

KIAWAH ISLAND - Living Shoreline Restoration

Year Constructed
2018

Client
Kiawah Island
Community Association

Reinforcement
Earth Anchors

Vegetation
Hydroseed

Engineer
Robert Race, P.E.
Envirolok Consulting Engineer

+ Project Snapshot

The Kiawah Island Community Association was looking for a sustainable solution to erosion issues that improved water quality and created natural habitats. For an inlet off the Kiawah River, water flow scoured the banks and soil was eroding quickly, pushing the shoreline beyond the adjacent residential property, putting land and infrastructure at risk. No hard armor would be permitted in this critical zone and the desired solution needed to be vegetated. Envirolok creates a permanent living solution that is perfect for this unique coastal environment. Due to limited accessibility, existing trees, and the fragile ecosystem, Envirolok worked best due to its flexibility and minimal construction footprint. Envirolok engineered a solution that incorporated earth anchors to give added stability and shear strength to withstand the forces of large tropical storms. Existing oyster "reefs" were left at the canal's base to prevent future scouring, essentially creating a living form of armor. Plant species were carefully selected for the tidal zone, and the entire system was hydroseeded for vegetation development.

