



**FY 13 Annual Report
Northern Virginia
Coastal Resources
Technical Assistance Program**

**October 1, 2013 – September 30, 2014
NOAA Grant #NA13NOS4190135
Fiscal Year 2013, Task 46**

**Northern Virginia Regional
Commission**

www.novaregion.org

The Voice of Northern Virginia

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Virginia Coastal Zone
MANAGEMENT PROGRAM

In Grant Year 2013, the Northern Virginia Coastal Resources Technical Assistance Program was funded in part by the Virginia Coastal Zone Management Program at the Department of Environmental Quality, through Grant # **NA13NOS4190135** of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

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1 Executive Summary

This report was produced, in part, through financial assistance from the Virginia Coastal Zone Management Program (CZM) in the Virginia Department of Environmental Quality through Grant No. NA13NOS4190135 from the National Oceanic and Atmospheric Administration (NOAA). This report describes the technical assistance program conducted by the Northern Virginia Regional Commission (NVRC) through its Coastal Resources Management Program. The Coastal Resources Management Program at NVRC includes; coordination of regional programs that advance VA CZM's interests in coastal resource management, public outreach, education and training, environmental impact and permit reviews, and technical assistance on coastal issues relevant to Northern Virginia localities.

This report fulfills the product requirements set forth in the FY 2013 Virginia Coastal Zone Management Program Grant, Task 46 (NOAA Grant #NA13NOS4190135) for:

- Product #1 – Annual Report – NoVA Coastal Resources TA Program; and
- Product #2 – Summary of Regional Stormwater Education Campaign
- Product #3 - Benefits accrued from prior CZM grants

2 Summary of Northern Virginia's Coastal Resources Technical Assistance Program

The Technical Assistance grant from CZM allows NVRC's Coastal Resources Program to conduct public outreach and education, coordinate regional programs that advance VA CZM's interests in coastal resource management and serve as a point of technical information exchange for local planning. The Technical Assistance grant also allows NVRC to participate in the quarterly Coastal PDC meetings, Potomac Watershed Roundtable and the Northern Virginia Urban Forestry Roundtable. These meetings help to identify appropriate special projects and technical studies that would benefit the region as well as ensuring that local efforts may take advantage of or leverage other related initiatives.

The grant also allows NVRC's Coastal Program Manager to provide assistance to local governments, non-profit groups and private entities on coastal resource issues such as management of non-point source pollution, habitat restoration, climate change, the Chesapeake Bay TMDL and shoreline erosion control. Specific requests typically include assistance on grant proposals, disseminating information about legislation or regulations, and identifying and sharing data that may be useful in local planning initiatives. During FY13, NVRC provided technical assistance to the Friends of Dyke Marsh and National Park Service for wetland habitat restoration, to Leesylvania State Park for a Living Shoreline project, George Mason University for their stormwater master plan, and to Northern Virginia Soil and Water Conservation District for a regional dredged material management strategy.

NVRC also continues to participate in the EA/EIS and permit intergovernmental review process. Over the fiscal year, NVRC responded to 19 EA/EIS requests throughout the region as part of the intergovernmental review process.

3 Special Project Report: Northern Virginia Clean Water Partners Regional Stormwater Education Campaign

Polluted stormwater runoff is the number one cause of poor water quality in streams and rivers in Northern Virginia. As stormwater runs off city streets, suburban yards and parking lots, it picks up pesticides and fertilizer from lawns, bacteria from pet waste, petroleum and oil from

driveways and parking lots, sediment from construction sites and litter and cigarette butts from the streets and sidewalk.

To reduce the impacts of stormwater pollution, the Northern Virginia Clean Water Partners aims to change human behaviors in our cities and neighborhoods through Regional Stormwater Education Campaign.

The Northern Virginia Clean Water Partners is comprised of a multi-disciplined group of local governments, drinking water and sanitation authorities, and individual businesses working together to address the common issues surrounding pollution prevention, stormwater management, and source water protection. “Only Rain Down the Storm Drain” is the motto of the partnership.

The Regional Stormwater Education Campaign was initiated in 2003 to assist localities in leveraging funds to achieve common goals regarding stormwater education and outreach and promote consistent messages for fertilizer and pesticide use, pet waste disposal, and motor oil recycling. The campaign satisfies the Partners MS4 (Municipal Separate Storm Sewer System) Phase I and Phase II permit requirements for stormwater education and documenting changes in behavior.

The Northern Virginia Clean Water Partners enables Northern Virginia jurisdictions to pool outreach funds to conduct a regional stormwater education campaign. NVRC received financial and in-kind contributions from 15 partners this year, for a total budget of \$150,000. The Partners met three times between October 2013 and September 2014 to plan and implement campaign activities. Meeting summaries are provided in Appendix A.

In 2014, the Northern Virginia Clean Water Partners used television, print, internet advertising and the Only Rain Down the Storm Drain website to distribute messages linked to specific stormwater problems, such as proper pet waste disposal, over fertilization of lawns and gardens and proper disposal of motor oil. In addition to the multi-channel media campaign, educational events hosted throughout the Northern Virginia region also raised awareness and encouraged positive behavior change in residents. The television and internet ads featured the well known national symbol of non-point source pollution; the rubber ducky.

From January 2014 through July 2014, four advertisements featuring messages on the importance of picking up pet waste and general household stormwater pollution reduction measures aired on twelve popular cable TV channels, including three Spanish speaking channels a total of 3,502 times.

These TV ads reached approximately 3,193,924 Northern Virginia households. The campaign also featured banner ads on the Xfinity.com website that promote the same messages as the cable TV ads. The internet banner ads resulted in over 300 click to the www.onlyrain.org website.

The Northern Virginia Clean Water Partners website also received a facelift and update to reflect the current stormwater regulations. To encourage more personal contact with the public, the jurisdictions distributed 10,000 pet waste bag dispensers at various community events to promote awareness of proper disposal of pet waste.

The ads fulfilled the outreach and education requirements of the jurisdictions' MS4 permits including a new requirement for each permittee to identify three high priority issues, determine the target audience for each high priority issue, and reach 20% of the target audience for each high priority issue. In addition, the Northern Virginia Clean Water Partners welcomed three new members, Northern Virginia Community College, Fairfax County Public Schools, and Arlington County Public Schools.

An online survey of 500 Northern Virginia residents was conducted by a market research firm to determine the effectiveness of the ads, reveal any changes in behavior, and aid in directing the future efforts of the campaign. Survey results are included as Appendix C.

NVRC staff prepared a report for the campaign and distributed it to the Partners in September 2014 for inclusion in their annual MS4 reports. In addition, Comcast Spotlight prepared a report for the campaign. The reports are included as Appendix B.

Of the 500 respondents to the 2014 survey, 8% were Spanish speakers. **15 percent of the respondents recalled hearing or seeing advertisements on the internet or on TV about reducing water pollution.**

Of those who recalled the ads, seven percent state they now pick up their pet waste more often, seven percent state that they are more careful with motor oil, and 18 percent state they fertilize fewer times per year.

Other interesting findings in the 2014 survey include:

- Respondents selected fertilizers and pesticides and runoff as the main causes of pollution in the Potomac River and Chesapeake Bay for the fourth year in a row.
- The number of respondents choosing litter or industrial pollution as the number one source of pollution decreased as compared with previous surveys.
- 42 percent of respondents knew they live in Potomac River watershed, up from 39 percent in 2011.
- Interestingly, 81 percent of people surveyed reported that they always pick up after their pet, as compared with 30 percent in previous surveys.

- Over 90 percent of residents surveyed stated that stormwater goes into the Potomac River or the Chesapeake Bay, or to local streams and rivers.
- 86 percent of respondents were familiar with rain barrels, and 66 percent stated they already have a rain barrel or are interested in getting one
- 36 percent of respondents were familiar with rain gardens, with 62 percent already having a rain garden or interested in installing one.
- More than half of the respondents (54%) prefer to receive information from online sources. Newspaper (19%) and television (18%) were the next two information sources.
- 70 percent would be more likely to take actions to reduce the amounts of pollutants they personally put into storm drains, after learning that polluted water runoff is the number one cause of local water pollution.

In addition to capturing responses to questions regarding the effectiveness of the campaign, this year's survey honed in on the current behaviors of Northern Virginia residents as they relate to pet waste management, lawn care, and motor oil disposal. Responses to these questions support the development of future messages and targeted promotion.

The most important reason dog owners are motivated to pick up their pet's waste is because "It's what good neighbors do". The number of respondents choosing "It causes water pollution" as the most important reason to pick up has risen from 13 percent in 2011 to 20 percent in 2014. 70 percent believe that dog waste disposal stations would be useful.

A third of the lawn and garden owners fertilize their lawns two or more times per year; an equal number never fertilize their lawns. Among those who fertilize once a year, 13 percent fertilize in the spring and only eight percent fertilize in the fall. This suggests that there is room to educate more residents of Northern Virginia that fertilizing in the fall is better for local waterways than fertilizing in the spring.

Among those who fertilize their lawn, 73 percent have never had or were not sure if their soil had been tested for fertility or pH and one third reported using a slow release N fertilizer. When asked where they get information to decide when and how much fertilizer to apply the top three most commonly selected responses were "Follow directions on the bag" (52%), followed by "Lawn service conducts the applications" (27%), and then "Follow soil test results / recommendations" (7%). About one third of the respondents reported using an herbicide to treat weeds in their lawn or garden.

The majority of respondents take their vehicle to a service station to change their oil (85%) or take used oil to a gas station or hazmat facility for recycling (11%). Only one percent of Northern Virginians store used motor oil in their garage, place it in the trash or dump it down the storm drain.

Responses to the survey suggest that public support remains strong for local government programs that improve the quality of water in local and regional streams and rivers and the Chesapeake Bay however the shifting demographics of the Northern Virginia region indicate that there continues to be a need to educate residents about stormwater pollution.

4 Coordination and Training

A fundamental component of NVRC's Coastal Resources Program is the provision of education and public outreach on environmental issues that affect the Northern Virginia region. Past examples include: onsite wastewater systems operations and maintenance, blue/green infrastructure planning, factors affecting the delivery of pollutants to downstream waterways, and Chesapeake Bay Local Assistance trainings. During the grant year NVRC collaborated with several partners to host a workshops and coordination opportunities for public and private planners, engineers, conservation professionals, homeowners and watershed non-profits.

Training

Residential Rain Gardens - Beautifying Your Yard for Clean Water (November 08, 2014)



NVRC co-hosted one Beautifying Your Yard for Clean Water workshop on building small-scale rain gardens. Through the workshop, 25 participants learned how to design, build, landscape, and maintain small-scale residential rain gardens. The workshop was held at Green Spring Gardens in Alexandria, VA. These workshops have proven to be instrumental in providing technical expertise and resources to support the application of stormwater management practices on private properties. Additionally, the workshops serve to educate local government staff on designing residential rain gardens. Local educators, land use planners, master gardeners, master naturalists and other local staff participated in the workshop that occurred during this reporting period. Over three-quarters of all participants who provided feedback stated that they will move forward with placing a rain garden on their properties. These workshops support efforts to improve habitat and reduce stormwater-related pollution. The presentations and other information pertaining to rain gardens can be viewed at www.novaregion.org/raingardens

Coordination

NVRC continues to support state and local groups engaged in watershed planning initiatives, tributary strategies, and other Chesapeake Bay-related efforts including the following projects:

- ***Grant Application to National Fish and Wildlife Foundation on behalf of the National Park Service and Friends of Dyke Marsh***

NVRC prepared a grant application to NFWF to partially fund the restoration of Dyke Marsh. The goal of the project is to restore approximately 55 acres of forested tidal swamp by re-establishing tidal connectivity with the Potomac River through development of breaks in the Haul Road. This project is part of a larger initiative to restore the tidal wetland at Dyke Marsh, as directed by Congressional legislation (Public Law 93-251) passed in 1974. Restoration will return much of Dyke Marsh to historical conditions, stabilize over two miles of Potomac River shoreline, protect 60 acres of existing tidal marsh that is disappearing at a rate of 1.5 to 2.0 acres per year, and reconstruct 150 acres of marsh that existed historically. Re-establishment of tidal connectivity under the Haul Road is the last, unfunded component of the larger restoration. The requested funds will result in 100% design with permits to allow for on-the-ground construction to begin.

- ***Grant Application to National Fish and Wildlife Foundation on behalf of VA Department of Conservation and Recreation, Prince William County, and Virginia Institute of Marine Science***

NVRC prepared a grant application to NFWF to fund construction of a “living shoreline” to protect approximately 800 feet of actively eroding shoreline from future storms on the tidal Potomac River. The project would use a Living Shoreline technique to provide shoreline stabilization and protection, while enhancing and restoring riparian, inter-tidal and near-shore coastal habitat on the Potomac River.

- ***Grant Application to National Fish and Wildlife Foundation with Northern Virginia Soil and Water Conservation District***

NVRC and the Northern VA Soil and Water Conservation District prepared a grant application to fund the formation of a Regional Dredge Planning Group to identify and promote opportunities to beneficially reuse dredged material, turning a waste product into a reusable resource. For example, many coastal restoration and soil remediation projects rely on dredge as a fill material. The Virginia Institute of Marine Science’s Shoreline Management Plans for Fairfax and Prince William Counties identifies many potential projects for shoreline restoration. In addition, NVRC’s own report, Sustainable Shorelines and Community Management, identifies the risk of inundation to Northern

Virginia shorelines caused by sea level rise. Both reports will help the group identify and recruit destination projects for the dredge material, reducing the implementation costs of these coastal restoration projects. A project that was formerly deemed worthwhile but too costly may become feasible if the implementation costs are reduced by access to cheap dredge.

NVRC staff participates in and supports the implementation of meetings and conferences for the following organizations:

- ***Coastal Planning District Commissions Planning Meetings***
 - November 26, 2013
 - June 12, 2014
- ***Virginia Coastal Policy Team Meetings***
 - March 26, 2014
 - September 30, 2014
- ***Potomac Watershed Roundtable***

A regional government – citizen forum whose purpose is to promote collaboration and cooperation on environmental concerns, especially water quality issues, among the various local governments and stakeholder interest groups residing within the Virginia side of the middle and lower Potomac River watershed. Meeting attended took place on July 12, 2013.
- ***Northern Virginia Urban Forestry Roundtable***

Citizen members of tree boards and commissions, elected officials, urban foresters and arborists, landscape architects, builders, developers, and planners desiring to enhance and protect Virginia’s urban forest. Meeting attended took place on September 5, 2014.

Benefits Accrued from Prior CZM Grants

The Technical Assistance grant from CZM has served as a foundation for the Northern Virginia Clean Water Partners project.

To reduce the impacts of stormwater pollution, the Northern Virginia Clean Water Partners aims to change human behaviors in our cities and neighborhoods through a public awareness and education campaign. The partnership is comprised of a multi-disciplinary group of local governments, drinking water and sanitation authorities, and individual businesses working together to address the common issues surrounding pollution prevention, stormwater management, and source water protection. “Only Rain Down the Storm Drain” is the motto of the partnership. By participating in the program, local jurisdictions have an unprecedented opportunity to pool local outreach dollars to collectively target pollution-causing behaviors for

greater impact at less cost and effort. In addition to taking advantage of mass media, the strategy provides for community engagement and the production of outreach materials that can be customized and used by each locality again and again. The primary goal of the partnership is to reduce stormwater-related pollution from entering local waterways.

To meet this goal, the Partners work together to:

- Educate the region's residents on simple ways to reduce pollution around their homes;
- Monitor changes in behavior through surveys and other data collection techniques; and
- Pilot new cost-effective opportunities for public outreach and education.

Members include stormwater program managers, Municipal Separate Storm Sewer System (MS4) Permit managers, communication directors, public information officers, water quality compliance specialists, and environmental planners. Membership is voluntary. However, the partnership provides a cost-effective means to meet mandatory state and federal stormwater requirements. By working together the partners are able to leverage their available funds to develop and place bi-lingual products with common messages and themes, thereby extending their individual reach.

The Annual Regional Stormwater Education Campaign was initiated in 2003 to assist localities in leveraging funds to achieve common goals regarding stormwater education and outreach and promote consistent messages for fertilizer and pesticide use, pet waste disposal, and motor oil recycling.

The 2014 campaign satisfied MS4 (Municipal Separate Storm Sewer System) Phase I and Phase II permit requirements for stormwater education and documenting changes in behavior.

For more information visit www.onlyrain.org

Funds Leveraged since 2007: \$734,225.00

Appendix A

Northern Virginia Clean Water Partners Meeting Summaries

Northern Virginia Clean Water Partners

PLANNING MEETING

January 6, 2014

1:00 – 3:00 pm

In Attendance:

Chris Stone	Loudoun County	chris.stone@loudoun.gov
Jen McDonnell	Arlington County	jmcdonnell@arlingtonva.us
Paul Santay	Stafford County	psantay@co.stafford.va.us
Richard West	Town of Dumfries	rwest@dumfriesva.gov
David Jensen	Doody Calls	djensen@doodycalls.com
Aileen Winquist	Arlington County	awinquist@arlingtonva.us
Irene Haske	Fairfax County	Irene.haske@fairfaxcounty.gov
Aimee Vosper	NVRC	avosper@novaregion.org
Corey Miles	NVRC	cmiles@novaregion.org
Jeanne Bailey	Fairfax Water	jbailey@fairfaxwater.org
Robbie Houser	George Mason University	rhouser@gmu.edu
Brad Glatfelter	George Mason University	bglatfel@gmu.edu
Sara Rilveria	Northern VA Community College	srilveria@nvcc.edu
Micah Vieux	Loudon Water	mieux@loudonwater.org
Hannah Somers	NVRC	hsomers@mail.umw.edu
Cathy Lin	Arlington County Public Schools	cathy.lin@apsva.us
Christina Alexander	City of Fairfax	Christina.Alexander@fairfaxva.gov

The purpose of this meeting was to review the 2013 campaign and plan for the 2014 campaign. The Agenda is attached as Appendix A. The Comcast Spotlight presentation is Appendix B.

Comcast Spotlight 2013 Advertising

Heather Cleary from Comcast Spotlight provided an overview of their advertising services and the benefits of advertising on cable television as well as on-line. Comcast Spotlight has the ability to reach viewers in a specific area through broadcasting in selected zones. They can also target specific demographics by advertising on various networks. Marketing research has shown that most adults consume media online and on television. Advertising on television and on their website XFINITY.com can increase brand recall and engagement.

Heather reviewed the results of the 2013 advertising on Comcast Spotlight. The Clean Water Partners spent **\$66,834** on advertising from April 2013–December 2013. Four rubber ducky themed, anti-pollution ads were aired throughout our region on twelve networks. The television ads resulted in almost 4 million impressions. Two on-line banner ads also ran on XFINITY.com. The Partners ordered 400,000 300x250 banner ad impressions and received 514,706 impressions resulting in an added value of \$1,386. People chose to watch the video 10,325 times resulting on 1,162 minutes of video consumption and 304 click-thrus to our website. This banner ad delivered a 2.14 percent engagement rate. We also ordered 240,000 impressions of the 160x600 banner impressions. We received 287,903

impressions resulting in another \$282 of added value. People chose to watch the video 1,913 times and 161 people clicked through to our web-site.

Comcast Spotlight 2014 Advertising Proposal

The proposal for 2014 advertising with Comcast Spotlight is as follows:

- Flight dates March 2014-December 2014
- 10 Premium networks – E, Animal Planet, ESPN, History, National Geographic, CNN, HLN, Oxygen, Cartoon Network, and HGTV.
- Oxygen, History, CNN and Headline News to channel 14 were added and Hallmark, DIY and Syfy were dropped because market research has shown that those who watch Headline News were more likely to participate in eco-friendly activities
- 3 Premium Hispanic Networks – Galavision, ESPN Deportes, CNN (Español)
- 800,000 impressions online on Xfinity.com
- 390 added value taggables - \$15,000 value/free production
- TV ads will run more frequently in spring and fall than in the summer
- Total investment **\$65,125**
- The taggable spots are 10 seconds long-can re-use the voice overs from the radio ads

Heather's presentation is attached as Appendix B.

Discussion of Comcast Proposal

The group agreed that the advertising efforts with Comcast Spotlight in 2013 were satisfactory. The 2014 proposal is \$1709 less and has additional features that add value. According to the Partners 2013 survey, the majority of respondents prefer to receive information online and on television. Advertising efforts that are multi-media are focused appropriately. The Partners agreed to continue advertising with Comcast Spotlight with on-line and cable television ads for 2014. Corey will manage the contract with Comcast.

Website Updates

Corey and Aileen worked with intern Hannah Somers to update the Only Rain website www.onlyrain.org. Updates included

- New theme
- Links to individual jurisdictions stormwater websites.
- Radio ads and tv ads posted
- Updated the text on all pages
- Added new pictures
- Changed Mechanics page to Home Maintenance
- Added more information on car washing
- Posted local stormwater hotline numbers
- Posted household hazardous waste drop off locations
- Simplified the design

- Added information and links to more resources on illicit discharge
- Added information on the Green Thumbs page about local farmers markets and native plant sales and nurseries
- Added “Learn More” pages with links to jurisdictions webpages
- Removed RSS and Twitter icons

Promotional Items

David Jensen from Doody Calls placed an order of dog waste bag dispensers for us through his supplier. The shipment is in and he will be making deliveries to individuals soon. Corey will figure out how to divvy up the shipment so everyone gets their fair share.

Annual Survey

The annual survey of at least 500 Northern Virginia will be conducted in July to determine the effectiveness of the ads, reveal any changes in behavior, and inform future efforts of the campaign.

2014 Campaign Plan

The 3 Priority issues this year are 1) lawn care practices and chemicals 2)proper disposal of pet waste 3) illicit discharge.

The 2014 campaign plan is as follows:

- Run television ads on Comcast Spotlight Jan-Dec
- Banner ads on XFINITY.com Jan-Dec
- Taggable spots on Comcast Spotlight March-Dec
- Conduct annual survey in July and have report by August
- Each jurisdiction to distribute the promotional items at community events February - Dec
- Campaign summary out to all Partners by early September for MS4 reports
- Corey will investigate the possibility of displaying banner ads on local buses and shelters (the shelters cost \$1500/month)
- Corey will do a comparison of costs and impressions of tv ads vs. radio ads

2014 Contributions

Dues will remain the same this year. Invoices will be sent out soon.

MOU

Corey has drafted some language for MOU between the Partners and private businesses who wish to join.

New Partners

Fairfax County Public Schools and Northern Virginia Community College would like to join the partnership. Other public school systems may join as well.

Next Meeting

Corey to schedule next meeting for late summer to review survey results and campaign summary

Appendix A

Northern Virginia Clean Water Partners

WINTER 2014 CAMPAIGN PLANNING MEETING

Tuesday, January 7, 2014

1:00 – 3:00

Main Conference Room

Northern Virginia Regional Commission

3060 Williams Drive – Suite 510

Fairfax, VA 22031

The purpose of this meeting is to plan for 2014 campaign activities

AGENDA

1. **Welcome & Introductions**
2. **2013 Ad Review and 2014 Proposal from Comcast**

Heather Cleary from Comcast will provide an overview of the 2013 advertising and propose a plan for 2014
3. **Discussion among partners on Comcast 2014 proposal**
4. **Unveil website updates**
5. **2014 Campaign Plan**
 - a. 3 Priority Issues
 - b. Survey
 - c. Banner ads for buses
6. **MOU, New Partners, Next Steps, 2014 dues**



Appendix B

Reach. Engage. Connect.

