



Northern Virginia Clean Water Partners

Annual Summary of Results

July 1, 2022 - June 30, 2023

This summary was produced by Northern Virginia Regional Commission on behalf of
the 2023 Clean Water Partners.



Stormwater Pollution in Northern Virginia

Water bodies in Northern Virginia, including the region's numerous streams, lakes, and rivers, provide a range of environmental, social, and economic benefits to surrounding communities. However, when waterways are polluted and water quality becomes impaired, their key resources are reduced and result in negative impacts to both humans and the natural environment.

Polluted stormwater runoff is the number one cause of poor water quality in Northern Virginia's waterways. When it rains and snows, water runs off streets, driveways, yards and parking lots and mixes with pollutants, such as litter, fertilizer, pet waste, road salt, and auto fluids. These pollutants then enter storm drains on the street and are discharged directly into nearby streams.

To reduce the impacts of stormwater pollution, the Northern Virginia Clean Water Partners joined together to improve residents' knowledge and behaviors through an ongoing public education campaign.

About the Partnership

The Northern Virginia Clean Water Partners (NVCWP) 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
- 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 are able to leverage their funds to develop and implement a range of bilingual education and outreach strategies throughout Northern Virginia.



"Only rain down the storm drain"
- Partnership Motto

The 2023 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 onlyrain.org

2023 Campaign Overview

The Northern Virginia Clean Water Partners identified the following water quality issues to highlight in their 2023 campaign:

- **Nutrients (Phosphorus and Nitrogen)**
- **Bacteria**
- **Salt**
- **Illicit Discharges (e.g., pesticides, motor oil, etc.)**

Target audiences for these issues include pet owners, winter salt applicators, home mechanics, and residents with a lawn or garden. To reach these audiences, the campaign used a combination of social media, television, printed advertising, and the Only Rain website to distribute messaging that would improve stormwater-related knowledge and behaviors. Partners also participated in local events throughout the year to engage residents and raise campaign awareness.

The 2023 campaign also continued to expand outreach and engagement programming with several new social marketing strategies, including:

- Updated infographics to promote pollution-reduction practices
- New social media content, including monthly partner spotlights
- A new campaign video
- An NVCWP Instagram account

Social Media

The NVCWP have continued to use social media as a key tool to engage their campaign's target audiences.

The partners created Facebook and Twitter accounts as a part of their 2020 campaign strategy. Since July 1, 2022, the Facebook page has gained 115 new followers for a total of 518 current followers. During the campaign year, the page had 387 posts, 20,858 post engagements, and 6,987 post link clicks.

The Twitter account currently has 165 followers, with 34 new followers since July 1, 2022. Over the year, the account had 393 tweets, 1,093 tweet engagements, and 116 link clicks.

As a part of the 2023 campaign, the partners also created an Instagram account to further reach the public. Since it was created in December 2022, the Instagram account has gained 140 followers and created 79 posts.



Top reaching Instagram photo in 2023

Video Advertisements

The campaign continued to reach residents through a series of video advertisements that focused on residential stormwater management actions. In 2023, the campaign aired two public service announcements (one in English and one in Spanish) on a combination of 44 English and Spanish language networks for a total of 865,060 impressions, or views.

Key Facts and Figures for 2023



2,256

visits to OnlyRain.org



596

Stormwater Survey responses



1,128

Clean Water Pledges



865,060

premium digital TV impressions*



825,685

total social media impressions*



22,151

engagements with social media posts

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



Annual Stormwater Survey

Survey Goal

The Northern Virginia Clean Water Partners conduct an annual online survey of approximately 500 Northern Virginia residents to better understand their stormwater-related knowledge and behaviors over time. Results help the partners to assess their campaign's effectiveness and direct future education and outreach efforts.

Results

Stormwater and Watershed Knowledge

69% of Northern Virginia residents reported that they are familiar with the term "watershed". When asked which watershed they live in, 45% of residents selected that they live within the Potomac River watershed, which represents a 8% increase in this response from 2022. However, only 30% selected that they live in the Chesapeake Bay watershed.

