City of Durham Small Scale Residential Stormwater Control Measures (SCM)

Durham, North Carolina



The project involved planting trees, disconnecting gutter downspouts, installing 108 cisterns, and constructing 42 bioretention SCM in residential lots to reduce nutrient concentrations in stormwater runoff.

SERVICES

Inventory & Assessments Planning Green Infrastructure Design Construction Management alls Lake was built in 1981 by the U.S. Army Corps of Engineers to provide flood control, drinking water supply, protection of downstream water quality, fish and wildlife habitat, and recreation to citizens in the region. Over the next 27 years development and stormwater runoff in the watershed began to impact water quality in the lake, and by 2008, it became listed as impaired.

A large area within the northern city limits of Durham, NC is in the Falls Lake watershed and drains to Falls Lake. The Falls Lake Nutrient Management Strategy was implemented in 2011 and requires sizable reductions in nitrogen and phosphorus concentrations of surface water flows to the Lake. In 2012 the City of Durham Stormwater Services implemented the Raincatchers project, in a strategically located neighborhood in the watershed.

The project involved planting trees, disconnecting gutter downspouts, installing 108 cisterns, and constructing 42 bioretention SCM in residential lots to reduce nutrient concentrations in stormwater runoff. Biohabitats designed three sizes of bioretention SCMs, assisted in contract bid award, and performed construction oversight on all of the SCMs installed. Biohabitats also produced the planting schedule for trees and supervised tree installation.