Comcast SPOTLIGHT

Heather Cleary
Senior Account Executive
Comcast Spotlight, Washington D.C.
703-656-6500

Northern Virginia Clean Water Partners
nvrc

About Comcast Spotlight

On TV On Cable On Demand On App

Who we are:

- Comcast Spotlight is the advertising sales division of Comcast, with a presence in over 80 U.S. markets - reaching over 30 million TV households
- We put TV's most powerful networks and the area's hottest web sites to use for local, regional and national advertisers
- We reach over 1.6 million TV households across the Washington D.C. market

Who we represent:

- Comcast
- Verizon FIOS
- DirecTV
- Dish Network
- Cox
- Atlantic Broadband
- MetroCast
- Shentel
- Antietam Cable

Comcast SPOTLIGHT

Our Difference

On TV On Cable On Demand On App

Why Advertise with Comcast Spotlight?

- We offer a full suite of multi-media solutions
- We surpass the 'reach' of broadcast television, and our viewers have more purchasing power
- We can target your audience demographic with precision
- We provide the flexibility to target viewers in a very specific geography, or message to the entire Washington DC DMA
- We improve ROI by minimizing ad waste
- We offer integrated marketing solutions
- We make cable advertising easy to buy

Comcast SPOTLIGHT



Potomac Superzone

(VZWA, 9555) Washington, DC DMA

ZIP	ZIP	ZIP	ZIP	ZIP	ZIP
20001	20166	20720	20851	22026	22202
20002	20169	20721	20852	22027	22203
20003	20170	20722	20853	22028	22204
20005	20171	20735	20854	22031	22205
20007	20175	20737	20855	22032	22206
20008	20176	20740	20860	22033	22207
20009	20181	20743	20861	22039	22209
20010	20190	20744	20862	22041	22213
20011	20191	20745	20866	22042	22302
20012	20194	20746	20868	22043	22303
20015	20601	20747	20871	22044	22306
20016	20602	20748	20872	22046	22307
20018	20603	20762	20874	22060	22308
20019	20607	20769	20876	22066	22309
20020	20611	20770	20877	22079	22310
20032	20613	20772	20878	22101	22311
20105	20622	20774	20879	22102	22312
20109	20623	20781	20882	22124	22315
20110	20632	20782	20886	22125	22401
20111	20646	20783	20889	22134	22405
20112	20664	20784	20895	22150	22406
20120	20675	20785	20896	22151	22407
20121	20677	20812	20901	22152	22408
20124	20693	20814	20902	22153	22508
20129	20695	20815	20903	22172	22511
20136	20705	20816	20904	22180	22513
20147	20706	20817	20905	22181	22514
20148	20707	20818	20906	22182	22516
20151	20708	20819	20910	22181	22510
20152	20710	20833	20912	22192	22701
20155	20712	20837	22003	22193	
20184	20715	20841	22015	22199	
20165	20716	20850	22025	22201	

All homes within listed zip codes may not be served through this zone.

Alexandria Zone

(ALEX, 0340) Washington, DC DMA

ZIP	TOWN
22301	Alexandria
22302	Alexandria
22304	Alexandria
22305	Alexandria
22311	Alexandria
22312	Alexandria
22314	Alexandria

All homes within listed zip codes may not be served through this zone.

Fairfax County (FFCY, 0356) Washington, DC DMA



ZIP	TOWN	ZIP	TOWN
20120	Centreville	22102	Tyson's
20121	Centreville	22124	Oakton
20124	Clifton	22150	Springfield
20151	Charlottesville	22151	Springfield
20170	Hemdon	22152	Springfield
20171	Hemdon	22153	Springfield
20192	Hemdon	22180	Vienna
22003	Annandale	22181	Vienna
22015	Burke	22182	Vienna
22027	Dunn Loring	22306	Alexandria
22030	Fairfax	22307	Alexandria
22031	Fairfax	22308	Alexandria
22032	Fairfax	22309	Alexandria
22033	Fairfax	22310	Alexandria
22039	Fairfax Station	22312	Alexandria
22041	Bailey's Cross	22315	Alexandria
22042	Falls Church		
22043	Falls Church		
22044	Seven Corners		
22046	Falls Church		
22079	Lorton		
22101	McLean		

All homes within listed zip codes may not be served through this zone.

Target your most valuable geographic areas with XFINITY.com

Your ad appears only in the geographic area you select!

20 individual zones available in Washington, DC area

Alexandria, VA	Montgomery Central, MD
Arlington, VA	Montgomery North, MD
Calvert, MD	Montgomery, MD-East
Charles, MD	Prince George's, MD-North
Calverton, VA	Prince George's, MD-South
Fairfax, VA	Prince William, VA-East
Frederick, MD	Prince William, VA-West
Keyser, WV / Cumberland, MD	Spotsylvania-Stafford, VA
Loudoun, VA	The District Of Columbia, DC
Martinsburg, WV	Warrenton, VA
	Winchester, VA



Demographic Targeting On-air and Online

Cable Television offers the unique ability to Target Programming by offering a variety of Networks tailored to specific needs.

- Affluent Adults**: XFINITY.com, FOX, travel, CNN, tbs, HGTV, ESPN
- News Buffs**: FOX, CNN, XFINITY.com, MSNBC, News
- Sports Fans**: BTU, ESPN 2, FSN, Classic, ESPN, XFINITY.com
- Women**: We, CNN, Lifetime, TLC, XFINITY.com, HGTV
- Kids & Families**: Nick, TLC, Discovery, XFINITY.com
- Trendsetters**: BET, XFINITY.com, MTV, Discovery

XFINITY.com is the Online Dashboard That Connects Customers to Their Daily Lifestyle

- Communications**
 - Email
 - Voicemail
 - Text
- Entertainment**
 - Record & manage DVR
 - Watch thousands of hours of full-length TV series online
 - Watch live sports
 - Short-form video features
- Information**
 - News
 - Finance
- Home Security**
 - Coming soon



U.S. Adult Media Consumption

Adults spend the majority of their time consuming media on TV and Online

Comcast Spotlight provides advertising access to the media where consumers are spending over 2/3 of their time

Are your advertising efforts focused appropriately?

- 42% TV
- 26% Online
- 15% Radio
- 10% Mobile
- 4% Newspapers
- 3% Magazines

Better Ad Recall With Multi-screen Viewing

TV Advertising

BRAND RECALL

Television Only	50%
Multiplatform	+24%
Total	74%

74% Recall the Message

ENGAGEMENT

Television Only	22%
Multiplatform	+17%
Total	39%

39% Remember the Details

Thank you!

Thank you for the partnership in 2013
and for consideration in 2014!

Heather Cleary
Senior Account Executive
703-656-6500
Heather_Cleary@Cable.Comcast.com




Animal Planet evokes the expansive and unexpected range of raw, visceral experiences within the animal kingdom-tapping into the instincts that drive us with stories and characters that resonate with the human condition.



River Monsters



Whale Wars

Age		
18 - 24	10.0%	
25 - 34	18.5%	
35 - 49	27.2%	
50 - 54	15.2%	
55 - 64	14.4%	
65+	14.7%	
Gender		
Male	46.0%	
Female	54.0%	
Education		
High School Grad	58.8%	
College Grad	17.6%	
Postgraduate Degree	11.2%	
Household Income		
\$50k - \$99,999	31.1%	
\$100,000 - \$149,999	13.2%	
\$150,000 - \$249,999	11.1%	
\$250,000+	6.9%	
HH Characteristics		
Own Home	61.1%	
White Collar	45.0%	
Married	52.3%	
1+ Children in HH	39.8%	

- After the Attack
- Animal Face-Off
- Call of the Wildman
- Finding Bigfoot
- I Shouldn't Be Alive
- Pit Boss
- Puppy Bowl
- River Monsters
- Swamp Wars
- Whale Wars

Source: Washington, D.C.-Synchro-Metric, M12-Fc13, Scarborough, TV + Paid 7 Days





Adventure Time



Ben 10: Omniverse

Age		
18 - 24	14.0%	
25 - 34	18.4%	
35 - 49	36.0%	
50 - 54	14.2%	
55 - 64	7.1%	
65+	10.3%	
Gender		
Male	39.4%	
Female	60.6%	
Education		
High School Grad	63.3%	
College Grad	13.6%	
Postgraduate Degree	9.8%	
Household Income		
\$50k - \$99,999	31.5%	
\$100,000 - \$149,999	24.7%	
\$150,000 - \$249,999	8.0%	
\$250,000+	4.3%	
HH Characteristics		
Own Home	60.7%	
White Collar	50.0%	
Married	55.1%	
1+ Children in HH	58.7%	

Cartoon Network offers a vast audience of cartoon lovers, young and old, the best cartoons ever made. Drawing from the world's largest cartoon library, Cartoon Network features an outrageous environment that celebrates toons! The network has been a consistent ratings leader with its innovative packaging of beloved cartoon characters.

- Adventure Time
- Ben 10: Omniverse
- Beware the Batman
- Clarence
- Lego: Legends of Chima
- Pokémon
- Regular Show
- Steven Universe
- Tenkai Knights
- Uncle Grandpa

Source: Washington, D.C.-Synchro-Metric, M12-Fc13, Scarborough, TV + Paid 7 Days





Anderson Cooper 360



The Situation Room

Age		
18 - 24	7.8%	
25 - 34	17.4%	
35 - 49	27.8%	
50 - 54	11.3%	
55 - 64	16.3%	
65+	19.6%	
Gender		
Male	52.9%	
Female	47.5%	
Education		
High School Grad	44.2%	
College Grad	25.8%	
Postgraduate Degree	23.5%	
Household Income		
\$50k - \$99,999	20.2%	
\$100,000 - \$149,999	22.0%	
\$150,000 - \$249,999	16.2%	
\$250,000+	7.3%	
HH Characteristics		
Own Home	68.0%	
White Collar	49.4%	
Married	56.3%	
1+ Children in HH	35.4%	

Since its first broadcast in 1980, CNN has grown to become the superior source of 24-hour news and information for well-informed viewers. CNN connects viewers with what they want to know - the facts, insights, analysis and perspectives that allow for the deepest understanding of the news as it happens.

- Anderson Cooper 360
- CNN Newsroom
- Crossfire
- Early Start
- Erin Burnett OutFront
- Legal View
- New Day
- Piers Morgan Tonight
- The Lead
- The Situation Room

Source: Washington, D.C.-Synchro-Metric, M12-Fc13, Scarborough, TV + Paid 7 Days





CNN Dinero



Directo USA

Age		
18 - 24	8.2%	
25 - 34	22.1%	
35 - 49	32.1%	
50 - 54	10.5%	
55 - 64	13.1%	
65+	14.1%	
Gender		
Male	50.2%	
Female	49.8%	
Education		
High School Grad	53.9%	
College Grad	7.9%	
Postgraduate Degree	3.8%	
Household Income		
\$50k - \$99,999	20.3%	
\$100,000 - \$149,999	5.3%	
\$150,000 - \$249,999	2.1%	
\$250,000+	1.3%	
HH Characteristics		
Own Home	42.8%	
White Collar	23.7%	
Married	65.7%	
1+ Children in HH	54.5%	

A 24-hour Spanish-language news network for Latin America, the Hispanic American, United States marketplace.

- Al Galope
- Aristegui
- Café CNN
- Cita
- CNN Dinero
- Destinos
- Directo USA
- México Opina
- México Perspectivas
- Sanjay Gupta, MD

Source: USA Plus-Metric, Fc12-Mc13, Scarborough, TV + Paid 7 Days





Keeping Up with the Kardashians



The Soup

Age		
18 - 24	17.6%	
25 - 34	29.3%	
35 - 49	29.8%	
50 - 54	6.8%	
55 - 64	11.9%	
65+	7.7%	
Gender		
Male	29.1%	
Female	70.9%	
Education		
High School Grad	55.9%	
College Grad	22.7%	
Postgraduate Degree	14.9%	
Household Income		
\$50k - \$99,999	29.9%	
\$100,000 - \$149,999	21.1%	
\$150,000 - \$249,999	12.0%	
\$250,000+	7.2%	
HH Characteristics		
Own Home	59.9%	
White Collar	56.3%	
Married	48.8%	
1+ Children in HH	49.0%	

E! is the ultimate destination for entertainment fans and adult consumers who crave the latest on celebrities, entertainment & pop culture. E! connects these consumers to the world of Hollywood in a positive, fun, witty and aspirational way. From our Red Carpet Coverage to E! News & True Hollywood Story, we're your #1 source for everything entertainment.

- Chelsea Lately
- E! Investigates
- E! News
- E! True Hollywood Story
- Fashion Police
- Hello Ross
- Keeping Up with the Kardashians
- Live from the Red Carpet
- The Soup
- Total Divas

Source: Washington, D.C.-Synchro-Metric, M12-Fc13, Scarborough, TV + Paid 7 Days





Age

18 - 24	11.4%
25 - 34	19.5%
35 - 49	29.1%
50 - 54	10.9%
55 - 64	14.2%
65+	14.8%

Gender

Male	70.5%
Female	29.5%

Education

High School Grad	50.1%
College Grad	22.8%
Postgraduate Degree	21.0%

Household Income

\$50k - \$99,999	32.2%
\$100,000 - \$149,999	20.4%
\$150,000 - \$249,999	17.8%
\$250,000+	8.0%

HH Characteristics

Own Home	70.2%
White Collar	50.8%
Married	60.2%
1+ Children in HH	41.0%

ESPN is the #1 network that America turns to for sports, with more than 4,800 hours of live coverage and original programming. ESPN offers sports fans live major events and original studio programming with the authority that they trust and the personality that they love. Viewers can catch coverage of the NFL, MLB, NBA, college football and men's and women's college basketball.

- 1st and 10th
- 30 for 30
- Around the Horn
- College GameDay
- E:60
- NFL Live
- Outside The Lines
- Pardon the Interruption
- SportsCenter
- SportsNation



Around the Horn



SportsCenter



Source: Washington, D.C.-Synchrocast-Mosaic, M12-F413, Scarborough, TV + Post 7 Days



Age

18 - 24	14.9%
25 - 34	21.7%
35 - 49	31.8%
50 - 54	9.8%
55 - 64	11.4%
65+	10.8%

Gender

Male	69.9%
Female	30.1%

Education

High School Grad	62.9%
College Grad	8.9%
Postgraduate Degree	4.0%

Household Income

\$50k - \$99,999	26.0%
\$100,000 - \$149,999	7.7%
\$150,000 - \$249,999	3.0%
\$250,000+	1.4%

HH Characteristics

Own Home	51.4%
White Collar	27.6%
Married	53.9%
1+ Children in HH	55.4%

ESPN Deportes is the leading multimedia, Spanish-language sports brand dedicated to providing the widest variety of sports to the U.S. Hispanic sports fan. Featuring more than 1,900 live original hours of sports programming presented annually including MLB, NBA, NFL, Winter Baseball from the Dominican Republic, and Caribbean Series, La Liga, Bundesliga, Mexican First Division, MLS, Dutch League Soccer, Friday Night Fights, Mexican Tennis Open, Wimbledon, French Open, U.S. Open, Australian Open, The Masters and NASCAR.

- Béisbol Esta Noche
- Capitales del Fútbol
- Cronómetro
- El Bar
- Fuera de Juego
- Fútbol Picante
- Goipe a Goipe
- Los Capitanes
- Raza Deportiva
- SportsCenter



Fútbol Picante



Los Capitanes



Source: USA Plus-Mosaic, F412-M13, Scarborough, TV + Post 7 Days



Age

18 - 24	13.7%
25 - 34	24.9%
35 - 49	36.1%
50 - 54	7.9%
55 - 64	9.9%
65+	7.4%

Gender

Male	50.1%
Female	49.9%

Education

High School Grad	54.7%
College Grad	4.5%
Postgraduate Degree	2.1%

Household Income

\$50k - \$99,999	16.3%
\$100,000 - \$149,999	4.9%
\$150,000 - \$249,999	1.9%
\$250,000+	0.8%

HH Characteristics

Own Home	40.3%
White Collar	20.4%
Married	60.1%
1+ Children in HH	67.9%

Galavisión airs a combination of classic comedy, telenovelas, and late night shows from the 1970s, 1980s and 1990s that aired originally on Univision, with more present day offerings from news, sports and specials originating from Televisa's three networks, Canal de las Estrellas, FOROtv, and Galavisión as well as two shows produced by Televisa's music network, Telehit.

- Bienvenidos
- Chespirito
- El Chapulin Colorado
- El Chavo
- El Mananero
- Hora 21
- Las Noticias Por Adela
- Primero Noticias
- Tercer Grado
- Vecinos



El Chavo



Vecinos



Source: USA Plus-Mosaic, F412-M13, Scarborough, TV + Post 7 Days



Age

18 - 24	4.0%
25 - 34	9.5%
35 - 49	18.3%
50 - 54	10.3%
55 - 64	23.7%
65+	34.2%

Gender

Male	26.8%
Female	73.2%

Education

High School Grad	65.4%
College Grad	14.7%
Postgraduate Degree	13.5%

Household Income

\$50k - \$99,999	35.7%
\$100,000 - \$149,999	13.8%
\$150,000 - \$249,999	8.7%
\$250,000+	3.8%

HH Characteristics

Own Home	70.4%
White Collar	32.7%
Married	50.6%
1+ Children in HH	26.2%

Hallmark Channel, owned and operated by Crown Media Holdings, Inc., is a 24-hour basic cable network that provides a diverse slate of high-quality entertainment programming. Hallmark Channel consistently ranks among the top 10 ad-supported cable networks in Prime Time and Total Day household ratings and is the nation's leading network in providing quality family programming.

- Cedar Cove
- Cheers
- Frasier
- Hallmark Original Movies
- Home & Family
- Home Improvement
- I Love Lucy
- The Better Show
- The Golden Girls
- The Waltons



I Love Lucy



The Golden Girls



Source: Washington, D.C.-Synchrocast-Mosaic, M12-F413, Scarborough, TV + Post 7 Days



Age

18 - 24	7.2%
25 - 34	15.2%
35 - 49	30.0%
50 - 54	12.4%
55 - 64	21.9%
65+	13.4%

Gender

Male	32.6%
Female	67.4%

Education

High School Grad	50.9%
College Grad	24.9%
Postgraduate Degree	21.1%

Household Income

\$50k - \$99,999	28.5%
\$100,000 - \$149,999	23.0%
\$150,000 - \$249,999	17.2%
\$250,000+	9.5%

HH Characteristics

Own Home	76.8%
White Collar	53.9%
Married	64.5%
1+ Children in HH	36.9%

HGTV is the inspiration to imagine, create, and enjoy home. Viewers have access to the only 24/7 multi-platform destination that offers an entertaining line-up of lifestyle programming, information and engaging talent. HGTV empowers people to love where they live. Full of ideas and often just plain fun, it is a starting point for decorating ideas, design tools, easy projects, real estate tips and great stories.

- Brother vs. Brother
- Cousins on Call
- Color Splash
- HGTV Star
- House Hunters
- Income Property
- Kitchen Cousins
- Love It or List It
- Property Brothers
- Property Virgins



Income Property



Property Brothers



Source: Washington, D.C.-Synchrocast-Mosaic, M12-F413, Scarborough, TV + Post 7 Days



Age

18 - 24	7.1%
25 - 34	16.2%
35 - 49	27.6%
50 - 54	12.7%
55 - 64	18.6%
65+	17.6%

Gender

Male	60.1%
Female	39.9%

Education

High School Grad	52.9%
College Grad	23.8%
Postgraduate Degree	16.5%

Household Income

\$50k - \$99,999	30.7%
\$100,000 - \$149,999	22.9%
\$150,000 - \$249,999	15.4%
\$250,000+	7.4%

HH Characteristics

Own Home	73.8%
White Collar	46.5%
Married	61.9%
1+ Children in HH	33.7%

The History Channel reflects the power and passion of history as an inviting place where people experience history personally and connect their own lives to the great lives and events of the past. Always ready to bring you different eras and cultures, The History Channel offers the escape from traditional TV fare.

- American Daredevils
- American Pickers
- Ancient Aliens
- Ax Men
- Gangland
- Ice Road Truckers
- Pawn Stars
- Swamp People
- Top Gear
- Vikings



American Pickers



Pawn Stars



Source: Washington, D.C.-Synchrocast-Mosaic, M12-F413, Scarborough, TV + Post 7 Days



Age	
18 - 24	2.8%
25 - 34	5.3%
35 - 49	37.4%
50 - 54	15.7%
55 - 64	19.5%
65+	19.3%

Gender	
Male	57.7%
Female	42.3%

Education	
High School Grad	43.3%
College Grad	24.4%
Postgraduate Degree	23.8%

Household Income	
\$50k - \$99,999	28.8%
\$100,000 - \$149,999	20.8%
\$150,000 - \$249,999	14.7%
\$250,000+	6.9%

HH Characteristics

Own Home	77.8%
White Collar	44.7%
Married	52.3%
1+ Children in HH	33.9%

CNN Headline News is the ultimate resource for today's "Time Warriors" — people who do more and demand more out of every day, and need convenient and instant access to the information they rely upon to chart the course of their day. Headline News delivers the day's headlines every 15 minutes, 24 hours a day.

- Dr. Drew On Call
- Evening Express
- HLN News Now
- Jane Velez-Mitchell
- Morning Express
- Nancy Grace
- Now in America
- Raising America
- Showbiz Tonight
- Weekend Express



Morning Express with Robin Meade



Showbiz Tonight



Source: Washington, D.C. - SynchroMosaic, M12-Fa13, Scarborough, TV + Fall 7 Days



Age	
18 - 24	8.3%
25 - 34	14.1%
35 - 49	24.7%
50 - 54	12.0%
55 - 64	20.9%
65+	19.9%

Gender	
Male	59.1%
Female	40.9%

Education	
High School Grad	57.4%
College Grad	21.2%
Postgraduate Degree	13.8%

Household Income	
\$50k - \$99,999	31.5%
\$100,000 - \$149,999	20.0%
\$150,000 - \$249,999	14.3%
\$250,000+	7.5%

HH Characteristics

Own Home	71.3%
White Collar	44.2%
Married	58.8%
1+ Children in HH	29.3%

Track down a biblical plague threatening modern-day lives. Uncover a new human species. Tempt fate with people whose risky jobs are just another day at the office. You can do it all on the National Geographic Channel where everyday is an adventure.

- Alaska State Troopers
- American Blackout
- American Cypries
- Border Wars
- Diggers
- Domsday Preppers
- Hell on the Highway
- Snake Salvation
- Taloo
- Wicked Tuna



Domsday Preppers



Wicked Tuna



Source: Washington, D.C. - SynchroMosaic, M12-Fa13, Scarborough, TV + Fall 7 Days



Age	
18 - 24	15.0%
25 - 34	23.6%
35 - 49	23.5%
50 - 54	12.3%
55 - 64	13.4%
65+	11.3%

Gender	
Male	23.5%
Female	76.5%

Education	
High School Grad	66.4%
College Grad	15.1%
Postgraduate Degree	10.1%

Household Income	
\$50k - \$99,999	32.0%
\$100,000 - \$149,999	16.2%
\$150,000 - \$249,999	8.7%
\$250,000+	4.8%

HH Characteristics

Own Home	58.7%
White Collar	42.4%
Married	43.7%
1+ Children in HH	48.2%

Oxygen connects women to their whole world with shows that are funny, wise, provocative, clever, and that reflect the best that women see in themselves such as their passion for life.

- Bad Girls Club
- Best Ink
- Hollywood Unzipped
- Love Games
- My Big Fat Revenge
- Preachers of L.A.
- Snapped
- Too Young to Marry?



