

# **Polluted Runoff: Solutions**

**Harford County** 



CHESAPEAKE BAY FOUNDATION Saving a National Treasure

### **Christ Our King Presbyterian Church**

### Problem:

This 50-year old church and school was plagued by periodic flooding from rooftop water runoff and an impermeable parking lot. A small retention pond on site was failing during big rains, causing neighboring residential areas to flood.

## **Solution:**

By connecting existing gutters to a 1,500 gallon cistern, the church was able to capture roof rainwater and mitigate overflow to the retention pond. Additionally, with the help of 60 church volunteers, two rain gardens were installed, providing a myriad of benefits: beautification of the church property; water uptake and filtration; provision of wildlife habitat; and an opportunity to strengthen the message of environmental stewardship with parishioners. The garden absorbs 2,300 gallons of water per inch of rainfall, improving water quality in Bynam Run. The church is now a certified Bay-Wise property via the Maryland Bay-Wise Program.



1,500 gallon cistern was installed to capture roof runoff. Water is used for irrigation.



Volunteers plant rain gardens with native plants. Photo credits: Julia Proust, Chesapeake Conservation Corps

## **Key Project Facts**

mostcenter.org/casestories

Type of Project: Bioretention

Scale: Runoff from 4000 Square foot roof

Water Diverted: 2,300 gallons per hour, per inch of rain

**Funding Sources:** Chesapeake Bay Trust, Alliance for the Chesapeake Bay and Interfaith Partners for the Chesapeake, and Christ Our King Church members.

**Partners:** Chesapeake Bay Foundation, University of Maryland Master Gardeners, Harford Community College Senior Science Society, Chesapeake Conservation Corps.

More information: https://tinyurl.com/yyr4lp65

#### 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.

Storm water 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!