



Photo: Burke Lake Park in Fairfax, VA
 Source: Fairfax County Park Authority

Northern Virginia Clean Water Partners Annual Summary of Results July 1, 2020 – June 30, 2021

www.onlyrain.org

Polluted stormwater runoff is the number one cause of poor water quality in streams and rivers in Northern Virginia. When it rains and snows, the water runs off streets, driveways, yards and parking lots and mixes with pesticides, grass clippings, fertilizer, bacteria, road salt, and oil. All this pollution enters the storm drains on the street and is discharged directly to a stream. The runoff is not filtered or sent to a wastewater treatment facility.

To reduce the impacts of stormwater pollution, the Northern Virginia Clean Water Partners came together to change peoples' behavior through a public education campaign.

About the Partnership

The Northern Virginia Clean Water Partners is composed of a group of local governments, drinking water and sanitation authorities, and businesses that share the common goals to keep Northern Virginia residents

healthy and safe by reducing the amount of pollution from stormwater runoff that reaches local creeks and rivers, and empower individuals to take action to reduce pollution. To meet these goals, the Partners work together to:

- Identify high priority water quality issues for the region.
- Identify the target audience(s) for outreach.
- 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.

Membership is voluntary and each member makes an annual contribution to fund the program. By working together, the partners can leverage their funds to develop and place bilingual educational products with

common messages and themes, thereby extending the campaign's reach.

Only Rain Down the Storm Drain is the motto of the partnership.

The 2021 campaign helped to satisfy 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



2021 Campaign Overview and Accomplishments

In 2021, the Northern Virginia Clean Water Partners selected the following high priority water quality issues to focus on for the Campaign:

- bacteria,
- nutrients,
- salt, and
- illicit discharge (i.e., motor oil, pesticides, and hhw).

The Partners identified the target audiences for these issues as pet owners, homeowners with a lawn or garden, home mechanics and do-it-yourselfers, and members of the public who apply winter salt. The campaign used television, print, internet advertising, Facebook, Twitter, and the [Only Rain Down the Storm Drain](http://www.onlyrain.org) website to distribute messages linked to specific stormwater issues, such as proper pet waste disposal, responsible fertilizer use on lawns and gardens, and proper disposal of detergents, paints, stains, and auto fluids.

In addition to the multi-media campaign, partners participated in local events to raise awareness and encourage positive behavior change in residents. The social media posts, television and internet ads featured the well-known national symbol of non-point source pollution, the rubber ducky.



771,115

Premium digital TV impressions* (cable network ads)

1,641,042

Total social media impressions (Facebook and Twitter)

48,095

Engagements with social media posts (Facebook and Twitter)

9,662

Visits to the www.onlyrain.org website

3,000

Storm drain labels distributed throughout the region

500

Survey Responses

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

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

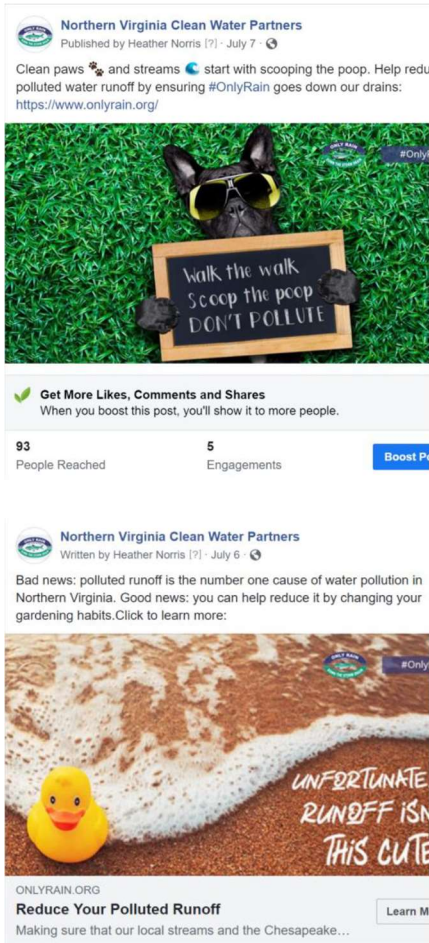
- From July 2020 through June 2021, aired four Public Service Announcements (2 in English and 2 in Spanish) on 44 English language cable TV networks, and four Spanish language networks a total of 761,756 times. The ads featured messages on the importance of picking up pet waste and general household stormwater pollution reduction measures.

