

**Loudoun County Stormwater Management
Engineering Services**

PUBLIC EDUCATION AND OUTREACH PLAN (PEOP)

Version 2, June 10, 2019

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Acronyms

B&D	Department of Building and Development
BMP	Best Management Practice
CWA	Clean Water Act
DAS	Department of Animal Services
DCR	Virginia Department of Conservation and Recreation
DES	Department of Extension Services
DEQ	Virginia Department of Environmental Quality
DGS	Department of General Services
EMG	Extension Service Master Gardeners
GIS	Geographic Information System
HOA	Homeowner Association
KLB	Keep Loudoun Beautiful
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NVCWP	Northern Virginia Clean Water Partners
NVRC	Northern Virginia Regional Commission
PEOP	Public Education and Outreach Plan
PRCS	Department of Parks, Recreation and Community Services
SWCD	Loudoun County Soil & Water Conservation District
SWM	Department of General Service - Stormwater Management Division
TMDL	Total Maximum Daily Load
VCE	Virginia Cooperative Extension
VDOT	Virginia Department of Transportation
VPDES	Virginia Pollutant Discharge Elimination System
WMD	Department of General Services - Waste Management Division

1.0 Background and Purpose

Loudoun County (County) operates a Municipal Separate Storm Sewer System (MS4) that is permitted through the Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Stormwater Discharges from Small MS4s (MS4 General Permit) issued by the Virginia Department of Environmental Quality (DEQ).¹ The current MS4 General Permit (effective November 2018) authorizes the County's MS4 outfall discharges into surface waters of Virginia. As a condition of the MS4 General Permit, the County is required to develop and implement a Public Education and Outreach Program² designed to:

- Increase the public's knowledge of how to reduce stormwater pollution, placing a priority on reducing impacts to impaired waters and other local water pollution concerns;
- Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
- Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

The purpose of this Public Education Outreach Plan (PEOP) is to identify the community involvement approach Loudoun County will use to promote methods to reduce the discharge of pollutants in stormwater runoff. The Department of General Services (DGS) is responsible for managing the PEOP for Loudoun County's Stormwater Management (SWM) program. The activities identified in this plan apply to the unincorporated urbanized areas of Loudoun County that are contained within the County's MS4 permit area. Loudoun County operates an MS4 as defined by the 2010 US Census (Figure 1).

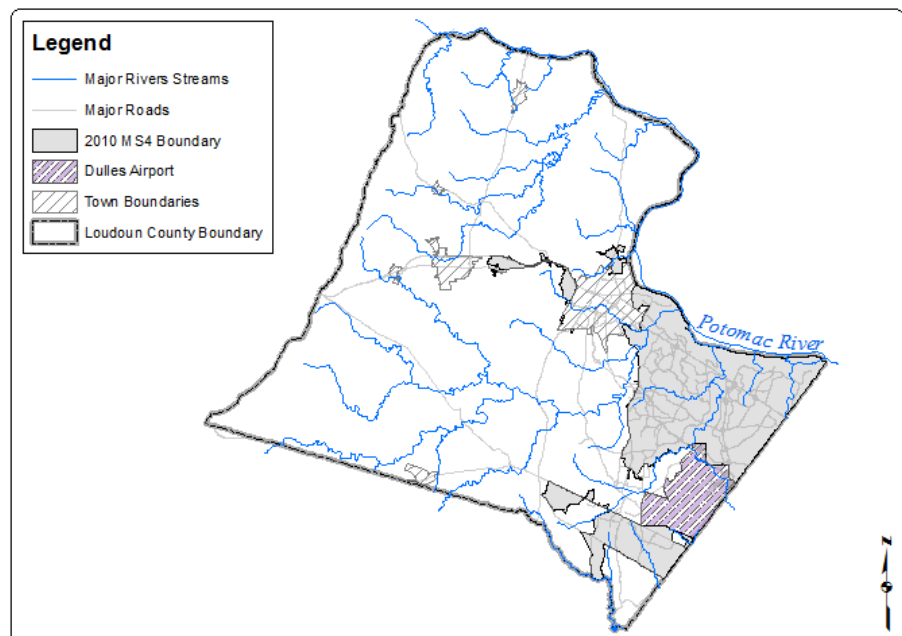


Figure 1. Loudoun County 2010 Urbanized Area

The County has historically placed, and continues to place, a high priority on stormwater pollution prevention. As the County addresses the requirements of the 2018 MS4 General Permit, it remains committed to providing education and outreach to its citizens and businesses.

¹ 9VAC-890-40

² 9VAC-890-40, Part I E 1 (a)



2.0 High-Priority Stormwater Issues

The MS4 General Permit requires that the County identify “no less than three high-priority stormwater issues to meet the goal of educating the public”.³ As part of its compliance effort under the previous MS4 General Permit (2013), the County identified bacteria impacts on water quality, illicit discharges, nutrient impacts on water quality, and sediment impacts on water as high-priority stormwater issues and has chosen to maintain its selection as high-priority stormwater issues during the current MS4 General Permit (2018). The rationale and importance for the selection of each high-priority stormwater issue selected are described in Table 1.

