

Reduce Water Pollution with Bioswales and Rain Gardens

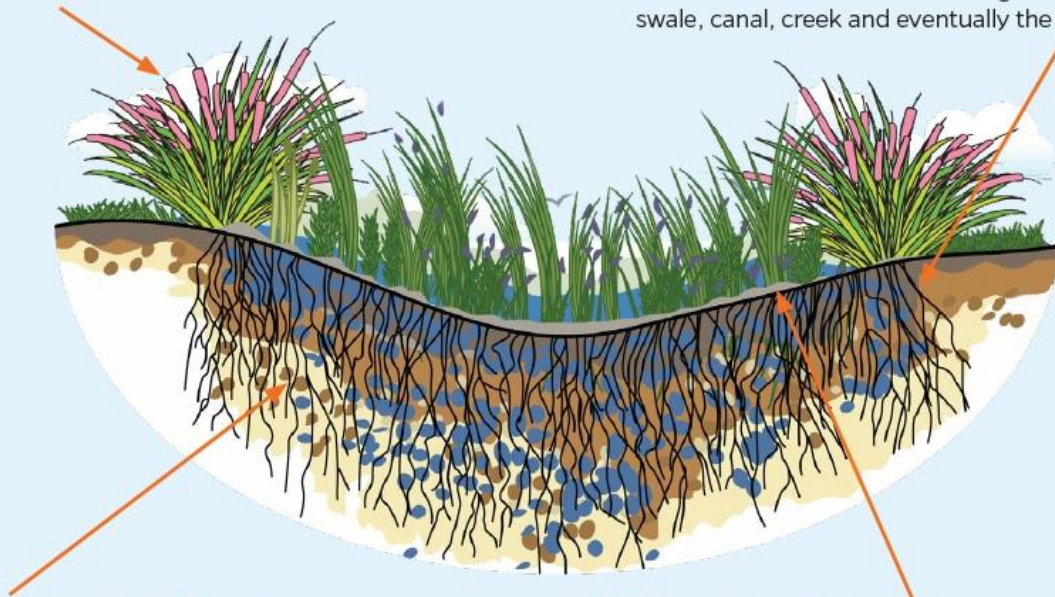
Bioswales and Rain Gardens are an alternative to turf stormwater drainage ditches using native vegetation. Water is slowed down so that it can be naturally filtered and stored, reducing pollutants to larger bodies of water. In addition, you can convert unsightly, difficult to mow drainage areas into attractive landscaping that benefits wildlife.

Native Landscaping Provides Habitat

Deep-rooted native plants build soil structure and allow water to infiltrate into the ground more easily than nonnatives. Native plants are low maintenance, adapted to Florida climate and rainfall patterns, and resist local pests and disease. They also provide habitat for native pollinators, birds and other animals.

Cycling Nutrients and Reducing Contaminants

Native plants have a tremendous root architecture that builds soil quality and increases organic matter content. High organic matter content helps soil hold water like a sponge, allowing for chemical transformation, plant uptake and soil adsorption. These functions help to clean the water before it moves down-gradient to the next swale, canal, creek and eventually the bay.



Soil Amendment Leads to Higher Infiltration

Along with native plantings, soils topped with 2 inches of pea-sized gravel may be needed to facilitate infiltration. If 2 inches cannot be spread across the swale, consider a rock trench down the center of the swale. Water infiltrated through bioswales helps recharge groundwater, which supplies creeks, streams, and wetlands with a slow, purified seep rather than surges of polluted surface runoff from roofs and other hard surfaces.

Mulch Protects from Erosion

All natural coconut fiber mats can be installed along the banks of the swale to protect from erosion and to inhibit weeds. The coconut fiber mat will break down over a few months, just enough time to get your plants established. Pine straw makes a great bioswale mulch. Pine straw mulch also has a better ability to stay in place compared to no-float mulches, which can move down the slope with the water flow.

Visit gardeningsolutions.ifas.ufl.edu for more information

Diagram by the Sarasota County UF/IFAS Extension <https://sfyl.ifas.ufl.edu/sarasota/>

Bioswale and Rain Garden Landscape Plants

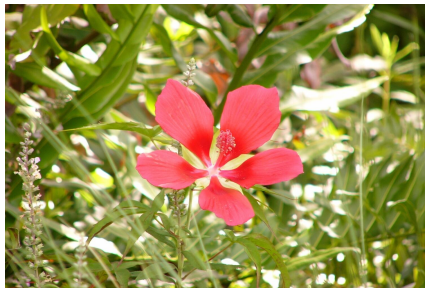


Carolina Willow

Long-lived native deciduous tree. 25-60 ft tall by 20-40 ft wide. Full sun. While generally a swamp plant, this tree can grow in uplands. Is often used in stream bank restoration. **Larval host plant for the Viceroy Butterfly.** Sends up multiple shoots from the ground. Excellent choice for screening along storm drainage areas or as a background plant in a rain garden or bioswale.

Yellow Canna Lily

A wetland wildflower growing 3'-6' tall that forms colonies. This plant prefers full to part sun and requires a consistently moist soil to thrive. They bloom with wonderful yellow flowers in late Spring and early Summer. These plants are wonderful nectar sources, but are also **hosts to the Brazilian skipper butterfly** and also provide habitat for dragonflies and other insects. Plant them near the edges of a pond or other moist areas of the landscape for a beautiful show of flowers.

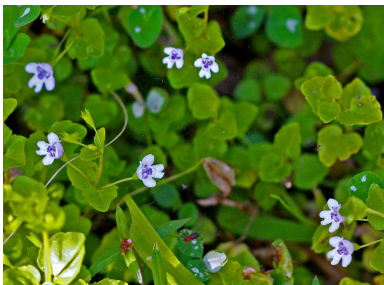


Scarlet Hibiscus

A long-lived deciduous perennial wildflower. It grows 5'-8' tall and about 2'-4' wide, and tolerates full to part sun. This plant requires a moist soil, but offers a beautiful spectacle of large, scarlet flowers throughout the summer. This plant can be maintained as a potted plant if properly cared for, but it does best on the edges of ponds or consistently moist areas.

Blue Flag Iris

A clumping perennial with striking deep purple to lavender iris flowers in spring. Spiky, 2-4 foot leaves add a nice texture to the garden, especially when grouped in front of shrubs. Can live in standing water but is also happy in moist soils above the water line. Prefers part shade but can tolerate full sun. Attracts butterflies, bumblebees, and long-horned bees.



Brown's Savory

Long-lived evergreen native groundcover. Likes wet soils and full to partial shade. Only reaches about 0.5ft tall and indefinitely spreads. Very minty aroma when disturbed. Whitish-purple flowers are very attractive to pollinators. It can be used to make a tea or to add mint flavor to a salad or other dish. **NOT DROUGHT TOLERANT.** Plant in areas that will stay moist year round.

Sweetbay Magnolia

A medium to large tree growing taller than broad up to 70 feet or more. Best located where the soil is always moist. They are **NOT** adaptable to average to dry soil. The 7 inch leaves are leathery, medium green above and silvery white underneath. The leaves are aromatic if crushed. It is a larval host plant for Eastern tiger swallowtail and palamedes butterflies. Attracts beetle and moth pollinators. Full-part sun and moist soil.

