



## Shoreline Erosion Control

### Protect Lake and Pond Banks and Shorelines

Shoreline erosion is a common, natural phenomenon that can occur as a result of harsh weather, recreation, poor landscape design or, simply, an aging freshwater ecosystem. If left unaddressed, your lake, stormwater pond or canal may experience native vegetation and habitat loss, nutrient loading, excess runoff and other complications. There are a variety of shoreline erosion restoration solutions available including rip-rap, bulkheads and coconut fiber logs. These solutions may be a fit depending on your needs and budget, however, SOLitude's recommended and premium erosion control solution is the SOX system.

### Bioengineered Living Shorelines and Hillsides

SOLitude Lake Management® is proud to provide SOX Erosion Solutions™ in our suite of erosion control products. The patented SOX system provides an innovative, eco-friendly solution that halts hillside and shoreline erosion while immediately stabilizing shorelines and hillsides, creating a natural foundation for vegetation.

**The SOX System is warrantied to provide at least 5 years of stabilization and is:**

- An excellent solution for re-stabilizing and restoring the shores of waterbodies in communities and golf courses.
- Made from a combination of ecofriendly, biodegradable burlap fabric and heavy-duty knitted mesh.
- Immediately effective in filtering and buffering run-off water, removing harmful contaminants and benefiting waterways, all while providing ongoing erosion control.

The SOX system is typically filled with organic compost or pond sediment. SOLitude's hydro-rakes complement this technology, as we can utilize material within the waterbody to fill the SOX system.

Once filled and secured, a native buffer of beneficial vegetation can be planted or sodded through the mesh and fabric layers.



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*I was impressed with how fast this project was completed and how reasonable the cost was. We are stewards of our environment and I value the like-minded commitment to Best Management Practices.*

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**Nate Watkins**

Golf Course Superintendent, Delray Beach, FL



## Erosion Control Using SOX System: Before, During and After



### Utilizing Hydro-Raking and Hydraulic Dredging

One of the many benefits of SOX systems is that they are designed to contain dredged materials. There are several ways to fill these systems with organic material but the most cost-effective methods are through hydro-raking and hydraulic dredging.

Utilizing the sediment at the bottom of your lake or pond achieves two goals:

- Increases depth and the lifespan of your waterbody.
- Provides the organic material to fill the SOX system without the need to drain the waterbody or ship the material off-site.

With the hydro-rake, sediment is scooped up and placed directly into the SOX system. Similarly, the hydraulic dredge breaks up the organic matter at the bottom and pumps it through a pipeline and directly into the system.



### The Importance of Maintaining A Vegetative Buffer

No matter the type of erosion problem you're facing, it's extremely important to cultivate a beneficial vegetative buffer around your waterbody. Buffers are simple to maintain and help keep sediment in place during rainstorms. They're also known to provide a plethora of benefits beyond erosion control, including nutrient filtration and aesthetic enhancement.

Whether you want to address an existing erosion problem or reinforce the strength and appearance of your aquatic ecosystem, it's important to stay ahead of sedimentation problems using buffer management and shoreline erosion control strategies.