Table 1. Rationale and Importance for the Selection of High-Priority Stormwater Issues

High-Priority Stormwater Issue	Rationale and Importance for Selection
Bacteria Impacts on Water Quality	2016 305(b)/303(d) Water Quality Assessment Integrated Report has identified bacteria as the cause of impairments in segments of numerous streams in the County's MS4 service area including Broad Run, Bull Run and tributaries to the Potomac River. Given the identified bacterial impairments, the County has identified bacteria as a high-priority stormwater issue.
Illicit Discharges	Given the predominance of minimizing pollutant discharge from illicit discharges in the MS4 General Permit, the County has identified illicit discharges as a high-priority stormwater issue. In previous versions of the PEOP, the County chose to concentrate on illicit discharges from swimming pools. In this updated version, the County has chosen to concentrate on all illicit discharges as a large percentage of illicit discharges identified in Loudoun County have been unrelated to swimming pool discharges.
Nutrient Impacts on Water Quality	Excessive nutrients (nitrogen and phosphorus) have been identified as a source of impairment in the Chesapeake Bay. As a regulated point source, the County is required to reduce the nutrient load that is discharged from its MS4. Proper application of nutrients such as fertilizers can improve water quality and assist the County in meeting these reductions. Therefore, the County has identified nutrients as a high-priority stormwater issue.
Sediment Impacts on Water Quality	Sediment has been attributed as a factor in the benthic impairment of Goose Creek, Bull Run, and the Chesapeake Bay. Given that water quality impairments have been attributed to sediment, the County has identified sediment as a high-priority stormwater issue.

The MS4 General Permit requires the County to annually employ two (2) or more of the outreach strategies identified in Table 1 of the 2018 MS4 General Permit (Figure 2) to communicate with the public on the high-priority stormwater issues including how the target audience can minimize stormwater pollution. The strategies from the MS4 General Permit table (Figure 2) utilized by the County to meet this permit requirement are identified in the individual outreach efforts discussed throughout Section 4.0.

³ 9VAC-890-40, Part I E 1 (b)



Table 1 Strategies for Public Education and Outreach	
Traditional Written Materials	Informational brochures, newsletters, fact sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative Materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, billboards, or storm drain stenciling
Media Materials	Information disseminated through electronic media, televisions, movie theater, or newspaper
Speaking Engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum Materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training Materials	Materials developed to disseminate during workshops offered to local citizens, trade organizations, or industrial officials

Figure 2. 2018 MS4 General Permit List of Strategies for Loudoun County Selection and Annual Use in Communicating with the Public

3.0 Loudoun County Departments and Partners Engaged in Public Education and Outreach Regarding High-Priority Stormwater Issues

Loudoun County's efforts to inform community members of how they can minimize the impacts of the selected high-priority stormwater issues are led by various County departments. To support the County in its efforts, the County partners with non-County organizations through relationships or funding mechanisms. The SWM program is responsible for determining the relationship of individual partner activities with MS4 General Permit compliance. The relationship between stormwater management public education and outreach and the County departments and partner organizations is presented in Figure 3, below.

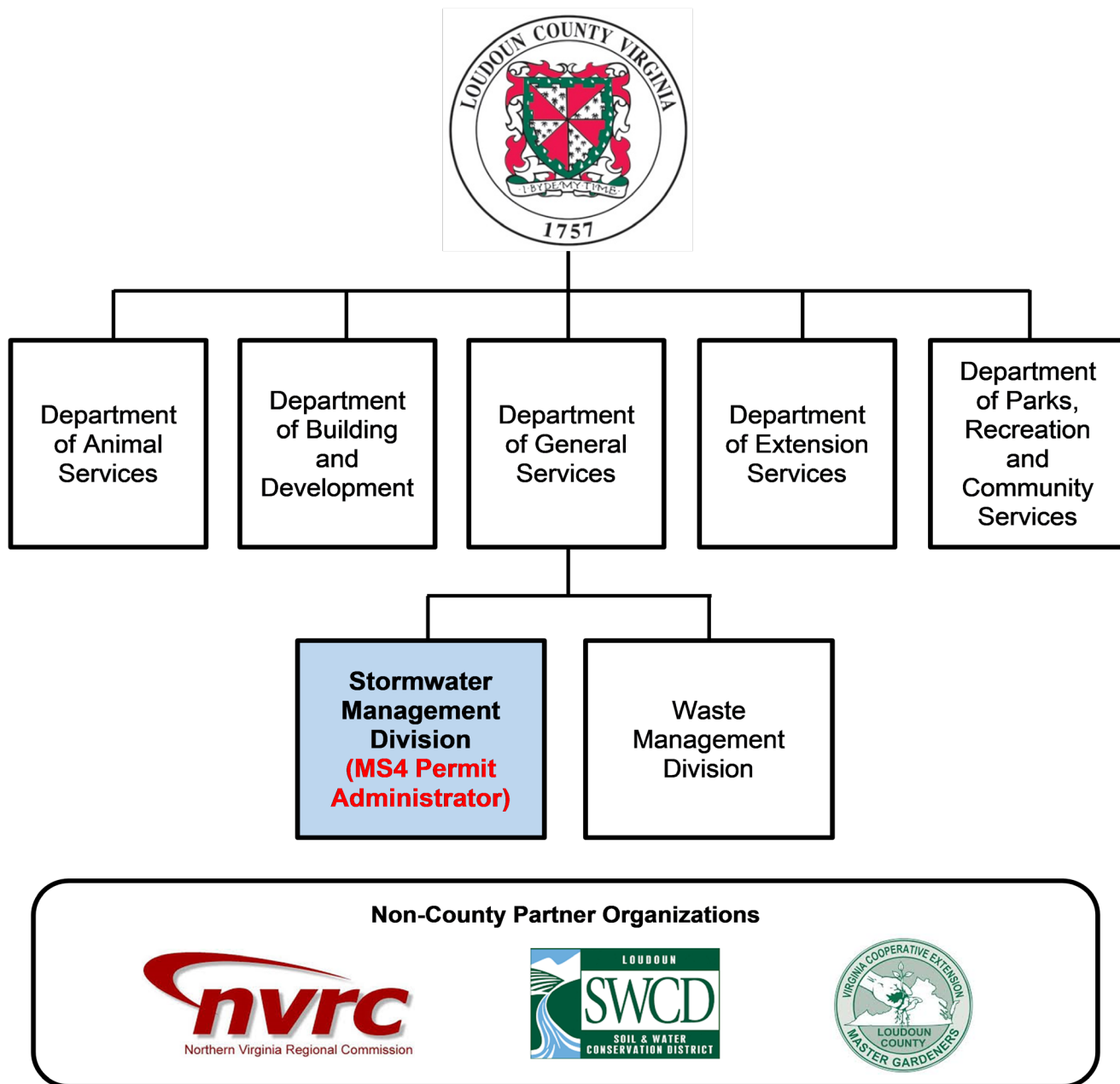


Figure 3. Relationship between SWM and Participating County Departments and Non-County Partner Organizations in Delivering High-Priority Stormwater Issue Public Education and Outreach.



