

IMPROVING STORMWATER MANAGEMENT & REDUCING RUNOFF

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WHY IT MATTERS

When it rains, nutrients and sediment pollution flow from the land into storm sewer systems and local waterways via stormwater runoff. Impervious surfaces—parking lots, roads, and rooftops—convey runoff and the pollution that flows with it to storm sewers and local waterways without giving it an opportunity to seep back into the ground. Runoff can erode streams, harm aquatic ecosystems, and contribute to poor water quality.¹

Stormwater runoff is the fastest growing source of pollution to the Chesapeake Bay. According to data from the Chesapeake Bay Program's Watershed Model, stormwater currently contributes 17% of nitrogen pollution delivered to the Bay, 17% of phosphorus, and 9% of sediment.² Land-use changes accelerate this pollution loading, particularly driven by large-scale development projects with insufficient erosion and sediment controls and stormwater best management practices (BMPs). Development typically expands the area of impervious surfaces in urban, suburban, and increasingly in rural areas.

As a result of development activities, Virginia is also losing tree canopy that naturally reduces runoff at an alarming rate. Over 50,000 acres of tree canopy were lost to development between 2014 and 2021.³ Further, new residential developments in HOAs often limit the ability of homeowners to reduce their runoff impacts (see *Reversing Tree Canopy Decline*, page 61).

As Virginia faces more frequent high-intensity rainfall events due to climate change, the Commonwealth is experiencing large-scale construction projects and an increasing percentage of impervious surfaces, which can negatively impact communities and our land and waterways without proper controls.

CURRENT LANDSCAPE

There are a number of programs and authorities to assist localities, organizations, and individuals in managing stormwater runoff as well as erosion and sediment control. Programs including the **Stormwater Local Assistance Fund (SLAF)**, **Virginia Conservation Assistance Program (VCAP)**, **Virginia Trees for Clean Water (VTCW)**, and **Riparian Forests for Landowners (RFFL)** are inconsistently funded, creating uncertainty for localities, organizations, and individuals that rely on them for assistance.

Stormwater Local Assistance Fund is a state and local matching grant program administered by the **Virginia Department of Environmental Quality (DEQ)** that protects and improves the health of our waterways by funding stormwater projects implemented

by local governments.

The Virginia Conservation Assistance Program is administered by the **Virginia Association of Soil and Water Conservation Districts (VASWCD)** and helps fund residential-scale stormwater BMPs, including rainwater harvesting, rain gardens, conservation landscaping, and permeable paver systems. Some homeowners associations (HOAs) place restrictions on residential **conservation landscaping** installations, which prevents access to VCAP.

Virginia Trees for Clean Water is a grant program administered by the **Virginia Department of Forestry (DOF)** to encourage the creation of long-term, sustained tree canopy cover to improve water quality across the Commonwealth. Grant awards can be used to fund tree planting and raise public awareness of the benefits of trees and impacts on water quality.

Riparian Forests for Landowners is a program administered by DOF and partnering watershed-based organizations to provide flexible, no-cost **riparian forest buffer** installation and one year of maintenance to landowners.

Legislation passed in 2026 increased maximum civil penalties for environmental violations, raising DEQ's authority from \$10,000 to \$32,500 and local governments' authority for land-disturbance violations from \$1,000 to \$32,500.⁴

OPPORTUNITIES

Consistent state funding is necessary to empower Virginia's localities, organizations, and residents to implement projects that reduce localized flooding and improve water quality. Programs including SLAF, VCAP, VTCW, and RFFL provide local governments and residents with financial support to improve stormwater management and reduce stormwater runoff.

Additionally, support is needed to ensure that local governments can effectively implement erosion and sediment control protections, especially in localities managing new large-scale development projects. Educating and empowering localities to impose protective measures on large-scale projects—such as limiting the area of disturbance or requiring phasing—can help prevent sediment runoff. Further, state-level support and oversight are needed, as many localities lack the expertise, oversight, and resources to adequately manage these projects.

In **Virginia's Watershed Implementation Plan (WIP)** to meet the Chesapeake Bay **Total Maximum Daily Load (TMDL)** goals, Virginia included an initiative

RETHINKING WATER WITHDRAWALS

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(WIP Initiative 49) to review 20 Virginia Stormwater Management Programs as part of its federally delegated authority to implement the Clean Water Act. Providing DEQ with adequate staffing and funding can help fully implement this and other initiatives, such as WIP Initiatives 44 and 46, which coordinate and accelerate the implementation of stormwater BMPs in urban areas not regulated under **Municipal Separate Storm Sewer System (MS4) permits**.

In Fiscal Year 2026, DEQ plans to evaluate nutrient management planning within its erosion and sediment regulations, an important opportunity to improve the regulatory framework to reduce nutrient runoff.

With almost 25% of Virginians living in HOA communities, it is also important to ensure these homeowners have the option to install conservation landscaping on private property to reduce runoff.

ENDNOTES

1. Stormwater runoff. (n.d.). Chesapeake Bay Program. <https://www.chesapeakebay.net/issues/threats-to-the-bay/stormwater-runoff>
2. Stormwater runoff. (n.d.). Chesapeake Bay Program. <https://www.chesapeakebay.net/issues/threats-to-the-bay/stormwater-runoff>
3. Visconti, E. (2025). Watershed mapping project shows rapid loss of forests, offers new view of Va.'s changing landscapes. *Virginia Mercury*. <https://virginiamercury.com/2025/09/29/watershed-mapping-project-shows-rapid-loss-of-forests-offers-new-view-of-va-s-changing-landscapes/>
4. Virginia Erosion and Sediment Control Program; assessment for violations, etc., civil penalties. HB 1350, VA Code §§ 10.1-1182 and 62.1-44.15:54 (2026). <https://lis.virginia.gov/bill-details/2026/HB1350/text/CHAP0467>
5. *Virginia Community Associations Facts and Figures*. (2024). Community Associations Institute. <https://www.caonline.org/getmedia/963d1fcb-0d43-4343-aa91-5221f74bf872/virginia-statefactsfiguresonepaggers2025-1-pdf-1.pdf>

TOP TAKEAWAYS

Stormwater runoff is the fastest-growing source of pollution to our waterways and reducing it by investing in support, oversight, and BMP implementation is critical.

Consistent funding for programs that reduce runoff and improve stormwater management including SLAF, VCAP, VTCW, and RFFL is vital to ensure localities, organizations, and residents have the support they need to manage stormwater and reduce runoff and to match associated federal funds, where still available.

Controlling runoff with robust local government and, where necessary, state oversight is key.

Sole tree in Stumpy Lake, Virginia Beach, VA

Photo by Caroline Prevost

