Weather Screening Results

STMN0181057031	Difficult Run	Unlikely	04/12/2017	10:14	BG & JM	John Miller	FOREST EDGE	Elementary	Institutional	Drains school grounds; Almost completely clogged with sediment. Maintenance badly needed.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15	No	
STMN0181058487	Difficult Run	Unlikely	04/12/2017	10:25	BG & JM	Ben Green	FOREST EDGE	Elementary	Suburban Residential	Roadside area and trail to the north, mostly forested.; Debris may likely be cleared naturally.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15	No	
STMN0181053504	Difficult Run	Unlikely	04/12/2017	10:05	BG & JM	John Miller	FOREST EDGE	Elementary	Institutional	Parking lots and athletic field.; Flows into restoration site	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15	No	
STMN0181057865	Difficult Run	Unlikely	04/12/2017	10:28	BG & JM	John Miller	FOREST EDGE	Elementary	Institutional	Playground; Very small outfall	Closed Pipe	HDPE - High Density Polyethylene	Circular	Single	10	No	
STMN0262013589	Difficult Run	Unlikely	04/11/2017	14:50	BG & JM	John Miller	SOUTH LAKES	High	Institutional	Originates from athletic fields.; Major downstream head cutting and erosion	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24	No	
STMN0262014404	Difficult Run	Unlikely	04/11/2017	14:32	BG & JM	John Miller	SOUTH LAKES	High	Institutional	Drains parking lot; NA	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18	No	
STMN0262013685	Difficult Run	Potential (presence of 2 or more indicators)	04/11/2017	15:31	BG & JM	Ben Green	SOUTH LAKES	High	Suburban Residential	Drains ditch/recent restoration. May be stream flow.; None. Outfall closed out.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24	Yes	Moderate, 40 mL / s
STMN0262508427	Difficult Run	Unlikely	04/11/2017	15:02	BG & JM	Ben Green	SOUTH LAKES	High	Suburban Residential Institutional	Drains east parking lot; Sever sedimentation, outfall nearly full, despite riprap placement around outfall and within spillway.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24	No	
STMN0262013802	Difficult Run	Unlikely	04/11/2017	14:47	BG & JM	John Miller	SOUTH LAKES	High	Institutional	Drains athletic fields.; Trash and algal growth on apron	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24	No	
STMN0464036816	Difficult Run	Unlikely	04/11/2017	9:31	BG & JM	John Miller	WAPLES MILL	Elementary	Institutional	Drains BMP; NA	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	27	No	
STMN0351022111	Horsepen Creek	Unlikely	04/12/2017	11:21	BG & JM	Ben Green	OAK HILL	Elementary	Suburban Residential	Drains neighboring residential development.; May need. To be reassigned. StormNet is incorrectly attributed as the ditch is not maintained in any way.	Open Drainage	Earthen	Parabolic	12 top, 5 bottom	24.0	No	
STMN0351022254	Horsepen Creek	Unlikely	04/12/2017	11:35	BG & JM	John Miller	OAK HILL	Elementary	Institutional	Drains athletic fields; None	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18	No	
STMN0351510298	Horsepen Creek	Unlikely	04/12/2017	11:40	BG & JM	Ben Green	OAK HILL	Elementary	Suburban Residential	Drains suburban area and downstream from BMP outfall before dropping into creek.; None.	Open Drainage	Earthen	Parabolic	36 top, 5 bottom	30.0	No	
STMN0351022101	Horsepen Creek	Unlikely	04/12/2017	11:16	BG & JM	John Miller	OAK HILL	Elementary	Institutional	Originates from field by trailers; Outfall almost completely full with sediment. Maintenance needed.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18	No	
STMN0351022188	Horsepen Creek	Unlikely	04/12/2017	11:29	BG & JM	Ben Green	OAK HILL	Elementary	Suburban Residential	Drains fields; StormNet update required.	Open Drainage	rip-rap	Parabolic	36 top, 12 bottom	No		
STMN1111498142	Little Hunting Creek	Unlikely	05/23/2017	13:18	BG & JM	John Miller	FORT HUNT	Elementary	Suburban Residential	Southern portion of facility.; Completely full of sediment, maintenance needed.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18	No	
STMN1111498151	Little Hunting Creek	Unlikely	05/23/2017	13:20	BG & JM	Ben Green	FORT HUNT	Elementary	Suburban Residential Institutional	Near bridge; Excavation/clear channel	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24	No	
STMN0924479476	Little Hunting Creek	Unlikely	05/23/2017	13:22	BG & JM	John Miller	HYBLA VALLEY	Elementary	Institutional	Soccer fields; Maintenance needed for trash.	Open Drainage	Concrete	Parabolic	54 top, 10 bottom	12.0	No	
STMN0924479404	Little Hunting Creek	Unlikely	05/23/2017	13:23	BG & JM	Ben Green	HYBLA VALLEY	Elementary	Suburban Residential	Western portion of property, near tennis court.; None	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	48	No	
STMN1062500289	Mill Branch	Unlikely	04/10/2017	13:49	BG & JM	John Miller	HALLEY	Elementary	Institutional	Drains BMP; None	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	21	Yes	Trickle, 25 mL / s
STMN0411058225	Pimmit Run	Unlikely	04/11/2017	13:19	BG & JM	John Miller	CHESTERBROOK	Elementary	Industrial Suburban Residential	End of rip rap; NA	Open Drainage	rip-rap	Ditch			No	
STMN0401415533	Pimmit Run	Unlikely	04/11/2017	13:40	BG & JM	Ben Green	LEMON ROAD	Elementary	Suburban Residential	Opposite street behind lemon road property, should not be assigned to FCPS; Remove from FCPS designation.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	24	No	
STMN0304413034	Pimmit Run	Unlikely	04/11/2017	12:09	BG & JM	Ben Green	MCLEAN	High	Suburban Residential	Athletic fields and parking lot.; Scour below outfall that will eventually need repair or armoring with riprap.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Triple	24	No	
STMN0771459104	Pohick Creek	Unlikely	05/23/2017	14:18	BG & JM	John Miller	FAIRVIEW	Elementary	Suburban Residential	Athletic fields and roadside forested area; Pipe scour and wearing away from hillside	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	36	No	
STMN0771459331	Pohick Creek	Unlikely	05/23/2017	14:17	BG & JM	John Miller	FAIRVIEW	Elementary	Institutional	In serious disrepair; Pipes falling into stream. Segments disconnected and failing.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	21	No	
STMN1074052345	Pohick Creek	Potential (presence of 2 or more indicators)	04/10/2017	12:23	BG & JM	John Miller	LORTON STATION	Elementary	Institutional	Iron oxidizing bacteria present; Iron oxidizing bacteria present. Standing water present, likely groundwater.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	27	No	
STMN0783468468	Pohick Creek	Suspect (one or more indicators with a severity of 3)	05/23/2017	14:20	BG & JM	Ben Green	WHITE OAKS	Elementary	Suburban Residential Other	Filled in from construction debris; 75% full of sediment. SWPPP enforcement.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	18	No	

