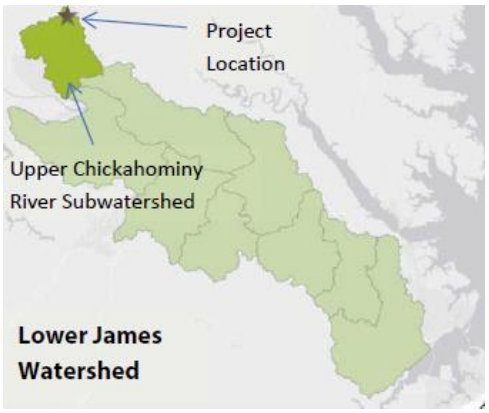
GREEN STREETS | GREEN JOBS | GREEN TOWNS INITIATIVE

The Green Streets, Green Jobs, Green Towns Partnership (G3) aims to stimulate the green jobs market and enable families to work where they live and play. Small to mid-sized communities can boost their local economies and protect water resources through the use of watershed planning, design and construction of stormwater best management practices.

LID RETROFIT FOR THE ASHLAND MUNICIPAL PARKING LOT

Ashland transformed part of an existing municipal area into a "green," low-impact parking lot using green infrastructure.



Ashland's Town Hall municipal parking lot serves as a multi-functional space for residents and visitors. Town officials and community members agreed that retrofitting the parking lot would provide an excellent opportunity for the Town to promote more sustainable stormwater runoff methods.

The 0.3 acre parking lot receives polluted runoff from rain water flowing from nearby rooftops and pavement as well as from the parking lot itself. When water hits the parking lot, it drains into the voids of a permeable interlocking concrete pavement system through 18 inches of open-graded stone. Here, it either soaks into the ground below, or drains into a commercial bioretention basin that borders the lot and, using a combination of native vegetation and specially designed soils, soaks up additional water and pollution.

The entire system is designed with enough space to capture and treat more than 91,000 gallons of rain water. This means that for the typical smaller 1-inch storm event, there's zero runoff.

In 2013, Ashland received the Dave Pearson Watershed Excellence Award from the Virginia Lakes and Watersheds Association in recognition of the Town's contribution to protecting the environment.

- 91,000 gallons of rain water can be treated at one time
- 270 ft² of rain gardens
- 100 native plants planted
- 7 trees planted
- 3,300 ft² of permeable pavement installed

PROJECT ELEMENTS

- **Permeable pavement** – Permeable pavement allows stormwater to soak into the ground. Several different kinds of permeable pavement are used at this site, allowing visitors to compare and contrast options for their own use.
- **Trees**– In urban areas a single tree can intercept from 500 to 4,000 gallons per year. Even young, small trees help, capturing 50 gallons per year. Trees not only treat stormwater, they provide a host of other benefits, including energy cost reduction in both summer (shade) and winter (proper placement can result in the reduction of energy use by 20-50%), aesthetics, property value enhancement, business traffic enhancement, and health benefits.
- **Conservation landscaping and gardens** – Native plants, which require less maintenance, capture rainwater and hold soils in place.
- **Bioretention cells** – These features filter and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system. Runoff from impervious surfaces that cannot be altogether removed or replaced with permeable pavement will be treated with this practice.
- **Educational signage** – Signage will educate residents and visitors about the various stormwater practices and features in the neighborhood.

SUSTAINABILITY & GROWTH: ADDITIONAL GREEN ACTIVITIES

Ashland has successfully promoted environmental stewardship and green initiatives. The Town has been designated a Tree City USA for 22 years and has set a goal of increasing its current tree canopy coverage to 57% by the year 2030. Town Officials have worked closely with developers to advocate LID features to reduce local flooding and runoff pollution to Stony Run – a 7 ½ mile tributary to the Chickahominy River. The Town has also invested money and time towards stream restoration efforts such as the Randolph-Macon College student-led effort to restore a heavily urbanized creek and conduct a ten-year study to determine the impacts on fish and wildlife habitat and sediment pollution.

TREE CITY USA®

Ashland now has other low-impact projects in the works, such as retrofitting the Police Department's parking lot with permeable pavers, and the resurfacing of 550 linear feet of a neighborhood street with permeable pavers and a bioretention system. Also in progress is the first phase of construction in a streetscape overhaul to help address stormwater drainage problems via bioretention systems in the Town's central downtown commercial strip along Railroad Avenue.

G3 Grant Awarded:	$25,000
Match Contribution:	$220,000
Status:	Completed

Project Partners: Town of Ashland, Chesapeake Bay Trust, U.S. Environmental Protection Agency

For additional information: visit www.epa.gov and www.cbtrust.org.