Below is a description of County departments and non-County partner organizations that employ public education and outreach efforts that address and often provide guidance in reducing the stormwater impact regarding the high-priority stormwater issues identified by the County.

3.1 County Departments

The following are County departments that play a role in the County's public education and outreach efforts.

3.1.1 Department of General Service

Website: <https://www.loudoun.gov/110/General-Services>

DGS provides direct emergency and essential public works support to Loudoun County residents while providing effective and responsive facility and vehicle support to County government. Among DGS's responsibilities are the County's Stormwater Management Division (SWM), Waste Management Division (WMD) and implementation of the Clean Waters Initiative.

3.1.2 Stormwater Management Division

Website: <https://www.loudoun.gov/686/Stormwater-Management-Program>

SWM administers the County's MS4 General Permit compliance efforts. In addition to acting as the compliance hub, SWM provides general public education and outreach efforts regarding the County's stormwater program.

3.1.3 Waste Management Division

Website: <https://www.loudoun.gov/127/Waste-Management>

WMD is responsible for operating the County's solid waste management facility; managing public recycling drop-off centers and hazardous waste collection services; and supporting recycling opportunities for electronics, automotive wastes, and other materials. Specific to MS4 Public Education and Outreach, WMD oversees the household hazardous waste collection program which provides residents opportunities to properly dispose of household hazardous wastes; thus, minimizing the potential for illegal dumping and illicit discharges.

3.1.4 Loudoun County Department of Animal Services

Website: <https://www.loudoun.gov/4118/Animal-Services>

The Department of Animal Services (DAS) is responsible for implementing the County's animal services programs including pet adoption, animal control, and pet licensing. Specific to implementation of high-priority stormwater issue public education and outreach, DAS investigates pet waste complaints as well as provides educational materials aimed at encouraging individuals who adopt dogs from the County's facility and mobile adoption events to clean up and properly dispose of dog wastes; thereby, minimizing the potential for bacteria to be captured in stormwater runoff and discharged through MS4 outfalls.

3.1.5 Loudoun County Department of Building and Development

Website: <https://www.loudoun.gov/96/Building-Development>

The Department of Building and Development (B&D) provides oversight of all phases of construction within the County, including acting as its local erosion and sediment control (E&SC) and Virginia Stormwater Management Program authority. In addition to its regulatory responsibilities, B&D provides extensive educational awareness materials to the development community that are aimed at minimizing sediment discharge through better site management and erosion and sediment control.



3.1.6 Loudoun County Department of Parks, Recreation and Community Services

Website: <https://www.loudoun.gov/4119/Parks-Recreation-Community-Services>

The Department of Parks, Recreation and Community Service (PRCS) provides County residents opportunities for recreation and leisure while supporting community services. As a community service, PRCS allows residents to exercise their pets at their park facilities. PRCS coordinates with DGS in the placement of dog waste stations at their facilities and promotes proper clean-up and disposal of dog waste. The use of dog waste stations and associated signage provide opportunities for County residents to minimize the potential for bacteria to be captured in stormwater runoff and discharged through MS4 outfalls.

In addition, PRCS leads volunteer park clean-up days at various facilities throughout the year in which litter and other wastes are collected and properly disposed of. This public participation opportunity minimizes the floatables and other potential stormwater pollutants from being discharged into receiving waters.

3.1.7 Department of Extension Services

Website: <http://loudouncountymastergardeners.org/>

The Department of Extension Services (DES) is Loudoun County's unit of Virginia Cooperative Extension (VCE) and serves its residents and local governments. DES staff members and volunteers develop and present education programs using research-based information published by Virginia's land-grant universities, Virginia Tech, and Virginia State University. Among its many missions, DES supports the County's efforts at minimizing nutrient and sediment pollutants in stormwater runoff that discharge through the County's MS4 system. An example of DES's public awareness and outreach associated with MS4 stormwater runoff includes the Extension Services Master Gardener (EMG) program which is comprised of a group of volunteers that are organized and trained by DES.

3.2 Non-County Participating Organizations

The following are non-County organizations that play a role in the County's public education and outreach efforts:

3.2.1 Northern Virginia Regional Commission

Website: <https://www.novaregion.org/>

The Northern Virginia Regional Commission (NVRC) is a regional council of thirteen-member local governments, including Loudoun County, in the Northern Virginia suburbs of Washington DC. NVRC's chief roles and functions have focused on providing information, performing professional and technical services for its members, and serving as a mechanism for regional coordination. NVRC efforts are supported by annual contributions from its members, local governments, by appropriations of the Virginia General Assembly, and by a variety of grants, contracts, and fees from both governmental and private sector sources. Current programs and projects address a wide array of local government interests and include numerous public education and outreach efforts aimed at minimizing the high-priority stormwater issues identified by the County, as well as providing educational outreach on Coastal and Chesapeake Bay resources, shoreline management, and residential stormwater best practices. NVRC manages the Northern Virginia Clean Water Partners (NVCWP) which is a regional stormwater education initiative by and for Northern Virginia jurisdictions that uses cable television ads, website ads, and a website (<https://www.onlyrain.org>) to encourage the public to keep pollutants from flowing into storm drains.