Bad Girls Club

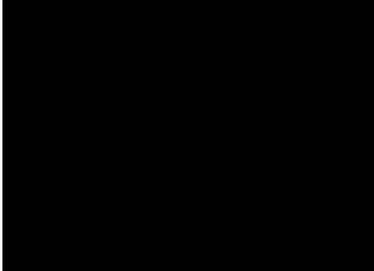


Best Ink



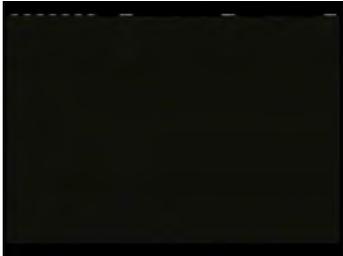
Source: Washington, D.C. - SynchroMosaic, M12-Fa13, Scarborough, TV + Fall 7 Days

NVRC Maine Devil Ducks Spot



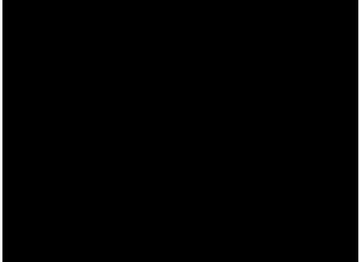


NVRC Hispanic Spot





Example Added Value Taggable Spot





Northern Virginia Clean Water Partners

SPRING 2014 CAMPAIGN PLANNING MEETING

Tuesday, May 13, 2014

11:30 – 1:00

Main Conference Room

Northern Virginia Regional Commission

3060 Williams Drive – Suite 510

Fairfax, VA 22031

The purpose of this meeting is to review 2014 campaign activities and plan for 2014 annual report

SUMMARY

In Attendance:

Chris Stone	Loudoun County	chris.stone@loudoun.gov
Jennifer McDonnell	Arlington County	jmcdonnell@arlingtonva.us
Paul Santay	Stafford County	psantay@co.stafford.va.us
Richard West	Town of Dumfries	rwest@dumfriesva.gov
David Jensen	Doody Calls	djensen@doodycalls.com
Aileen Winquist	Arlington County	awinquist@arlingtonva.us
Corey Miles	NVRC	cmiles@novaregion.org
Brad Glatfelter	George Mason University	bglatfel@gmu.edu
Sara Rilveria	Northern VA Community College	srilveria@nvcc.edu
Cathy Lin	Arlington County Public Schools	cathy.lin@apsva.us
Christina Alexander	City of Fairfax	Christina.Alexander@fairfaxva.gov
Douglas Day	Town of Herndon	doug.day@herndon-va.gov
Jennifer Lamberton	Town of Leesburg	jlamberton@leesburgva.gov
Melanie Mason	City of Alexandria	Melanie.mason@alexandriava.gov
Jason Widstrom	City of Falls Church	jwidstrom@fallschurchva.gov
Joanna Grey	City of Falls Church	jgrey@fallschurchva.gov

1. Introductions, Updates, News Items

a. Pet Waste Bag Dispensers-all delivered? Extras?

Dave Jensen from Doody Calls has delivered all of the pet waste bag dispensers. Several jurisdictions have reported that they were handed out at different spring events around the region and that they were very well received. Fairfax County decided not to take their full share so about 40 extra boxes were available for members of the group to take with them if they wanted to. Several jurisdictions took boxes but there are still a few left. Corey will store the extras here at NVRC. Please contact Corey if you would like to take some more.

b. Invoices – everyone receive? Any issues?

Invoices for FY 2014-2015 were sent out in January. No issues about the invoices were reported at the meeting.

c. Stormwater Door Hangers

Melanie Mason from the City of Alexandria brought a door hanger that had the Only Rain Down the Storm Drain logo on the front and some numbers about who to call about illicit discharges in Alexandria, Arlington, and Falls Church on the back. The door hanger also said “Drains to Four Mile Run” on the front. Corey thinks that it was created as part of the Four Mile Run Program since it only contains jurisdictions in the Four Mile Run watershed. She will check the Four Mile Run Program files to try to find it. If it is not located there, than it will have to be remade with updated information so we can order new ones. Arlington County stated that they have created something similar for their use when they do storm drain marking.

d. Dog waste post cards

Corey reported that she received a complaint from a citizen who received one of the dog waste post cards. The complaint was that the post card targets dog owners to pick up after their pets but not cat owners. This is unfair because people don't typically pick up after their outdoor cats.

Where appropriate in the future, NVCWP will be more conscientious about using the term 'pet waste' rather than 'dog waste'.

e. Charity Car Washes Update from Arlington

Aileen Winquist and Cathy Lin from Arlington County provided an update to the group about the County's ban on charity carwashes in order to comply with their new stormwater permit. Fundraiser carwashes will no longer be allowed by the County on school property due to the wash water runoff containing detergents, petroleum, chlorine and other pollutants.

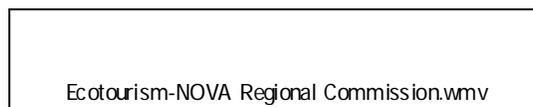
2. **2014 Comcast Advertising Update**

a. The number of ads aired through April are summarized in the table below.

	Spots Aired on Comcast	Cost
Oct-13	761	8016
Nov-13	863	5676
Dec-13	687	5676
Jan-14	351	4602
Feb-14	413	6828
Mar-14	553	7023
Apr-14	553	7023

b. Taggable Spot (show spot)

The taggable spots have been developed and are now running. (Click link below to see taggable spot)



3. **Discussion of needs for Annual Reports**

a. Survey to be done in August- should we expand it to include some number of Spanish speakers?

Since NVCWP has been advertising on Spanish channels, Corey explained that the annual survey could be modified to include some Spanish speaking individuals. Amplitude Research provided a quote of an additional \$500 to include 8% Spanish speakers.

Also, the group agreed that it would be most beneficial to initiate the survey by the end of June due to fiscal year reporting requirements.

- b. MS4's timeline for education and outreach plans and reports
The annual report will be completed by end of August.
- c. How are we reaching 20% of each high priority issue target audience
Corey gave a short presentation to detail the specifics of how 20% of each high priority issue target audience is reached. The powerpoint slides are attached as Appendix A.
- d. Send Corey the number of promotional items that were handed out so she can include in Annual Report

4. 2015 Campaign Plan

- a. New Ads? (show Excal video sample)

A potential new 30 second video that targets the issue of illicit discharge was shown. The video was produced by Excal Video, a private company that creates training videos in Colorado. The video is part of a 5-video set with different run times. The cost for the license will be about \$10,000 and includes:

1. The License for our 5-video set includes both English and Spanish versions of all programs.
2. While your group is primarily interested in the 30-second public service announcement version, the License also allows each MS4 to use any of the 5 programs (from 30 seconds to 10-1/2 minute run times). Each MS4 would be able to copy any program (on DVD or CD) and provide copies to anyone or any organization within their jurisdiction. Many of our customers make copies for middle schools, high schools, public service organizations like LWV, Ducks Unlimited, Rotary, etc. MS4s would also be able to stream any of the programs on their public website.
3. The 4-disk set includes 60 different video formats. The large number of formats are included so that TV stations and web managers will be able to find a format that works well for them.
4. All the programs can be customized. Not every disk (DVD or CD) can be customized but there is a blank 'slate' at the end of 3 of the disks. The slate can be edited with logos and who to contact for questions or if anyone spots a possible illicit discharge and wants to report it.

The video was well received however, the group would like to evaluate the effectiveness of the video and message using focus groups before making a large purchase. Jen McDonnell of Arlington County suggested we ask the following questions:

- Did the ad hold your interest for the full 30 seconds?
- Do you think this ad will encourage people to stop pouring pollutants down the storm drain?
- Do you have any general comments about the ad that you wish to share?
- Do you have any recommendations for ways to encourage people not to put pollutants down the storm drain?

- Would you be less likely to pour something in the storm drain after watching this video?

Ideally, participants in the focus groups would be part of the target audience.

Corey explained that the NVCWP budget would likely be able to support the purchase if we did not order any promotional items this year. She will double check with the accounting department to see what the balance is.

5. Wrap-up

a. Schedule next meeting

The next meeting will be scheduled for the fall or winter to discuss 2014 results and plan for 2015.



Appendix A

See attached Powerpoint presentation titled “Reaching 20% of the Target Audience”



2014 Only Rain Down the Drain Campaign

Northern Virginia Clean Water Partners



MS4 Public Education

- ▶ The permittee shall implement a public education program with the goal of increasing the stormwater knowledge of target audiences and changing behavior to result in pollutant reductions. The permittee may fulfill all or part of the requirements of this permit through regional outreach programs involving two or more MS4 localities.



Required MS4 Phase I and Phase II Education and Outreach Requirements

- ▶ education and outreach activities designed to reach an equivalent 20% of each high-priority issue target audience (Only applies to Phase II's).
(Note: *It shall not be considered noncompliance for failure to reach 20% of the target audience.* However, it shall be a compliance issue if insufficient effort is made to annually reach a minimum of 20% of the target audience.)
20% of total population (2.2 million) = 440,000
total



20% of each high-priority issue target audience.

High Priority Issues

► Fertilizer

- Target Audience= 45% of males and females over age 35 fertilize other than never or once in fall

	Arlington County	Fairfax County	Loudoun County	Stafford County	City of Alexandria	City of Fairfax	City of Falls Church	Town of Dumfries	Town of Herndon	Town of Leesburg	Town of Vienna
MALES: Ages 35-75	45,824	261,799	72,615	29,699	32,365	5,379	3,037	961	5,315	9,294	4,007
FEMALES: Ages 35-75	44,166	276,387	74,267	30,905	34,335	5,715	3,301	1,104	4,892	9,750	4,220

i.e. Stafford County has 29,699 males and 30,905 females aged 35–75. We need to reach 5,340 males and 6,181 females to meet the 20% requirement*.

*To be conservative we could argue that we only need to reach 20% of 45%



20% of each high-priority issue target audience.

▶ High Priority Issue: Fertilizer

i.e. Stafford County we need to reach 11,521 males age 35-75

Stafford falls in Potomac Superzone

Affluent Adults



News Buffs



Sports Fans





20% of each high-priority issue target audience.

► Fertilizer High Priority Issues

i.e. Stafford County we need to reach 11,521 people age 35-75

Spots Aired on
Comcast

Oct-13	761
Nov-13	863
Dec-13	687
Jan-14	351
Feb-14	413
Mar-14	553
Apr-14	

Of the 553 total spots aired in March, 413 aired in Potomac Superzone as follows

Animal Planet	83
DIY	82
ESPN	83
Headline News	82
Nat Geo	83



20% of each high-priority issue target audience.

► High Priority Issue: Fertilizer

i.e. Stafford County we need to reach 5,340 males age 35-75

How does this translate into the number of people reached?

	Spots Aired on Comcast	Impressions
Oct-13	761	
Nov-13	863	
Dec-13	687	
Jan-14	351	
Feb-14	413	
Mar-14	553	942,803

Since the target demographic is only 8.9% of the total population, we can assume that we are reaching 20% of that based on number of impressions per channel

Apr-14



20% of each high-priority issue target audience.

High Priority Issues

- ▶ Pet Waste 28% of respondents have dogs
 - Target Audience = 25% of dog owners don't pick up waste in yard or on walks

Northern Virginia Clean Water Partners

FALL 2014 CAMPAIGN PLANNING MEETING

Thursday September 11, 2014

12:00 – 1:30

Main Conference Room

Northern Virginia Regional Commission

3060 Williams Drive – Suite 510

Fairfax, VA 22031

The purpose of this meeting is to review 2014 annual report

SUMMARY

In Attendance:

Jennifer McDonnell	Arlington County	jmcdonnell@arlingtonva.us
Paul Santay	Stafford County	psantay@co.stafford.va.us
Richard West	Town of Dumfries	rwest@dumfriesva.gov
David Jensen	Doody Calls	djensen@doodycalls.com
Aileen Winqvist	Arlington County	awinqvist@arlingtonva.us
Corey Miles	NVRC	cmiles@novaregion.org
Sara Silveria	Northern VA Community College	srilveria@nvcc.edu
Melanie Mason	City of Alexandria	Melanie.mason@alexandriava.gov
Jason Widstrom	City of Falls Church	jwidstrom@fallschurchva.gov
Joanna Grey	City of Falls Church	jgrey@fallschurchva.gov
Irene Haske	Fairfax County	Irene.Haske@fairfaxcounty.gov
Raj Bhansali	Comcast Spotlight	Raj_Bhansali@cable.comcast.com
Heather Parker	Comcast Spotlight	Heather_Parker@cable.comcast.com

AGENDA

1. Comcast Data Presentation by Raj Bhansali, Director of Research

Raj Bhansali
Director of Research | Comcast Spotlight, Washington DC
7501 Wisconsin Ave; Suite 650E | Bethesda, MD 20814
O: 240.482.2525 | M: 703-656-6531
Raj_Bhansali@cable.comcast.com

Raj presented the findings of his report titled “Documentation of reaching desired targets for ‘Only Rain’ Campaign”. The report is attached as Appendix A.

2. Discussion of 2014 Annual Reports and Survey

- a. Survey included 8% Spanish speakers
The results of the 2014 survey are slightly different than in the past few years due to the addition of the new demographic group.

- b. How are we reaching 20% of each high priority issue target audience

The data and report supplied by Comcast Spotlight combined with the data and report supplied by Amplitude research provides enough information to explain who the target audience is for each issue and how we reached 20% of that audience.

3. 2015 Campaign Plan

- a. Do we want the IDDE video? Cost is \$10,000 for all licensing. Budget can support.

Corey showed the Illicit Discharge Detection and Elimination public outreach video from Excal Visual again. The group decided not to purchase the license for the video. Corey explained that we have the extra funds available from contributions made by three new partners this year. The group decided that it was not compatible with the rubber ducky branding we have been using and not to purchase the video. Instead the group decided to purchase additional advertising from Comcast. Corey worked with Heather Parker from Comcast to form a plan for fourth quarter ads. The plan includes a combination of television and digital ads as follows:

Run 151 Premium Prime Time spots on Animal Planet and ESPN from 5p-12m to get high visibility with big reach. We also added an additional \$500 per month to the digital component. Heather suggested running "forced viewed" Pre-roll spots. Those are the spots that you view when you request video content. Before you view it, you have to watch a 30 or 15 second spot. We would receive 12,500 of those per month from October thru December.

4. Wrap-up

- a. Schedule next meeting for spring 2015

Corey explained that she would be going on maternity leave from December thru February. She will send the invoices out in November this year. Any questions regarding the Clean Water Partners during this time should be directed to:

Aimee Vosper

avosper@novaregion.org

703-642-4623

Next meeting will be in March 2015.



Appendix A

Northern Virginia Clean Water Partners

FALL 2014 CAMPAIGN PLANNING MEETING

Thursday September 11, 2014

12:00 – 1:30

Main Conference Room

Northern Virginia Regional Commission

3060 Williams Drive – Suite 510

Fairfax, VA 22031

The purpose of this meeting is to review 2014 annual report

AGENDA

1. **Comcast Data Presentation by Raj Bhansali, Director of Research**
2. **Discussion of 2014 Annual Reports and Survey**
 - a. Survey included 8% Spanish speakers
 - b. How are we reaching 20% of each high priority issue target audience
3. **2015 Campaign Plan**
 - a. Do we want the IDDE video? Cost is \$10,000 for all licensing. Budget can support.
4. **Wrap-up**
 - a. Schedule next meeting for spring 2015



Appendix B

Comcast Spotlight Power Point
Documentation of reaching desired targets for
“Only Rain” Campaign

Northern Virginia Regional Commission

Documentation of reaching desired targets for “Only Rain”
Campaign.



Prepared by Raj Bhansali
Director of Research, Comcast Spotlight -Washington DC

Northern Virginia Regional Commission

In support of the Only Rain campaign, Northern Virginia Regional Commission enacted an advertising campaign with Comcast Spotlight to target localities in Virginia. These localities are located in the following counties:

- Alexandria
- Arlington
- Fairfax County
- Fairfax City
- Falls Church
- Loudoun County
- Stafford County

In targeting these areas, the Potomac geographic super zone, Alexandria trade zone and Fairfax County trade zone were used to reach target customers for three segments of residential customers.

- Lawn Care (fertilizers)
- Auto Care (oils and lubricants)
- Pet Waste (dog waste)

Additionally, the digital platform “Xfinity.com” was used to further reach customers within these segments.

This document provides support that 20% of each target audience has been reached by the advertising campaign.

Please note that Dumfries receives coverage from the Potomac super zone, but is not included in the analysis due to a limitation of data.

Trade Zone Definitions:

The Fairfax County trade zone represents Cox Cable households in the county of Fairfax and independent cities of Fairfax City and Falls Church

The Potomac super zone represents all Verizon FiOS households across the Greater Washington DC Region. For this analysis, we are limiting our scope of data to the counties/ independent cities of Arlington, Fairfax County, Fairfax City, Falls Church, Loudoun and Stafford

The Alexandria trade zone represents Comcast households in the independent city of Alexandria

Northern Virginia Regional Commission

Table of Contents:

1. Media Motivations for target groups
2. Selection of advertising properties
3. Overall Campaign Delivery
4. Overall Campaign Performance – 20% reach of target group
5. Summary

Northern Virginia Regional Commission

Media Motivations

In support of the “Only Rain” campaign from the Northern Virginia Regional Commission (“Clean Water Partners”), we evaluated media motivations for each of the three target attribute groups. The survey questions are from Ad-ology (a nationwide syndicated data service) and are phrased: “Which of the following media have you seen/heard and ad that led them to respond or take action?”

As the exact target attribute is not available, the most similar attribute was used.

For Dog Waste: “Dog Owners” was used

For Lawn Care: “Personal Yard Care/ Landscaping Enthusiast” was used

For Auto Care: “Personal Car Maintenance/Restoration” was used

Media	<u>Dog Owners</u>		<u>Personal Yard Care/ Landscaping Enthusiasts</u>		<u>Personal Car Maintenance/ Restoration</u>	
	<u>Responded Last 30 Days</u>	<u>Rank</u>	<u>Responded Last 30 Days</u>	<u>Rank</u>	<u>Responded Last 30 Days</u>	<u>Rank</u>
Television	47.9%	1	43.9%	1	50.7%	1
Sponsored search result (like on Google, Yahoo or Bing)	39.1%	2	36.3%	2	42.8%	2
Radio	26.8%	9	23.8%	8	31.5%	6
Newspaper (print, online, mobile or tablet)	34.4%	3	34.0%	3	37.6%	3
Mobile smartphone app or text message	23.9%	10	18.5%	10	30.1%	9
Magazine (print, online, mobile or on tablet)	29.2%	5	25.9%	7	31.2%	7
Internet banner ad	34.1%	4	27.7%	4	36.7%	4
Ads mailed to you	27.7%	7	26.8%	5	31.5%	5
Ad or newsletter emailed to you	27.5%	8	26.5%	6	30.4%	8
Ad on a social network	28.0%	6	20.5%	9	29.4%	10

[Source: 2014 Ad-ology® AudienceSCAN study.Methodology]

Television and internet banner advertising were both strong media outlets. Television ranked #1 and internet banner advertising ranked #4 for each of the three attributes.

Northern Virginia Regional Commission

Selection of advertising properties (networks/platforms)

With television media and internet banner advertising being options that Comcast Spotlight offers our clients, we analyzed the three target attributes using the Scarborough Research syndicated data set for the Washington DC DMA (March 2013-February 2014 survey period). In conjunction to pricing this provides guidance on the networks to use. For Dog Waste, we used the attribute of "Own a Dog." We limited the analysis to the geographic scope identified by Clean Water Partners. This analysis is to show the selected properties helped achieve the target goal of 20% by attribute.

County Of Residence: Alexandria City, VA OR Arlington, VA OR Fairfax City, VA OR Fairfax, VA OR Falls Church City, VA OR Loudoun, VA OR Stafford, VA

TARGET	A18+ Intab
Lifestyle Characteristics: Own a Dog	486
Household Activities: Lawn Care	928
Unpaid/ Personal Labor: Anti-Freeze/Coolant OR Oil Filter/Oil Change-	210

Scarborough Research- Washington DC DMA (Base adults 18+), March 2013-February 2014 survey period

The above survey respondents in tabulation ("in tab") are considered significant and therefore can be used for analysis.

	Lifestyle Characteristics			Leisure Activities Past 12 Months			Auto Repairs Pst.Yr:Unpd.Labor-HH		
	Own A Dog			Lawn Care			Anti-Freeze/Coolant OR Oil Filter/Oil Change		
Cable Network:	Adults 18+ Reach	Reach %	Index	Adults 18+ Reach	Reach %	Index	Adults 18+ Reach	Reach %	Index
APL -TV	76,018	18.8%	131	92,040	12.9%	90	31,386	16.6%	115
CNN -TV	116,459	28.7%	95	234,296	32.8%	109	61,549	32.5%	108
ENT -TV	42,130	10.4%	128	53,483	7.5%	93	13,530	7.1%	88
ESPN-TV	118,414	29.2%	91	256,549	35.9%	112	48,350	25.6%	80
HGTV-TV	104,778	25.8%	124	175,105	24.5%	118	39,541	20.9%	100
HIST-TV	125,117	30.9%	118	218,108	30.5%	117	51,017	27.0%	103
HLN -TV	18,415	4.5%	141	32,211	4.5%	140	5,876	3.1%	96
NGC -TV	51,036	12.6%	82	124,630	17.5%	114	40,636	21.5%	140
TOON-TV	27,907	6.9%	154	24,775	3.5%	78	3,413	1.8%	40
XFINITY.COM	33,782	8.3%	90	64,402	9.0%	98	26,179	13.8%	150

Northern Virginia Regional Commission

The networks selected for the campaign over-index or provide a large number of targeted viewers. If a network indexes over 100 for an attribute, it suggests that the network is more likely to deliver that attribute compared to the general population. It is treated as an indicator of value and helps ensure that the campaign will deliver its goal.

For television networks, the question is positioned as “viewed network past 7 days.” For Xfinity.com, the question is positioned as” visited site past 30 days.” The data is collected via self-reporting by respondents and is therefore treated as suggestive.

Overall Campaign Delivery

Before we look at the performance for each of the three target groups, we wanted to understand the overall delivery of the campaign. This is taken from Nielsen’s sample estimates. Since the estimates are from a sample, Spanish language networks did not have enough coverage area to derive audience estimates from. Therefore this analysis is limited to the English language networks for each zone as well as for internet banner advertisements. For television, we used household impressions.

	Scheduled		Results
	Entire Flight 2/24/14-12/19/14	Flight to date 2/24/14- 8/17/14	Flight to date 2/24/14- 8/17/14
Total Household Impressions	4,148,947	2,385,700	3,193,924
9555, POTOMAC	3,455,345	2,024,378	2,871,055
HLN -TV	248,593	144,828	173,544
OXYG-TV	336,036	194,880	310,261
TOON-TV	1,775,205	1,039,760	1,061,087
ENT -TV	597,849	351,920	479,889
APL -TV	497,663	292,990	340,469
Rotational spots (5 Nets)	NA	NA	505,805
0356, Fairfax County	655,178	336,898	292,881
APL -TV	107,157	58,561	47,143
ESPN-TV	185,687	82,023	56,371
CNN -TV	218,562	116,710	77,371
HIST-TV	110,459	60,170	64,132
NGC -TV	33,313	19,434	31,764
Rotational spots (5 Nets)	NA	NA	16,100
0340, Alexandria, VA	38,424	24,424	29,988
APL -TV	13,176	7,930	10,786
ESPN-TV	14,083	9,054	6,705
HGTV-TV	11,164	7,440	12,497

Nielsen Company –Washington DC Live+7 data extrapolated through Strata CablePost. Strata uses its NuMath methodology to derive zone based estimates

Northern Virginia Regional Commission

Comparing the household impressions delivered, to the impressions that were scheduled, we over-delivered what was forecasted by **+808,224 household impressions**. Additionally, while the Fairfax County (0356) zone appears to have under-delivered, the Potomac Super zone coverage encompasses Fairfax County in its entirety. These figures should also be treated as suggestive as they are derived from the Nielsen television sample for the entire Washington DC TV market.