As a new strategy in 2020, the Partners contracted with a digital communications firm to develop and implement a social media

campaign on Facebook and Twitter. The results so far have shown that these platforms are an effective way to engage with the target audiences.

- Since July 1, 2020, the Facebook page has gathered an additional 271 page likes and 275 fans.
- During this time there were 244 published posts, 46,875 post engagements, and 41,050 post clicks
- Facebook outreach campaigns reached 1,360,699 individuals and led to 23,820 clicks through to the website.





- Since July 1, 2020 the Clean Water Partners Twitter page has gained: 81,066 impressions, 1220 total engagements, 105 post link clicks, and 77 followers.
- We have tweeted 398 times leading to: 198 retweets and 199 likes.
- Continued to update and maintain the Northern Virginia Clean Water Partners website.



Stormwater Survey Results

The Partners conducted an online survey of 500 Northern Virginia residents to understand the general awareness of stormwater runoff, determine the effectiveness of the ads, aid in directing the future efforts of the campaign, and to reveal any changes in behavior.

General Awareness Findings:

Nearly half (47%) of respondents either don't know where storm water ends up or believes that it goes to a wastewater treatment plant. This indicates that there is a need to educate residents that stormwater drains are directly connected to local waterways.

Close to one third (29%) of respondents recalled seeing the ad on TV, Facebook, or Twitter after watching the video clip in the survey which is a statistically significant increase from 2020. This indicates that using social media to conduct outreach is an effective way to reach residents. Of those who recalled seeing the ads, 42 percent state they already take action to protect clean water, 46 percent state they now pick up their pet waste more often, 19 percent state that they now properly dispose of motor oil, and 32 percent state they plan to fertilize fewer times per year.

When shown the Only Rain Down the Storm Drain logo, 61 percent of the respondents recognized it compared to 54 percent in 2013. This increase indicates that **awareness of the logo has increased over time.**

Regardless of whether respondents have seen the ads or logo, 34 percent reported they had received information about reducing water pollution in the past 12 months. **The 2021 result was significantly higher than in 2018 (24%) and 2019 (22%).** Even though more than half of respondents feel at least somewhat confident that they would know where to report potential water pollution, only 53 percent would report water pollution if they saw it. Interestingly, 8 percent of respondents from Prince William County indicated they "definitely would not" report potential water pollution. This suggests **there is a need for education on what pollution may look like and encourage residents to report it if they see something.**

The majority (65%) of respondents indicated that they were aware their locality has a specific place to drop off household hazardous waste.

Understanding Behaviors

In addition to capturing responses to questions regarding the effectiveness of the campaign, the survey gathered information on the current behaviors and attitudes 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.

Interestingly, dog ownership increased significantly (14

percent) in the region since the COVID-19 pandemic began. **During this time, the percent of respondents reporting that they pick up dog waste on walks decreased by 12 percent.** This suggests that there is ample opportunity to do outreach to new pet owners about picking up waste.

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 main reason has fluctuated and was the fourth most common reason in 2021.

77% of lawn and garden owners fertilize their lawns at least once per year no matter what. **Among those who fertilize once a year, 19 percent fertilize in the spring and only six percent fertilize in the fall.** This suggests that there is room to educate residents of Northern Virginia that fertilizing in the fall is better for local waterways.

Among those who fertilize their lawn, only four percent of respondents indicated that they fertilize based on results of a soil test. Slightly less than one-third (29%) in 2021 leave their grass clippings on their lawn, while half (49%) bag their grass clippings for disposal indicating the need for education on "greener" lawn care practices.