Dry Weather Screening Results

STMN0783468470	Pohick Creek	Unlikely	05/23/2017	14:30	BG & JM	Ben Green	WHITE OAKS	Elementary	Suburban Residential	Construction on property, does not drain to outfall.; Scour in pool	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15	No	
STMN0783468094	Pohick Creek	Suspect (one or more indicators with a severity of 3)	05/23/2017	14:24	BG & JM	Ben Green	WHITE OAKS	Elementary	Suburban Residential	Sediment in channel due to construction.; SWPP enforcement.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	12	No	
STMN0754470099	Popes Head Creek	Unlikely	04/10/2017	16:30	BG & JM	Ben Green	FORMER CLIFTON ES	Administrative Center	Suburban Residential	Roadside leading up to Clifton lot.; Some wet marks present but no discoloration or odor. Downstream infrastructure is failing due to scour.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	15	No	
STMN0223405549	Turkey Run	Unlikely	04/11/2017	11:41	BG & JM	John Miller	LANGLEY	High	Institutional	Drains athletic fields; Completely covered by household yard waste and stumps.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	27	No	
STMN0223405550	Turkey Run	Unlikely	04/11/2017	10:55	BG & JM	Ben Green	LANGLEY	High	Institutional	Construction at school; None. Outfall closed out.	Closed Pipe	RCP - Reinforced Concrete Pipe	Circular	Single	27	Yes	Moderate, 50 mL / s

Dry Weather Screening Results - WQ Parameters

Stormnet ID	Retest Required	Retest Results	Outfall Characterization	Date Inspected	School Name	Land Use	Flow Observed	Flow Rate	Water Temp (Cel)	pH	Specific Conductivity	Copper	Phenol	Fluoride	Detergents	Chlorine	Ammonia	Flow Physical Indicators
STMN0262013685	Yes	4/12/2017, Unlikely	Potential (presence of 2 or more indicators)	04/11/2017	SOUTH LAKES	Suburban Residential	Yes	Moderate, 40 mL / s	24.44	7.98	0.311	0.0	0.0	0.13	1.1	0.0	0.313	None
STMN1062500289			Unlikely	04/10/2017	HALLEY	Institutional	Yes	Trickle, 25 mL / s	22.54	7.17	0.328	0.347	0.166	0.15	0.2	0.0	0.0	None
STMN0223405550	Yes	4/12/2017, Unlikely	Unlikely	04/11/2017	LANGLEY	Institutional	Yes	Moderate, 50 mL / s	19.0	7.76	0.343	0.434	0.14	0.13	0.8	1.0	0.0	None



The header features a green landscape background with icons for a person on a bicycle and a family walking. On the left, there are social media icons for Facebook, Twitter, and YouTube, along with the Fairfax County Public Schools logo. The central text reads "FCPS Get2Green". On the right, there is a "Show/Hide Weather" button. Below the header is a navigation menu with the following items: Home, Dashboards (highlighted), Eco-Schools, Energy, Energy Star, Recycling, Initiatives, Resources, and About Us.

Download Data

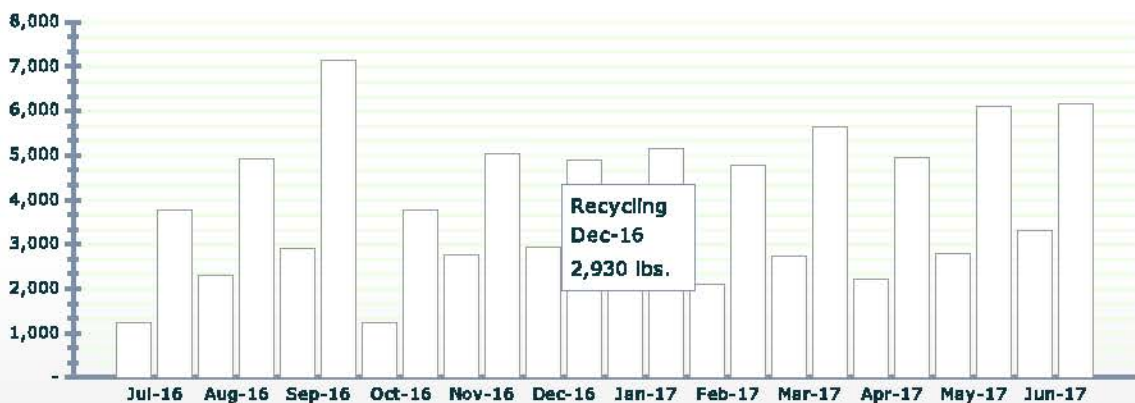
[home](#) [dashboards](#) [eco-schools](#) [energy](#) [energy star](#) [recycling](#) [initiatives](#) [resources](#) [about](#)

Curator: Liz Hatcher get2green@fcps.edu
Department of Facilities & Transportation Services
© 2017 Fairfax County Public Schools, Fairfax County, Virginia

- Bucknell ES
- Bull Run ES
- Bush Hill ES
- Camelot ES**
- Cameron ES
- Canterbury Woods ES
- Cardinal Forest ES
- Cedar Lane ES
- Centre Ridge ES
- Centreville ES
- Cherry Run ES
- Chesterbrook ES
- Churchill Road ES
- Clearview ES
- Clermont ES
- Coates ES
- Colln Powell ES
- Columbla ES
- Colvin Run ES
- Crestwood ES
- Crossfield ES
- Middle**
- Secondary**
- High**
- Center**

Aldrin ES

(Weight in Lbs. | Jul. 2016 - Jun. 2017)



12 MONTH TOTAL

(Jul. 2016 - Jun. 2017)

TRASH
62,290 lbs
68.22%

RECYCLING
29,020 lbs
31.78%

■ RECYCLING ■ TRASH

IF YOU WERE TO RECYCLE

29,020 lbs. = 15 Tons

OF PAPER EACH YEAR, YOU COULD HELP SAVE:



FCPS District Wide Totals
(Jul. 2016 - Jun. 2017)

FCPS TOTAL RECYCLED
5,895,480 lbs.

FCPS TOTAL TRASH
26,739,993 lbs.

