

Polluted Runoff: Solutions Frederick County, MD







Creek Releaf

https://mostcenter.umd.edu/casestories

Problem:

Since 1992 Frederick County has lost over 1,300 acres of forest from development. Forests provide important ecological services such as preventing floods, filtering polluted runoff, cooling streams, fighting climate change, cleaning the air, and creating homes for wildlife.

Solution:

Creek Releaf is a multi-year reforestation program that brings more forests to Frederick County and assists with the County's Clean Water Act permit requirements. Creek Releaf creates permanent reforestation easements and provides private landowners with native trees and shrubs and a guaranteed five years of maintenance. It also provides a payment for a permanent reforestation easement and a restriction against changes to the planted land in order to protect the parcel.

Maintenance: The County pays for the trees and the first five years of maintenance. It mows around the trees, treats weeds with herbicide, and maintains the protective tubes around the saplings.

Vibrant forests: Species planted include Birch, American Plum, Witch Hazel, Sycamore, Elderberry, Pecan, Black Cherry, Persimmon, and many more. Thus far, Creek Releaf has reforested different types of land uses including agricultural, lawn, scrub, and meadow.

Award-winning: The program won 2nd place in the 2019 BUBBA's for Best Habitat Creation through the Chesapeake Stormwater Network.



Tree tubes were placed around seedlings for protection. Tubes stop animals like deer and harsh winds from damaging young trees.



Key Project Facts

Project Location: Frederick County, MD

Type of Project: Tree planting

Scale: Over 150 acres of forests planted on private and County owned land

Cost: Approx. \$17,000 per acre planted

Funding Sources: Frederick County Office of Sustainability Capital Improvement Project and operational budget funding

Monitoring Plan: Mowed and maintained at least three times per year for the first five years. County does an official inspection at Year 1 and then additional spot checks in Years 2-5.

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BUBBA Awards: buff.ly/2TuvVdd

Frederick County site: buff.ly/2N1MJqY

What is Polluted Runoff?

The growth of our cities has resulted in too many paved surfaces, which prevent rain water from being absorbed by the ground. Instead, the water runs off streets and buildings, collecting trash and dangerous chemicals on its way. This contaminated water overflows into our streams and rivers, creating public health hazards and toxic waters.

Stormwater projects create safe paths for polluted runoff to be captured and filtered before it reaches our waterways. It keeps communities healthy and the environment clean.

When communities and their local governments work together to solve big problems like stormwater runoff, that's a story worth telling!