For the digital delivery, we guarantee the impressions by given month. For Xfinity.com, 50,000 impressions were ordered per month for the 300 x 250 banner ad size and 30,000 impressions were ordered for the 160 x 600 banner ad size. The campaign exceeded the guaranteed impressions for both ad sizes for each of the six months.

Month 2014	Xfinity.com	
	300 x250 ad size (50,000 impressions/ month)	160x 600 ad size (30,000 impressions/month)
February	56,111	31,754
March	55,975	31,600
April	55,137	33,089
May	55,799	31,854
June	55,573	32,710
July	55,179	33,082

For the first six months, Xfinity.com delivered 333,774 impressions compared to the forecast of 300,000 for the 300 x 250 ad size. Similarly, Xfinity.com delivered 194,089 impressions compared to a forecast of 180,000 for the 160 x 600 ad size.

Campaign Performance –20% reach of target group

To understand the delivery of the overall campaign we created target logic to properly identify the audience we reach, using the below zone definitions and networks within. For the campaign delivery, we limited the audience captured to the network, cable provider and geography. However, the base for the calculation of reach is the adult population for the combined geographies in Northern Virginia.

Alexandria (Comcast)	Fairfax County (Cox Cable)	Potomac Super zone (Verizon FiOS)
ANIMAL PLANET	ANIMAL PLANET	ANIMAL PLANET
ESPN	CNN	CARTOON NETWORK
HGTV	ESPN	E!
	HISTORY CHANNEL	HEADLINE NEWS
	NATIONAL GEOGRAPHIC CHANNEL	OXYGEN

Northern Virginia Regional Commission

Overall, 20% of each of the three target groups was reached by the television portion of the campaign alone. When we add in Xfinity.com, the homepage for Comcast Xfinity customers, the overall reach increases to over 30% of each target group

County Of Residence: Alexandria City, VA OR Arlington, VA OR Fairfax City, VA OR Fairfax, VA OR Falls Church City, VA OR Loudoun, VA OR Stafford, VA

	Lifestyle Characteristics		Leisure Activities Past 12 Months		Auto Repairs Pst.Yr: Unpd.Labor-HH	
	Own A Dog		Lawn Care		Anti-Freeze/Coolant OR Oil Filter/Oil Change	
	Reach	Reach %	Reach	Reach %	Reach	Reach %
<i>Population of Target Area</i>	405,333	100.0%	714,109	100.0%	189,232	100.0%
NVRC Campaign (Television only)	102,673	25.3%	168,084	23.5%	46,679	24.7%
NVRC Campaign (TV and Xfinity.com)	132,924	32.8%	228,091	31.9%	67,938	35.9%

Scarborough Research- Washington DC DMA (Base adults 18+), March 2013-February 2014 survey period

Summary

Through use Comcast Spotlight's targeted media offerings; the data strongly supports the Clean Water Partners goal of reaching at least 20% of each target attribute among the defined geographies in Northern Virginia. The reach increases to above 30% when Xfinity.com is included for each attribute. In addition, to achieving its target, the campaign delivered additional impressions to both the television and online campaigns, far greater than what was forecasted. These additional impressions simply reinforce the messaging of the campaign.

While these results appear favorable for the attainment of goals, these are derived from samples and therefore have variance associated with it. Therefore we cannot investigate results at a more finite level due to a large increase in the variance in the results.

Appendix B

Northern Virginia Clean Water Partners Summary of Regional Stormwater Education Campaign



Northern Virginia Clean Water Partners

2014 Summary

WORKING TOGETHER FOR HEALTHY STREAMS AND RIVERS

Polluted stormwater runoff is the number one cause of poor water quality in streams and rivers in Northern Virginia. As stormwater runs off city streets, suburban yards and parking lots, it picks up pesticides and fertilizer from lawns, bacteria from pet waste, as well as petroleum and oil from driveways and parking lots. Don't forget about the sediment from construction sites or the litter and cigarette butts from the sidewalk.

To reduce the impacts of stormwater pollution, the Northern Virginia Clean Water Partners aims to change human behaviors in our cities and neighborhoods through a public awareness and education campaign.

The Northern Virginia Clean Water Partners is comprised of a multi-disciplined group of local governments, drinking water and sanitation authorities, and individual businesses working together to address the common issues surrounding pollution prevention, stormwater management, and source water protection. "Only Rain Down the Storm Drain" is the motto of the partnership.

The primary goal of the partnership is to reduce stormwater-related pollution from entering local waterways.

To meet this goal, the Partners work together to:

-  Educate the region's residents on simple ways to reduce pollution around their homes;
-  Monitor changes in behavior through surveys and other data collection techniques; and
-  Pilot new cost-effective opportunities for public outreach and education.

Members include stormwater program managers, Municipal Separate Storm Sewer System (MS4) Permit managers, communication directors, public information officers, water quality compliance specialists, and environmental planners.

Membership is voluntary and each member pays annual dues to fund the program. The partnership provides a cost-effective means to meet mandatory state and federal stormwater requirements. By working together the partners are able to leverage their available funds to develop and place bilingual educational products with common

messages and themes, thereby extending their individual reach.

Regional Stormwater Education Campaign

The Annual Regional Stormwater Education Campaign was initiated in 2003 to assist localities in leveraging funds to achieve common goals regarding stormwater education and outreach and promote consistent messages for high priority water quality issues.

The 2014 campaign satisfied MS4 (Municipal Separate Storm Sewer System) Phase I and Phase II permit requirements for stormwater education and documenting changes in behavior.

For more information visit www.onlyrain.org



About the Partnership

The Northern Virginia Clean Water Partners is open to any water and sewer district, municipal government agency or school system in and around Northern Virginia.



2014 Northern Virginia Clean Water Partners

Fairfax County | Arlington County | Loudoun County | Stafford County | Fairfax Water | City of Alexandria | Loudoun Water | City of Fairfax | Town of Herndon | City of Falls Church | Town of Leesburg | Town of Vienna | Town of Dumfries | Doody Calls | Northern Virginia Regional Commission | Virginia Coastal Zone Management Program | George Mason University | Fairfax County Public Schools | Arlington County Public Schools | Northern Virginia Community College



2014 Campaign Overview

In 2014, the Northern Virginia Clean Water Partners used television, print, internet advertising and the Only Rain Down the Storm Drain website to distribute messages linked to specific stormwater problems, such as proper pet waste disposal, over fertilization of lawns and gardens and proper disposal of motor oil. In addition to the multi-channel media campaign, educational events hosted throughout the Northern Virginia region also raised awareness and encouraged positive behavior change in residents. The television and internet ads featured the well known national symbol of non-point source pollution; the rubber ducky.



Throughout the campaign year, the Partners made the following efforts to educate the public and promote awareness of stormwater pollution:

- From January 2014 through July 2014, four Public Service Announcements featuring messages on the importance of picking up pet waste and general household stormwater pollution reduction measures aired on twelve popular cable TV channels, including three Spanish speaking channels a total of 3,502 times.



2014 Accomplishments

- The campaign also featured banner ads on the Xfinity.com website that promote the same messages as the cable TV ads.
- The internet banner ads resulted in over 300 click thrus to the www.onlyrain.org website.



- Conducted an online poll survey of 500 Northern Virginia residents to determine the effectiveness of the ads, to reveal any changes in behavior, and to aid in directing the future efforts of the campaign.



- Distributed 10,000 pet waste bag dispensers at various community events to promote awareness of proper disposal of pet waste.
- Renovated and updated the Northern Virginia Clean Water Partners website. ▶

3,193,924	Total household television impressions*
527,863	Total internet banner ad impressions*
10,000	Dog waste bag dispensers distributed at community events
3,502	Number of times the ads aired on television from January – July 2014
300	Visits to the www.onlyrain.org website
500	Online Annual Survey Responses

**Impressions are the number of times an ad appeared on a single television or computer screen.*





Main cause of water pollution...

For the fourth year in a row, the majority of survey respondents stated fertilizers and pesticides as the number one cause of pollution in local streams, the Potomac River and Chesapeake Bay.



Where stormwater goes...

Over 90 percent of Northern Virginia residents surveyed stated that stormwater goes to the Potomac River, the Chesapeake Bay, or to local streams and rivers.



93%

Stated the actions of individuals are important in protecting water quality in local streams, the Potomac River, and the Chesapeake Bay is important.



70%

Would be more likely to take actions to reduce the amounts of pollutants they personally put into storm drains, after learning that polluted water runoff is the number one cause of local water pollution.



95%

Believe it is important for local governments to spend more money on protecting water quality.

Annual Survey Highlights

To assist in determining the effectiveness of the campaign at increasing awareness and changing behaviors, after each campaign year, the Partners conduct an online annual survey of 500 Northern Virginia residents.

Findings in the 2014 survey include:

- 15 percent of the respondents recalled hearing or seeing advertisements on the internet or on TV about reducing water pollution.
- Of those who recalled the ads, seven percent state they now pick up their pet waste more often, seven percent state that they are more careful with motor oil, and 18 percent state they fertilize fewer times per year.
- The number of respondents choosing runoff from streets and parking lots as the number one source of pollution has remained steady over the past four years.
- 42 percent of respondents knew they live in the Potomac River watershed, up from 38 percent in 2011.
- Interestingly, 81 percent of people surveyed reported that they always pick up after their pet, as compared with 30 percent in previous surveys.
- When shown the Only Rain Down the Storm Drain logo, over half of the respondents recognized the logo.
- 86 percent of respondents were familiar with rain barrels, and 66 percent stated they already have a rain barrel or are interested in getting one
- 36 percent of respondents were familiar with rain gardens, with 62 percent already having a rain garden or interested in installing one.
- More than half of the respondents (54%) prefer to receive information from online sources. Newspaper (19%) and television (17%) were the next two preferred information sources.

Understanding Behaviors

In addition to capturing responses to questions regarding the effectiveness of the campaign, this year's survey honed in on the current behaviors of Northern Virginia residents as they relate to pet waste management, lawn care, and motor oil disposal. Responses to these questions support the development of future messages and targeted promotion.

The most important reason dog owners are motivated to pick up their pet's waste is because "It's what good neighbors do". The number of respondents choosing "It causes water pollution" as the most important reason to pick up has risen from 13 percent in 2011 to 20 percent in 2014.

A third of the lawn and garden owners fertilize their lawns two or more times per year; an equal number never fertilize their lawns. Among those who fertilize once a year, 13 percent fertilize in the spring and only eight percent fertilize in the fall. This suggests that there is room to educate more residents of Northern Virginia that fertilizing in the fall is better for local waterways than fertilizing in the spring.

About half of the respondents reported using an herbicide to treat weeds in their lawn or garden.

To better understand behavior related to the application of fertilizer, three new questions about fertilizer were added to the 2013 survey. Among those who fertilize their lawn, 69 percent have never had or were not sure if their soil had been tested for fertility or pH and four-in-ten reported using a slow release N fertilizer. When asked where they get information to decide when and how much fertilizer to apply the top three most commonly selected responses were "Follow directions on the bag" (52%), followed by "Lawn service conducts the applications" (31%), and then "Eyeball it based on size of lawn" (7%).

The majority of respondents take their vehicle to a service station to change their oil (85%) or take used oil to a gas station or hazmat facility for recycling (10%). Only two percent of Northern Virginians reported storing used motor oil in their garage, placing it in the trash or dumping it down the storm drain.

Only Rain Down the Drain

www.onlyrain.org

2014 Northern Virginia Clean Water Partners

Fairfax County | Arlington County | Loudoun County | Stafford County | Fairfax Water |
City of Alexandria | Loudoun Water | City of Fairfax |
Town of Herndon | City of Falls Church | Town of Leesburg | Town of Vienna |
Town of Dumfries | Doody Calls | Northern Virginia Regional Commission | George Mason
University | Virginia Coastal Zone Management Program | Northern Virginia Community College |
Fairfax County Public Schools | Arlington County Public Schools



Summary prepared by NVRC on behalf of the Partners

For more information contact:
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Senior Environmental Planner
703-642-4625
3060 Williams Drive, Suite 510
Fairfax, VA 22031
cmiles@novaregion.org



Appendix C

Regional Stormwater Education Campaign Survey Results

Northern Virginia Regional Commission 2013 Only Rain NVRC Survey

Summary Report of Findings

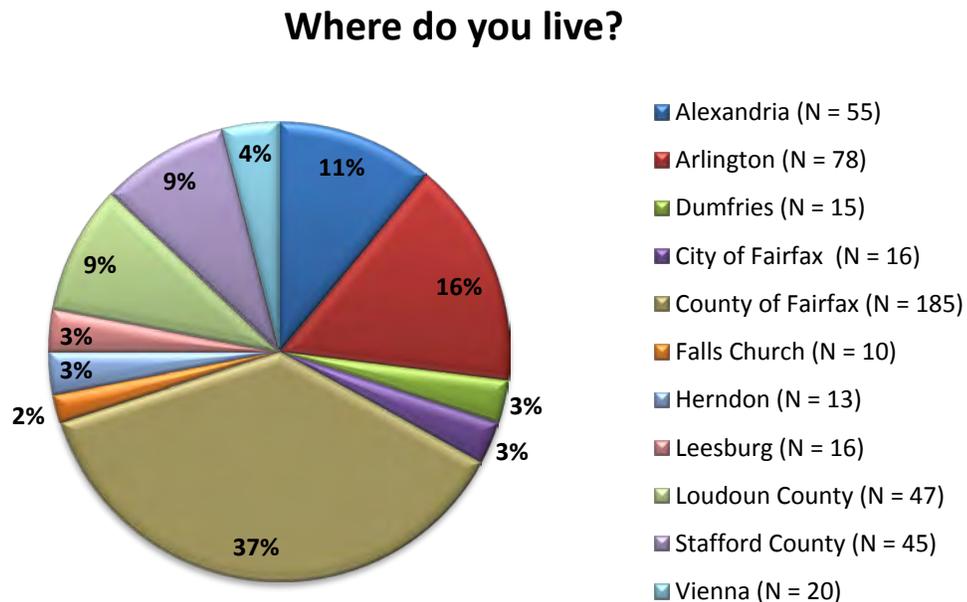
8/13/2013

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 2013 study online between July 29 and August 2, 2013. 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.

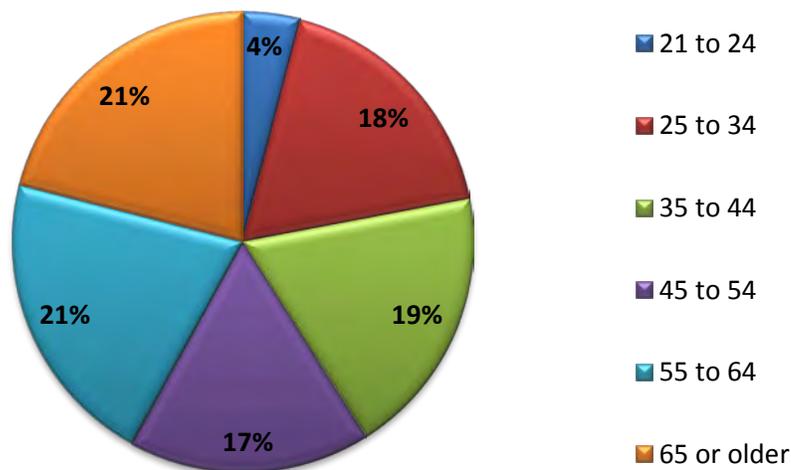
Residents from Leesburg and Loudoun County were combined into a single category labeled “**Leesburg / Loudoun**,” since the town of Leesburg lies within Loudoun County. Another category used for analysis was “**Dumfries / Stafford**,” since Dumfries lies just north of Stafford County. Although Dumfries 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 more than 50 respondents and therefore 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?

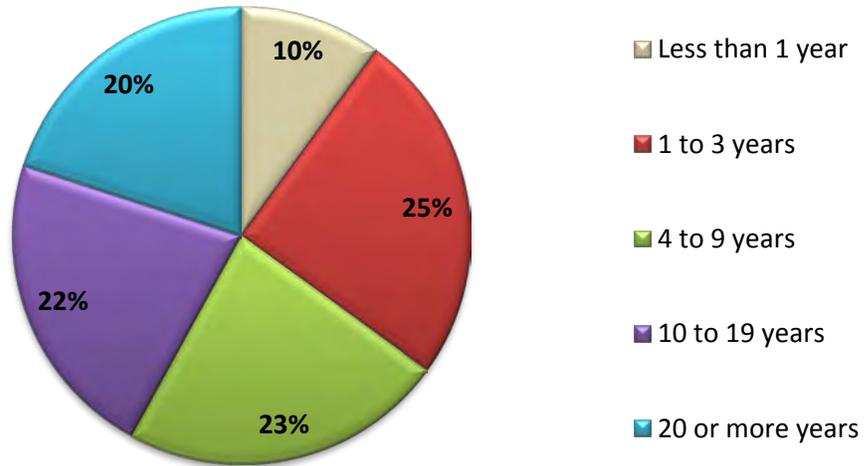


The survey respondents were split between males (47%) and females (53%), while approximately three-fourths (76%) indicated that they own their residence, and 24% reported renting.

The chart on the next page shows how long respondents have lived in their current residence. Some had been living in their current homes for a fairly short period of time (e.g., less than one year – 10%, one to three years – 25%).

A survey was conducted in 2012 and 2011 that included many of the same questions, targeted the same geographic area, and had a similar demographic mix as in this 2013 study. Later in this report, comparisons between years are shown where appropriate. In previous years, the title used for the study was “NVRC Resident Survey.” This year, the study title is “Only Rain NVRC Survey,” since a new question was added this year about awareness of the “Only Rain” logo.

For how many years have you lived in 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).

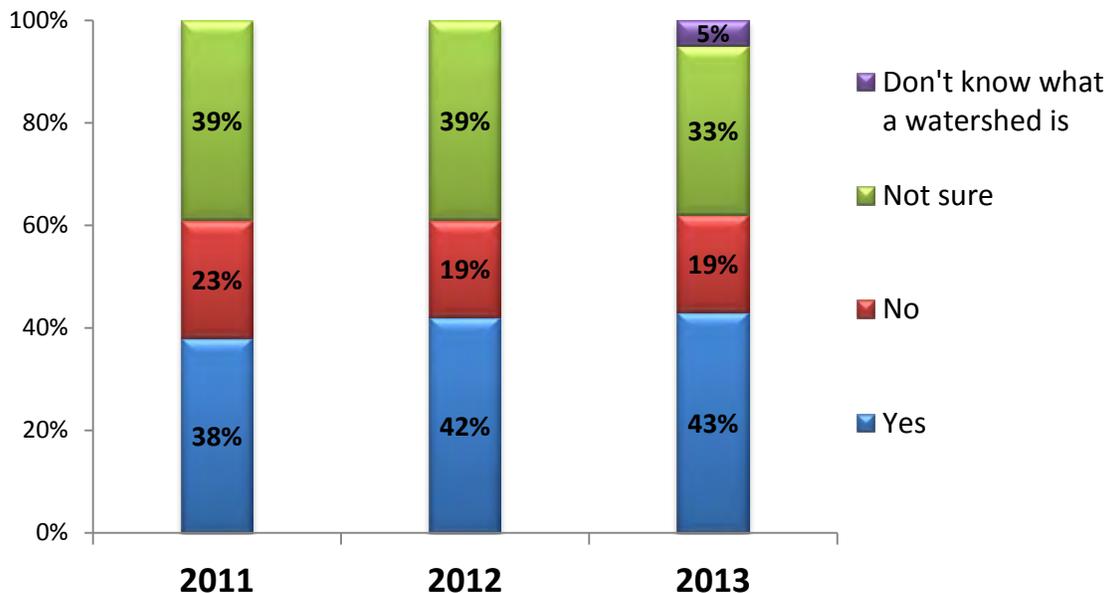
Results from different years can be considered similar when differences between the years are small. If the difference between two years is referred to as “statistically significant” in this report, this essentially means that the difference in the survey results is large enough to be highly confident (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 2013 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 “significantly more likely” (or “significantly 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 in 2013 (43%) and 2012 (42%) indicated that they believed that they did in fact live within the Potomac River Watershed. The corresponding 2011 result was slightly lower (38%), but the change from 2011 to 2013 was not large enough to be statistically significant.

Do you live within the Potomac River Watershed?



- Interestingly, 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. (However, 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, respondents living in Alexandria and Arlington were significantly more likely than others to say they live in the Potomac River Watershed.

Live Within Potomac River Watershed	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	53%	53%	39%	43%	35%
No	14%	9%	23%	21%	18%
Not sure	29%	34%	33%	33%	37%
Don't know what a watershed is	4%	4%	5%	3%	10%
<i>N = number of respondents</i>	55	78	244	63	60

- As shown in the next table, those who have lived in their residence for 10 or more years were significantly more likely than others to say they live in the Potomac River Watershed.

Live Within Potomac River Watershed	Have Lived in Current Residence < 1 Year	1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Yes	39%	33%	28%	58%	57%
No	22%	19%	25%	15%	15%
Not sure	35%	41%	39%	25%	25%
Don't know what a watershed is	4%	7%	8%	2%	3%
<i>N = number of respondents</i>	49	123	117	111	100

- Generally, younger residents were significantly less likely than older residents to say they live in the Potomac River Watershed, except that a higher proportion of respondents age 55 to 64 held this view compared to those age 65 or older (58% vs. 48%, respectively).

