Low Impact Development (LID) Retrofit FACTSHEET:

Tenbrook Drive and Breewood Road

Sligo Creek Subwatershed Facts:

Sligo Creek is a tributary of the Northwest Branch of the Anacostia River. The Sligo Creek subwatershed is 7,404 acres (11.6 square miles) in size and the surface is approximately 35% impervious.

Property Ownership:

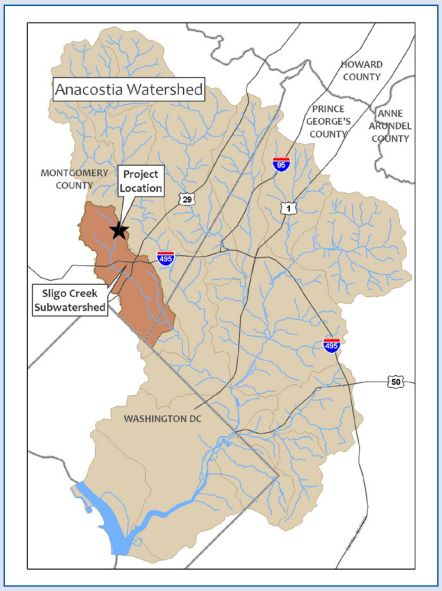
Montgomery County

Restoration Goals:

Maximize stormwater management to improve water quality treatment, encourage infiltration of runoff from parking lots, roadways and other impervious surfaces, and to fulfill the requirements in the County's National Pollutant Discharge Elimination System (NPDES) permit.

Impervious Area Treated:

3.55 acres

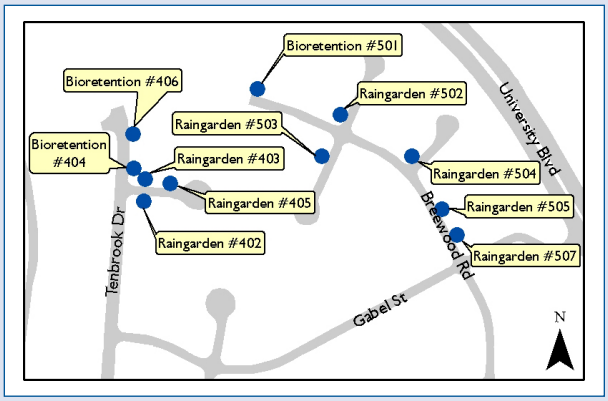


Sligo Creek is a tributary of the Northwest Branch of the Anacostia River.

Project Facts:

Total Stormwater Management LID features proposed for the public right-of-way: 11

- 3 Bioretention facilities
- 8 Rain Gardens



Existing conditions at Tenbrook Drive.

Project Status:

Construction Began July 2014 - Construction Contractor is Environmental Quality Resources, LLC

Estimated Construction Period:

July 2014 - September 2014

Project Selection

In 2009, a study was conducted by the Montgomery County Department of Environmental Protection (DEP) to develop an inventory and prioritize Low Impact Design (LID) opportunities at selected Montgomery County owned facilities and roadways. The study identified and prioritized thirty nine sites based on the feasibility of capturing and treating or infiltrating stormwater runoff. Ranking criteria for the sites included existing drainage patterns, site access, potential utility and tree impacts, soil types relative to infiltration rates and site visibility. Tenbrook Drive and Breewood Road were among the sites chosen for LID retrofits.

Pre-Retrofit Conditions

Much of the Anacostia Watershed, including the Sligo Creek Subwatershed, was developed prior to regulations that require storm water management. Impervious surfaces prevent rain water from soaking into the ground to replenish groundwater supplies, which is important to vegetation (i.e. trees) and to maintaining base flow in local streams during dry periods of the year. Increased impervious surfaces also lead to increases in both the volume of stormwater runoff and the amount of pollution that flows into local streams causing damage and erosion, often eliminating habitat for fish and aquatic organisms.

