

Sweetwater Preserve Parking Lot Retrofit

#### **Project Purpose**

The parking area for the west Sweetwater Preserve trailhead is located at the intersection of Williston Road and 16th Avenue in Gainesville, FL. Runoff from this area was collected in two inlets and discharged directly into Sweetwater Branch without any water quality treatment. This project fixed the failing outfall; provided water quality treatment; demonstrated the effectiveness of low impact design (LID) and Green Stormwater Infrastructure (GSI); and created a safe, attractive, and educational parking area for the Preserve.



### **How Does It Work?**

## **Treatment Train**

Runoff from the parking area is treated using a treatment train. The paved drive aisles are sloped to drain to the parking stalls which are permeable interlocking concrete pavers with a stone reservoir underneath. Once the reservoir is filled, runoff ponds in a biofiltration island between the two parking bays and filters through the pollutant-reducing media and into an underdrain.

# **Biofiltration Area**



An additional biofiltration area treats runoff from Williston Road and the parking lot entrance. The biofiltration area is landscaped as a rain garden with native vegetation. The biofiltration area is lined with an impervious liner and drains through underdrains to Sweetwater Branch. This area is constructed with four internal cells to evaluate the treatment effectiveness of different media (native soil versus a non-proprietary wood chip-based media) and internal configuration (permanently saturated versus no permanently saturated layer) in partnership with UF.



### **Education and Outreach**

The educational component of the project consists of educational signs explaining watersheds, stormwater pollution, biofiltration, and native vegetation. The two storm drains are painted with murals, selected through a public art contest, to illustrate the connections between stormwater runoff and watershed health.