3.2.2 Keep Loudoun Beautiful

Website: <http://www.keeploudounbeautiful.org/>

Keep Loudoun Beautiful (KLB) is an all-volunteer, 501(c)(3) tax-exempt non-profit organization with a mission to maintain the natural beauty and visual quality of Loudoun County; encourage and educate citizens to keep Loudoun beautiful; promote public awareness of environmental challenges and common-sense solutions, like reducing, reusing, and recycling; and, improve County trash disposal and eliminate illegal dumping. KLB's public education and outreach efforts include providing "Green Tips" and organizing public participation for community and watershed clean-up events aimed at minimizing the litter and other trash from entering receiving waters. To assist KLB in its efforts, Loudoun County waives disposal fees for wastes collected as part of the clean-up events.

3.2.3 Loudoun County Soil and Water Conservation District

Website: <http://www.loudounsoilandwater.com/>

The Loudoun County Soil and Water Conservation District (SWCD) is a political subdivision of the Commonwealth of Virginia that is funded by federal, state, local, and private funding streams. The SWCD, in partnership with the County, offers various programs aimed at addressing high-priority stormwater issues including storm drain marking projects, watershed education exhibits, family stream day, and promoting the voluntary use of best management practices (BMPs) including rain barrels and tree planting. Most recently, the SWCD has taken over application of the Virginia Conservation Assistance Program in which Loudoun County property owners can apply for and receive cost-share grants for the implementation of voluntary BMPs. The SWCD also provides classroom education to school-age children including Enviroscape© lessons and sponsors events, such as Rain Barrel Workshops. The SWCD public education and outreach efforts support the County's efforts in minimizing pollutants in stormwater runoff.

3.3 Other Non-Government Organizations

Numerous other non-government organizations (NGOs) within the County advocate environmental stewardship through public education and outreach programs independent of the County's PEOP. The NGO messages often supplement the County's efforts in communicating the issues regarding the high-priority stormwater issues and how the public can assist in minimizing their impacts on water quality. While these independent education and outreach initiatives are not part of the County's overall effort at addressing high-priority stormwater issues, they do provide a platform to increase public awareness on minimizing pollutants associated with high-priority stormwater issues upon which the County can explore cooperative messaging and delivery and coordinate informally or formally through a memorandum of understanding (MOU). Active NGOs in the County include:

- Loudoun County Watershed Watch (<http://www.loudounwatershedwatch.org/>)
- Loudoun Environmental Stewardship Alliance (<http://loudounnature.org/>)
- Loudoun Water (<https://www.loudounwater.org/>)
- Piedmont Environmental Council (<https://www.pecva.org/>)
- Audubon Naturalist Society (<https://anshome.org/>)



4.0 Strategies for Providing Public Education and Outreach on Selected High-Priority Stormwater Issues

Loudoun County, through its departments and non-County participating organizations, utilizes numerous strategies to provide public outreach and education for the selected high-priority stormwater issues. Table 2 provides a summary of the strategies that the County utilizes for each high-priority water quality issue identified.

Table 2. Summary of Strategies to be Implemented for Providing Public Education and Outreach on Selected County High-Priority Stormwater Issues

Loudoun County High-Priority Stormwater Issues				
Strategies	Bacteria Impacts on Water Quality	Illicit Discharges	Nutrient Impacts on Water Quality	Sediment Impacts on Water Quality
Traditional Written Materials	✓	✓	✓	✓
Alternative Materials	✓			
Signage	✓	✓		
Media Materials	✓	✓	✓	✓
Speaking Engagements				✓
Curriculum Materials			✓	
Training Materials				✓

Sections 4.1 through 4.4 provide details regarding the strategies and associated messaging the County implements for each of the high-priority stormwater issues. Each strategy contains the following:

- Target Audience
- Availability of materials for public consumption
- Responsibility parties for implementing the strategy
- Location of resources
- Items to be included in the County's MS4 Annual Report



4.1 High-Priority Stormwater Issue 1: Bacteria Impacts on Water Quality

The County employs numerous outreach efforts to minimize bacteria contribution to receiving waters from its MS4. These efforts concentrate on reducing the bacteria contribution associated with improper pet waste management and include the use of the following strategies:

- Strategy 1 - Traditional written materials as described in Section 4.1.1
- Strategy 2 - Media materials as described in Section 4.1.2
- Strategy 3 - Signage as described in Section 4.1.3
- Strategy 4 - Alternative materials as described in Section 4.1.4

4.1.1 Traditional Written Materials

SWM has developed both English and Spanish versions of a “Scoop the Poop” brochure. This brochure outlines the issues associated with pet wastes while informing pet owners of ways they can manage pet wastes so that bacteria impacts are minimized.

Table 3. Description of County's use of "Scoop the Poop" Brochure to Communicate Issues Associated with Bacteria Impacts on Water Quality

Traditional Written Materials - Scoop the Poop Brochure	
Target Audience	Loudoun County Dog Owners
Public Availability	Year-round; hard copies of the brochure are provided to County libraries and distribution upon request.
SWM Responsibility	SWM to make cooperating partners aware of the brochure's availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital version of the brochure on its web page.
	SWM to continue to print and distribute the brochure at County libraries.
	SWM to continue to print and distribute the brochure at applicable County events in which it participates.
Resource Location	Hard copies of the brochure are provided to County libraries on a regular basis and are distributed to the general public and homeowner associations (HOAs) upon request.
	The brochure is available electronically in both English and Spanish on the County's website. The English version is available at: https://www.loudoun.gov/DocumentCenter/View/32600/Pet-Waste-Brochure-English-PDF The Spanish version is available at: https://www.loudoun.gov/DocumentCenter/View/129389/Pet-Waste-Brochure-Spanish-PDF
MS4 Annual Reporting	A link to the “Scoop the Poop” brochure.



