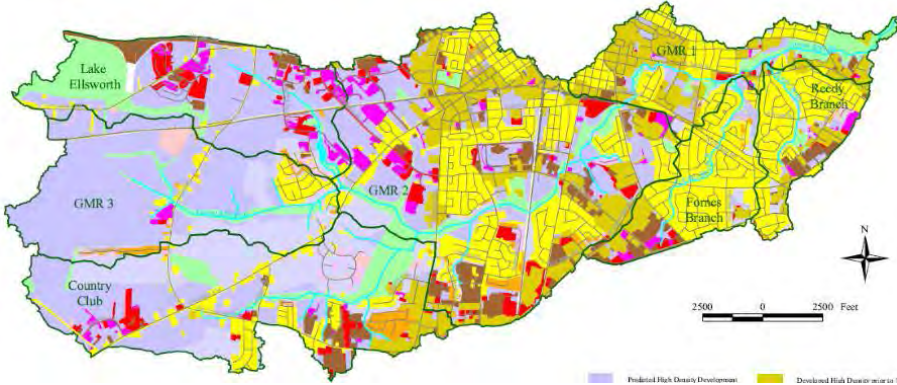


## ECU Campus Retrofits Project: 2013-2016



Green infrastructure is the use of manmade structures designed to reduce stormwater runoff generated from impervious surfaces, such as roofs and parking lots. These technologies utilize plants, soils, and natural processes to manage and create healthier urban environments.

Currently, much of ECU's stormwater drainage allows runoff to drain directly to Greens Mill Run, causing erosion, flooding and poor water quality resulting in poor aquatic habitat.

More than 70% of GMR watershed is developed. ECU is the largest landowner. A

- Constructed Wetland, 3 BRCs, Permeable Pavement designed and implemented on campus
- Inflow and outflow measured over one year
- Sample results show overall reduction in TN, TP, TSS and flow volumes.
- More than 500 students and 70 professionals utilizes BMPs as outdoor classroom during the project



Volunteers plant BRC on campus

Urban settings, like ECU's campus, pose significant challenges for installing stormwater BMPs. Available space, existing utilities, and pedestrian use are all challenges to finding suitable locations to install stormwater control measures. This project demonstrated that even undersized measures provide environmental benefits for both quality and volume control.



Created wetland and educational signage one year after construction.



The project provides ongoing learning opportunities for students, teachers, homeowners and professionals