



GREEN INFRASTRUCTURE, IS THAT YOU?

What filters water pollutants, reduces flooding potential, recharges groundwater, enhances water conservation, and creates habitat for birds, butterflies, and other wildlife? If you guessed Green Infrastructure, you are correct! Green infrastructure is a valuable tool for improving stormwater quality and management, as well as buffering the effects of climate change. Let's dive in!

What is Green Infrastructure

Green Infrastructure (GI) is about constructing and retrofitting storm drainage systems to mimic natural processes by enabling stormwater to infiltrate the soil, rather than to runoff into storm drains and pipes. Think of GI as a kind of engineered wetland, removing pollutants as stormwater infiltrates the soil and plant roots to become groundwater. GI or low impact development (LID) facilities are becoming increasingly common but are subtle so you may have overlooked them in your community... rain barrels, rain gardens, tree wells, bio retention basins, and bio-swales are all considered types of LID or green infrastructure. GI filters stormwater, but it also reduces air and water pollution, while enhancing communities' quality of life.

Environmental Benefits

As the many forms of Green Infrastructure are nature-inspired, they have multiple benefits besides stormwater quality and management! GI can contribute to climate regulation through improved air quality and reducing the "urban heat island effect" by providing more shaded areas when trees are included. In addition, the plants growing in rain gardens and bio-swales can also help to improve air quality by absorbing and filtering particulate matter, especially around roadways where GI features are often located. A well designed GI can also provide homes for a variety of insects, birds, and even small frogs.

Social Impact

Not only does Green Infrastructure enhance our local environments, but it also has positive social and economic impacts, especially in disadvantaged communities. When compared to conventional "gray infrastructure," GI creates green jobs and reduces municipal water usage and cooling costs. Green infrastructure can also have positive impacts on social determinants of health because the additional greenery creates a space for recreation, exercise, and to see wildlife.

Green Infrastructure is becoming a standard element in landscape design because of how beneficial the elements are proving to be. However, it can only do so much to protect our local water quality by itself. When you partner with it by doing your part to help keep our Bays and creeks litter free by picking up trash, properly disposing of pet waste, and utilizing eco-friendly yard products, we can have the best and greatest impact. Learn more about stormwater, green infrastructure, and reducing pollutants at www.cccleanwater.org.