

Georgia is home to more than 368,000 acres of protected marshlands. These marshes provide habitat for a variety of species, from shrimp to egrets to terrapins.

The marshes also protect people and property from the effects of damaging storms, like hurricanes and nor-easters. When these storms pass through the Georgia coast, they can alter shorelines, sometimes causing erosion. Erosion, caused by strong currents and battering waves, can lead to changes in the shape of shorelines. These changes may result in the loss of upland, concerning property owners.

In the past, people have used a variety of man-made structures to protect against erosion. Structures like bulkheads and rock revetments, also known as rip rap, have been placed in erosional areas to prevent property damage.

But since 2006, some locations in Georgia have chosen a new, more environmentally friendly way to prevent erosion called “living shorelines.”

Living shorelines provide an alternative to conventional armored shores like bulkheads and rip rap. They use bioengineering combined with native vegetation to stabilize or enhance wetland habitats.

These nature-based structures are constructed by the placement of bagged oyster shell along the shoreline and by planting native plants in the intertidal and supratidal zone. Mesh netting and lining secures the oyster bags to the bank. Because they mimic natural shorelines, they also provide upland and aquatic habitat for estuarine life, including the eastern oyster – which is keystone species to the marshland ecosystem. The habitat provided by living shorelines is an important feeding and nursery habitat for fish, including the state saltwater gamefish, the red drum.

Living shorelines can also trap and retain land runoff. Native plants are a part of living shoreline construction. It is important to include buffer plants that filter run off from the upland so that fertilizers do not enter the water and runoff does not increase turbidity.

Once these living shorelines are established, other live oysters found naturally in the ecosystem will attach to them and grow, further protecting the shoreline and supporting other marine life like shrimp, blue crab and flounder.

You may think that living shorelines might be more expensive than traditional erosion control methods, but in fact, they are often equal to or less expensive than the cost of bulkheads and rip rap.

With changes to our landscape caused by sea level rise, more and more coastal residents are opting for living shorelines to protect their property and provide essential habitat for marsh species.

To learn more about living shorelines, visit [www. Coastal GA DNR .org](http://www.CoastalGA.DNR.org) .

<https://coastalgadnr.org/>