APPENDIX D

Stormwater Management Facilities Brought Online PY4

FCPS Stormwater Facilities Brought Online PY4

Facility ID	Function	Maintained By	Date Installed	BMP Name	Practice Description	Drainage Area (ac)	Total Acres Treated (ac)	Impervious Acres Treated (ac)	Pervious Acres Treated (ac)	Runoff Captured (ac-ft)	Amount Applied	Measurement Unit	Latitude	Longitude	HUC12	Inspection Date/Year	Routine Maintenance Date/Year	Watershed	VAHUC6
1909AS	BMP	Public	10/3/2016	SOIL COMPOST AMENDMENT	Compost with native seed mixture	0.21	0.21	0.00	0.21	0.00	0.21	ACRE	38.87559666	-77.34520355	20700081004	FY18		Difficult Run	PL22
GR0002	BMP	Public	3/15/2017	VEGETATED ROOF	Green Roof	1.6	1.6	1.60	0.00	0.80	1.6	ACRE	38.78528137	-77.29773334	20700100401	FY19	FY18	Pohick Creek	PL29
TR1288	BMP	Public	5/11/2017	INFILTRATION PRACTICE	Synthetic Turf Field	3.6	3.6	2.31	1.29	0.48	3.6	ACRE	38.7523194	-77.14250174	20700100306	FY18		Dogue Creek	PL27
TR1289	BMP	Public	5/11/2017	INFILTRATION PRACTICE	Synthetic Turf Field	1.89	1.89	0.04	1.85	0.00	1.89	ACRE	38.75260817	-77.14407202	20700100306	FY18		Dogue Creek	PL27
TR1290	BMP	Public	4/6/2017	INFILTRATION PRACTICE	Synthetic Turf Field	1.85	1.85	0.50	1.35	0.00	1.85	ACRE	38.72936553	-77.09239313	20700100306	FY18		Dogue Creek	PL27
TR1291	BMP	Public	5/15/2017	INFILTRATION PRACTICE	Synthetic Turf Field	1.84	1.84	0.00	1.84	0.13	1.84	ACRE	38.72428822	-77.09395552	20700100306	FY18		Dogue Creek	PL27

APPENDIX E

Parking Lot Sweeping Tracking

Nutrient Management Plan Locations and Planning Status

PCB Recognition and Reporting Training Tracking Sheet

MS4 Education and Spill Recognition and Reporting Training Tracking Sheet

Pesticide applicator certifications

Spill Response Training Materials

Fairfax County Public Schools Parking Lot Sweeping for Permit Year 4, July 1, 2016 - June 30, 2017

	D	E	F	G	H
1	Facility Name	Address	Sq Ft	COMPLETED DATE	YARDS DEBRIS
2	Ellen Glasgow Middle School	4101 Fairfax Pkwy, Alexandria, VA 22312	181720	7/2/2016	2.00
3	Belle View Elementary School	6701 Fort Hunt Rd, Alexandria, VA 22307	50410	7/8/2016	0.50
4	Wayneswood Elementary School	1205 Wayneswood Blvd, Alexandria, VA 22308	48672	7/8/2016	0.50
5	Joyce Kilmer Middle School	8102 Wolftrap Rd, Vienna, VA 22182	148816	7/21/2016	1.00
6	Pimmit Hills Alternative High School	7510 Lisle Ave, Falls Church, VA 22043	73097	7/24/2016	1.00
7	Groveton Elementary School	6900 Harrison Ln, Alexandria, VA 22306	86894	7/28/2016	1.00
8	Virginia Hills Elementary School	6520 Diana Lane, Alexandria, VA 22310	63528	7/29/2016	0.50
9	Waples Mill Elementary School	11509 Waples Mill Rd, Oakton, VA 22124	82773	7/30/2016	1.00
10	Crestwood Elementary School	6010 Hanover Ave, Springfield, VA 22150	56020	8/2/2016	0.50
11	Franconia Elementary School	6043 Franconia Rd, Alexandria, VA 22310	43652	8/2/2016	0.50
12	Alan Leis Center	7423 Camp Alger Ave, Falls Church, VA 22042	42239	8/3/2016	0.50
13	Luther Jackson Middle School	3020 Gallows Rd, Falls Church, VA 22042	144084	8/4/2016	1.00
14	Washington Irving Middle School	8100 Old Keene Mill Rd, Springfield, VA 22152	107811	8/9/2016	1.00
15	South County Middle School	8700 Laurel Crest Dr, Lorton, VA	149759	8/11/2016	1.00
16	Churchill Road Elementary School	7100 Churchill Rd, Mclean, VA 22101	47368	8/15/2016	1.00
17	Wakefield Forest Elementary School	4011 Iva Ln, Fairfax, VA 22032	50845	8/16/2016	0.50
18	Wolftrap Elementary School	1903 Beulah Rd, Vienna, VA 22182	39397	8/18/2016	0.50
19	Fox Mill Elementary School	2601 Viking Dr, Herndon, VA 20171	45538	8/19/2016	0.50
20	Oak Hill Elementary School	3210 Kinross Circe, Herndon, VA 20171	53551	8/19/2016	0.50
21	Forest Edge Elementary School	1501 Becontree Ln, Reston, VA 20190	62302	8/24/2016	1.00
22	Lake Anne Elementary School	11510 North Shore Dr, Reston, VA 20190	50124	8/24/2016	0.50
23	Poplar Tree Elementary School	13440 Melville Ln, Herndon, VA 20171	43965	8/25/2016	1.00
24	Olde Creek Elementary School	9524 Old Creek Dr, Fairfax, VA 22032	47544	8/26/2016	1.00
25	Beech Tree Elementary School	3401 Beechtree Ln, Falls Church, VA 22042	36212	8/29/2016	1.00
26	Belvedere Elementary School	6540 Columbia Pike, Falls Church, VA 22041	49860	8/30/2016	1.00
27	Floris Elementary School	2708 Centreville Rd, Herndon, VA 20171	61138	9/1/2016	1.00
28	Graham Road County Center	3036 Graham Rd, Falls Church, VA 22042	33913	9/5/2016	0.50
29	Lemon Road Elementary School	7230 Idylwood Rd, Falls Church, VA 22043	49058	9/5/2016	0.50
30	Shreveewood Elementary School	7525 Shreve Rd, Falls Church, VA 22043	44046	9/5/2016	0.50
31	Riverside Elementary School	8410 Old Mt Vernon Rd, Alexandria, VA 22309	45961	9/6/2016	0.50
32	Westbriar Elementary School	1741 Pine Valley Dr, Vienna, VA 22182	43068	9/13/2016	0.50
33	Hollin Meadows Elementary School	2310 Nordok Place, Alexandria, VA 22306	45311	9/16/2016	0.50
34	Cedar Lane School (cluster 2)	101 Cedar Ln SW, Vienna, VA 22180	50862	9/17/2016	1.00
35	Vienna Elementary School	128 Center St S, Vienna, VA 22182	40737	9/18/2016	0.50
36	Graham Road Elementary School	2831 Graham Rd, Falls Church, VA 22042	53746	9/20/2016	1.00
37	Westgate Elementary School	7500 Magarity Rd, Falls Church, VA 22043	79722	9/22/2016	1.00
38	Cunningham Park Elementary School	1001 Park St, Vienna, VA 22180	51775	9/25/2016	1.00
39	Louise Archer Elementary School	324 Nutley St NW, Vienna, VA 22180	37046	9/25/2016	1.00