Proposed Retrofit Actions

In an effort to reduce impacts from uncontrolled and untreated runoff, DEP is constructing eleven new stormwater management Low Impact Development (LID) facilities: three bioretention facilities and eight rain gardens. Pavement removal is also proposed at the west end of Tenbrook Drive. The proposed LID facilities will provide environmental benefits, improve the aesthetics of the neighborhood and provide opportunities for local residents to become involved in improving the environmental quality of their community.

Bioretention facilities will be installed at the end of Breewood Road and near the end of Tenbrook Road. These facility will capture and filter runoff through layers of planting soil, sand and gravel prior to entering an underdrain system and ultimately into the adjacent stream channel. This

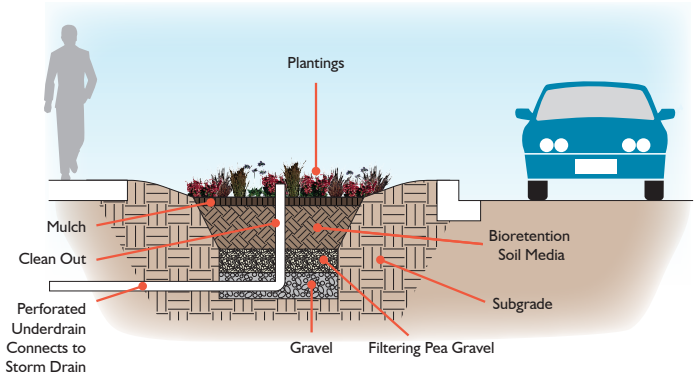
type of LID feature also promotes groundwater recharge. In order to increase the amount of available stormwater management treatment area at Breewood Road, approximately 65 feet of existing pavement will be removed. Removal of existing pavement is also proposed at the end of Tenbrook Drive.

Eight rain gardens will be constructed along Tenbrook Court, Breewood Road, Fiesta Road and Breewood Road. Rain gardens filter runoff through layers of media (similar to bioretention) but do not have an underdrain system. The filtered runoff infiltrates and recharges the groundwater supply. These facilities are generally proposed in areas where storm drain is not available to tie an underdrain system into and the existing soils have adequate infiltration rates.

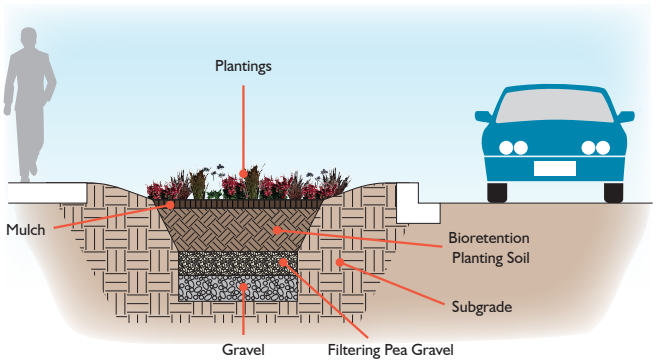
RainScapes Program

The RainScapes Program provides funding and technical resources for County property owners who volunteer to install environmentally friendly landscaping practices in their yards. RainScapes techniques are a variety of landscaping features that help to decompact soil and use plant root systems to slow down and soak in rainfall, while providing attractive landscaping with multiple benefits, including reducing the amount of stormwater runoff and pollutants from residential property. DEP has evaluated properties in the Breewood neighborhood for potential project sites. Properties with suitable locations for rain gardens, conservation landscaping, tree canopy, and other similar runoff reduction projects are eligible to sign up to have the County install a RainScapes project. Several residents in the Breewood neighborhood have already had projects installed on their property. Other residents in the neighborhood are encouraged to visit the Montgomery County Department of Environmental Protection website *(www.montgomerycountymd.gov/DEP/water/rainscapes)* to learn about having a Rainscapes project installed on their property.

Bioretention



Rain Garden



An Example of a Rain Garden

For more information:

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