4.1.2 Media Materials

On behalf of Loudoun County, and the other members of the Northern Virginia Clean Water Partners (NVCWP), NVRC produces and provides a regional multi-media program comprised of an informational website and an annual advertisement blitz across internet and television. NVCWP's efforts are aimed at providing simple ways for pet owners to love their pets and protect the environment.

Table 4. Description of County's use of the NVCWP's Multi-Media Program to Communicate Issues Associated with Bacteria Impacts on Water Quality

Media Materials - NVCWP Multi-Media Program	
Target Audience	Northern Virginia Dog Owners
Public Availability	Year-round
NVRC – NVCWP Responsibility	NVCWP must continue to meet the requirements of the MOU which may include producing and providing annual regional public education and outreach advertising blitzes while maintaining their website as directed by the regional partnership.
	NVCWP to continue to prepare an annual report that summarizes the activities completed during the reporting period and evaluates the program's outreach.
SWM Responsibility	SWM to continue to ensure County's participation in NVCWP.
Resource Location	Information regarding the NVRC-NVCWP program can be found at https://www.onlyrain.org/pets .
MS4 Annual Reporting	A copy of the latest NVCWP annual report.

4.1.3 Signage

PRCS and SWM implement a cooperative outreach program aimed at encouraging pet waste management at County parks. The program involves the installation, maintenance, and promotion of dog waste stations. SWM maintains a contract with a private firm to install and maintain dog waste stations, including signs. PRCS promotes the availability of the dog waste stations through its online "Find-A-Facility" search engine that identifies which parks have dog waste stations.

Table 5. Description of County's use of Signage at Dog Waste Stations to Communicate Issues Associated with Bacteria Impacts on Water Quality

Signage - Dog Waste Station Signs	
Target Audience	Dog Owners using Loudoun County Park Facilities
Public Availability	Year-round
PRCS Responsibility	PRCS to coordinate with SWM to continue to identify potential locations for placement of dog waste stations.
	PRCS to promote the usage of dog waste stations on web page and in publications.
	PRCS to maintain an updated list of parks with dog waste stations on its "Find-A-Facility" search engine.
SWM Responsibility	SWM to coordinate with PRCS to continue to identify potential locations for dog waste stations.
	SWM to develop and implement a schedule to install dog waste stations at locations identified through coordination with PRCS.
	SWM to ensure continued installation and maintenance of dog waste stations at County PRCS facilities.



Signage - Dog Waste Station Signs	
Resource Location	Dog owners can locate County park facilities with dog waste stations by searching PRCS's on-line "Find-A-Facility" search engine at https://www.loudoun.gov/Facilities .
MS4 Annual Reporting	Total number of new dog waste stations brought online during the permit year.

4.1.4 Alternative Materials

In an outreach initiative to reach owners of newly adopted dogs from DAS, SWM provides DAS pet waste bag leash dispensers and brochures. DAS provides these leash dispensers and written materials to individuals who adopt dogs either directly from their facility or from one of their mobile adoption events. DAS also provides these pet waste bag leash dispensers at public education and outreach events regarding pet adoption.

Table 6. Description of County's use of Pet Waste Bag Leash Dispensers and Adoption Handouts to Communicate Issues Associated with Bacteria Impacts on Water Quality

Alternative Materials - Pet Waste Bag Leash Dispensers and Adoption Handouts	
Target Audience	Owners of Dogs Newly Adopted from DAS
Public Availability	Year-round and at scheduled adoption events
DAS Responsibility	DAS to hand out pet waste bag leash dispensers to individuals adopting dogs at their facility or at one of their mobile adoption events.
	DAS to hand out pet waste leash dispensers to individuals at public education and outreach events regarding pet adoption.
	DAS to provide SWM a list of the events, including event name, location, and date, at which the pet waste bag leash dispensers were distributed.
SWM Responsibility	SWM to provide DAS pet waste bag leash dispensers and Scoop the Poop brochures for continued distribution during dog adoptions.
Resource Location	The DAS Animal Shelter is located at 39820 Charles Town Pike, Waterford, VA 20197. Scheduled DAS adoption events can be found at https://www.loudoun.gov/538/Pet-Adoption-Events .
MS4 Annual Reporting	A list of events including the location and date where DAS distributed pet waste bag leash dispensers.

4.2 High-Priority Stormwater Issue 2: Illicit Discharges

The County continues to stress the importance of eliminating unauthorized non-stormwater discharges through MS4 outfalls in its public education and outreach program. In addition to promoting community reporting of illicit discharges through the use of the Loudoun Express Request (LEx), which allows citizens to report concerns to the County 24-hours a day via the internet at <https://www.loudoun.gov/3055/Report-an-Issue> and mobile applications by downloading the app from the App Store and Google Play, the County continues to maintain its Stormwater Reporting Line (703-777-0117).

To combat sources of illicit discharges, the County employs numerous outreach efforts to report and eliminate illicit discharges and include the use of:

- Strategy 1 - Traditional written materials as described in Section 4.2.1
- Strategy 2 - Media materials as described in Section 4.2.2
- Strategy 3 - Signage as described in Section 4.2.3



4.2.1 Traditional Written Materials

SWM has developed both English and Spanish versions of numerous brochures that identify potential activities that may result in illicit discharges and what the public can do to eliminate them. SWM outreach materials include a brochure specific to illicit discharge identification and notification, and informational sheets that address activities specific to commercial establishments/industries that are likely to have a high potential for illicit discharges and stormwater pollution, including automotive care, food industry, lawn care, outdoor washing, pet wastes, pool operations, sediment, and vehicle repair.