Live Within Potomac River Watershed	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Yes	28%	38%	42%	58%	48%
No	19%	21%	21%	15%	19%
Not sure	43%	36%	30%	25%	32%
Don't know what a watershed is	10%	5%	7%	2%	1%
<i>N = number of respondents</i>	111	95	86	105	103

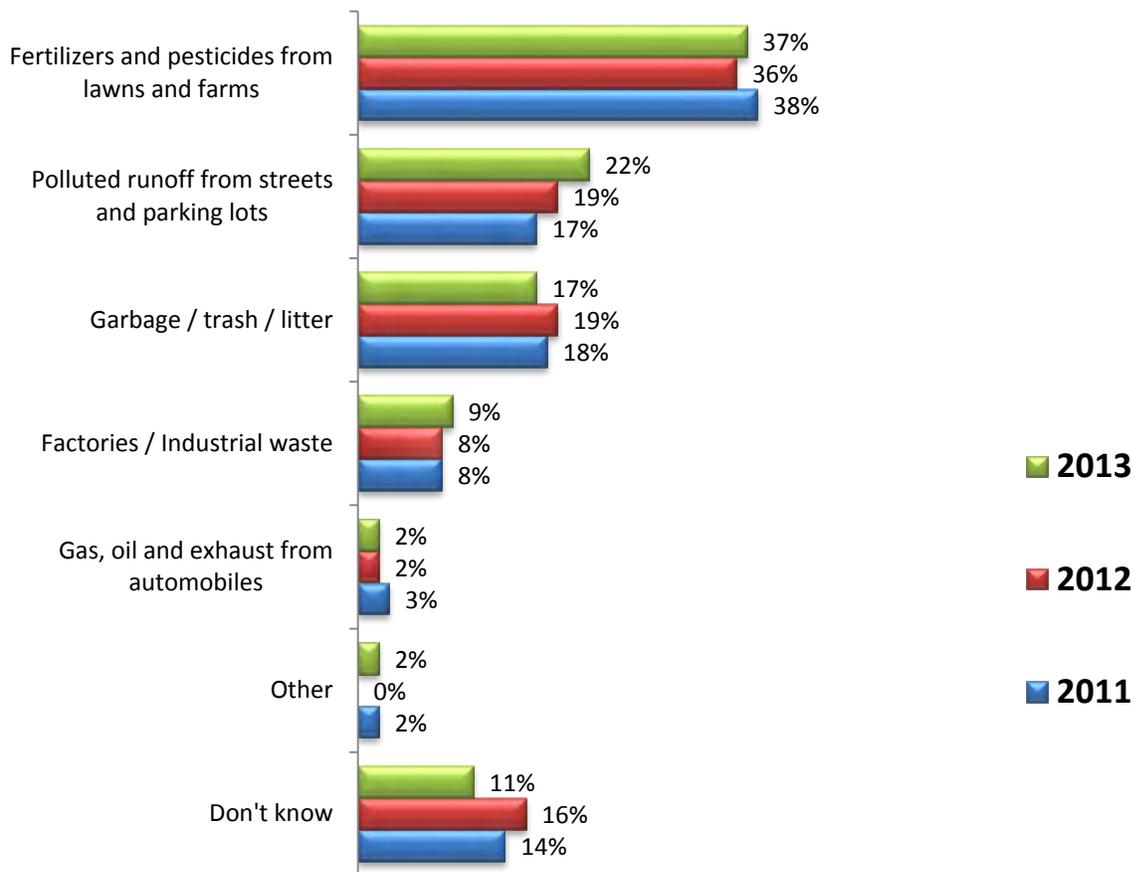
- When examining the results by other subgroups, males were significantly more likely than females and homeowners were significantly more likely than renters to say they live in the Potomac River Watershed.

Live Within Potomac River Watershed	Male	Female	Homeowners	Renters
Yes	50%	36%	46%	33%
No	18%	20%	19%	20%
Not sure	28%	38%	32%	37%
Don't know what a watershed is	4%	6%	3%	10%
<i>N = number of respondents</i>	234	266	380	120

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.” As shown in the chart below, this was selected by 37% of the respondents in 2013, 36% in 2012, and 38% in 2011.

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



- The second most often selected cause in 2013 was “Polluted runoff from streets and parking lots.” The difference between the proportions selecting this cause in 2013 vs. 2011 was statistically significant (22% vs. 17%, respectively).
- Tables on the next two pages show the 2013 results broken out by various subgroups of the total sample for the question above. For example, older respondents, those who have lived in their residence for a longer period of time, males, and homeowners were significantly more likely than others to select fertilizers and pesticides from lawns and farms.

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

	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Fertilizers and pesticides from lawns and farms	38%	26%	40%	43%	38%
Polluted runoff from streets and parking lots	31%	31%	21%	17%	13%
Garbage / trash / litter	16%	18%	16%	8%	25%
Factories / Industrial waste	4%	11%	9%	14%	7%
Gas, oil and exhaust from automobiles	0%	5%	1%	3%	0%
Other	0%	1%	2%	2%	7%
Don't know / not sure	11%	8%	11%	13%	10%
<i>N = number of respondents</i>	55	78	244	63	60

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

	Have Lived in Current Residence < 1 Year	1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Fertilizers and pesticides from lawns and farms	16%	27%	28%	49%	59%
Polluted runoff from streets and parking lots	37%	24%	19%	20%	19%
Garbage / trash / litter	10%	18%	26%	14%	10%
Factories / Industrial waste	10%	15%	11%	6%	2%
Gas, oil and exhaust from automobiles	6%	2%	1%	2%	0%
Other	6%	2%	2%	3%	0%
Don't know / not sure	15%	12%	13%	6%	10%
<i>N = number of respondents</i>	49	123	117	111	100

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

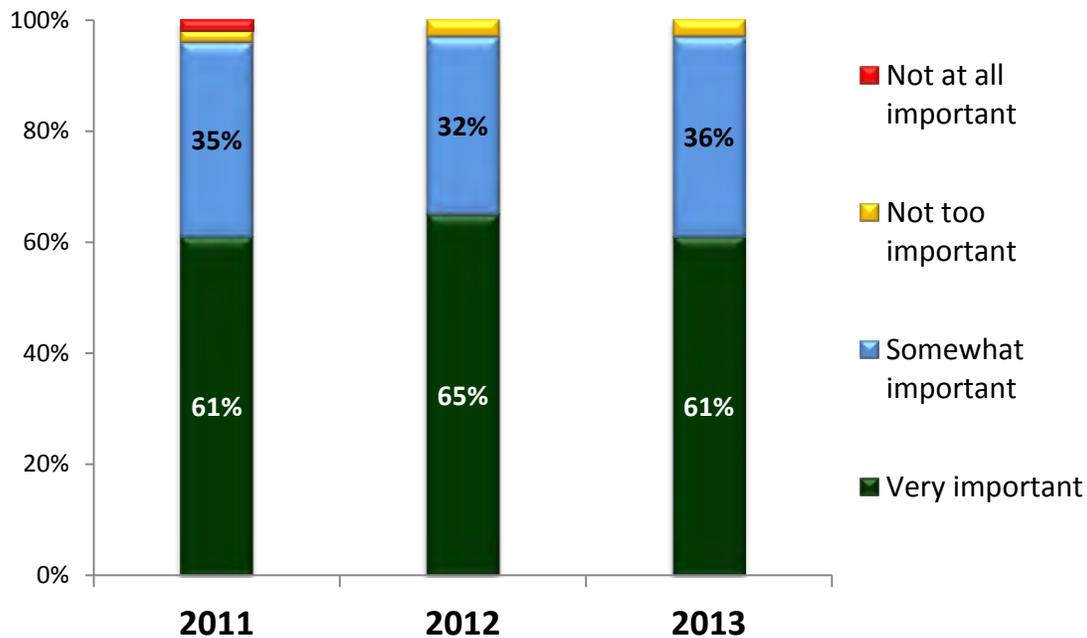
	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Fertilizers and pesticides from lawns and farms	17%	26%	34%	54%	56%
Polluted runoff from streets and parking lots	26%	28%	20%	17%	19%
Garbage / trash / litter	23%	20%	21%	9%	11%
Factories / Industrial waste	15%	7%	12%	5%	6%
Gas, oil and exhaust from automobiles	4%	3%	2%	0%	0%
Other	3%	3%	1%	3%	1%
Don't know / not sure	12%	13%	10%	12%	7%
<i>N = number of respondents</i>	111	95	86	105	103

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

	Male	Female	Homeowners	Renters
Fertilizers and pesticides from lawns and farms	47%	29%	44%	19%
Polluted runoff from streets and parking lots	23%	21%	20%	27%
Garbage / trash / litter	13%	20%	17%	16%
Factories / Industrial waste	8%	10%	6%	18%
Gas, oil and exhaust from automobiles	1%	3%	1%	4%
Other	2%	2%	2%	3%
Don't know / not sure	6%	15%	10%	13%
<i>N = number of respondents</i>	234	266	380	120

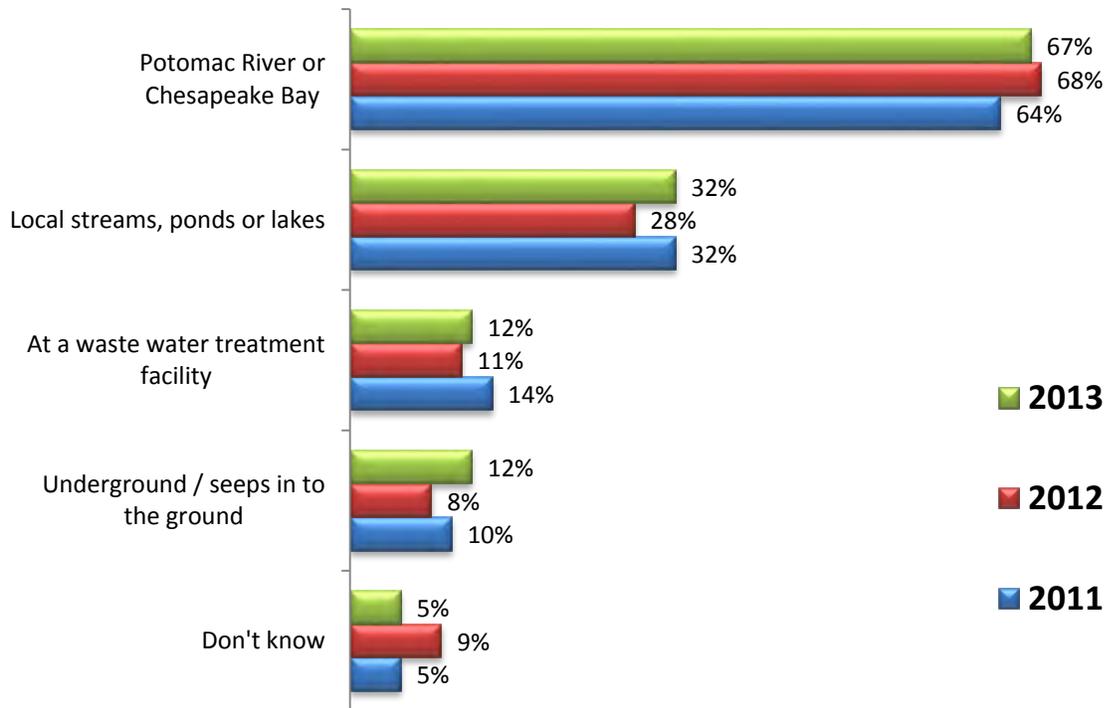
- Most gave a rating of *at least* “Somewhat important” for the importance of actions of individuals in protecting local water quality. As shown below, more than half gave a rating of “Very important” in 2013 (61%), 2012 (65%), and 2011 (61%).

How important do you feel the actions of individuals are in protecting water quality in local streams, the Potomac River and the Chesapeake Bay?



- The majority among each of the subgroups examined for previous questions gave a rating of “Very important” for the question above, and most of those who did not rate “Very important” gave a “Somewhat important” rating.
- In another question designed to assess beliefs about local water pollution, as shown on the next page, two-thirds (67%) in 2013 correctly indicated that stormwater ultimately ends up in the Potomac River or Chesapeake Bay. This was similar to the corresponding 2012 result (68%) and 2011 result (64%).
- However, this leaves approximately one-third who did not select the Potomac River or Chesapeake Bay. Interestingly, the respondent was allowed to select multiple options for this question. For example, those who selected “Local streams, ponds or lakes” could have also selected “Potomac River or Chesapeake Bay” if they wanted to. Also, as part of the question, respondents were told that stormwater 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 stormwater eventually ends up?



- The table below shows that “Potomac River or Chesapeake Bay” was selected more often than other options among respondents in each area, especially among residents of Alexandria and Arlington.

Believed Destination of Stormwater	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Potomac River or Chesapeake Bay	75%	74%	66%	57%	65%
Local streams, ponds or lakes	42%	28%	30%	40%	28%
At a waste water treatment facility	2%	13%	15%	8%	12%
Underground / seeps in to the ground	15%	10%	10%	14%	15%
Don't know	2%	3%	6%	6%	3%
<i>N = number of respondents</i>	55	78	244	63	60

- The majority of those in other subgroups selected "Potomac River or Chesapeake Bay," as shown in the following tables.

Believed Destination of Stormwater	Have Lived in Current Residence < 1 Year	1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Potomac River or Chesapeake Bay	63%	61%	61%	74%	76%
Local streams, ponds or lakes	53%	38%	32%	25%	21%
At a waste water treatment facility	24%	14%	14%	9%	5%
Underground / seeps in to the ground	24%	11%	17%	8%	4%
Don't know	4%	8%	6%	2%	3%
<i>N = number of respondents</i>	49	123	117	111	100

Believed Destination of Stormwater	Age 21 to 34	35 to 44	45 to 54	55 to 64	65 +
Potomac River or Chesapeake Bay	55%	62%	65%	75%	78%
Local streams, ponds or lakes	52%	36%	31%	21%	18%
At a waste water treatment facility	21%	12%	13%	9%	6%
Underground / seeps in to the ground	27%	9%	13%	6%	3%
Don't know	8%	7%	0%	4%	4%
<i>N = number of respondents</i>	111	95	86	105	103

- However, respondents under age 35 were significantly more likely than older respondents to select "Local streams, ponds, or lakes" as the ultimate destination for stormwater.
- As shown on the next page, males were significantly more likely than females and homeowners were significantly more likely than renters to select "Potomac River or Chesapeake Bay."

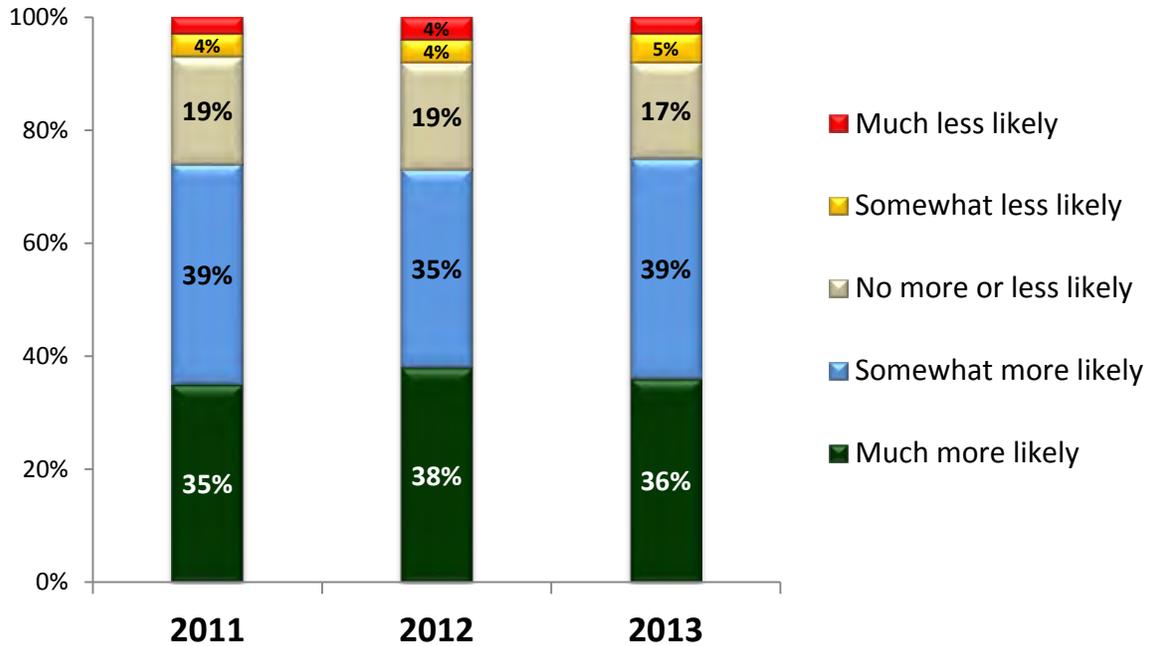
Believed Destination of Stormwater	Male	Female	Homeowners	Renters
Potomac River or Chesapeake Bay	77%	58%	69%	59%
Local streams, ponds or lakes	28%	35%	28%	45%
At a waste water treatment facility	7%	16%	11%	16%
Underground / seeps in to the ground	9%	14%	9%	20%
Don't know	2%	7%	4%	8%
<i>N = number of respondents</i>	234	266	380	120

- After being asked the questions covered up to this point in the report, respondents were asked to read the following information and then indicate their future intentions.

Many people are surprised to learn that polluted water runoff is the number one cause of pollution in the Potomac River and Chesapeake Bay. When it rains and when snow melts, the water picks up pollutants on the land and washes them into local waterways. Knowing this, would you be more likely or less likely to take actions to reduce the amount of pollutants that you personally put into storm drains?

- The chart on the next page shows the results for this question. For example, slightly more than one-third each year indicated that they would be “Much more likely” to take actions to reduce the amount of pollutants they personally put into storm drains after reading the information above. Also, slightly more than one-third each year would be “Somewhat more likely.” As a result, the majority would be *at least* somewhat more likely to take corrective actions when given this information. However, there were still some who would not change (17% to 19%, depending on the year) or would be *less* likely to act.

[AFTER READING STATEMENT] **Would you be more or less likely to take actions to reduce the amount of pollutants that you personally put into storm drains?**



- When examining the results by area, the proportion “Much more likely” ranged from a low of 32% in Arlington to a high of 43% in Leesburg / Loudoun. However, in light of the number of respondents from each area, the difference between 32% and 43% here is not large enough to be statistically significant.

Likelihood Act to Reduce Storm Drain Pollutants	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Much less likely	4%	3%	2%	2%	3%
Somewhat less likely	4%	5%	5%	5%	5%
No more or less likely	12%	22%	20%	9%	12%
Somewhat more likely	42%	38%	37%	41%	45%
Much more likely	38%	32%	36%	43%	35%
<i>N = number of respondents</i>	55	78	244	63	60

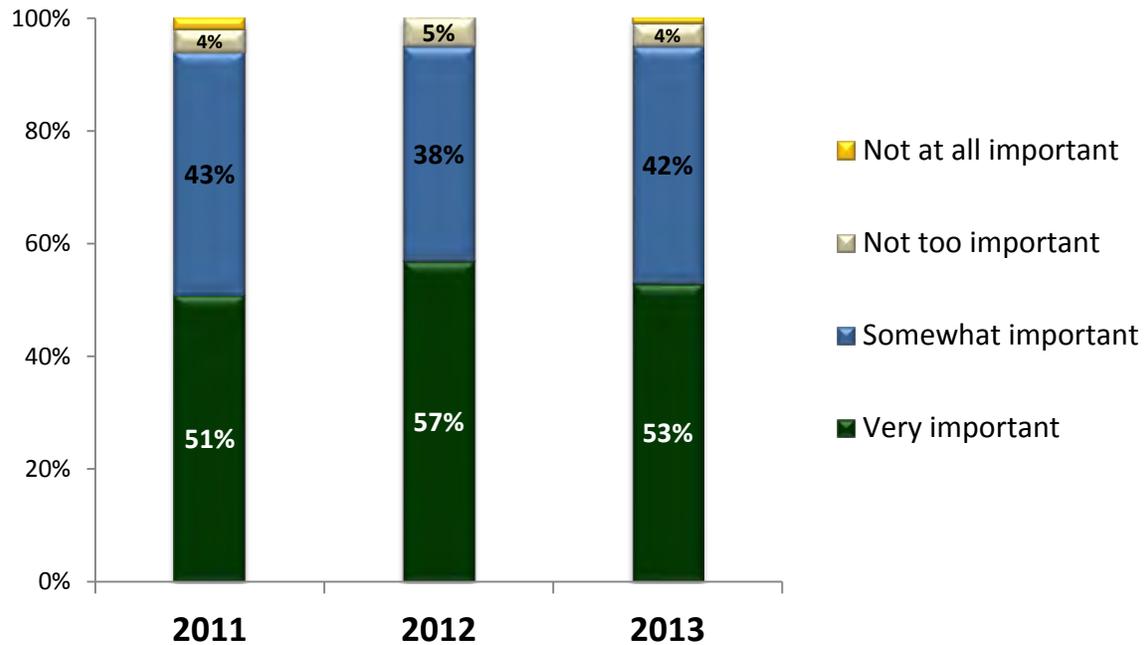
Likelihood Act to Reduce Storm Drain Pollutants	Have Lived in Current Residence				
	< 1 Year	1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Much less likely	2%	3%	5%	1%	1%
Somewhat less likely	4%	5%	5%	6%	2%
No more or less likely	20%	19%	21%	13%	14%
Somewhat more likely	43%	37%	35%	45%	40%
Much more likely	31%	36%	34%	35%	43%
<i>N = number of respondents</i>	49	123	117	111	100

Likelihood Act to Reduce Storm Drain Pollutants	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Much less likely	5%	3%	2%	0%	3%
Somewhat less likely	6%	5%	2%	4%	5%
No more or less likely	24%	13%	13%	19%	15%
Somewhat more likely	33%	48%	47%	39%	32%
Much more likely	32%	31%	36%	38%	45%
<i>N = number of respondents</i>	111	95	86	105	103

Likelihood Act to Reduce Storm Drain Pollutants	Gender		Homeownership	
	Male	Female	Homeowners	Renters
Much less likely	3%	2%	2%	3%
Somewhat less likely	6%	3%	5%	4%
No more or less likely	19%	16%	16%	21%
Somewhat more likely	39%	40%	41%	34%
Much more likely	33%	39%	36%	38%
<i>N = number of respondents</i>	234	266	380	120

- Slightly more than half each year felt that it was “Very important” for local governments to spend more money on protecting water quality.

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



- Slightly more than half 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%	2%	0%	2%
Not too important	4%	1%	5%	2%	3%
Somewhat important	34%	42%	42%	46%	42%
Very important	58%	57%	51%	52%	53%
<i>N = number of respondents</i>	55	78	244	63	60

- Only small proportions in each subgroup gave a rating of “Not too important” or “Not at all important.”

Importance of Local Water Quality Spending	Have Lived in Current Residence < 1 Year				
		1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Not at all important	0%	2%	2%	0%	3%
Not too important	4%	3%	3%	3%	4%
Somewhat important	43%	45%	40%	41%	39%
Very important	53%	50%	55%	56%	54%
<i>N = number of respondents</i>	49	123	117	111	100

Importance of Local Water Quality Spending	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Not at all important	1%	1%	0%	2%	3%
Not too important	3%	3%	3%	2%	6%
Somewhat important	48%	43%	41%	49%	27%
Very important	48%	53%	56%	47%	64%
<i>N = number of respondents</i>	111	95	86	105	103

Importance of Local Water Quality Spending	Gender		Homeownership	
	Male	Female	Homeowners	Renters
Not at all important	2%	1%	1%	3%
Not too important	7%	1%	3%	3%
Somewhat important	46%	38%	42%	42%
Very important	45%	60%	54%	52%
<i>N = number of respondents</i>	234	266	380	120

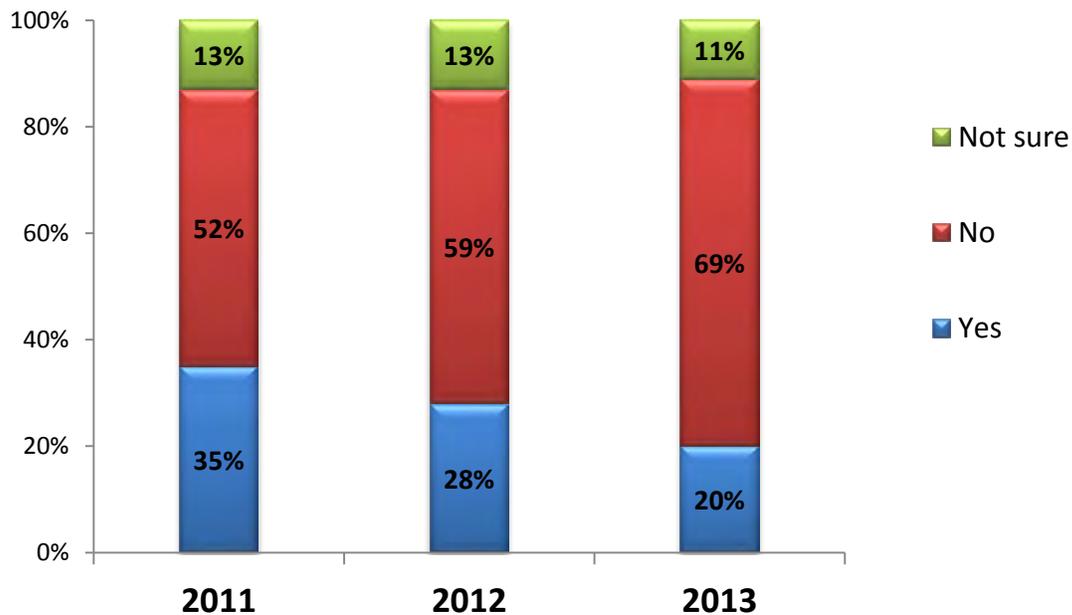
- However, women were significantly more likely than men to give a rating of “Very important.”