Fairfax County Public Schools Parking Lot Sweeping for Permit Year 4, July 1, 2016 - June 30, 2017

	D	E	F	G	H
1	Facility Name	Address	Sq Ft	COMPLETED DATE	YARDS DEBRIS
40	Westlawn Elementary School	3200 Westley Rd, Falls Church, VA 22042	64769	9/26/2016	1.00
41	Timber Lane Elementary School	2737 West St, Falls Church, VA 22046	62142	9/27/2016	1.00
42	Bailey's Elementary School for the Arts and Sciences	6111 Knollwood Dr, Falls Church, VA 22041	65752	10/4/2016	1.00
43	Glen Forest Elementary School	5829 Glen Forest Dr, Falls Church, VA 22041	55311	10/6/2016	1.00
44	Mason Crest Elementary School	3705 Crest Drive, Annandale, VA 22003	72275	10/10/2016	1.00
45	Nancy Sprague Center	4414 Holburn Ave, Alexandria, VA 22003	63331	10/10/2016	1.00
46	Parklawn Elementary School	4116 Braddock Rd, Alexandria, VA 22312	74162	10/10/2016	1.00
47	Chesterbrook Elementary School	1753 Kirby Rd, Mclean, VA 22101	58683	10/11/2016	1.00
48	Columbia Elementary School	6720 Alpine Dr, Annandale, VA 22003	59131	10/12/2016	1.00
49	Kent Gardens Elementary School	1717 Melbourne Dr, Mclean, VA 22101	66410	10/13/2016	1.00
50	Colvin Run Elementary School	1400 Trap Rd, Vienna, VA 22182	80149	10/16/2016	1.00
51	Flint Hill Elementary School	2444 Flint Hill Rd, Vienna, VA 22181	55608	10/16/2016	1.00
52	Freedom Hill Elementary School	1945 Lord Fairfax Rd, Vienna, VA 22182	60172	10/16/2016	1.00
53	Pine Spring Elementary School	7607 Willow Ln, Falls Church, VA 22042	56429	10/18/2016	1.00
54	Sleepy Hollow Elementary School	3333 Sleepy Hollow Rd, Falls Church, VA 22044	55495	10/20/2016	1.00
55	Fairhill Elementary School	3001 Chichester Ln, Fairfax, VA 22031	60951	10/23/2016	1.00
56	Franklin Sherman Elementary School	6630 Brawner St, Mclean, VA 22101	40592	10/23/2016	1.00
57	Woodburn Elementary School for the Fine & Communicative Arts	3401 Hemlock Dr, Falls Church, VA 22042	46569	10/23/2016	0.50
58	Spring Hill Elementary School	8201 Lewinsville Rd, McLean, VA 22102	79750	10/24/2016	1.00
59	Haycock Elementary School	6616 Haycock Rd, Falls Church, VA 22043	56065	10/30/2016	1.00
60	Marshall Road Elementary School	703 Marshall Rd SW, Vienna, VA 22180	62250	10/30/2016	1.00
61	Stenwood Elementary School	2620 Gallows Rd, Vienna, VA 22180	63691	10/30/2016	1.00
62	Devonshire Center (Graham Road ES)	2831 Graham Rd, Falls Church, VA 22042	52387	3/20/2017	1.00
63	Clermont Elementary School	5720 Clermont Dr, Alexandria, VA 22310	44051	3/21/2017	1.00
64	Clermont ES	5720 Clermont Dr, Alexandria, VA 22310	44051	3/21/2017	1.00
65	Dunn Loring Center	2334 Gallows Rd, Dunn Loring, VA 22027	76660	3/22/2017	1.00
66	Anthony T. Lane Elementary School	7137 Beulah St, Alexandria, VA 22315	114861	3/25/2017	1.00
67	Bren Mar Park Elementary School	6344 Beryl Rd, Alexandria, VA 22312	31827	4/1/2017	1.00
68	Hayfield Elementary School	7633 Telegraph Rd, Alexandria, VA 22315	61992	4/5/2017	1.00
69	Lorton Station Elementary School	9298 Lewis Chapel Rd, Lorton, VA 22079	102800	4/10/2017	1.00
70	Lorton Station ES	9298 Lewis Chapel Rd, Lorton, VA 22079	102800	4/10/2017	1.00
71	Lynbrook Elementary School	5801 Backlick Rd, Springfield, VA 22150	51747	4/11/2017	1.00
72	Fort Hunt Elementary School	8832 Linton Ln, Alexandria, VA 22308	62041	4/12/2017	1.00
73	Carl Sandburg Middle School	8428 Fort Hunt Rd, Alexandria, VA 22308	415051	4/14/2017	4.00
74	Sandburg MS	8428 Fort Hunt Rd, Alexandria, VA 22308	415051	4/14/2017	4.00
75	Dogwood Elementary School	12300 Glade Dr, Reston, VA 20191	52589	4/19/2017	1.00
76	Brookfield Elementary School	4200 Lees Corner Rd, Chantilly, Va 20151	53225	4/21/2017	1.00

Fairfax County Public Schools Parking Lot Sweeping for Permit Year 4, July 1, 2016 - June 30, 2017

	D	E	F	G	H
1	Facility Name	Address	Sq Ft	COMPLETED DATE	YARDS DEBRIS
77	Armstrong Elementary School	11900 Lake Newport Rd, Reston, VA 20194	57283	4/26/2017	1.00
78	Cub Run Elementary School	5301 Sully Station Dr, Centreville, VA 20121	63029	4/26/2017	1.00
79	Hughes MS	11401 Ridge Heights Rd, Reston, VA 20191	82376	4/30/2017	1.00
80	Bush Hill Elementary School	5927 Westchester St, Alexandria, VA 22310	47785	5/2/2017	1.00
81	Bush Hill ES	5927 Westchester St, Alexandria, VA 22310	47785	5/2/2017	1.00
82	Mount Eagle Elementary School	6116 N Kings Hwy, Alexandria, VA 22303	39073	5/3/2017	1.00
83	Mount Eagle ES	6116 N Kings Hwy, Alexandria, VA 22303	39073	5/3/2017	1.00
84	Woodley Hills ES	8718 Old Mt Vernon Rd, Alexandria, VA 22309	51121	5/4/2017	1.00
85	Garfield Elementary School	7101 Old Keene Mill Rd, Springfield, VA 22150	41729	5/7/2017	1.00
86	Garfield ES	7101 Old Keene Mill Rd, Springfield, VA 22150	41729	5/7/2017	1.00
87	Cameron Elementary School	3434 Campbell Dr, Alexandria, VA 22303	62573	5/8/2017	1.00
88	Cameron ES	3434 Campbell Dr, Alexandria, VA 22303	62573	5/8/2017	1.00
89	Lees Corner Elementary School	13500 Hollinger Ave, Fairfax, VA 22033	58643	5/9/2017	1.00
90	Lees Corner ES	13500 Hollinger Ave, Fairfax, VA 22033	58643	5/9/2017	1.00
91	Springfield Estates ES	6200 Charles C Goff Dr, Springfield, VA 22150	53514	5/10/2017	1.00
92	Marshall Road ES	703 Marshall Rd SW, Vienna, VA 22180	62250	5/15/2017	1.50
93	Cedar Lane Center	101 Cedar Ln SW, Vienna, VA 22180	50862	5/16/2017	1.50
94	Nancy Sprague Center	4414 Holburn Ave, Alexandria, VA 22003	63331	5/17/2017	1.50
95	Riverside ES	8410 Old Mt Vernon Rd, Alexandria, VA 22309	45961	5/18/2017	1.50
96	Hunters Woods Elementary School for the Arts and Sciences	2401 Colts Neck Rd., Reston, VA 20191	58037	5/24/2017	1.00
97	Hunters Woods ES	2401 Colts Neck Rd., Reston, VA 20191	58037	24-May	1.00
98	Navy Elementary School	3500 West Ox Rd, Fairfax, VA 22033	79884	5/26/2017	1.00
99	Navy ES	3500 West Ox Rd, Fairfax, VA 22033	79884	5/26/2017	1.00
100	Bull Run Elementary School	15301 Lee Highway, Centreville, VA 20121	120205	5/27/2017	1.00
101	Bull Run ES	15301 Lee Highway, Centreville, VA 20121	120205	5/27/2017	1.00
102	Burke School	9645 Burke Lake Rd, Burke, VA 22015	45105	6/1/2017	1.00
103	Burke Center	9645 Burke Lake Road, Burke, VA 22015	45105	6/1/2017	1.00
104	Kent Gardens ES	1717 Melbourne Dr, Mclean, VA 22101	66410	6/2/2017	1.50
105	Stone MS	5500 Sully Park Dr, Centreville, VA 20121	151971	6/3/2017	1.50
106	Kings Park ES	5400 Harrow Way, Springfield, VA 22151	65606	6/4/2017	1.50
107	London Town ES	6100 Stone Rd Centreville, Va 20120	62235	6/7/2017	1.50
108	Fairhill ES	3001 Chichester Ln, Fairfax, VA 22031	60951	6/8/2017	1.50
109	Wolftrap ES	1903 Beulah Rd, Vienna, VA 22182	39397	6/8/2017	1.50
110	Little Run ES	4511 Olley Ln, Fairfax, VA 22032	51665	6/9/2017	1.50
111	Herndon MS	901 Locust St, Herndon, VA 20170	178487	6/10/2017	2.50
112	Woodburn ES	3401 Hemlock Dr, Falls Church, VA 22042	46569	6/12/2017	1.50
113	Beech Tree ES	3401 Beechtree Ln, Falls Church, VA 22042	36212	6/13/2017	1.00

Fairfax County Public Schools Parking Lot Sweeping for Permit Year 4, July 1, 2016 - June 30, 2017

	D	E	F	G	H
1	Facility Name	Address	Sq Ft	COMPLETED DATE	YARDS DEBRIS
114	Wakefield Forest ES	4011 Iva Ln, Fairfax, VA 22032	50845	6/14/2017	1.50
115	Oakton ES	3000 Chain Bridge Rd, Oakton, VA 22124	60960	6/15/2017	1.50
116	Kings Glen ES	5401 Danbury Forest Dr, Springfield, VA 22151	44721	6/20/2017	1.50
117	Shrevevood ES	7525 Shreve Rd, Falls Church, VA 22043	44046	6/21/2017	1.50
118	Pine Spring ES	7607 Willow Ln, Falls Church, VA 22042	56429	6/22/2017	1.50
119	Lake Braddock	9200 Burke Lake Rd, Burke, VA 22015	479958	6/24/2017	5.00
120	Mount Vernon	8515 Old Mt Vernon Rd, Alexandria, VA 22309	358048	6/29/2017	4.00
121	Westfield	4700 Stonecroft Blvd, Chantilly, VA 20151	396899	6/30/2017	4.00
122					
123				Total Cubic Yards of Debris	137.50

FCPS Elementary School Fields Requiring NMPs

School Name	Acres	Field Type	Latitude	Longitude	NMP Complete
Bull Run ES	1.17	RF	38.827679	-77.474513	Y
Canterbury Woods ES	1.80	BB	38.819565	-77.249664	Y
Centre Ridge ES	1.21	RF	38.825763	-77.447276	Y
Clearview ES	1.78	RF	38.982483	-77.391609	Y
Coates ES	2.03	MP	38.952459	-77.420248	Y
Colin Powell ES	1.14	RF	38.846786	-77.407891	Y
Colvin Run ES	1.10	RF	38.947623	-77.266035	Y
Colvin Run ES	1.13	RF	38.947274	-77.265526	Y
Crossfield ES	1.50	RF	38.915095	-77.361018	Y
Flint Hill ES	1.38	MP	38.896628	-77.286057	Y
Fort Hunt ES	1.37	RF	38.717809	-77.066141	Y
Freedom Hill ES	1.19	RF	38.910971	-77.228785	Y
Herndon ES	1.25	RF	38.975525	-77.374875	Y
Marshall Road ES	1.94	MP	38.881881	-77.265136	Y
McNair ES	1.18	RF	38.947828	-77.403395	Y
McNair ES	1.18	RF	38.947325	-77.402799	Y
North Springfield ES	1.48	RF	38.802468	-77.207267	Y
Waples Mill ES	1.57	RF	38.875706	-77.343981	Y
Willow Springs ES	1.30	RF	38.832159	-77.37866	Y
Wolftrap ES	1.07	MP	38.917777	-77.265196	Y
Total Acres	27.77				27.77

FCPS Middle School Fields Requiring NMPs

School Name	Acres	Field Type	Latitude	Longitude	NMPs Completed
Carl Sandburg	1.72	RF	38.729818	-77.064032	Y
Carl Sandburg	1.78	BB	38.729061	-77.064298	Y
Franklin MS	1.60	RF	38.906398	-77.422018	Y
Kilmer MS	1.01	RF	38.905942	-77.224872	Y
Kilmer MS	1.67	RF	38.905639	-77.223932	Y
Stone MS	1.27	RF	38.856186	-77.456688	N
Total Acres	9.05				7.78