Table 7. Description of County's use of Illicit Discharge Brochures and Information Sheets to Communicate Issues Associated with Illicit Discharges

Traditional Written Materials - Illicit Discharge Brochures and Information Sheets	
Target Audience	General Public; Loudoun County Businesses and Homeowners
Public Availability	Year-round
SWM Responsibility	SWM to make cooperating partners aware of the brochure's availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital versions of the brochures on its web page.
	SWM to routinely review and update its brochures.
Resource Location	Digital versions of the individual brochures are available at https://www.loudoun.gov/2094/Stormwater-Education-Outreach
MS4 Annual Reporting	A link to the SWM Stormwater Education and Outreach web page.

4.2.2 Media Materials

On behalf of Loudoun County, and the other members of the NVCWP, NVRC produces and provides a regional multi-media program comprised of an informational website and an advertisement blitz across internet and television. NVCWP's efforts are aimed at providing home-owners information on the proper use and disposal of potential stormwater pollutants such as automotive fluids, wash wastewater, paints and stains, and household hazardous wastes.

Table 8. Description of County's use of NVCWP's Multi-Media Program to Communicate Issues Associated with Illicit Discharges

Media Materials - NVCWP Multi-Media Program	
Target Audience	Northern Virginia Homeowners
Public Availability	Year-round
NVRC – NVCWP Responsibility	NVCWP must continue to produce and provide annual regional public education and outreach advertising blitzes while maintaining their website as directed by the regional partnership.
	NVCWP to continue to prepare an annual report that summarizes the activities completed during the reporting period and evaluates the program's outreach.
SWM Responsibility	SWM to continue to ensure County's participation in NVCWP.
Resource Location	Information regarding the NVRC-NVCWP program can be found at https://www.onlyrain.org/home-maintenance .
MS4 Annual Reporting	A copy of the latest NVCWP annual report.

4.2.3 Signage



SWM coordinates volunteer efforts to mark neighborhood storm drains. This effort is designed to increase awareness of volunteer groups such as Boy Scouts and Girl Scouts, and also members of the community where the storm drains have been marked as draining straight to receiving waters.

Table 9. Description of County's use of Storm Drain Markers to Communicate Issues Associated with Illicit Discharges

Signage - Storm Drain Markers	
Target Audience	Volunteer Groups such as Boy Scouts and Girl Scouts; General Public
Public Availability	Year-round
SWM Responsibility	SWM to promote the storm drain marking program among partners and other interested groups.
	SWM to continue to coordinate storm drain marking activities between volunteers and the Virginia Department of Transportation (VDOT) if applicable.
	SWM to provide the necessary materials such as maps, markers, and glue for volunteers to complete storm drain marking projects.
Resource Location	https://www.loudoun.gov/2094/Stormwater-Education-Outreach
MS4 Annual Reporting	The number of storm drain marking activities completed during the reporting period.



4.3 High-Priority Stormwater Issue 3: Nutrient Impacts on Water Quality

Loudoun County and its partners have developed a consistent message aimed at property owners and landscape professionals regarding the impacts to the Chesapeake Bay from excessive nutrient application on turf and urban landscapes. These efforts collectively concentrate on responsible turf and landscape management practices regarding the application of fertilizers and yard waste management. These efforts include the use of:

- Strategy 1 - Traditional written materials as described in Section 4.3.1
- Strategy 2 - Media materials as described in Section 4.3.2
- Strategy 3 - Curriculum as described in Section 4.3.3

4.3.1 Traditional Materials

SWM has developed and distributes “A Resident’s Guide to Lawn Care for a Cleaner Environment” brochure. This brochure outlines the water quality issues associated with excessive nutrients while informing the target audience of ways they can reduce their impact.

Table 10. Description of County's use of "A Resident's Guide to Lawn Care for a Cleaner Environment" Brochure to Communicate Issues Associated with Nutrients

Traditional Written Materials - A Resident's Guide to Lawn Care for a Cleaner Environment Brochure	
Target Audience	Loudoun County Homeowners
Public Availability	Year-round
SWM Responsibility	SWM to make cooperating partners aware of the brochure's availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital version of the brochure on its web page.
	SWM to continue to print and distribute the brochure at applicable County events in which it participates.
Resource Location	The English version can be found at: https://www.loudoun.gov/DocumentCenter/View/32603/Lawn-Care-Brochure-English-PDF
	The Spanish version can be found at: https://www.loudoun.gov/DocumentCenter/View/129402/Lawn-Care-Brochure-Spanish-PDF
MS4 Annual Reporting	A link to the “A Resident’s Guide to Lawn Care for a Cleaner Environment” brochures.

4.3.2 Media Materials

The County’s strategy to educate the public as to the impact of excess nutrients to the Chesapeake Bay and how they can minimize their contributions includes multiple media-centered County and regional efforts.

Clean Waters Initiative

DGS oversees the County’s Clean Waters Initiative, which is a web-based outreach effort employed to encourage implementation of the County’s Chesapeake Bay Watershed Implementation Plan commitments while supporting local, healthy communities. The Clean Waters Initiative outlines how the public can be the solution to water quality impacts associated with nutrients and sediment whether at home, on the farm, and as a community. The Clean Waters Initiative promotes environmentally proactive actions, local events, and acts as a gateway for local projects and programs. Specific to nutrient management, the Clean Waters Initiative promotes proper lawn fertilizer application for homeowners and implementation of nutrient management plans for common community properties. The Clean Waters Initiative provides a gateway to other locally available



resources such as the EMG program as well as the Virginia Department of Conservation and Recreation's (DCR) information on Urban Nutrient Management.

