



The difference Sea & Shoreline can make on an aquatic ecosystem

## Oakland Park Resident RESTORES FLORIDA'S WATER BODIES

By Heather Herold, Oakland Park Resident and Staff Writer

We've all seen the news headlines claiming another Florida water body has fallen victim to algae blooms. The blooms are toxic, not only to fish, wildlife and people, but also to property values, ecotourism, commercial fishing, and local economies. One Oakland Park resident has made it his company's mission to restore Florida's waters to healthy, sustainable aquatic ecosystems.

Since 2014, Jeff Huenink and his cofounders at Sea & Shoreline have been awarded some of the most significant projects in the state including the restoration of Crystal River, the Indian River Lagoon, the Caloosahatchee River, and most recently, the Homosassa River.

"Using patented technologies and innovative processes, our goal is to transform algae-based bodies of water into plant-based systems," says Huenink.

"Healthy aquatic ecosystems need sunlight, submerged aquatic vegetation (SAV), and an appropriate balance of nutrients to survive. When they are in balance, they are self-sustaining, but unintended human intervention can turn our beautiful bodies of water toxic to both humans and wildlife."

This natural balance can be shifted by stormwater runoff, herbicides, pesticides, septic tanks, leaking sewer systems, and

industrial waste that overload the water with excess nutrients and harmful chemicals.

These excess nutrients promote the growth of nuisance plants and algae blooms. The invasive plants and algae can take over an aquatic ecosystem, prevent sunlight from reaching native plants, and release sediments in the water. The unbalance strips oxygen from the water column, which suffocates aquatic life. Decomposing fish then release methane gas, which smells like rotten eggs. This methane gas and decomposition negatively impact aquatic plants and can contribute greatly to climate change. The lake then shifts to an algae-dominated system, becomes stagnant, and can no longer provide food, habitat or enjoyment for fish, animals, or humans.

Such was the case with our own Lake Apopka, which sits at the feet of Oakland Park. Spanning over 50 square miles, Lake Apopka is Florida's fourth-largest lake and was once a top tourist destination. Anglers traveled from all over the U.S. to fish here for trophy-sized bass, and 21 fish camps lined the lake's shoreline. Today, the lake's chronic algae problems, which stemmed from decades of water discharges (rich in harmful nutrients) into the lake from nearly 28 square miles of farms at the lake's north side, have resulted in the loss of the lake's recreational value and game fish populations.

"The good news is that unbalanced aquatic ecosystems can be reversed and algae-dominated water bodies can be restored to clean, clear water bodies again," says Huenink. To restore a lake, river, estuary, lagoon, or canal to a healthy ecosystem, Sea & Shoreline dredges the bottom to remove muck caused by decaying vegetation and animals, plants SAV, protects it from being eaten or uprooted until it can survive on its own, maintains it, and monitors its growth and success for several years. The company operates the largest upland seagrass nursery in the world with over 250,000 plants and guarantees their work.

The established SAV stabilizes the sediment, oxygenates the water, filters and stores excessive nutrients, and cleans the water allowing sunlight to reach the plants on the lake's bottom. The clearer water creates conditions for the water body to then become self-sustaining.

The lake is restored to a sustainable healthy state with a clean bottom, clear water, and flourishing plants that provide an abundance of food, protection, and habitat.

"We love creating more places and opportunities for people to enjoy Florida's springs, lakes, and rivers," says Huenink.

In addition to aquatic restoration, Sea & Shoreline also restores propeller scars, and creates oyster and coral reefs, living shorelines, vegetated retaining walls, seagrass mitigation banks, and more.

For more information, visit [seaandshoreline.com](http://seaandshoreline.com) or follow the company on Facebook, Instagram, LinkedIn, or YouTube.

Check next month's issue for another story about plans to clean up Lake Apopka.



Manatees enjoy clean water and eating seagrass in Crystal River, FL



Oakland Park Resident Jeff Huenink of Sea & Shoreline



Sea & Shoreline biologist plants seagrass in the river



Sea & Shoreline diver dredges a river to remove muck from the bottom



Getting ready to plant seagrass which will help to clean the water



Crystal River residents enjoying their restored estuary