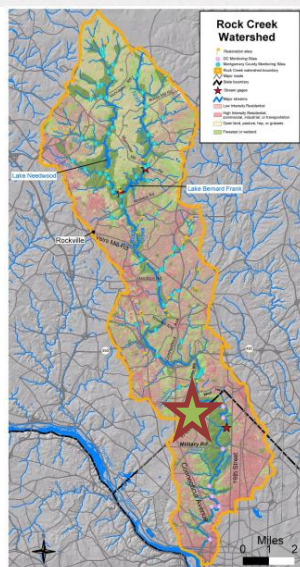




GREEN STREETS | GREEN JOBS | GREEN TOWNS INITIATIVE

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.



Audubon Naturalist Society's Showcasing Green Infrastructure at an Urban Nature Sanctuary

The Audubon Society implements stormwater features to reduce runoff in an urban nature sanctuary.

For this project, the Audubon Naturalist Society (ANS) will install and maintain a rain garden at its 40-acre Woodend Nature Sanctuary in Chevy Chase, Maryland, both to control runoff and to serve as a demonstration project for the public. Woodend is located close to the border of Washington, DC and near several urban areas. It is open to the public year-round.

urban watershed restoration and protection.” In order to achieve this goal, we must “walk the talk” by managing our own stormwater.

Approximately 1.2 acres of the 40-acre Woodend Sanctuary is impervious, including four parking areas, a long driveway, and several buildings. The bulk of our stormwater currently flows into storm drains that scour and pour sediment into feeder streams of Lower Rock Creek, which has been seriously eroded by high runoff volumes.

The project would be the second in a series of green infrastructure showcase projects that ANS is planning to install and use to inspire landowners to manage stormwater using green infrastructure on their own properties. The first project was a 1,650-square foot Conservation Landscape. The ANS Strategic Plan calls for the organization to “transform Woodend Sanctuary into the DC region’s flagship educational center that demonstrates, teaches and champions citizen engagement in



1.2 acres of impervious surface treated



1,628 ft² of rain garden



11 Green Jobs supported



1,650 ft² conservation landscaping installed



PROJECT ELEMENTS

- **Assessment** – The Center for Watershed Protection performed a stormwater assessment of Woodend Nature Sanctuary.
- **Conservation landscaping** – Native plants, which require less maintenance, capture rainwater and hold soils in place.
- **Rain Garden**– This feature filters and reduces stormwater runoff, allowing it to infiltrate into the ground. This current project is referred to as the North Side Drainage Area Rain Garden.
- **Educational Signage**– Describes the rain garden and native plants while creating a community identity and educating visitors about the other retrofits on the property.
- **Master Plan** – Woodend is currently in the process of creating a 50 year Master Plan that aims to make the sanctuary a flagship education center for nature interpretation, habitat restoration, and environmental best practices.
- **Looking forward** – By 2020 Woodend Nature Sanctuary will be accessible by the Purple Line of the Metro which will allow for a much wider audience to be reached.

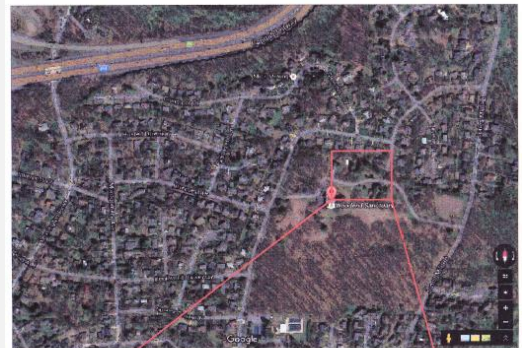
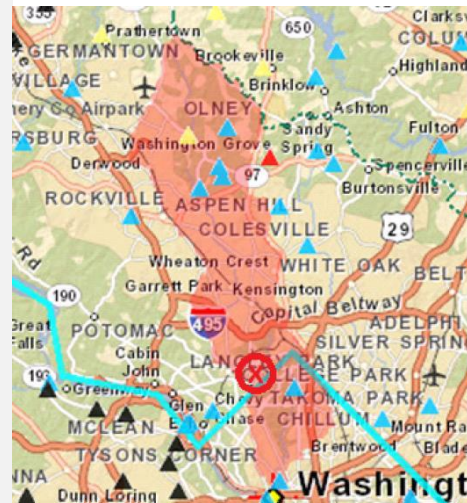
SUSTAINABILITY & GROWTH: ADDITIONAL GREEN ACTIVITIES

ANS has set a goal of capturing and absorbing 100 percent of the stormwater from Woodend on-site. We contracted with the Center for Watershed Protection for a stormwater assessment that recommended a suite of green infrastructure projects that would achieve this goal. The proposed rain garden was identified as one of these projects. The project will help meet Montgomery County's Rock Creek Watershed Implementation Plan's target of retrofitting 141 privately-owned impervious acres during the 2010-2015 MS-4 permit period.¹

It will also serve as a model for future Montgomery Parks stormwater retrofit projects, since their own MS-4 Phase II permit requires restoration projects, and many parklands have extensive mature trees in areas needing retrofits – so we have offered to partner with them, and are encouraging them to consider adapting our tree-saving design to their sites. The project will also help Montgomery County meet the following watershed-specific restoration goals and water quality standards in its current MS-4 permit:

- Achieve the Total Maximum Daily Loads (TMDLs) for sediment and bacteria for the Lower Rock Creek watershed. Rock Creek is the second highest priority watershed for Montgomery County's stormwater retrofits program, second only to the Anacostia River watershed. It is impaired based on phosphorus, total suspended sediments, and biological factors.
- Educate and involve residents, businesses, and stakeholder groups in achieving measurable water quality improvements.

G3 Grant Amount: \$49,955
Additional Funding: \$25,000
Status: Approved



Project Partners: Chesapeake Bay Trust, U.S. Environmental Protection Agency, Diane Cameron Consulting, Center for Watershed Protection