When asked where stormwater eventually ends up, 62% of residents responded that it goes to the Potomac River or Chesapeake Bay, while 46% also selected that it goes to a wastewater treatment plant. Responses to this question have not significantly changed since 2019.

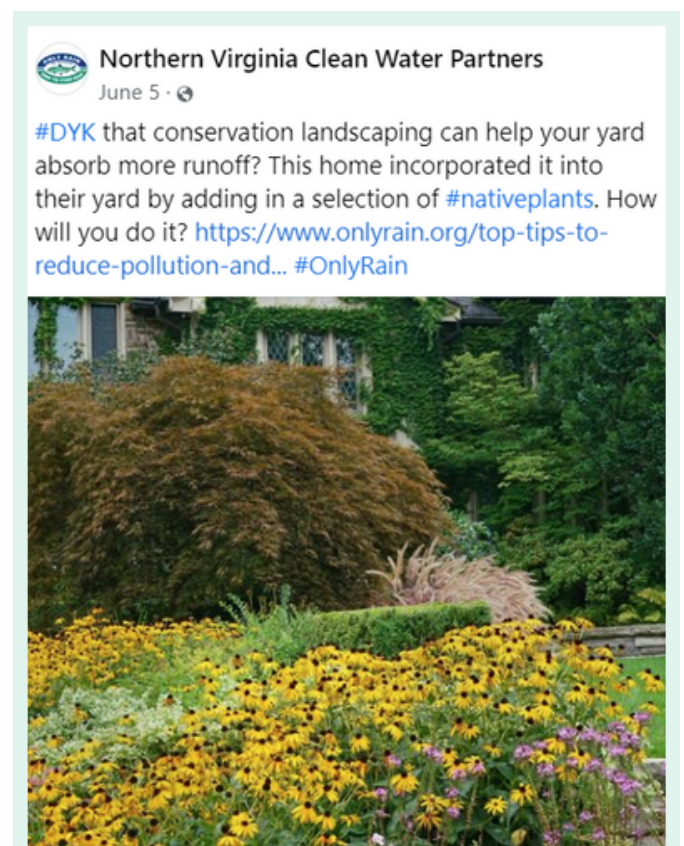
These results indicate that although residents have likely heard of a "watershed", further education is needed to characterize the term in Northern Virginia and explain its relationship to stormwater runoff.

Information and Advertising

Similar to 2022, 34% of residents reported that they have seen or received at least some form of information about reducing water pollution in the past 12 months. Notably, there was a 9% increase (24% in 2022 versus 33% in 2023) in those that had heard of specific opportunities to participate in water quality improvement activities, such as stream clean ups or storm drain stenciling.

42% of survey respondents indicated that they were familiar with the NVCWP prior to the survey. 74% selected that they trust information from the campaign, and 71% would contact the NVCWP if they had questions about water quality.

When shown the "only rain down the storm drain" fish logo, 61% of residents reported seeing the logo prior to the survey. Although this represents a 5% decrease in those that recognize the logo from 2022, responses to this question have remained above 60% since 2019.



Campaign Impact

Residents who have viewed at least one NVCWP ad were asked a series of questions about the impact of the ads, including ways that their behaviors have changed since they first saw the ads. Over 70% of respondents reported that they now have a greater understanding of pet waste, fertilizer, and motor oil impacts on local water quality. 43% of residents stated that they pick up pet waste more often, 50% plan to fertilize less frequently, and 48% now also properly dispose of motor oil. However, over 50% of residents also reported that they were already taking some action to reduce water pollution. These results indicate that NVCWP advertisements likely reinforce positive behaviors in many residents while providing new information to a smaller percentage of ad viewers.

Resident Behaviors

The survey asked specific questions to understand changes in Northern Virginia residents' behaviors around relevant stormwater management and pollution issues, including pet waste, lawn and garden care, car fluids, and household hazardous waste.