FCPS High School and Secondary School Fields Requiring NMPs

School Name	Acres	Field Name	Field Type	Size	Latitude	Longitude	NMPs Completed
Annandale HS	2.41	1	BB	90	38.822653	-77.211097	
Centreville HS	2.39	1	BB	90	38.825262	-77.40886	
Chantilly HS	2.48	1	BB	90	38.878644	-77.407824	
Edison HS	2.22	1	BB	90	38.780876	-77.13158	
Falls Church HS	1.62	1	BB	90	38.862399	-77.209376	Y
Hayfield SS	2.53	1	BB	90	38.751867	-77.141143	
Herndon HS	1.97	1	BB	90	38.988213	-77.37533	Y
Jefferson HS	2.25	1	BB	90	38.820276	-77.169125	Y
Lake Braddock SS	2.53	1	BB	90	38.803775	-77.262891	
Langley HS	2.05	1	BB	90	38.951303	-77.16446	
Lee HS	2.32	1	BB	90	38.778687	-77.170356	
Madison HS	2.29	1	BB	90	38.897537	-77.279657	
Marshall HS	2.45	1	BB	90	38.904245	-77.21228	Y
McLean HS	1.93	0	BB	60	38.921557	-77.185808	Y
McLean HS	2.27	1	BB	90	38.92221	-77.184599	Y
Mt Vernon HS	2.46	1	BB	90	38.724756	-77.092659	Y
Oakton HS	2.22	1	BB	90	38.881068	-77.281933	
Robinson SS	2.70	1	BB	90	38.817933	-77.306542	Y
South County HS	2.51	1	BB	90	38.720014	-77.239823	
South Lakes HS	2.49	1	BB	90	38.934321	-77.341299	
West Potomac HS	1.99	1	BB	90	38.774367	77.074601	Y
West Springfield HS	2.17	1	BB	90	38.78388	-77.240444	Y
Westfield HS	2.07	1	BB	90	38.886739	-77.46687	
Woodson HS	2.43	1	BB	90	38.836297	-77.277409	
Total Acres	54.74						21.82

FCPS Other Fields Requiring NMPs

Fields	Acres	Field Type	Latitude	Longitude	NMPs Completed
Burke Center	1.36	RF	38.783122	-77.277634	Y
Dunn Loring Center	1.49	RF	38.896384	-77.227642	Y
Leis Center	1.59	MP	38.85668	-77.202873	Y
Virginia Hills Center	1.15	RF	38.773706	-77.102007	Y
Wilton Woods Center	1.25	MP	38.789885	-77.095956	Y
Total Acres	6.84				6.84

Date of Report: 07/05/2017 10:38:35 AM EDT

[Download CSV](#)

Ad-Hoc Report - Roster

Roster		Roster Sections				Section Courses				Roster People	
Registration Status	Section #	Section Title	Start Date	End Date	Start Time	End Time	Course #	Course Title	Last Name	First Name	
1. Registered	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting-ON DEMAND	Bayne	Patrick	

		MS4 Education for FCPS						MS4 Education for FCPS		
		Training on	April	June	2:00	3:00	FT-	Training on		
2. Completed	FT- 88767	Polychlorinated Biphenyls (PCBs)	28, 2017	30, 2017	PM	PM	88767	Polychlorinated Biphenyls (PCBs)	Bertelli	Carlo
		Recognition and Reporting						Recognition and Reporting- ON DEMAND		

		MS4 Education for FCPS						MS4 Education for FCPS		
		Training on	April	June	2:00	3:00	FT-	Training on		
3. Registered	FT- 88767	Polychlorinated Biphenyls (PCBs)	28, 2017	30, 2017	PM	PM	88767	Polychlorinated Biphenyls (PCBs)	Bittinger	Jeffrey
		Recognition and Reporting						Recognition and Reporting- ON DEMAND		

4. Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Campbell	David
--------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	----------	-------

5. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Carros	Philip
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	--------	--------

6. Completed	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Cross	Russell
--------------	----------	--	----------------	---------------	---------	---------	----------	---	-------	---------

7. Completed	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Dols	Paul
--------------	----------	--	----------------	---------------	---------	---------	----------	---	------	------

8. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Fletcher	Roger
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	----------	-------

9. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Garcia	Jose
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	--------	------

10. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Gore	John
----------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	------	------

11. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Groves	Jeremy
----------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	--------	--------

12.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Henry	Michael
-----	------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	-------	---------

13.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Herrick	Russell
-----	------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	---------	---------

14. Completed	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Holmes	Timothy
---------------	----------	---	----------------	---------------	---------	---------	----------	--	--------	---------

15. Registered	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Jenkins	Dennis
----------------	----------	---	----------------	---------------	---------	---------	----------	--	---------	--------

16.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Jones	Timothy
-----	------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	-------	---------

17.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Krzywicki	Joseph
-----	------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	-----------	--------

18. Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Lariscy	William
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	---------	---------

19. Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Liverman	Paul
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	----------	------

20. Completed	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	MacBeth	Joel
21. Registered	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Martin	Timothy

22. Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Moran	Holly
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	-------	-------

23. Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Morgan	Justin
---------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	--------	--------

24.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Nothwehr	James
25.	Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Reynolds	Timothy

26. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Rinaldi	Joseph
----------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	---------	--------

27. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Rusert	John
----------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	--------	------

28.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Santmyer	Vincent
-----	------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	----------	---------

29.	Completed	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Sheth	Dilipkum
-----	-----------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	-------	----------

30.	Registered	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	St. John	David
31.	Completed	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Stevens Jolly	Amanda

32.	Completed	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Swain	John
33.	Registered	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	West	Jeffrey

34. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Wood	Carter
----------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	------	--------

35. Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Woodson	Willie
----------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	---------	--------

36.	Registered	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting	April 28, 2017	June 30, 2017	2:00 PM	3:00 PM	FT- 88767	MS4 Education for FCPS Training on Polychlorinated Biphenyls (PCBs) Recognition and Reporting- ON DEMAND	Wyne	James
-----	------------	--------------	---	----------------------	---------------------	------------	------------	--------------	---	------	-------

Date of Report: 07/05/2017 10:15:25 AM EDT

[Download CSV](#)**Ad-Hoc Report - Roster**

Roster		Roster Sections				Section Courses			Roster People		
Registration Status	Section #	Section Title	Start Date	End Date	Start Time	End Time	Course #	Course Title	Last Name	First Name	
1. Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Appiah	George	1
2. Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Berryman	Grayling	1

3.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Bertelli	Carlo	2
4.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Brammer	Timothy	1

5. Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Campbell	David	1
--------------	----------	--	---------------------	---------------------	------------	------------	---------------	---	----------	-------	---

6. Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Caridakis	George	1
--------------	----------	--	---------------------	---------------------	------------	------------	---------------	---	-----------	--------	---

7.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Carney	Craig	1
----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	--------	-------	---

8.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Clement	William	2
----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	---------	---------	---

9.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Cooper	Woodrow	2
----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	--------	---------	---

10.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Daub	Wilbur	2
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	------	--------	---

11. Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Egas-Vides	Diana	2
---------------	----------	--	------------------	---------------	---------	---------	---------------	--	------------	-------	---

12. Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Ellis	David	1
---------------	----------	--	------------------	---------------	---------	---------	---------------	--	-------	-------	---

13.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Ellis	Robert	1
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	-------	--------	---

14.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Gore	John	1
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	------	------	---

15.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Groves	Jeremy	2
-----	-----------	----------	--	------------------	---------------	---------	---------	---------------	--	--------	--------	---

16.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Hensberger	Alan	1
-----	-----------	----------	--	------------------	---------------	---------	---------	---------------	--	------------	------	---

17.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Holmes	Timothy	1
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	--------	---------	---

18.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Jones	James	1
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	-------	-------	---

19.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Langhorne	Gary	1
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	-----------	------	---

20.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	MacBeth	Joel	2
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	---------	------	---

21.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Marchante	Jonathan	2
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	-----------	----------	---

22.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Martin	Timothy	2
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	--------	---------	---

23.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Moran	Holly	2
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	-------	-------	---

24.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Morgan	Justin	2
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	--------	--------	---

25.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Payne	Larry	1
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	-------	-------	---

26.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Phillips	Brandon	2
-----	-----------	----------	--	---------------------	---------------------	------------	------------	---------------	---	----------	---------	---

27.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Reinoso	Gerardo	1
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	---------	---------	---

28.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Rinaldi	Joseph	1
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	---------	--------	---

29.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Rusert	John	1
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	--------	------	---

30.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Santmyer	Vincent	2
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	----------	---------	---

31.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	St. John	David	1
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	----------	-------	---

32.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Stevens Jolly	Amanda	2
-----	-----------	----------	---	------------------	---------------	---------	---------	---------------	---	---------------	--------	---

33.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Swain	John	1
-----	-----------	----------	--	------------------	---------------	---------	---------	------------	--	-------	------	---

34.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Williams	Gregory	1
-----	-----------	----------	--	------------------	---------------	---------	---------	------------	--	----------	---------	---

35.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Williams	Mary	1
-----	-----------	----------	---	------------------	---------------	---------	---------	------------	--	----------	------	---

36.	Completed	FT-44444	2017 (On Demand) MS4 education for FCPS Sites and Spill Recognition and Reporting	January 11, 2017	June 30, 2017	2:00 PM	3:00 PM	FT-44444 A	MS4 Education for FCPS Sites and Spill Recognition and Reporting - On demand	Wyne	James	1
-----	-----------	----------	---	------------------	---------------	---------	---------	------------	--	------	-------	---

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
P O BOX 1163, RICHMOND VA 23218-1163

Form Number US 7375-901 BL

PESTICIDE APPLICATOR CERTIFICATE

Issued
08/15/2017
Expires
06/30/2019

GOVT EMPLOYEE
FOR BL# 2634

Fee Paid
EXEMPT

Certificate
69352-G



Issued in accordance with application duly executed by the person shown below who has agreed to comply with all applicable laws, rules and regulations

MAURICE STAFFORD SR
FAIRFAX CO PUBLIC SCHOOLS



Sandra J. Adams
Commissioner

Liza Fleson Trosbach
Authorized Representative

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
Office of Pesticide Services
P O Box 1163
Richmond, VA 23218

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
P O BOX 1163, RICHMOND VA 23218-1163

PESTICIDE APPLICATOR CERTIFICATE

Issued
07/27/2017

GOVT EMPLOYEE
FOR BL# 2634

Fee Paid
EXEMPT

Certificate
32596-G

Expires
06/30/2018



Issued in accordance with application duly executed by the person shown below who has agreed to comply with all applicable laws, rules and regulations

TYRONE N TURNER
FAIRFAX CO PUBLIC SCHOOLS
5025 SIDEBURN RD
FAIRFAX, VA 22032



Sandra J. Adams
Commissioner

Liza Fleeson Trossbach
Authorized Representative

F
t

3

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
P O BOX 1163, RICHMOND VA 23218-1163

PESTICIDE APPLICATOR CERTIFICATE

Issued
08/01/2016

GOVT EMPLOYEE
FOR BL# 2632

Fee Paid
EXEMPT

Certificate
109951-G

Expires
06/30/2018



Issued in accordance with application duly executed by the person shown below who has agreed to comply with all applicable laws, rules and regulations

JACK T STARRY
FAIRFAX COUNTY PUB SCHOOLS



Sandra J. Adams
Commissioner

Liza Fleeson Trossbach
Authorized Representative

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
P O BOX 1163, RICHMOND VA 23219-1163

PESTICIDE APPLICATOR CERTIFICATE

Issued
06/06/2016

GOVT EMPLOYEE
FOR BL# 7725

Fee Paid
EXEMPT

Certificate
80292-G

Expires
06/30/2018



Issued in accordance with application duly executed by the person shown below who has agreed to comply with all applicable laws, rules and regulations

WALTER L RILEY
PRINCE WILLIAM CO PUBLIC SCHOOLS



Sandra J. Adams
Commissioner

Liza Fleeson Trossbach
Authorized Representative

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
P.O BOX 1163, RICHMOND VA 23218-1163

PESTICIDE APPLICATOR CERTIFICATE

Issued
05/09/2017

GOVT EMPLOYEE
FOR BL# 2632

Fee Paid
EXEMPT

Certificate
78459-G

Expires
06/30/2019



Issued in accordance with application duly executed by the person shown below who has agreed to comply with all applicable laws, rules and regulations

COREY A ALLEN
FAIRFAX COUNTY PUB SCHOOLS



Sandra J. Adams
Commissioner

Liza J. Fleeson
Authorized Representative

Spill Response Procedures

Spill Drills

7 Steps to Spill Response

1. Assess the risk (starts before a spill even occurs)
2. Protect yourself
3. Stop the source
4. Confine the spill
5. Clean-up
6. Decontaminate
7. Report



Step 1: Assess the Risk

- What level of protection is needed?
- What substance?
- How much?
- How dangerous is the substance?
- Risk to property, life, the environment?
- Recognize what you can and can't handle.