Advertising

- One-in-five (20%) in 2013 indicated that they have seen ads on TV or the Internet about fertilizing less often and/or reducing water pollution. This was significantly lower than the proportion aware of related advertising last year. However, the question wording last year was different, including references to radio advertising and pet waste. The full wording last year was as follows: *“Have you heard any ads on the radio, or have you seen any ads on websites or blogs about picking up pet waste, fertilizing less often, and/or reducing water pollution?”*

ADVERTISING AWARENESS

(2013 Question Wording: *Have you seen any ads on TV or the Internet about fertilizing less often and/or reducing water pollution?*)



- A lower proportion of those in Arlington (11%) were aware of the advertising in 2013 compared to other areas. (However, the difference between Arlington vs. other areas was statistically significant only in comparison to Leesburg / Loudoun and Dumfries / Stafford.)

Saw TV / Internet Ads on Reducing Water Pollution	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	18%	11%	21%	25%	25%
No	71%	86%	68%	54%	63%
Not sure	11%	3%	11%	21%	12%
<i>N = number of respondents</i>	55	78	244	63	60

- Awareness was significantly higher among those who have lived in their residence for 10 to 19 years, but it is not clear why awareness peaked for this category while being lower among those who have lived in their current residence for 20 or more years.

Saw TV / Internet Ads on Reducing Water Pollution	Have Lived in Current Residence				
	< 1 Year	1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Yes	10%	20%	15%	32%	19%
No	80%	72%	72%	57%	69%
Not sure	10%	8%	13%	11%	12%
<i>N = number of respondents</i>	49	123	117	111	100

- Those age 45 or older were significantly more likely than those under age 35 to be aware of the advertising.

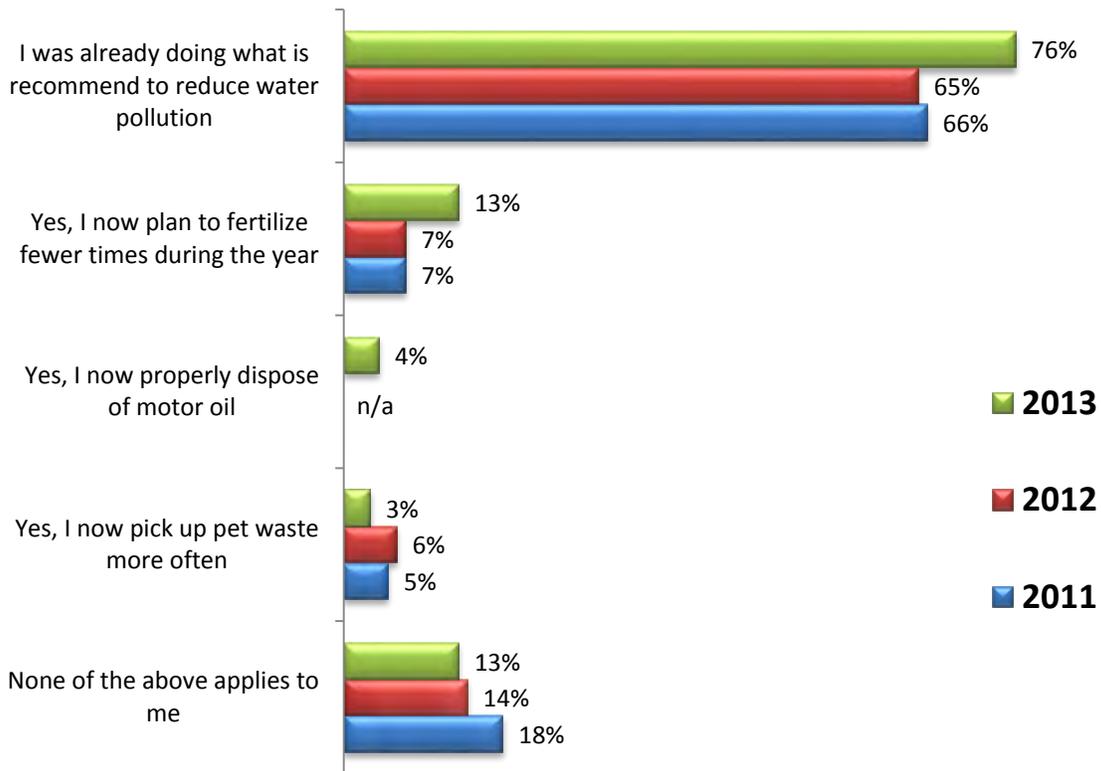
Saw TV / Internet Ads on Reducing Water Pollution	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Yes	11%	17%	23%	26%	26%
No	80%	74%	68%	61%	61%
Not sure	9%	9%	9%	13%	13%
<i>N = number of respondents</i>	111	95	86	105	103

- Men were significantly more likely than women to report seeing the ads. The proportion of homeowners aware of the ads was higher compared to renters, but the difference below between 22% and 14% was not quite large enough to be statistically significant.

Saw TV / Internet Ads on Reducing Water Pollution	Gender		Homeownership	
	Male	Female	Homeowners	Renters
Yes	26%	15%	22%	14%
No	63%	74%	65%	81%
Not sure	11%	11%	13%	5%
<i>N = number of respondents</i>	234	266	380	120

- The question covered in the chart on the next page was asked only of those who reported awareness of the ads.

Did seeing those ads make you change any of your behaviors related to fertilizing less often and/or reducing water pollution?

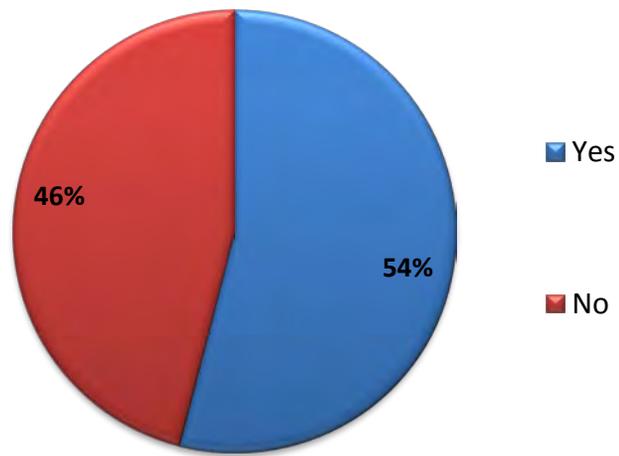


- A noteworthy proportion (13% in 2013) of those aware of the advertising indicated that they now plan to fertilize fewer times during the year. (However, the difference between 13% vs. 7% selecting this response in previous years was not large enough to be statistically significant.)
- The wording of the question above in 2013 was not exactly the same as in 2012, since the mix of advertising was not the same both years, and the wording in the 2013 questionnaire was adjusted to be consistent with current advertising.

- 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.



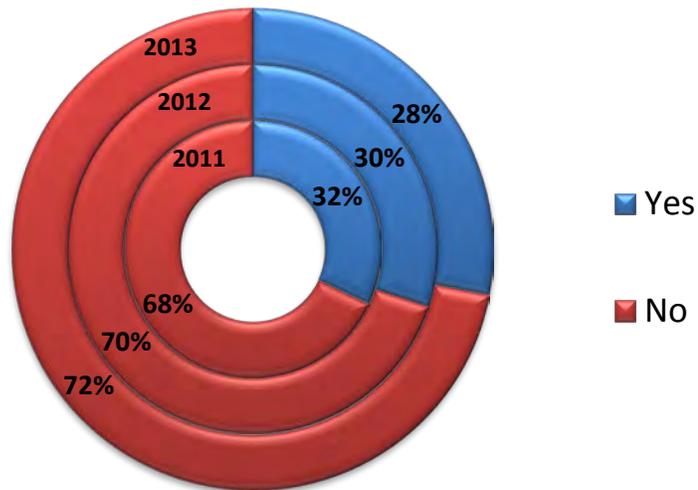
Have you ever seen the logo above anywhere?



Behavior Among Dog Owners

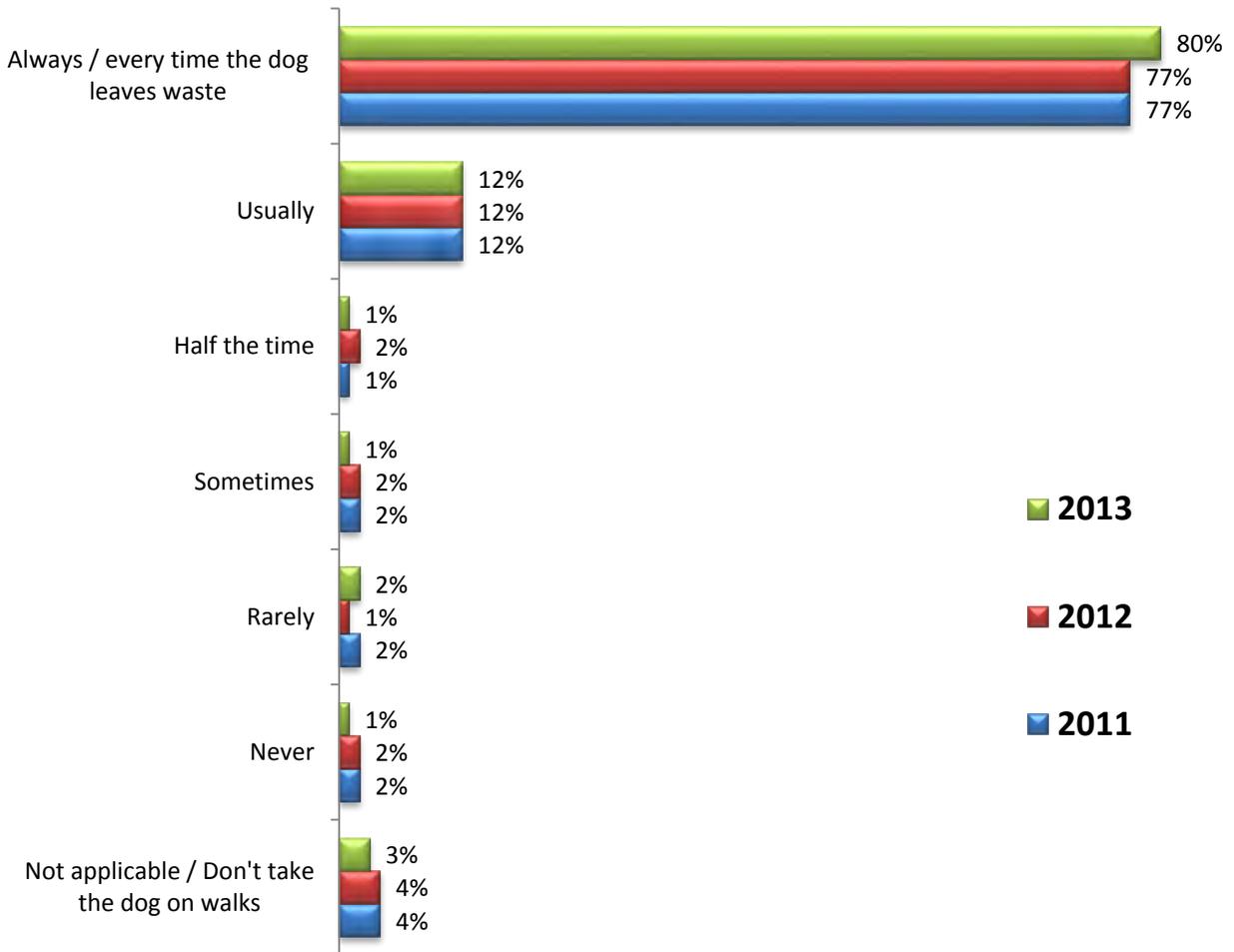
- More than one-fourth indicated that they have a dog (or someone else in their household has a dog) in 2013 (28%), 2012 (30%), and 2011 (32%). Several questions were asked of these dog owners. (However, since a subset of the total sample reported having a dog, the results for the questions applicable only to dog owners are not broken out by area or demographic subgroups.)

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



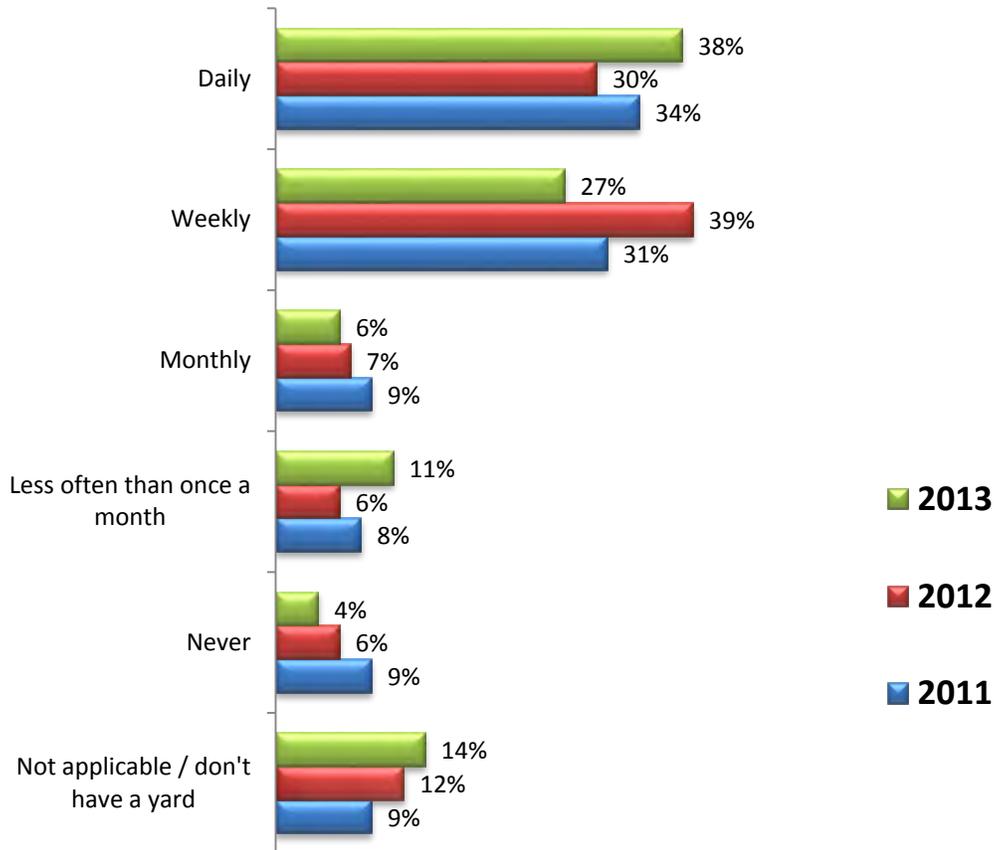
- On the following pages, results are shown for questions about how often dog owners pick up after their dogs and what motivates them to do so.

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



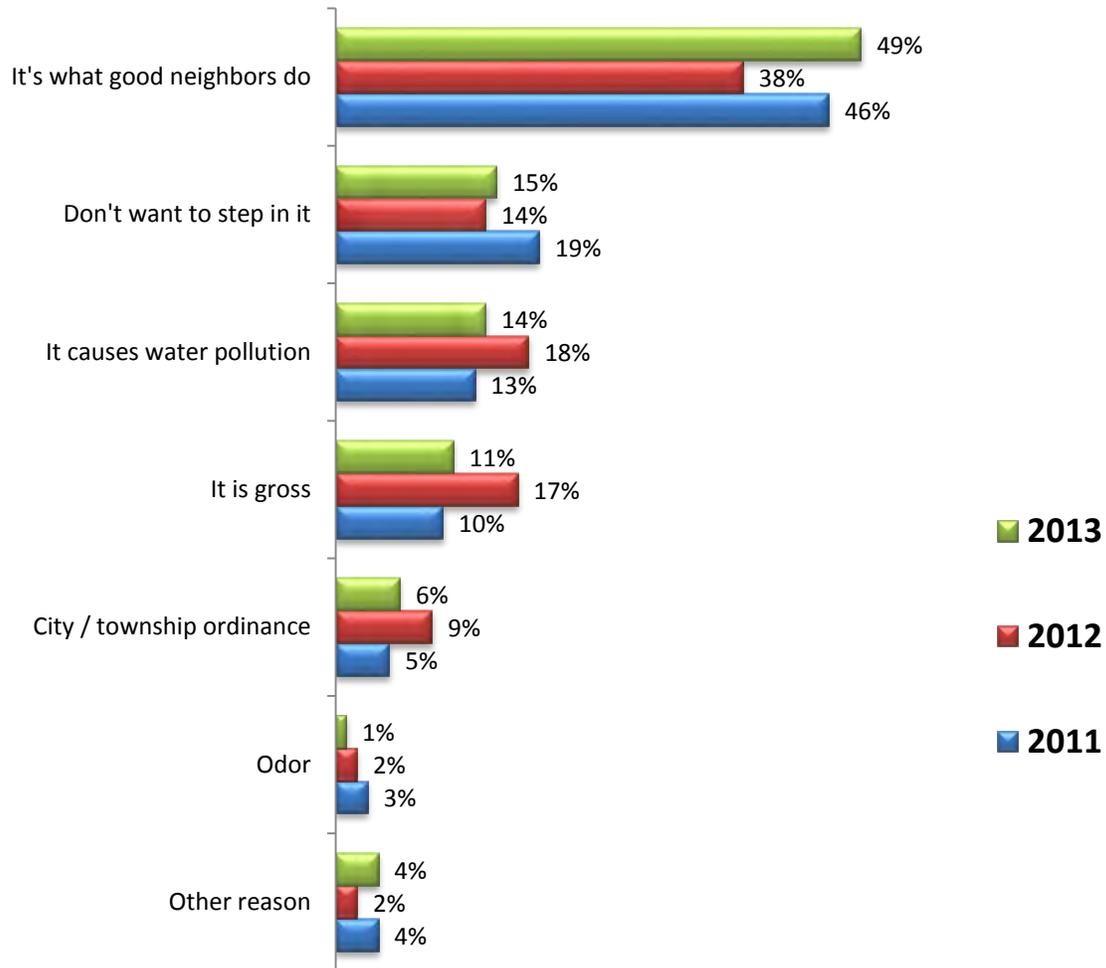
- More than three-fourths each year indicated that they always pick up after their dog(s) when taking the dog(s) for a walk. Many others usually do so.

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



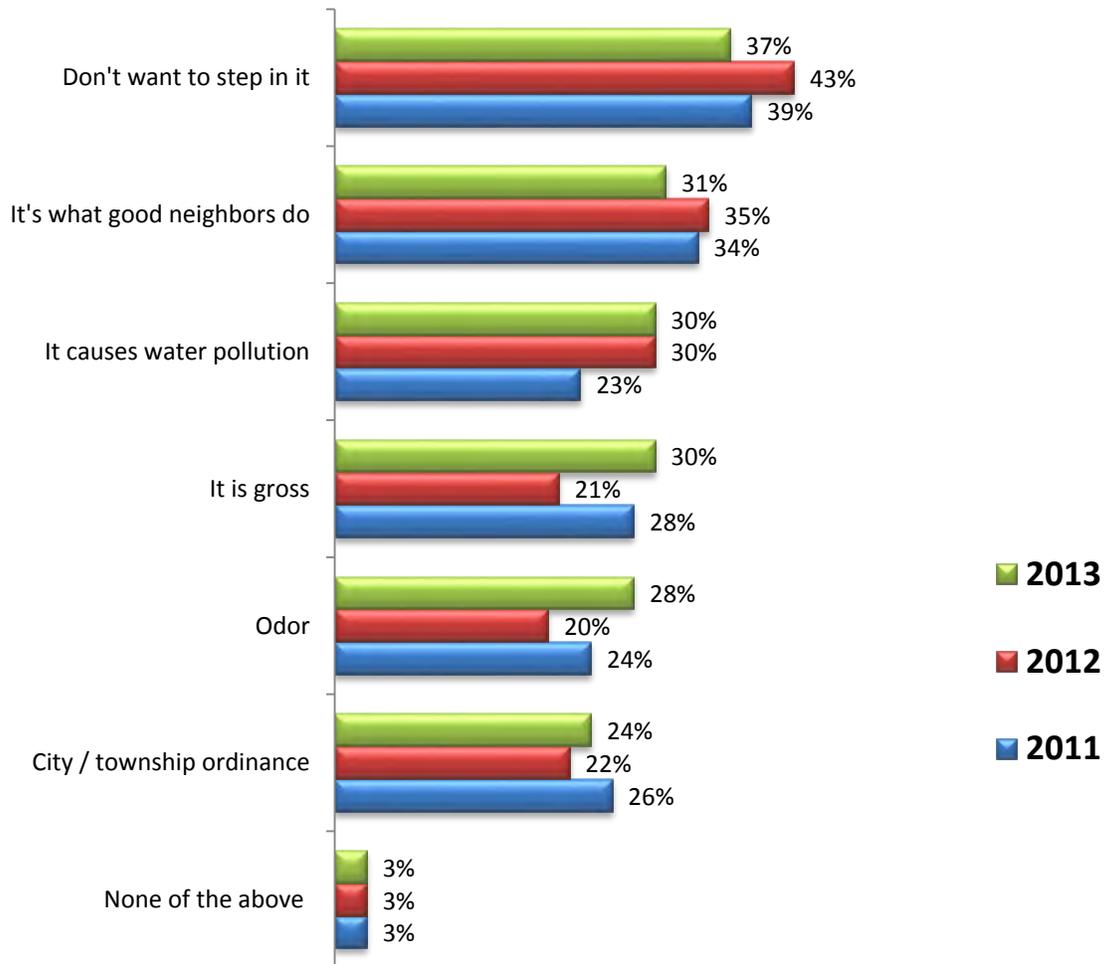
- In their own yard, more than one-third in 2013 reported removing dog waste daily, while slightly more than one-fourth do so weekly.
- The difference between 2013 and 2012 in the proportion removing dog waste daily (38% vs. 30%) was not statistically significant, but the difference removing dog waste weekly (27% vs. 39%) was statistically significant. However, the proportions removing dog waste from their yard daily and weekly in 2013 were similar to 2011.