Table 11. Description of County's Clean Waters Initiative used to Communicate Issues Associated with Nutrients

Media Materials - Clean Waters Initiative	
Target Audience	Loudoun County Homeowners and Community Groups
Public Availability	Year-round
DGS Responsibility	DGS to maintain an updated Clean Waters Initiative website that includes updated local events and project opportunities.
SWM Responsibility	N/A
Resource Location	Information on the DGS Clean Waters Initiative can be found at: https://www.loudoun.gov/3493/Clean-Waters-Initiative
MS4 Annual Reporting	N/A

NVCWP

On behalf of Loudoun County, and the other members of the NVCWP, NVRC produces and provides a regional multi-media program comprised of an informational website and an annual advertisement blitz across internet and television. NVCWP's efforts are aimed at providing homeowners information on the proper landscape management including when to apply fertilizer and how to manage grass clippings.

Table 12. Description of County's use of Media Materials to Communicate Issues Associated with Nutrients

Media Materials - NVCWP Multi-Media Program	
Target Audience	Northern Virginia Homeowners
Public Availability	Year-round
NVRC-NVCWP Responsibility	NVCWP must continue to produce and provide annual regional public education and outreach advertising blitzes while maintaining their website as directed by the regional partnership. NVCWP to continue to prepare an annual report that summarizes the activities completed during the reporting period and evaluates the program's outreach.
SWM Responsibility	SWM to continue to ensure County's participation in NVCWP.
Resource Location	Information regarding the NVRC-NVCWP program can be found at https://www.onlyrain.org/gardening .
MS4 Annual Reporting	A link to the latest NVCWP annual report.

4.3.3 Curriculum Materials

Each spring, the EMG offers the Healthy Virginia Lawns Program, which promotes proper lawn care through administration of a fee-based program in which interested residential property owners coordinate with the EMG to conduct an on-site analysis of the property owners' yards and develop detailed nutrient management plans. In addition, the speakers are available to speak on a wide range of topics through the EMG's Speaker Bureau Program. Additionally, EMG promotes healthy lawns through its brochure titled Healthy Virginia Lawns. EMG has also developed a Speakers Bureau. Interested parties who are interested in topics such as lawn maintenance, mulching, composting and rain gardens can contact the Speakers Bureau to have someone speak to their club or organization.



Table 13. Description of County's use of EMG's Healthy Virginia Lawns Program to Communicate Issues Associated with Nutrients

Curriculum Materials - Healthy Virginia Lawns Program	
Target Audience	Loudoun County Homeowners
Public Availability	The Healthy Virginia Lawns program is available in the spring each year.
EMG Responsibility	EMG to continue implementation of the Healthy Virginia Lawns program.
SWM Responsibility	SWM to promote the availability of the Healthy Virginia Lawns Program.
Resource Location	Information regarding the Healthy Virginia Lawns program is available at http://loudouncountymastergardeners.org/programs/healthy-virginia-lawns/ .
MS4 Annual Reporting Item	The number of participating homeowners.



4.4 High-Priority Stormwater Issue 4: Sediment Impacts on Water Quality

Similar to its efforts at minimizing the impacts of nutrients on downstream receiving waters, Loudoun County has developed a consistent message regarding the impacts to local waters and the Chesapeake Bay from excessive sedimentation. These efforts collectively concentrate on minimizing impacts from both sediment discharge from the anthropogenic activity and in-stream erosion from the unregulated discharge of stormwater and include the utilization of the following methods:

- Strategy 1 - Traditional written materials as described in Section 4.4.1
- Strategy 2 - Media materials as described in Section 4.4.2
- Strategy 3 - Training materials as described in Section 4.4.3
- Strategy 4 - Speaking engagements as described in Section 4.4.4

4.4.1 Traditional Written Materials

SWM has developed both English and Spanish versions of a “Resident’s Guide to Sediment Reduction for a Cleaner Environment” brochure. This brochure outlines the issues associated with pet wastes while informing property owners of ways they can minimize the amount of sediment leaving their properties.

Table 14. Description of County’s use of its “Resident’s Guide to Sediment Reduction for a Cleaner Environment” to Communicate Issues Associated with Sediment

Traditional Written Materials - Resident's Guide to Sediment Reduction for a Cleaner Environment	
Target Audience	Loudoun County Residents
Public Availability	Year-round
SWM Responsibility	SWM to make cooperating partners aware of the brochure’s availability for use in their individual public education and outreach efforts.
	SWM to continue to provide access to the digital versions of the brochures on its web page.
	SWM to routinely review and update its brochures.
Resource Location	The English version can be found at https://www.loudoun.gov/DocumentCenter/View/129393/Sediment-English-PDF .
	The Spanish version can be found at https://www.loudoun.gov/DocumentCenter/View/129394/Sediment-Spanish-PDF .
MS4 Annual Reporting	A link to the “A Resident’s Guide to Lawn Care for a Cleaner Environment” brochures.

4.4.2 Media Materials

As part of the Clean Waters Initiative, DGS prioritizes the use of stormwater management facilities at County residences to minimize stormwater runoff and reduce in-stream erosion caused by uncontrolled stormwater runoff. DGS promotes the value of both rain barrels and rain gardens in capturing stormwater runoff to minimize impact to the aquatic environment. The Clean Waters Initiative website provides links to partner resources such as the NVRC’s Residential Rain Gardens program and the Loudoun County Soil and Water Conservation District Rain Barrel program.

Clean Waters Initiative

DGS oversees the County’s Clean Waters Initiative. The Clean Waters Initiative is a web-based outreach effort employed to encourage implementation of the County’s Chesapeake Bay Watershed Implementation Plan commitments while supporting local, healthy communities. See the previous discussion in Section 4.3.2 for a full description of the Clean Waters Initiative.