In 2023, 51% of residents reported owning at least one dog. Of those that walk their dog, 89% stated that they always or usually pick up their dog's waste during walks, while 3% rarely or never pick up the waste. In comparison, only 61% of residents reported picking up their pet's waste on a daily basis in their own yard.

When asked why they pick up their dog's waste, 25% of residents responded that their actions were due to city or county ordinances, and 20% selected that they "don't want to step in it". Similar to 2022 (17%), only 15% of residents noted picking up their pet's waste because it causes water pollution.

As in previous years, Northern Virginia residents continue to clean up after their pet for a variety of reasons unrelated to local water quality. As such, future messaging could aim to encourage homeowners to pick up waste in their own yard and further describe the connection between dog waste and water quality impacts.



When asked about reporting potential water pollution, 57% of residents reported knowing who to contact, and nearly two-thirds (63%) stated that they would probably or definitely contact someone to report a potential source of water pollution. Of those who were equally likely to call and not to call as well as those who reported that they would not call, 32% selected their reason being that they would prefer not to communicate with officials or authorities, while 23% selected that "it's none of my business".

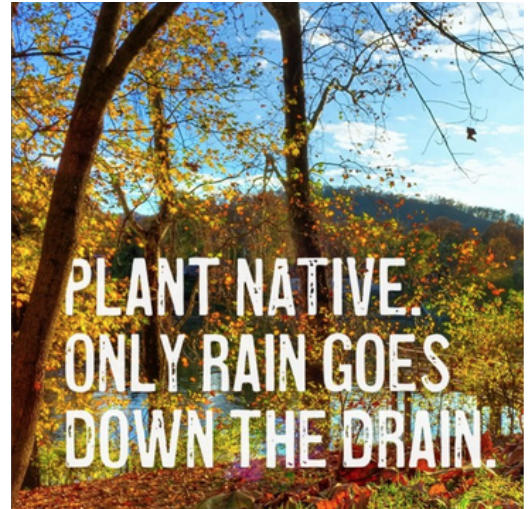




Two-thirds (66%) of residents with a lawn or garden stated that they use a lawn care service at least once a year. Notably, 71% of residents with a lawn or garden reported using fertilizer at least once a year. Similar to 2022, 26% of residents most frequently fertilize twice a year, while 13% never fertilize their lawn.

For those that cut their own grass, 29% of residents keep their grass clippings on their lawn or garden. 56% choose to bag their clippings and either recycle them (32%) or put them in the regular trash (24%).

If grass clippings ended up in the street, only 53% reported sweeping or blowing them back into their lawn, instead choosing to leave them in the street (20%) or to sweep them into the storm drain (15%). These results indicate a need for further outreach to encourage residents to leave clippings or sweep them back into their yard after mowing.



As in 2022, respondents were provided descriptions of a rain barrel, rain garden, and conservation landscaping and asked whether they have heard of these stormwater management features and would be interested in getting one for their property. Compared to prior years, there was a significant increase in residents that not only reported having a feature on their property, but also in those that were familiar and/or interested in installing the features.

In particular, residents are most familiar with rain barrels, and 45% reported an interested in obtaining one for their property. 28% also reported already owning at least one. Over 40% of residents were also interested in installing a rain garden or some form of conservation landscaping on their property.



With growing awareness of their benefits to water quality and conservation, the Clean Water Partners will continue to highlight opportunities and resources for installation and maintenance of stormwater management features, including regional workshops and other education events, throughout the year.



61% of residents reported knowing if their locality has a specific drop-off location for household hazardous waste (HHW). This response represents a slight decrease from 2022 (67%), indicating the need for new tools and resources, such as online maps and fact sheets, to more specifically point out HHW sites across local jurisdictions.



Similar to 2022, the majority of residents who own a car reported going to an auto center for an oil change (70%) or taking their old motor oil to a gas station or hazmat facility for recycling (17%). In addition, approximately 13% of residents continue to store their used motor oil in their garage, place it in the trash, or dump it down the storm drain, sink or onto the ground.