Step 2: Protect Yourself

- Use Personal Protective Equipment
- Make sure PPE does not break/leak while working

Step 3: Stop the Source

- Stop the leak to prevent the spill from getting larger

Step 4: Confine the Spill

- Pads
- Socks
- Pillows
- Diking, damming, berming etc.
- Absorbent material

Step 5: Clean-up

- Absorb liquids
- Minimize contamination
- Remove contaminated cleaning materials

Step 6: Decontaminate

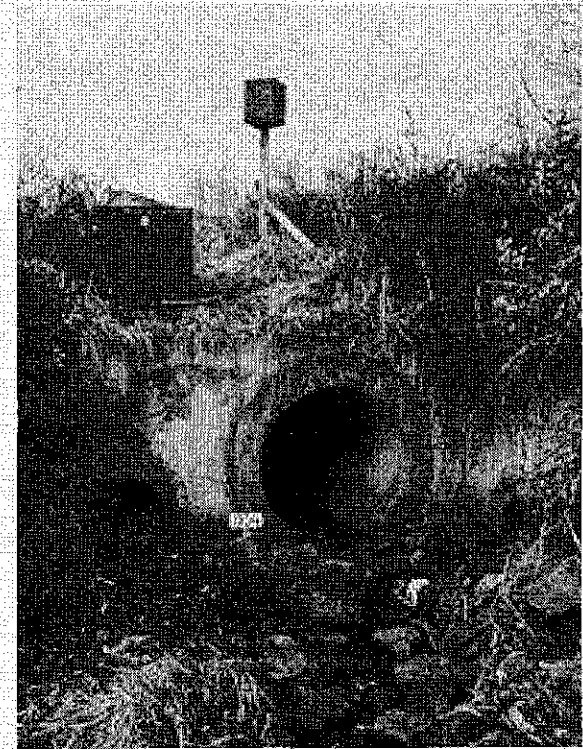
- Cleaning up people and equipment

Step 7: Report

- Form to be completed
- Call supervisor and OSS to report

Spill Drills

1. Spill on land
 - Asphalt, concrete
 - Soil, grass, etc.
2. Spill in standing water
 - Retention pond
 - Detention pond
3. Spill in moving water



Thank you - Any Questions

Contact Information:

Dale Taylor
Coordinator II Grounds Maintenance
Office of Facilities Management
Fairfax County Public Schools
Sideburn Support Center
5025 Sideburn Road
Fairfax, VA 22032
703-764-2429
dltaylor2@fcps.edu

Holly Moran, P.E.
Facilities Services
Environmental Specialist
Office of Facilities Management
Fairfax County Public Schools
Sideburn Support Center
5025 Sideburn Road
Fairfax, VA 22032
703-624-0337
hmmoran@fcps.edu

Mike Hutchinson
Field Representative
Office of
Facilities Management
Woodson Complex
9515 Main St.
Fairfax, VA 22301
703-764-3503
MRHutchison@fcps.edu

Richard Michelback, REHS
Environmental Health Specialist
Office of Safety and Security
703-909-5931
rpmichelback@fcps.edu

Spill Kit Training Outline

- Show video large spill response video:
http://www.youtube.com/watch?v=bJaWTJ_2pgo
- Show Resource Venture video: <http://www.youtube.com/watch?v=sQMwTYy-A4s>
- Be prepared, be aware of your procedures
- Be prepared before a spill happens
- Know what you have and prepare for it

7 Steps to Spill Clean Up

1. Assess the risk
 - a. Identify the hazard, protect yourself, your employees and your environment.
 - b. What substances?
 - c. How much?
 - d. How dangerous? Toxic, caustic, flammable etc.
 - e. Risk to life, property or the environment?
 - f. Recognize what you can or cannot do.
2. Protect yourself
 - a. Chemical protective (PPE) clothing based on what you have
 - b. Don't work alone
 - c. PPE Breakthrough
3. Stop the source
 - a. Do what you can to stop the leak from causing more damage
 - i. Plug the leak
 - ii. Tip the barrel back up
 - iii. Put a catch basin under the leak
 - iv. Turn a valve
4. Confine the spill
 - a. Protect the stormwater
 - b. Keep the spill area as small as possible
 - c. Enclose the spill with spill kit materials
5. Clean up
 - a. Use spill kit materials
 - b. Put a contaminated materials in trash bags or the spill kit container
 - c. Place contaminated materials in designated area at Woodson Grounds
 - i. Contact OSS when doing so
6. Decontaminate
 - a. Clean yourself and your clothes

7. Report
 - a. Complete the spill response report form
 - b. Note whether or not the

Types of spills

1. Spill on land
 - a. Asphalt, concrete
 - b. Soil, grass, etc.
2. Spill in standing water
 - a. Retention pond
 - b. Detention pond
3. Spill in moving water
 - a. Most difficult to handle
 - b. Do what you can with socks, booms, etc.
 - c. Best to plan on clean-up after rain event is over.

Spill kit

Go over contents

Pillows:

- Pillow has large surface area, high capacity and fast-wicking filler to quickly soak up oils
- Tough, chemical-resistant polypropylene skin and filler absorb oils but repel water-based liquids
- Polypropylene skin resists chemicals and tearing; reduces dust and holds in liquid, even when saturated
- Ideal for skimming oil off of acid baths or for use in other acidic environments
- Floats to clean up spills on water confined by booms or socks
- Skin is UV resistant up to 12 months; meets NFPA 99 standards for static decay
- Absorbs and retains oils and oil-based liquids - including lubricants, fuels and cleaning agents - without taking in a drop of water
- Bright white color makes pillow easier to see in outdoor environments, draws attention to machine leaks and clearly shows saturation level
- Can be incinerated after use to reduce waste or for fuels blending

Socks

- Tough, chemical-resistant polypropylene skin and filler absorb oils but repel water-based liquids
- Tough enough for acid baths and phosphates tanks
- Ideal for skimming oil off acid or caustic baths or for use in other acidic environments
- Meets NFPA 99 standards for static decay
- Attached string allows socks to be tied down, tied together or dipped into tanks
- PIG Skimmer Socks float at the surface for easy retrieval
- Absorbs and retains liquids - including lubricants and fuels - without taking in a drop of water

Pads

- Lasts 2X longer than ordinary mats for fewer change-outs, absorbs everything, works everywhere; that's why more plants worldwide use PIG Mat than any other brand
- Eight layers of 100% polypropylene are thermally bonded to make PIG Mat the strongest mat on the market; won't rip, tear or fray even when saturated
- Exclusive dimple pattern speeds wicking of liquid throughout mat for faster, easier cleanup
- Highly absorbent, fine-fiber construction won't leave liquids or fiber residue behind
- Absorbs most common industrial liquids - oils, water, solvents, coolants and more
- Absorbed leaks and drips blend right in; dark gray color hides grime so mat stays on the job longer
- Flame-resistant material won't burn immediately like cellulose mats; melts when exposed to high heat while on the job
- Can be wrung out and incinerated after use to reduce waste or for fuels blending
- Dispenser box makes it easy to take, carry and store your mat while protecting it from dirt and moisture
- Pads are ideal for catching drips and soaking up spills
- Easy-tear perforations let you take only what you need so you use less mat and save money
- Heavy-weight construction delivers greater durability and absorbency for demanding tasks and large-volume cleanups

Spill kit demonstration

- Spill near a storm water drain
 - o Protect the drain
 - o Stop the source
 - o Contain the spill
 - o Cleanup
 - o Properly dispose of waste
 - o Decontaminate
 - o Report

Other Issues

- o Custodial training
- o Dry weather screening
- o Illicit discharge