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



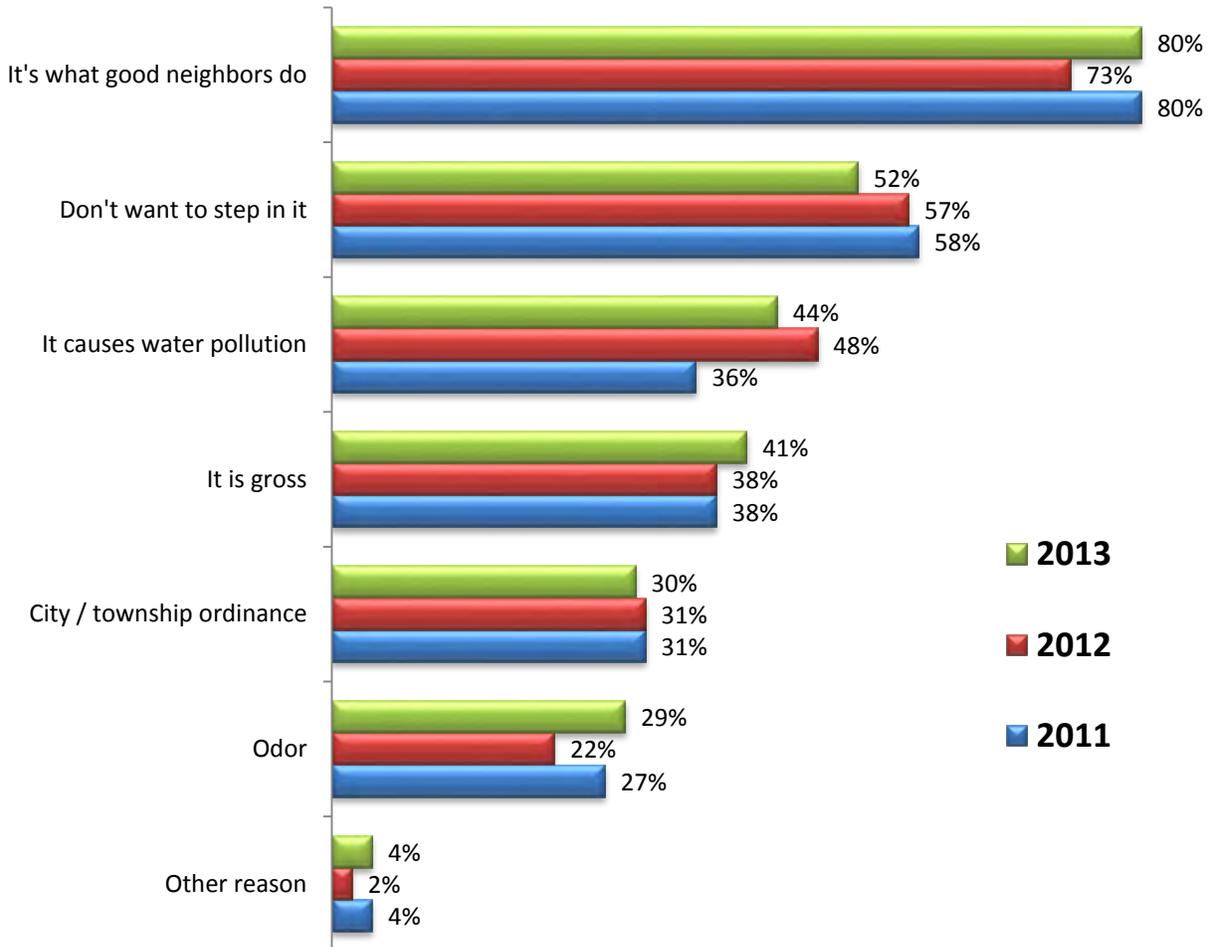
- When asked about the “Most important reason” for picking up after their dog(s), nearly half (49%) in 2013 selected “It’s what good neighbors do.” This was higher than in 2012, but the change was not statistically significant. Also, the proportion selecting this response in 2011 was similar, compared to 2013.
- Approximately one-in-eight (14%) in 2013 selected “It causes water pollution” as the most important reason to pick up after their dog.

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



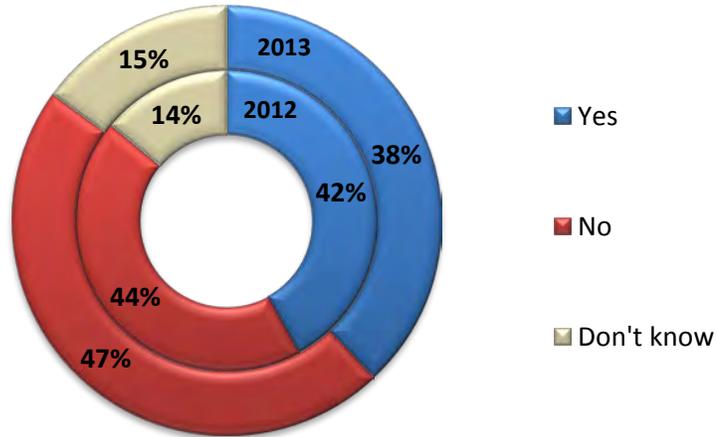
- In addition to the *most* important reason for picking up after their dog(s) as shown on the previous page, respondents were also asked to select any other reasons that motivate them. As shown in the chart above, an additional 30% in 2013 selected “It causes water pollution” as a motivation.
- When combining results in the chart above with the chart on the previous page, a total of 44% in 2013 were motivated to pick up after their dog(s) because “It causes water pollution.” (That is, take 14% from the previous page + 30% from the chart above to get 44%.) For easy reference, the chart on the next page has *most* important and *other* motivations combined.

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



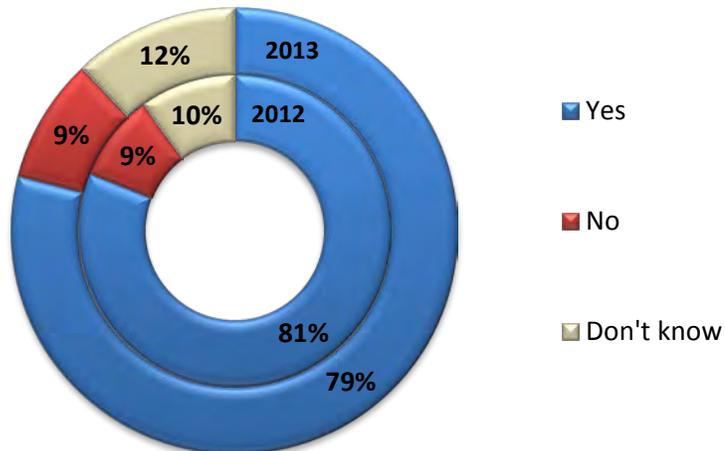
- While it is encouraging to see that more than four-in-ten in 2013 were motivated to pick up after their dog by wanting to reduce water pollution, this also means that more than half were not thinking about water pollution in this context. This implies that there is room to “educate” more northern Virginia residents about how dog waste is an important cause of water pollution, and “picking up after your dog” is an important action that helps reduce water pollution.
- The proportion motivated to pick up after their dog by wanting to reduce water pollution was significantly higher in 2012 (48%) than in 2011 (36%), but the difference between 2013 vs. 2011 (44% vs. 36%) was not statistically significant.
- On the next page, results are shown for two questions about dog waste that were first introduced in 2012. These questions were actually asked of all respondents, since those who do not own a dog, as well as those who do, can answer the following questions.

Does your neighborhood have any dog waste disposal stations (e.g., dispenser with waste bags and a trash can to dispose of dog waste)?



- While approximately four-in-ten reported having pet waste stations in their neighborhood, approximately eight-in-ten felt they are (or would be) useful.

Do you think these types of pet waste stations are (or would be) useful?



- While the results in the chart above apply to the total sample, the results were similar when examining just dog owners. For example, 80% of dog owners in 2013 felt that dog waste stations are (or would be) useful.
- It is also interesting to note that, among just those who already have dog waste stations in their neighborhood, 95% thought they were useful.
- Among those who do not already have dog waste stations in their neighborhood, 70% felt they would be useful. Among those who did not know if they had these types of stations, 69% felt they would be useful. These results can also be examined in the cross-tabulation below.

		Does your neighborhood have any dog waste disposal stations (e.g., dispenser with waste bags and a trash can to dispose of dog waste)?			Total
		Yes	No	Don't know	
Do you think these types of pet waste stations are (or would be) useful?	Yes	94.8%	70.2%	68.9%	79.4%
	No	2.1%	15.3%	4.1%	8.6%
	Don't know	3.1%	14.5%	27.0%	12.0%
Total		100.0%	100.0%	100.0%	100.0%

- Some readers may be interested in how responses related to dog waste disposal stations vary by area. For example, as shown below, the proportion reporting dog waste disposal stations in their area was highest in Leesburg / Loudoun (60%), followed by Alexandria (54%).

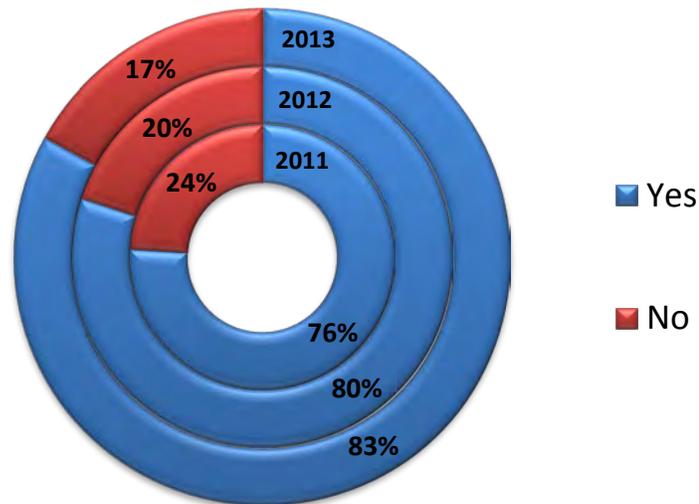
Neighborhood Has Dog Waste Disposal Stations	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	54%	44%	30%	60%	25%
No	35%	28%	55%	32%	67%
Don't know	11%	28%	15%	8%	8%
<i>N = number of respondents</i>	55	78	244	63	60

Dog Waste Disposal Stations Useful	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Yes	91%	87%	74%	83%	77%
No	4%	6%	10%	9%	10%
Don't know	5%	7%	16%	8%	13%

Behavior Related to Lawns & Gardens

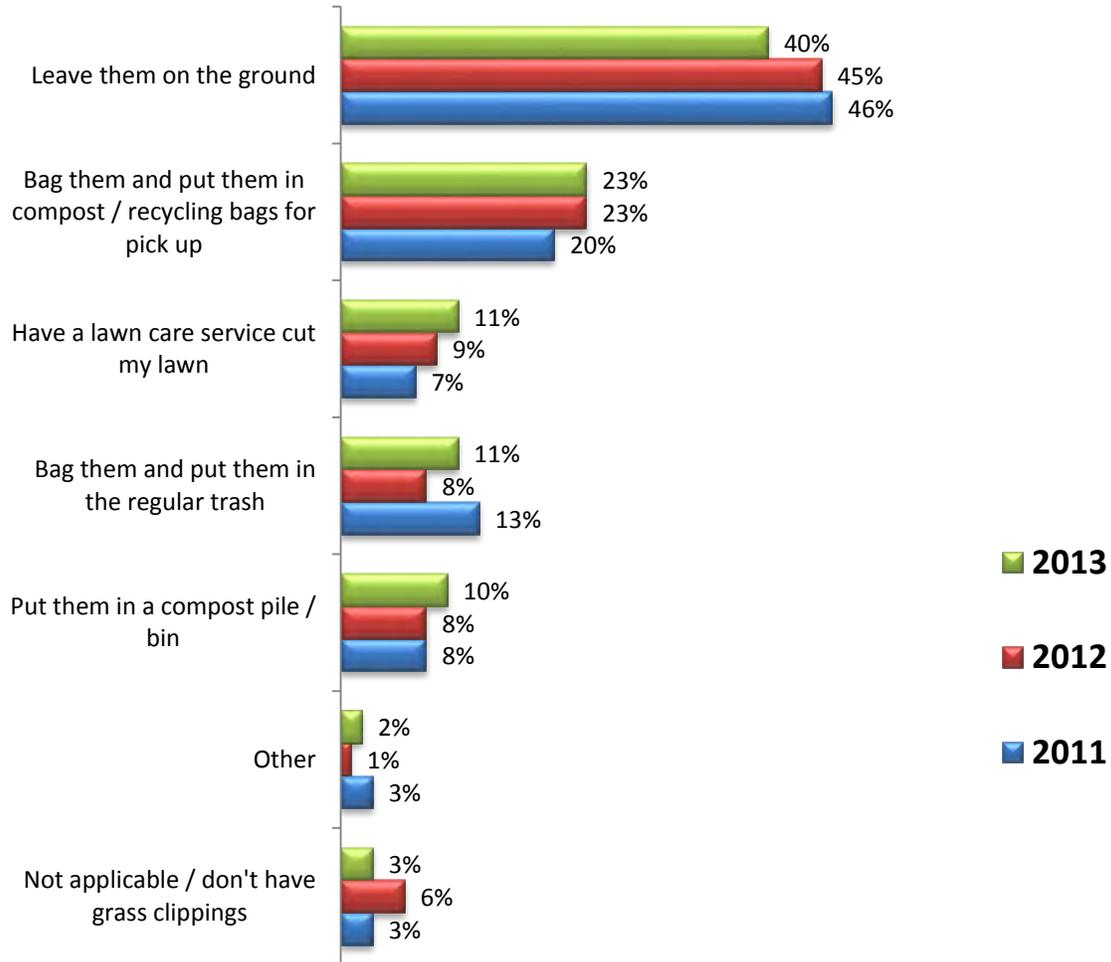
- More than three-fourths of the survey respondents each year indicated that their current home has a lawn or garden.

Does your home have a lawn or garden?



- In a separate question, of the respondents who have a lawn or garden, more than half (60% in 2013, 62% in 2012, and 67% in 2011) 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).
- The first question about lawns and gardens addressed actions related to grass clippings. As shown in the chart on the next page, four-in-ten (40%) in 2013 reported that they leave grass clippings on the ground.

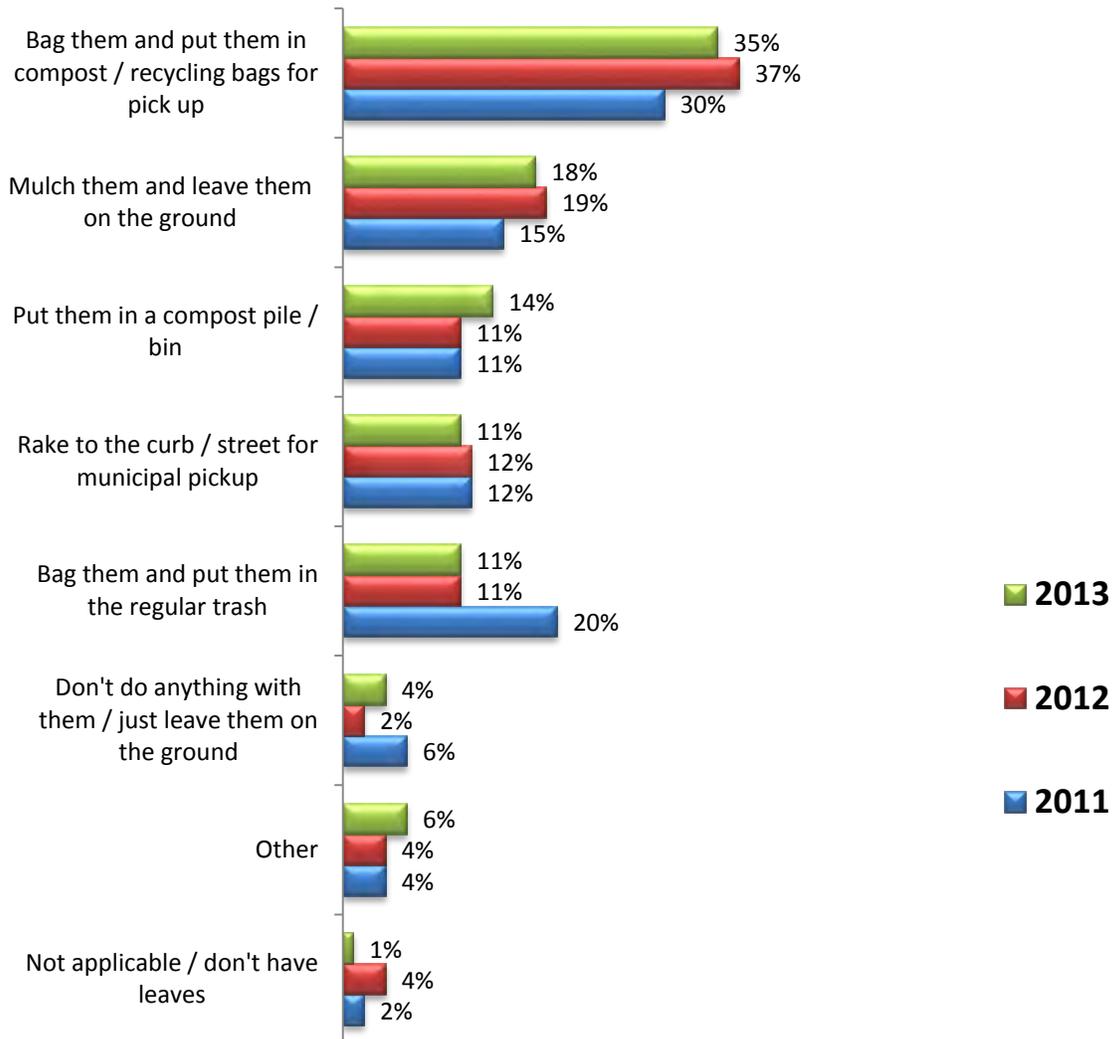
What do you do with grass clippings from your lawn or garden?



- However, some (11% in 2013, 8% in 2012, and 13% in 2011) reported putting grass clippings in the regular trash, and this suggests that there is room to educate these residents about better ways to handle grass clippings.

- When it comes to leaves that collect on the lawn or garden, more than one-third (35%) in 2013 reported putting them in compost / recycling bags for pick up.

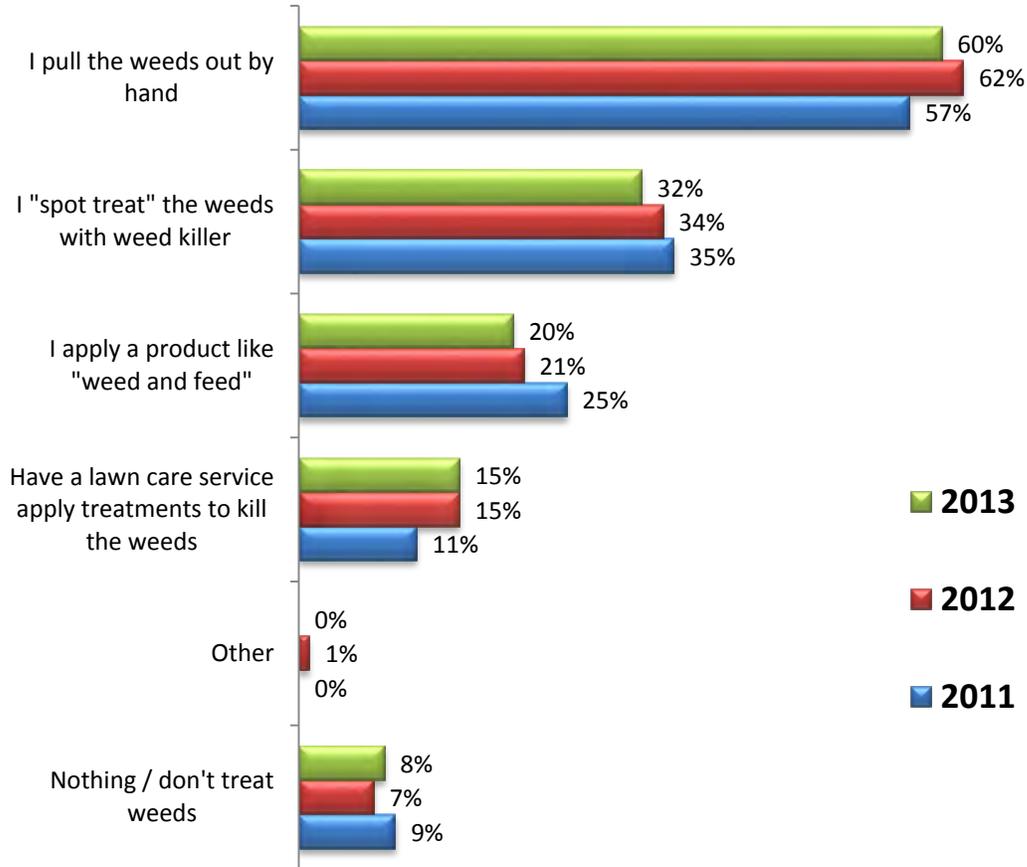
What do you do with leaves that collect on your lawn or garden?



- Some (11% in 2013) put them in the regular trash, and this suggests that there is room to educate these residents about better ways to handle leaves.

- When dealing with weeds, more than half reported pulling them out by hand.

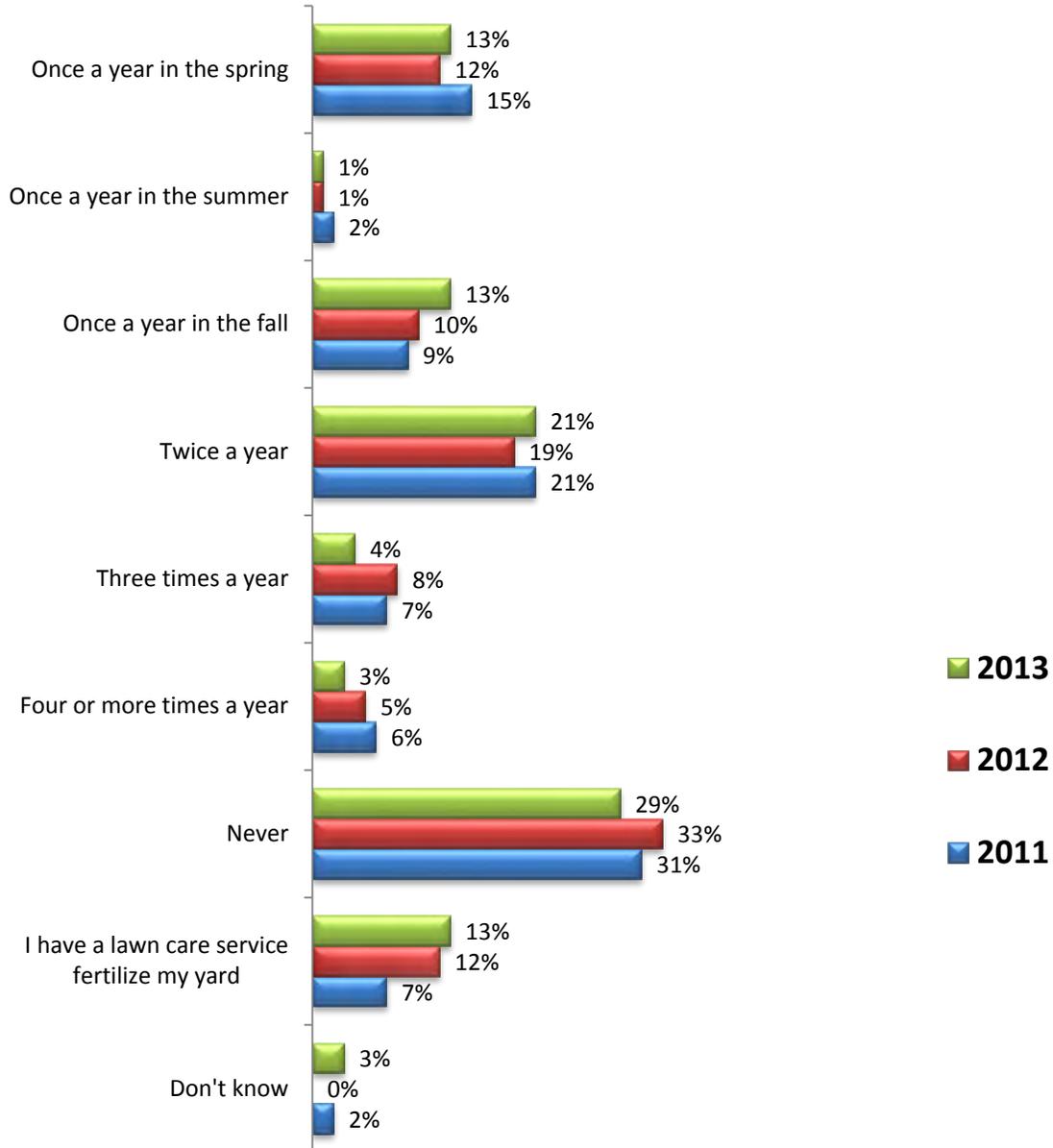
How do you treat weeds in your lawn or garden?