After reading a description of a rain barrel, rain garden, and conservation landscaping,

respondents were asked if they had implemented these features at their home or had heard about them. **In a significant increase over 2020 (6%), eleven percent reported having a rain barrel, while five percent reported having a rain garden, and twelve percent reported having conservation landscapes in their yard.**

Additionally, the percentage of respondents that reported never hearing of all three practices has decreased and the percentage of respondents interested in getting them has increased since 2020. This implies that general awareness and interest of these practices is increasing. **There is a significant opportunity to continue to promote these practices to homeowners and build awareness of how they can reduce stormwater runoff.**

Consistent with past years, most respondents take their vehicle to a service station for oil changes (71%) or take used oil to a gas station or hazmat facility for recycling (15%). **However, approximately ten percent of Northern Virginians reported storing used motor oil in their garage, placing it in the trash or dumping it down the storm drain, sink or on the ground.**

Overall, the 2021 campaign demonstrated that using a multi-media approach that includes traditional cable TV, streaming TV, website, and social media platforms will reach a large portion of the population of Northern Virginia.

To keep moving the needle towards building a culture of water quality stewardship, there is a need to combine public outreach with community based social marketing tools.

The FY22 campaign will be utilizing additional tools such as: 1) an interactive on-line pledge to adopt a new clean water behavior, 2) new "made for social media" psa's for target audiences, 3) an e-newsletter, and 4) a Clean Water Facebook Group for people to interact with each other.

All the tools mentioned above will continue to shape a robust behavior change campaign that keeps pace with the ever-evolving ways that the people of Northern Virginia consume information.

NORTHERN VIRGINIA 2021 WATER QUALITY SURVEY

Although the entirety of the Northern Virginia region is in the Potomac River watershed, many Northern Virginians are underinformed about actions they can take to reduce pollution in stormwater runoff.



Where do you believe stormwater goes?

60% of NoVA residents think it eventually ends up in the Potomac River or Chesapeake Bay



AND

Around 40% of NoVA residents either don't know where it goes or believe it goes to a wastewater treatment plant.

59%

of Northern Virginians feel at least somewhat confident that they would know where to report potential water pollution.

BUT ONLY 53% are likely to report water pollution if they saw it.



About four in ten residents of Northern Virginia feel they are most **prevented from taking action** to protect clean water because they **DON'T KNOW WHAT TO DO.**



1/3

About **1/3** of NoVA residents have seen or received **information about reducing water pollution** in the past 12 months.

Although improperly disposed pet waste is a major source of bacteria in stormwater,

ONLY 14%

of dog owners in Northern Virginia believe **water pollution** is the most important reason to pick up after your pet.

77% of lawn owners in Northern Virginia **fertilize** their lawn at least once a year.

ONLY 6% fertilize once in the Fall, even though fertilizing **once a year in the fall** is better for local waterways.



71%

of car/truck owners take their vehicle to a mechanic for oil changes

15%

take used oil to a gas station or hazmat facility for disposal

10%

store used oil in their garage, put it in the trash or dump it down the storm drain, sink or on the ground.



About 1/3 of NoVA residents are **unaware** of whether their locality has a specific place to drop off



HOUSEHOLD HAZARDOUS WASTE

One in five Northern Virginians



ARE INTERESTED IN GETTING A RAIN BARREL.

Only Rain Down the Drain

www.onlyrain.org

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2021 Northern Virginia Clean Water Partners

Fairfax County | Arlington County | Loudoun County | Fairfax Water |
City of Alexandria | City of Fairfax | City of Falls Church | City of Manassas | Town of Leesburg |
Town of Dumfries | Prince William County | Northern Virginia Regional Commission | George Mason University |
Virginia Coastal Zone Management Program | Fairfax County Public Schools | Prince William County Public
Schools | Northern Virginia Soil and Water Conservation District



Summary prepared by NVRC on behalf of the Partners

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