



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.

BUCHANAN GREEN STREET PROJECT - CITY OF MOUNT RAINIER, MD

Mount Rainier demonstrates effective stormwater management on its municipal grounds.



Water from Buchanan Street in Mount Rainier currently drains directly into a small tributary of the Northwest Branch. The combination of aging infrastructure and large areas of impervious parking causes significant ponding of stormwater during heavy rain events. The leadership of the City decided in 2012 it was time to solve both of these problems.

capture, retain and filter stormwater runoff. The lane diet will slow down traffic in an area frequented by children visiting the nearby swimming pool, ball fields, and nature center. Funds from this program were used to design the project, for which construction is intended within two years.

The City leaders used the Decatur Green Street in nearby Edmonston, Maryland, as a model when looking for sustainable solutions for dealing with both stormwater and flooding issues. The project plan integrates urban best management practices for stormwater management with pedestrian amenities to improve drainage, reduce water pollution, and provide a safe, attractive environment for the community. Improvements included a realigned curb and reduced lane widths to accommodate a bioswale between the roadway and pool parking. Buchanan Street will direct stormwater to the bioswale that will



90% zero run off effective rate in a 2 inch rain event



2100 ft² of rain garden



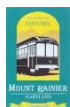
420 native plants



10 trees



1200 ft² of impervious pavement removed



PROJECT ELEMENTS

- **Bioretention cells /stormwater planters**– These features filter and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system.
- **Sidewalk trees/Tree boxes**– Native trees reduce urban heat island effect, reduce stormwater runoff, improve air quality, and increase property values.
- **Impervious pavement removal**– The existing roadway was narrowed significantly, allowing implementation of conservation landscaping.
- **Conservation landscaping** – Native plants, which require less maintenance, capture rainwater and hold soils in place.
- **Soil amendment**– Soil amendments improve water infiltration, permeability, drainage, aeration, and structure.
- **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.
- **Green Jobs and Engagement of local businesses** – Local management firms, construction firms, and suppliers were engaged in the project, supporting local jobs.

G3 Grant Awarded: \$35,000
Match Contribution: \$2500
Status: Completed 4/1/2013



BEFORE



Artists' Housing Green Roof



BEFORE



AFTER

SUSTAINABILITY & GROWTH: ADDITIONAL GREEN ACTIVITIES

The City of Mount Rainier, MD, has long understood that environmental sustainability, quality of life, and economic prosperity are related features of the most successful communities. In the early 1970s, the City committed itself to improve air and water quality and establish an environmentally friendly city.

The City of Mount Rainier used this project, which they initiated in 2010, as a launching point for a green initiative and a suite of green practices. The City recently organized a tree commission, which has taken the lead on preparing a tree inventory for the town and developing a planting and maintenance plan to protect and increase tree canopy.

The City has taken the lead in articulating its goals to be “stormwater neutral” through strong planning efforts. In 2011, the Mount Rainier Sustainability Plan was adopted. In 2013, the City published its Urban Green Infrastructure Master Plan, which presents a set of tools to be utilized when selecting and implementing projects to improve and reduce urban stormwater runoff. Neighborhoods, single blocks, and even single lots can proactively use this document to identify tools and projects that will enhance their individual areas in stormwater management. These efforts signal Mount Rainier’s continued commitment to collaboration and leadership on the environment.

Mount Rainier has also been one of the inaugural Sustainable Maryland Certified communities, a program that recognizes municipalities that implement a series of green practices from water quality implementation to renewable energy projects to citizen engagement activities.

Project Partners: City of Mount Rainier, Biohabitats, Chesapeake Bay Trust, MD Department of the Environment, U.S. Environmental Protection Agency, Low Impact Development Center