GREEN STREETS PROJECT TO PROVIDE NEW INFORMATION ON MANAGING STORMWATER RUNOFF

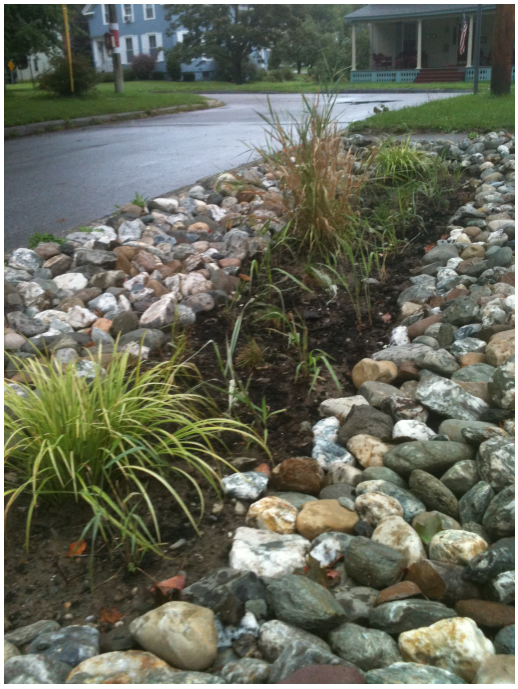
FOR IMMEDIATE RELEASE

CONTACT – Laura Killian, LCSG Land Use Planning & Water Quality Educator, lkillian@uvm.edu, (802) 859-3086 ext. 340 OR Dave Braun, Water Quality Scientist, Stone Environmental, (802) 229-5379, dbraun@stone-env.com

NOVEMBER 8, 2011, ST. ALBANS, VT – Can roadside landscaping minimize the impacts of stormwater runoff? That is the question Lake Champlain Sea Grant (LCSG) staff member Laura Killian is trying to answer through the collaborative Green Streets Monitoring Project in the City of St. Albans.

In partnership with the city, the Vermont Youth Conservation Corps (VYCC), and Stone Environmental, and funded by a grant from the Vermont Agency of Natural Resources, Killian designed and oversaw the installation of five bioretention gardens along Rugg Street in St. Albans over the summer.

A bioretention garden, or rain garden, is designed to capture and filter stormwater runoff from impervious surfaces, such as roads and sidewalks. Lack of infiltration, a common problem in urban and suburban areas, can lead to large volumes of water flowing into storm drains. In many cases, the water is then deposited directly into a nearby stream, which can cause flash flooding and a spike in sediment, bacteria, and other pollutants.



The gardens, installed at five sites along the narrow strip of property between the sidewalk and Rugg Street, were designed to infiltrate up to an inch of rain during a storm. Before the gardens were be planted, a VYCC crew excavated shallow basins. Killian then planted native, perennial plants that have the root system and moisture tolerance needed to absorb stormwater runoff, and laid landscaping fabric and stones around the plants to reduce the gardens' maintenance while maintaining public safety and aesthetics. Finally, the City of St. Albans made cuts in the curb adjacent to each garden, allowing water to flow from the street to the gardens.

This research project will measure the effectiveness of the bioretention gardens at

infiltrating road runoff. Special monitoring equipment will measure stormwater runoff volume on two parallel streets, Rugg Street, where the gardens were installed, and Ferris Street. Stone Environmental will then compare the data from Ferris Street to the data from Rugg Street to gauge the gardens' impact.

According to Killian, "This research project is the first of its kind in Vermont, where little research exists on the effectiveness of stormwater management practices, specifically for Vermont. We'll be able to use the information gained from this project to guide future decisions on how best to manage stormwater runoff."

Killian will conduct tours of the project site on Wednesday, November 9th, 11 AM – 12 PM and on Friday, November 11th, 2 – 3 PM. The tour will convene at the top of Rugg Street in St. Albans.

For more information on bioretention gardens or the St. Albans Green Streets Monitoring Project, contact Laura Killian, LCSG Land Use & Water Quality Educator, at lkillian@uvm.edu or (802) 859-3086 ext. 340.