**Table 15. Description of County's Clean Waters Initiative used to Communicate Issues Associated with Sediment**

Media Materials - Clean Waters Initiative	
Target Audience	Loudoun County Residents
Public Availability	Year-round
DGS Responsibility	DGS to maintain an updated Clean Waters Initiative website that includes an updated local events and project opportunities.
SWM Responsibility	N/A
Resource Location	Clean Waters Initiative information regarding rain barrels can be found at https://www.loudoun.gov/3495/At-Home .
	Clean Waters Initiative information regarding rain gardens can be found at https://www.loudoun.gov/3495/At-Home .
MS4 Annual Reporting Item	N/A

Resource Program

B&D's Forest Resource Program promotes the value of forested stream buffers in maintaining streambank stability and reducing sediment in downstream receiving waters. Additionally, the Forest Resource Program provides information on planting and maintaining trees, links to additional resources, and annual Arbor Day information.

Table 16. Description of County's use of Media Materials to Communicate Issues Associated with Sediment

Media Materials - Forest Resource Program	
Target Audience	Loudoun County Residents
Public Availability	Year-round
B&D Responsibility	B&D to maintain an updated Forest Resource Program website that includes an updated local vents and project opportunities.
SWM Responsibility	N/A
Resource Location	Information regarding B&D's Forest Resource Program is available at https://www.loudoun.gov/3537/Forested-Stream-Buffers .
MS4 Annual Reporting	N/A

4.4.3 Training Materials

Through its Natural Resources Program, B&D provides the development community access to information resources regarding:

- Environmental and cultural resources
- Forest, soils, and geology
- Natural features
- Water and hydrology

By providing this information to the development community and making members of the development community aware of it during meetings between individual developers and County staff, the County improves



the knowledge and understanding of how to minimize the discharge of sediment during land disturbing activities and provides valuable information to the development community for incorporation into site designs.

Table 17. Description of County's use of the Natural Resources Program's Training Materials to Communicate Issues Associated with Sediment

Training Materials - Natural Resources Program	
Target Audience	Development Community
Public Availability	Year-round
B&D Responsibility	B&D to maintain an updated Natural Resources website that includes updated local events and project opportunities.
	B&D to promote (and when appropriate, distribute) the available Natural Resources materials to the development community.
SWM Responsibility	N/A
Resource Location	Information for the development community regarding Natural Resources is available at https://www.loudoun.gov/1321/Natural-Resources .
MS4 Annual Reporting	N/A

4.4.4 Speaking Engagements

Members of the EMG Speakers Bureau Program provide speakers to interested clubs and organizations. Among the wide range of available environmental stewardship topics are those such as rain gardens, mulching, and natural landscapes, which are promoted to reduce stormwater runoff and reduce in-stream erosion.

Table 18. Description of County's use of EMG's Speakers Bureau Program to Communicate Issues Associated with Sediment

Speaking Engagements - EMG Speakers Bureau Program	
Target Audience	Loudoun County Residents
Public Availability	Year-round
EMG Responsibility	EMG to conduct speaking engagements to promote stormwater BMPs aimed at reducing stormwater runoff and stormwater pollution.
SWM Responsibility	SWM to promote the availability of the EMG Speakers Bureau Program to provide speakers to community groups regarding the management of stormwater runoff.
Resource Location	Information for the development community regarding Natural Resources is available at http://loudouncountymastergardeners.org/ .
MS4 Annual Reporting	A list, including community group, date, and location of SWM-related speaking engagements conducted by EMG.



5.0 Public Participation Opportunities

In conjunction with the public education and outreach efforts, the County and its partners offer numerous public participation events that are designed to minimize the impacts of high-priority stormwater issues on downstream receiving waters. These events are promoted on individual sponsor web sites and occur throughout the year. Public participation events include household hazardous waste collection days, rain barrel workshops, and watershed cleanup events.

5.1 Household Hazardous Waste Collection Days

The WMD sponsors household hazardous waste collection days throughout the year. At these events, County residents can dispose of unwanted household hazardous wastes and materials such as gasoline and household chemicals. In addition to promoting the events on its web site, WMD promotes the household hazardous waste collection events through social media including Facebook and Twitter. Information regarding household waste collection events is available at <https://www.loudoun.gov/344/Upcoming-Events>.

5.2 Rain Barrel Workshops

In partnership with Loudoun County and the Towns of Leesburg, Lovettsville and Purcellville, the Loudoun County Soil and Water Conservation District (SWCD) sponsors a Rain Barrel program and holds occasional Rain Barrel workshops throughout the County. Rain Barrel workshop events are promoted on the SWCD website, <http://www.loudounsoilandwater.com/>.

5.3 Watershed Cleanup Events

Keep Loudoun Beautiful (KLB) sponsors watershed cleanup events throughout the year. These events are designed to gather trash and debris from the banks of local waters to reduce floatables and other solid pollutants. Information regarding watershed cleanup events is available at <http://www.keeploudounbeautiful.org/KLBcanoe.html>.



6.0 Public Reporting

To facilitate public participation relating to Public Education and Outreach and Public Involvement and Participation, the County has established a stormwater reporting telephone number, and website for stormwater management concerns, including the discovery of illegal dumping to the MS4 or the discovery of any other illicit discharge. In addition, the mobile app Loudoun Express (LEx) Request was developed as a citizen request system for members of the public to submit requests or report concerns, including illicit discharges. It is the County's goal to investigate reported potential illicit discharges within three (3) calendar days of receipt.

The County maintains the following tools to facilitate public reporting of stormwater concerns:

- The County's stormwater reporting telephone number is: 703-777-0117.
- The County's Stormwater Management Program web page, including how to "Report a Problem", is located at the following address:
<https://www.loudoun.gov/686/Stormwater-Management-Program>.
- The County's web page to download LEx is located at the following address:
<https://www.loudoun.gov/3055/Report-an-Issue>.