

Polluted Runoff: Solutions Prince George's County, MD



First United Methodist Church

Problem:

The parking lot of First United Methodist Church in Hyattsville was prone to flooding, and polluted runoff from the lot was entering the local waterway Wells Run. In addition, the parking lot experienced frequent cutthrough traffic, which created unsafe conditions for pedestrians.

Solution:

The church's lot was redesigned to incorporate permeable parking pads and rain gardens along the length of the lot. Native plantings provide wildlife habitat and function as a natural water treatment facility. The site diverts an estimated 1.9 million gallons of water per year from Wells Run. In addition to its water quality and flood mitigation benefits, the newly redesigned site also calms traffic and makes the site a safe and pleasant place.



The parking lot was continuous asphalt with flooding and no traffic controls.



Permeable pavement and natural plantings capture runoff efficiently and create a healthy habitat

Photo credit: Anacostia Watershed Society

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Key Project Facts

Type of Project: Bioretention

Scale: 49,340 square foot parking lot

Pollutants Removed: 50% nitrogen, 60% phosphorous, 90% sediment

Cost: \$744,000.00

Cost Effectiveness: \$.40 per gallon of water diverted

Funding Sources: Maryland Department of Natural Resources' Chesapeake & Atlantic Coastal Bays Trust Fund

Partners: AB Consultants. Anacostia Watershed Society, Ruppert Landscape, The Nature Conservancy

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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. They keep 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!