



Rain Gardens

Rain gardens are an application of bioretention Low Impact Development (LID) stormwater management techniques. For the homeowner, a rain garden is a beautiful and colorful way to help ease a community's stormwater problems by promoting greater infiltration and treatment of polluted runoff.



Photo courtesy of NC State University



Photo courtesy of City of Maplewood, Minnesota

- ◆ Rain gardens are designed with deep-rooted native perennial plants, grasses, shrubs or trees.
- ◆ While rain gardens have a bowl-shaped dip to create a ponding area to catch stormwater runoff, they are not ponds and should not hold water more than 24-48 hours maximum.
- ◆ Rain gardens receive stormwater runoff from an impervious surface, such as a roof, driveway or sidewalk.
- ◆ Rain gardens have been shown to remove many of the common pollutants in stormwater.
- ◆ Rain gardens are low maintenance—no fertilizer, watering or mowing required (once established). An annual clean-up, mulch replenishment and occasional weeding is all that is required.
- ◆ Rain gardens can contribute to groundwater recharge, a natural process that is interrupted by soil compaction and hard surfaces during development and building.
- ◆ Rain garden plants create wildlife habitat and attract butterflies, birds and other wildlife.

Glynn County Rain Garden Demonstration Project

Gascoigne Park on St. Simons Island, GA is a popular destination for both tourists and residents of Glynn County. In 2006-07, the park added a picnic pavilion, fishing pier, bathroom facilities and handicap parking spaces. Not only did these improvements increase the demand at the park, they increased the amount of impervious surfaces at the park, and subsequently, the amount of stormwater runoff during rain events. To offset this increase in stormwater runoff, Glynn County decided to install a bioretention stormwater management cell, also known as a rain garden, to filter, treat and store stormwater runoff. This project was a large collaborative effort between UGA MAREX NEMO, Glynn County Public Works, Golden Isles Engineering, Georgia Department of Natural Resources Coastal Resources Division, and Glynn County Cooperative Extension.



Top-Left: Excavating the draining area of the garden

Top-Right: Amending the native sandy soil with a soil rich in organics

Bottom-Left: Glynn County Public Works staff

Bottom-Center: Just after planting

Bottom-Right: completed rain garden!

While this rain garden was highly engineered, a homeowner rain garden is much simpler and does not require heavy equipment! Check www.uga.edu/coastalnemo for more information!