

**Environmental Challenge :** Thousands of miles of canals have been cut into Florida's coastal landscape, particularly in the southern portion of the state. Residential canals are artificial waterways that provide boating access to intracoastal waterways, lagoons and the ocean, but are relatively shallow in depth. Most residential canals are hardened with seawalls, bulkheaded or lined with revetments, which prevents mangroves from naturally growing along canal embankments. Without mangrove trees there is limited habitat to support fish, birds and crustaceans. Additionally, mangroves are the natural members of the estuary system that remove pollutants and nutrients, stabilize bottom sediments, improve water quality and reduce turbidity, thereby promoting and maintaining a healthy marine ecosystem.

Mangroves provide a link between marine and terrestrial ecosystems and are also important to the wellbeing of various complementary ecosystem, including seagrass beds, salt marshes and reefs. Due to the hardened structures that typically line canal embankments, mangroves cannot naturally establish and grow; as a result, residential canals have typically not been able to benefit from mangrove development.



## Take Action for the Environment — What You Can Do

**Environmental Solution :** As a waterfront property owner you can participate in the mangrove planting program.



The establishment of reproductively mature mangroves along seawalls, rip-rap and revetments is accomplished through Riley Encased Methodology™ (REM 2010), which enables young mangrove seedlings to adapt while absorbing nutrients from the canal, maintaining water quality, and providing habitat for a wide range of marine life.

Planting mangroves along canal frontage offers a number of options regarding the location of the trees and practices in pruning growth. In order to maintain an open view of the water, the typical pruning technique has been to trim mangroves into a hedge; however, mangroves are hard wood trees and it is our recommendation that they be pruned similar to oaks, that is, prune the mangrove to create a high canopy of healthy foliage.



Because natural recruitment does not occur along most seawalls, the mangroves we plant will be the only vegetation at your seawall. By considering the placement of each mangrove tree relative to buildings and docks, mangroves will benefit the environment and enhance a great view of the water.



Mangroves pruned with a high canopy will provide shade along the seawall that will further enjoyment of the waterfront.

Ultimately, as the REM planted mangroves mature, they create habitat for fish and birds, stabilize sediments, and clean the water of a variety of harmful pollutants.

