

Cater's Lake (Anderson, SC)

Rain Garden

Project Overview

The City of Anderson Stormwater Department recently designed and installed a rain garden at Cater's Lake Park, a popular seven-acre park located in Anderson, SC. The rain garden was installed to improve water quality in the Cox Creek Watershed by capturing and filtering stormwater runoff draining off nearby asphalt pavement surfaces before entering the lake.

The first step was to prepare the site for installation. The area was cleared and graded to allow for proper drainage. Next, a swale was dug connecting the asphalt pavement to the rain garden. Swales act essentially as drainage ditches conveying runoff from the impervious surfaces to the rain garden where it then infiltrates into the soil. Filter fabric was placed along the bottom of the garden with a gravel layer on top to aid in infiltration. The gravel layer was then overlaid with soil media and plants were installed. The plants selected were those especially suited to thrive in rain garden conditions, meaning they are both water and drought tolerant species. Examples of species included are *Coreopsis grandiflora* (Coreopsis); *Momdarda didyma* (Bee balm); *Aster symphyotrichum corifolium* (Common Blue Wood Aster); and *Asclepia tuberosa* (Butterfly weed).



Rain garden at Cater's Lake Park in Anderson, SC

Benefits

Approximately 19.5 acres drain towards the Cater's Lake rain garden and of that drainage area roughly 38% (7.43 acres) consists of impervious surfaces while the remaining land area is comprised of low permeability soils. In an attempt to improve water quality in Cater Lake and the Cox Creek watershed the City installed the 300 sq ft rain garden. Capturing this excess stormwater flowing off land surfaces helps to reduce erosion and takes pressure off the municipal stormwater system. In addition this rain garden will filter out harmful pollutants from the stormwater before it is discharged into the lake and associated tributaries. Moreover, the rain garden will add not only to the aesthetic appeal of the park but will also provide valuable habitat for local wildlife.



Rock bed intercepts stormwater and directs it to rain garden.

Costs

The total project cost was approximately \$5,600. City Staff conducted extensive research on rain garden design, installation, materials, plant species, and maintenance requirements before construction.

Maintenance

Regular maintenance will include routine monitoring of the outlet pipe to keep it clean and free of debris, regular weeding, and the replacement of plants on as needed basis.

For more information, visit www.upstateforever.org or call (864) 250-0500