



Calvert County Environmental Commission

WHAT IS STORMWATER RUNOFF?

When it rains or snow melts, the water that doesn't soak into the ground becomes **stormwater runoff**. It flows over hard surfaces like roofs, sidewalks, streets and parking lots, picking up pollutants such as oil, trash, sediment, fertilizers and pet waste.

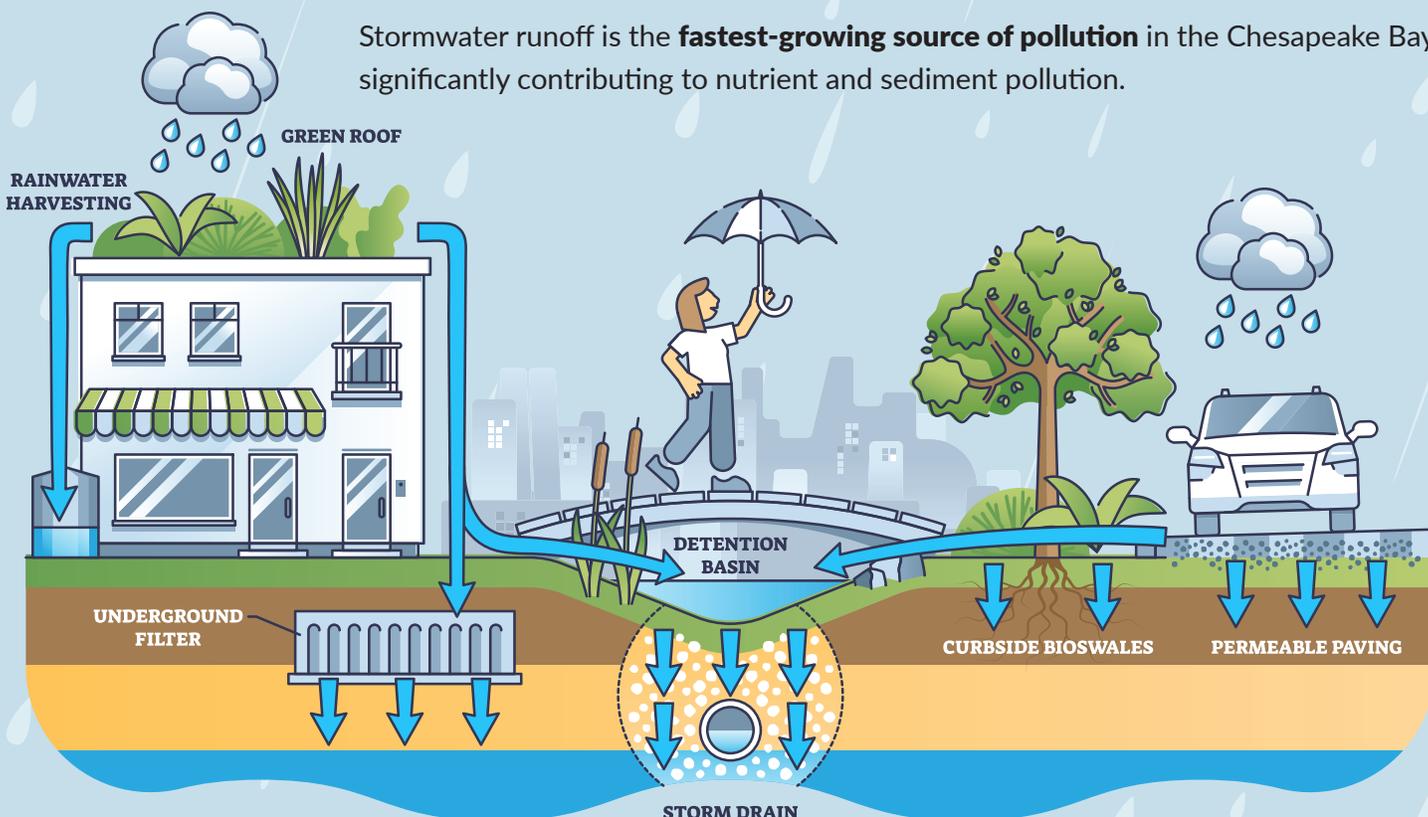
WHY IT MATTERS

Because stormwater usually bypasses treatment plants, it often flows directly into waterways, carrying pollutants with it. When including nontidal and tidal waterways, Calvert County has over 230 miles of shoreline, making us particularly impacted by stormwater runoff. Stormwater runoff can:

- Harm wildlife and habitats
- Cause erosion (a particular concern in Calvert County as much of our soil is highly erodible)
- Increase flooding risks
- Reduce groundwater recharge
- Increase sediment loads, clogging waterways
- Make places where we swim, fish or kayak unsafe



Stormwater runoff is the **fastest-growing source of pollution** in the Chesapeake Bay, significantly contributing to nutrient and sediment pollution.



*MD Geological Survey, 1990

This document was written by the Environmental Commission for informational purposes only and is not official Calvert County policy. Reviewed January 2026.

STORMWATER MANAGEMENT

By designing communities with stormwater in mind, we can protect our waterways, reduce flooding and create healthier, more attractive neighborhoods.

Natural systems. Forests, wetlands and green spaces absorb rain and melting snow, slowing runoff and filtering pollutants. When development replaces these areas with hard surfaces like roads, rooftops and parking lots, runoff increases and absorption drops. Choose native species; their deeper, fibrous roots help stabilize soil and improve water filtration.

Traditional solutions. Dry and wet ponds help by collecting stormwater and allowing sediment and pollutants to settle before the water flows downstream or seeps into the ground.

Newer solutions. Residents and commercial businesses can use Environmental Site Design (ESD) and Low Impact Development (LID) techniques to integrate natural hydrology, site planning and small-scale practices to treat runoff close to its source. Examples include:



- **Rain gardens** and **vegetated swales** that absorb water and filter pollutants
- **Green roofs** and **cisterns** that capture rainwater for reuse
- **Narrower streets, fewer sidewalks** and **permeable pavers** to reduce hard surfaces
- **Bioretention ponds** and **grassy channels** that slow and clean runoff
- **Rain barrels** can hold concentrated flows from rooftops or other collection points

According to the **U.S. Environmental Protection Agency**, a typical city block produces **five times more runoff** than a forested area of the same size during the same storm.

Managing stormwater protects our environment, health and the beauty of our communities.

WHAT AGENCY MANAGES STORMWATER RUNOFF IN CALVERT COUNTY?

The Department of Public Works is the primary county agency responsible for managing stormwater runoff, enforcing Chapter 123, Stormwater Management, of the Code of Calvert County. While exemptions apply, inadequate stormwater drainage may be required to mitigate, as determined by the Planning Commission Administrator*.

This local regulation follows guidance from both the **Maryland Department of the Environment (MDE)** and the **U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS)**. These agencies provide statewide and national standards for managing stormwater. To read Maryland's stormwater design guidance, visit the Maryland Department of the Environment.



BE A STORMWATER CHAMPION!

Given the extent of stormwater infrastructure in our county, we need your help in monitoring blocked drains. Report flooded storm drains to Calvert County Department of Public Works, Highway Maintenance Division by calling 410-535-0905.



* Chapter 3, Adequate Public Facilities, Article VIII Storm Drainage System of the Code of Calvert County.