- However, it is possible to report more than one way of dealing with weeds. Approximately one-third use "spot treatments," and one-in-five in 2013 reported that they apply "weed and feed." Also, some have a lawn service apply weed killer.

- Nearly one-third each year reported that they *never* fertilize their lawn. Among those who do so, fertilizing behavior varied, as shown in the chart below.

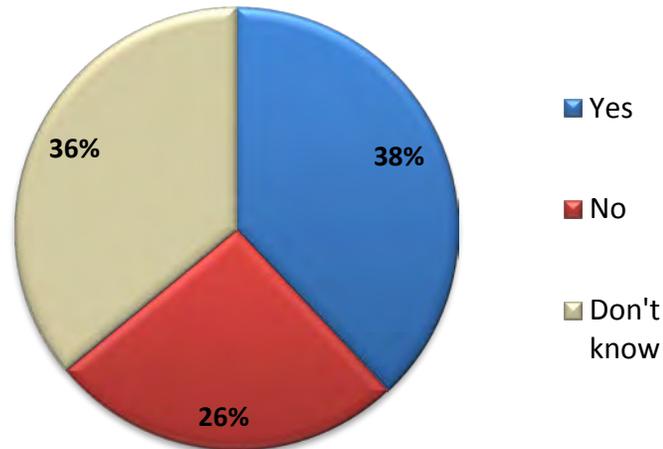
Which of the following best describes how often you fertilize your lawn?



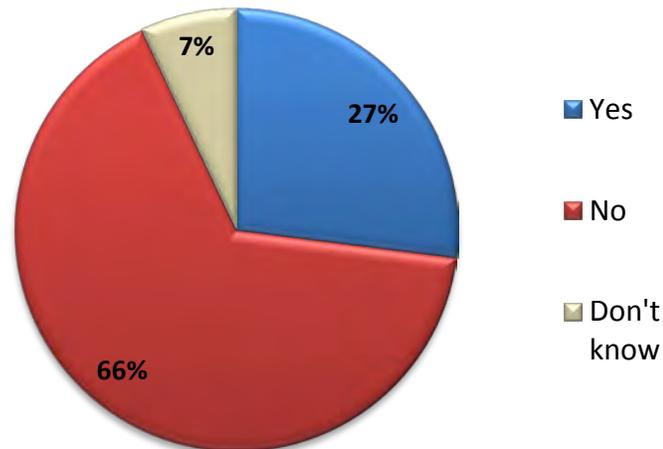
- Among those who fertilize once a year, the same percentage in 2013 reported doing so in the spring as reported doing so in the fall. This suggests that there is room to educate more residents of northern Virginia that fertilizing in the fall is better for local waterways than fertilizing in the spring.

- The next two questions were new in the 2013 survey and were asked only of those who fertilize their lawn (or have a lawn service fertilize their lawn) at least once a year. First, as shown below, nearly four-in-ten (38%) use a “slow release N fertilizer,” although many didn’t know. Second, more than one-fourth have had their soil tested for fertility or pH.

Do you use a slow release N fertilizer?



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

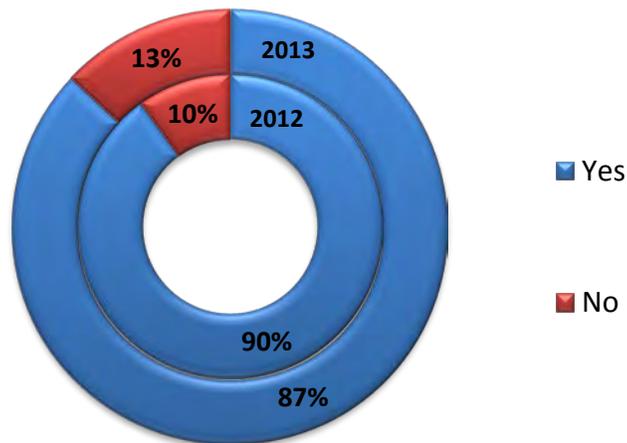


- In a third new question, respondents were asked where they get information to decide when and how much fertilizer to apply. The most commonly selected response option was “Follow directions on the bag” (52%), followed by “Lawn service conducts the applications” (27%), and then “Follow soil test results / recommendations” (7%), “Apply amount that feels right” (6%), “Eyeball it based on size of the lawn” (3%), and various other responses (5%).

Rain Barrels & Rain Gardens

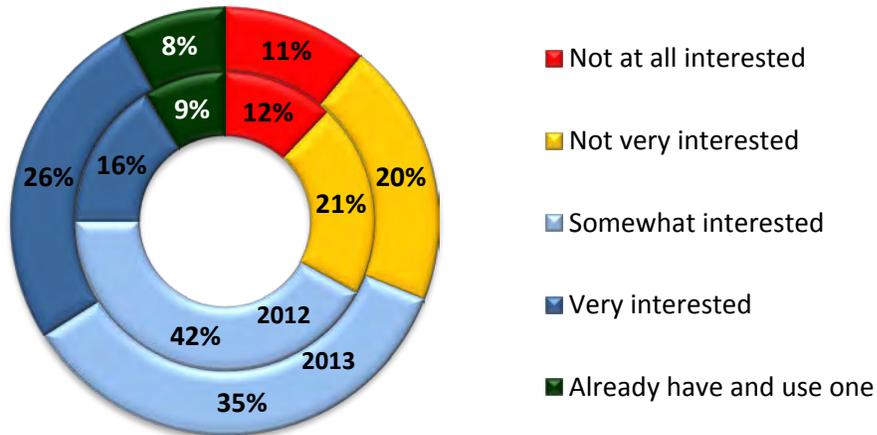
- Questions about “rain barrels” and “rain gardens” were first introduced in the 2012 survey. However, in 2013 these questions were asked only if the respondent was the primary person who takes care of the lawn or garden. In 2012, these questions were asked of all respondents. *Thus, to ensure valid year-to-year comparisons, the 2012 results below were also based only on the respondents who take care of their lawn or garden.* (For this reason, the 2012 results shown on this page and the next page differ from the results shown in the 2012 report.)

Have you ever heard of a “rain barrel” (i.e., a barrel you put under your downspout to collect rain water that you can use around your yard)?



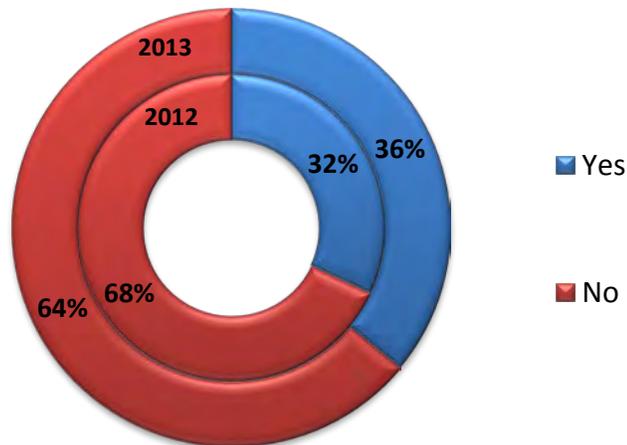
- When asked how interested they would be in installing and using a rain barrel, a significantly higher proportion in 2013 vs. 2012 would be “Very interested” (26% vs. 16%, respectively).

How interested would you be in installing and using a “rain barrel” at your home within the next few years?



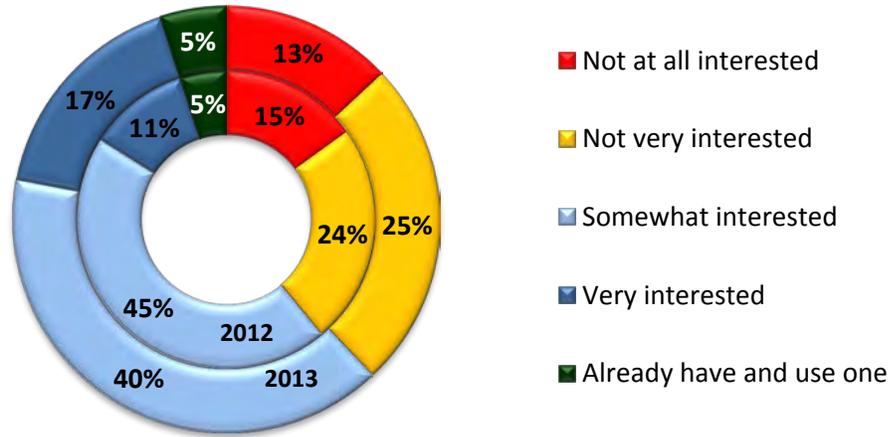
- Among respondents who reported being the primary person in their household who takes care of their lawn or garden, approximately one-third have heard of a “rain garden.”

Have ever you heard of a "rain garden" (i.e., a bowl shaped garden area where runoff can collect and soak into the ground)?



- Again among respondents who reported being the primary person in their household who takes care of their lawn or garden, a higher proportion in 2013 vs. 2012 were “Very interested” in a “rain garden,” but the change (from 11% to 17%) was not quite large enough to be statistically significant.

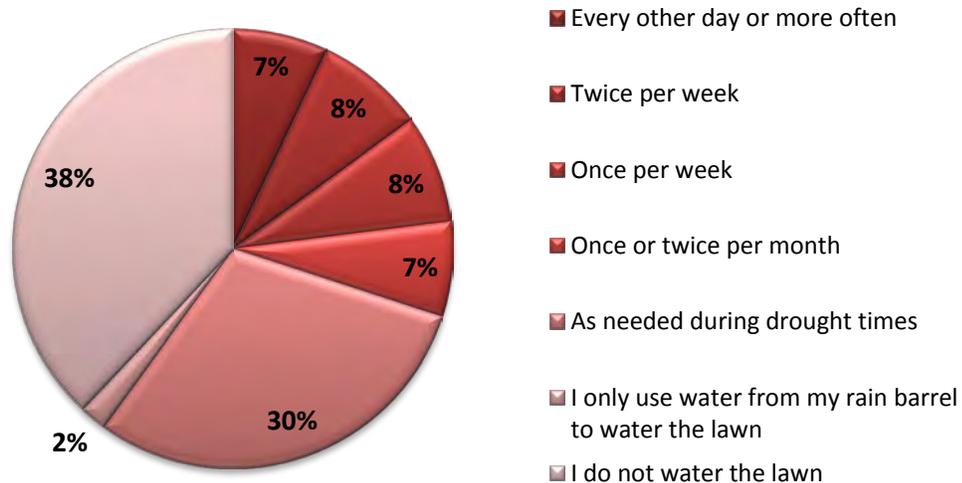
How interested would you be in installing and using a “rain garden” at your home within the next few years?



Lawn Watering

- The question below was first introduced in the 2013 survey and was asked only of those who reported being the primary person in their household who takes care of the lawn or garden. Interestingly, nearly four-in-ten (38%) indicated that they do not water their lawn.

How often do you water your lawn during the summer (May-September) on average?



- On the other hand, some watered their lawn every other day or twice per week on average.

Behavior Related to Changing Vehicle Oil

- When asked about changing the oil in their car or truck, more than eight-in-ten each year reported that they use an oil change service, while approximately 11% in 2013 reported taking old motor oil to a gas station or hazmat facility for recycling. A few respondents selected other response options, including three respondents in 2013 who put old motor oil in the trash. Because the number selecting some response options was so small, the results are shown in the tables below, with the frequency (number of respondents selecting each response) and the percentage.

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%

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%

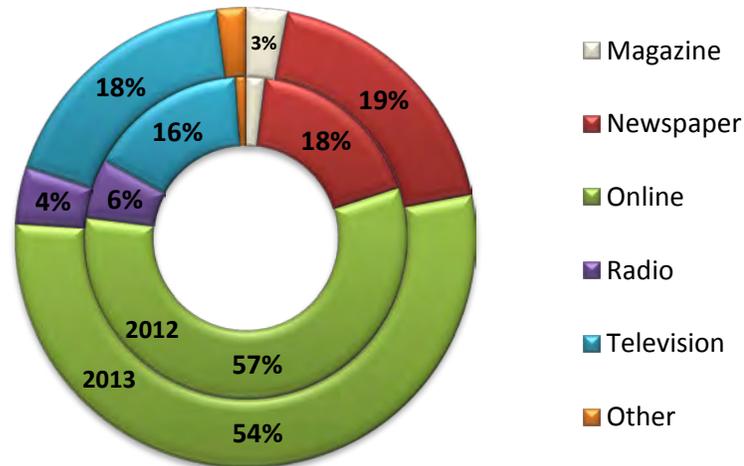
2011: When you need to change the oil in your car or truck, what do you do with the old motor oil?

	<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

- Based on a question that was first introduced in the 2012 survey, more than half prefer to receive information online. (To be sure, recall that this was a web survey, and this preference may be more common among those who complete web surveys than those who don't.)

How do you prefer to receive information?



- In each of the areas included in the survey, more preferred to receive information online than preferred to receive information from other sources, as shown below.

Preference for Receiving Information	Alexandria	Arlington	Fairfax Inclusive	Leesburg / Loudoun	Dumfries / Stafford
Online	63%	55%	52%	58%	47%
Newspaper	18%	20%	21%	13%	17%
Television	11%	13%	18%	25%	22%
Radio	2%	6%	5%	2%	3%
Magazine	4%	3%	2%	2%	8%
Other	2%	3%	2%	0%	3%
<i>N = number of respondents</i>	55	78	244	63	60

- As might be expected, younger respondents were more likely than older respondents to prefer receiving information online.

Preference for Receiving Information	Have Lived in Current Residence < 1 Year	Have Lived in Current Residence			
		1 to 3 Years	4 to 9 Years	10 to 19 Years	20 or More Years
Online	72%	56%	54%	47%	48%
Newspaper	10%	15%	15%	28%	21%
Television	14%	19%	22%	13%	18%
Radio	0%	6%	3%	5%	7%
Magazine	4%	2%	3%	5%	3%
Other	0%	2%	3%	2%	3%
<i>N = number of respondents</i>	49	123	117	111	100

Preference for Receiving Information	Age				
	21 to 34	35 to 44	45 to 54	55 to 64	65 +
Online	62%	61%	55%	51%	40%
Newspaper	8%	12%	24%	24%	28%
Television	22%	17%	13%	14%	21%
Radio	5%	5%	3%	2%	7%
Magazine	2%	4%	3%	3%	4%
Other	1%	1%	2%	6%	0%
<i>N = number of respondents</i>	111	95	86	105	103

Preference for Receiving Information	Gender		Homeownership	
	Male	Female	Homeowners	Renters
Online	55%	52%	51%	63%
Newspaper	20%	18%	22%	10%
Television	14%	21%	18%	18%
Radio	5%	4%	4%	4%
Magazine	4%	3%	3%	3%
Other	2%	2%	2%	2%
<i>N = number of respondents</i>	234	266	380	120

Appendix: Questionnaire

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. Which of the following best describes your residence?

- 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
- Fairfax (city of)
- Fairfax (county of)
- Falls Church
- Herndon
- Leesburg
- Loudoun County
- Stafford County
- Vienna
- None of the above **[END SURVEY]**

Q1. 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

Q2. Do you live within the Potomac River Watershed?

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

Q3. 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
- Garbage / trash / litter
- Gas, oil and exhaust from automobiles
- Pet waste
- Polluted runoff from streets and parking lots
- Don't know / not sure
- Other: _____

Q4. How important do you feel the actions of individuals are in protecting water quality in local streams, the Potomac River and the Chesapeake Bay?

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

Q5. "Stormwater" 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, ponds or lakes
- Potomac River or Chesapeake Bay
- Underground / seeps in to the ground
- Don't know
- Other: _____

Q6. Many people are surprised to learn that polluted water runoff is the number one cause of pollution in the Potomac River and Chesapeake Bay. When it rains and when snow melts, the water picks up pollutants on the land and washes them into local waterways. Knowing this, would you be more likely or

less likely to take actions to reduce the amount of pollutants that you personally put into storm drains?

- Much less likely
- Somewhat less likely
- No more or less likely
- Somewhat more likely
- Much more likely

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

- Yes **[CONTINUE WITH Q8]**
- No **[SKIP TO Q10c]**

Q8. When taking your dog(s) for a walk, how often do you pick up after your dog(s)?

- Always / every time the dog leaves waste
- Usually
- Half the time
- 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
- It causes water pollution
- It is gross
- It's what good neighbors do
- Odor
- Other reason
- None / no reason to **[SKIP TO Q10c]**

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
- It causes water pollution
- It is gross
- It's what good neighbors do
- Odor
- None of the above

Q10c. Does your neighborhood have any dog waste disposal stations (e.g., dispenser with waste bags and a trash can to dispose of dog waste)?

- Yes
- No
- Don't know

Q10d. Do you think these types of pet waste stations are (or would be) useful?

- Yes
- No
- Don't know

Q11. Does your home have a lawn or garden?

- Yes [CONTINUE WITH Q12]
- No [SKIP TO Q22]

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

- Yes [CONTINUE WITH Q13a]
- No [SKIP TO Q22]

Q13a. What do you do with grass clippings from your lawn or garden?

- Bag them and put them in the regular trash
- Bag them and put them in compost / recycling bags for pick up
- Leave them on the ground
- Put them in a compost pile / bin
- Have a lawn care service cut my lawn
- Other
- Not applicable / don't have grass clippings

Q13b. What do you do with leaves that collect on your lawn or garden?

- Bag them and put them in the regular trash
- Bag them and put them in compost / recycling bags for pick up
- Rake to the curb / street for municipal pickup
- Mulch them and leave them on the ground
- Put them in a compost pile / bin
- Don't do anything with them / just leave them on the ground
- Other
- Not applicable / don't have leaves

Q14. 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

Q15. 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 Q19]**
- I have a lawn care service fertilize my yard
- Don't know

Q16. Do you use a slow release N fertilizer?

- Yes
- No
- I don't know

Q17. Have you ever had your soil tested for fertility or pH?

- Yes
- No
- I don't know

Q18. Where do you get information to decide when and how much fertilizer to apply?

- Follow directions on the bag
- Lawn service conducts the applications
- Apply amount that feels right
- Eyeball it based on size of lawn
- Follow soil test results / recommendations
- Other: _____

Q19. How often do you water your lawn during the summer (May-September) on average?

- Every other day or more often
- Twice per week
- Once per week
- Once or twice per month
- As needed during drought times
- I only use water from my rain barrel to water the lawn
- I do not water the lawn

Q20a. Have you ever heard of a “rain barrel” (i.e., a barrel you put under your downspout to collect rain water that you can use around your yard)?

- Yes
- No

Q20b. How interested would you be in installing and using a “rain barrel” at your home within the next few years?

- Not at all interested
- Not very interested
- Somewhat interested
- Very interested
- I already have and use a “rain barrel”

Q21a. Have you ever you heard of a “rain garden” (i.e., a bowl shaped garden area where runoff can collect and soak into the ground)?

- Yes
- No

Q21b. How interested would you be in installing and using a “rain garden” at your home within the next few years?

- Not at all interested
- Not very interested
- Somewhat interested
- Very interested
- I already have a “rain garden” at my home

Q22. 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

Q23. 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

Q24. Have you seen any ads on TV or the Internet about fertilizing less often, and/or reducing water pollution?

- Yes **[CONTINUE WITH Q25]**
- No **[SKIP TO Q26]**
- Not sure **[SKIP TO Q26]**

Q25. Did seeing those ads make you change any of your behaviors related to fertilizing less often and/or reducing 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



Q26. Have you seen the logo above anywhere? (Show Only Rain logo)

- Yes
- No

Q27. How do you prefer to receive information? (Please select only one)

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

Appendix D
Workshop Agendas

Beautifying Your Yard for Healthy Streams

Designing, Building, and Maintaining Small-Scale Residential Rain Gardens

Saturday, Nov. 17
9:30 AM – 12:30 PM

Fairlington Community Center,
3308 S. Stafford Street
Arlington, VA

AGENDA

Welcome 9:30-9:40

Corey Miles, Senior Environmental Planner, Northern Virginia Regional Commission

Designing and Building a Rain Garden 9:40-10:45

Asad Rouhi, Urban Conservation Engineer, Northern Virginia Soil & Water Conservation District

Break 10:45-11:00

Selecting Plants and Landscaping a Rain Garden 11:00-11:30

Christin Jolicoeur, Watershed Management Planner, Arlington County

Maintaining a Rain Garden, Lessons-Learned 11:30-12:00

Aileen Winquist, Watershed Outreach Program Manager, Arlington County

Rain Garden Exercise 12:00-12:20

Asad Rouhi and Christin Jolicoeur

Working in groups, participants will have an opportunity to use what they learn in the seminar to develop a rain garden plan for a single-family house. Using information provided by the Workshop sponsors, groups will calculate the surface area for a rain garden, determine a location for the rain garden, and show how they plan to bring runoff to the rain garden. Groups may have 2 – 3 minutes to share their ideas with the rest of the class.

Questions 12:20-12:30

Optional Tour of Rain Gardens at Fairlington Community Center

Christin Jolicoeur



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Atmospheric Administration, under the Coastal Zone

Stormwater Retrofitting Workshop for Stormwater Practitioners
A Chesapeake Bay Stormwater Training Partnership Workshop
April 29 – 30, 2013
8:30 – 4:30
Fairfax County Government Center
Conference Rooms 2 and 3
12000 Government Center Pkwy
Fairfax, VA 22035

FREE!

Several drivers, including the Chesapeake Bay TMDL and MS4 permit requirements, are increasing the demand for stormwater retrofitting as a tool for reducing urban runoff and pollution. Stormwater retrofitting has emerged as one of the solutions to mitigate the impact of un-managed runoff from developed areas as well as to provide better water quality treatment in older stormwater structures, such as detention ponds.

This **free** workshop is for practitioners with at least a basic understanding of stormwater management design and with an interest in learning more about the nuts and bolts of stormwater retrofitting. The two-day program will include a mix of lecture, discussion, small group exercises, and field activities. *We encourage you to bring your laptops for the design exercise portion of the workshop.* The focus of this training is on how to locate and prioritize retrofit opportunities in developed areas, through field investigations and concept drawings. We will cover retrofitting streets, existing stormwater basins, public lands, and other topics.

Instructors: *Tom Schueler, Chesapeake Stormwater Network*
 Cecilia Lane, Chesapeake Stormwater Network
 Dave Hirschman, Center for Watershed Protection
 Laurel Woodworth, Center for Watershed Protection
 Matt Meyers, Fairfax County, Department of Public Works and Environmental Services

DAY 1 – Monday, April 29

8:30 – 9:00	Registration	
9:00 – 9:15	Welcome and Introductions	ALL
9:15 – 9:45	Why Retrofit? (Discussion)	CWP
9:45 – 10:45	Retrofit Types & Locations	CSN
10:45 – 11:00	Break	
11:00 – 12:00	Desktop Assessments (& Group Exercise)	CWP
12:00 – 1:00	Lunch (on your own)	
1:00 – 2:00	Intro to Field Investigations	CSN/CWP

