



# BIOSWALES

**Bioswales** are shallow vegetated landscape areas with gently sloped sides designed to capture, convey and temporarily store rainfall. Bioswales mimic important functions of the natural environment by using a combination of gravel, soils, mulch and plants to promote: 1) recapture of eroded sediments; 2) reduction of stormwater volume by percolation into the soil, evaporation or uptake by plants; 3) uptake of nutrients like nitrogen and phosphorus by plants; and 4) natural breakdown of bacteria and pesticides.

**861,000,000,000 gallons of rainwater** fall on Sarasota County each year. Where natural landscapes are hardened by development, rainstorms can wash landscape debris, eroded soils, fertilizer-based nutrients, pesticides and bacteria off the landscape and into our waterways. There, it

can trigger harmful algae blooms, damage seagrass, kill fish and other aquatic life and endanger human health. Bioswales are an attractive, effective, low-cost solution for stormwater and water quality management.



**Top** A bioswale in front of the Marathon station on Fruitville Road captures and filters runoff. **Above** A variety of Florida friendly plants can be used in bioswales including muhly grass, common tickseed, blue flag iris and sunshine mimosa.

**Honore Avenue** hosts a series of connected bioswales that capture runoff from roadways and adjacent neighborhoods. These bioswales reduce the amount of sediment and pollution entering Phillippi Creek.



**Brother Geenen** was transformed from an ugly ditch into an attractive greenway, creating a pedestrian and bike friendly habitat corridor. These bioswales capture stormwater from the Laurel Park neighborhood and US 301, preventing it from entering Hudson Bayou and Sarasota Bay.



**BEFORE**



**AFTER**

**Ringling Boulevard** features a network of interconnected bioswales designed to intercept downtown stormwater pollution before it reaches the bayfront. These bioswales reduce nutrient pollution and the volume of freshwater entering Sarasota Bay, improving habitat for fish, scallops and oysters.



For more information about bioswales, contact Sarasota County Government or our partners: