



BIOSWALE

Above: A bio-swale in front of the Marathon station on Fruitville Road captures and filters runoff. A variety of Florida friendly plants can be used in bio-swales.

Bio-swales are shallow vegetated landscape areas with gently sloped sides designed to capture, convey and temporarily store rainfall. Bio-swales mimic important functions of the natural environment by using a combination of gravel, soils, mulch and plants. Bio-swales recapture the loss of eroded sediments and promote the reduction of storm-water volume by percolation and evaporation. Plants and mulch in bio-swales uptake nutrients like nitrogen and phosphorus; they also create a natural breakdown of bacteria and pesticides to keep our waterways clean and healthy.

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. Bio-swales are an





Ringling Boulevard

features a network of interconnected bio-swales designed to intercept downtown storm-water pollution before it reaches the bayfront. These bio-swales reduce nutrient pollution and the volume of freshwater entering Sarasota Bay; improving habitat for fish, scallops and oysters.

For more information about bio-swales, contact
Sarasota County Government or our partners:



'Adopt-A-Bio-Swale' proposals:

- 1) City of Marco Island has allowed residents and businesses to "Adopt" Cul-De-Sacs and Medians. This proposal would allow Swales to be added to that list.
- 2) Adopt-A-Bio-Swale would be a Trial/Pilot Program for either 1-year, or for the first approved (5) Bio-Swales (whichever occurs first). After which point, this Bio-Swale Program would either be renewed annually or permanently. At which time, any issues can be addressed and corrected.
- 3) University of Florida (Collier Extension Office) would need to verify that plants are 'Florida-Friendly' and that the design is a Bio-Swale.
- 4) Beautification Advisory Committee would verify that applicants' design would enhance the beauty of Marco Island.

“Adopt-A-Bio-Swale” Permit Proposed Requirements:

- Plants must be ‘Florida-Friendly-Plants,’ or Certified as ‘Florida Friendly’ by the University of Florida Collier (County Extension Office).
(An incomplete list of these plants can be found at: FloridaYards.org).
- Bio-Swale Design must be certified by the University of Florida (Collier County Extension Office) to fit the criteria of Bio-Swale.
- Beautification Advisory Committee must consider all permit applicants to verify that proposed Bio-Swale would enhance the beauty of Marco Island.
- Permit Applicant Must Sign a Right-Of-Way Planting Agreement (Letter of Responsibility) that specifies that City Of Marco Island can remove some or all of these plants if needed for utility or road improvements. Furthermore, Permittee shall be responsible for all maintenance of these plants.
- Must call the utilities hotline to have utilities flagged.
- City verifies that no large plants are planted within 10’ of supply line, wastewater pipes (both gravity or force-main), or reuse water pipes.
- City verifies that trees, and large plants over 3’, do not interfere with line of sight triangles.
- City verifies that no non-groundcover plants are planted in the flow line of swale.