63% of residents reported taking their vehicle to a commercial car wash, while only 21% reported washing their vehicle at home. This represents a significant change in responses from prior years, in which 43% of residents washed their vehicle at home and 36% used a commercial car wash in 2022.

For those that wash their cars or trucks at home, nearly a quarter of residents (26%) most frequently wash their vehicle three to four times a year, although 17% wash their vehicle at home more than 12 times a year. To wash their vehicle, the majority of residents reported using environmentally-friendly detergent (60%) or only water (29%), and 53% wash on pervious surfaces, including grass, gravel, and/or dirt.

These results highlight an increase in water-conscious decisions that residents are making for their automobile care. Future campaign messaging can continue to reinforce these behaviors, including further promotion of commercial car washes to reduce runoff of cleaning detergents.



2024 Campaign Goals

Through a combination of social media, TV advertisements, the Only Rain website, and other regional activities, the 2023 Northern Virginia Clean Water Partners campaign strived to engage Northern Virginia residents around a number of priority stormwater runoff and pollution topics. In particular, new social media platforms, such as Instagram, and messaging strategies helped the campaign to reach new audiences and further advance the campaign's education and outreach goals.

The 2024 campaign will continue to diversify and implement new strategies to most effectively reach Northern Virginia residents and improve their stormwater-related knowledge and behaviors. The next campaign year will include:

- A new campaign video
- New and updated website resources
- Engaging social media content, including "Wednesday Water Tips"
- And more!

Northern Virginia Clean Water Partners 2023 SURVEY AT A GLANCE

The Clean Water Partners conduct an annual survey to better understand Northern Virginia residents' stormwater knowledge and behaviors in order to inform future education and outreach efforts.

WATERSHED KNOWLEDGE

45% of residents believe they live in the Potomac River watershed. 31% were not familiar with the term "watershed" prior to the survey.



STORMWATER RUNOFF

Nearly 2/3 of residents believe that stormwater runoff ends up in the Chesapeake Bay or Potomac River. 46% of residents think that it goes to a wastewater treatment plant.

AUTOMOBILE BEHAVIORS

63% of vehicle owners go to a commercial car wash at least once a year. Of those that clean their car at home, over 60% report only using water or environmentally-friendly detergent.



DOG OWNERS

89%

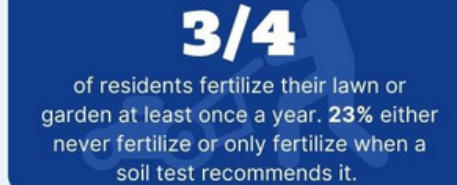
of dog owners report always or usually picking up their pet's waste while on a walk. 15% pick up the waste because it causes water pollution.



LAWN CARE

3/4

of residents fertilize their lawn or garden at least once a year. 23% either never fertilize or only fertilize when a soil test recommends it.



CONSERVATION LANDSCAPING

Over 1/2 of residents are familiar with a rain barrel, rain garden, and/or conservation landscaping. Over 40% report an interest in obtaining one or more for their property.



POLLUTION REPORTS

2/3

of residents would probably or definitely report potential pollution to their town or county.



CWP PROMOTION

61%

of residents recognize the Clean Water Partners logo.



ADVERTISING REACH

About 1/4 of residents have viewed a Clean Water Partners ad. When asked about perceptions of the ads, over 75% trust the information conveyed and believe the ads are important.



Additional Information

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Website: www.onlyrain.org

Social Media:

- **Facebook:** facebook.com/NVCWP
- **X (Formerly Twitter):** twitter.com/nova_cwp
- **Instagram:** instagram.com/novacwp

2023 Clean Water Partners:

Fairfax County | Arlington County | Loudoun County | Loudoun Water | Fairfax Water | City of Alexandria | City of Fairfax | City of Falls Church | City of Manassas | City of Manassas Park | Stafford County | Town of Leesburg | Town of Dumfries | Town of Herndon | Town of Vienna | Prince William County | Northern Virginia Regional Commission | George Mason University | Virginia Coastal Zone Management Program | Fairfax County Public Schools | Prince William County Public Schools

