



DEBIDUE GROINS II

This groin on Hunting Island State Park shows how the beach updrift of the structure appears healthy, whereas the downdrift beach has experienced significant exacerbated erosion.

CASE BRIEF

SCELP is challenging a permit granted by SCDHEC to construct three groins on Debidue Beach in Georgetown County.

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On behalf of the Coastal Conservation League, we filed an appeal before the South Carolina Administrative Law Court to overturn a permit granted by the state’s Department of Health and Environmental Control to construct three groins on Debidue Beach in Georgetown County.

The proposed groin system would be located on the southernmost end of Debordieu Colony Community Association’s property, with the southernmost groin located on the boundary with Hobcaw Barony, the Baruch Foundation property that is home to the North Inlet-Winyah Bay National Estuarine Research Reserve.

Groins are hard shoreline stabilization structures that extend into the ocean and are designed to trap and hold sand on eroding beaches. But by trapping and holding sand, groins rob downdrift beaches of that sand supply.

This process triggers a domino effect: When one groin is installed, another will be needed at the beach downdrift, and eventually another at the next beach downdrift, and so on until the beach is covered in a groin field.

In fact, the U.S. Army Corps of Engineers describes groins as “probably the most misused and improperly designed of all coastal structures” because they contribute to erosion and decreased beach width on the downdrift side of the groin.

“Constructing three massive groins on a stretch of fragile beach would absolutely cause irreparable harm — for downdrift beaches, for wildlife, and for one of the country’s last remaining pristine estuaries,” the Conservation League’s Laura Cantral said.

“Up and down the coast and in Columbia, we will continue to fight more attempts to meet climate change and sea level rise with hard structures that jeopardize the present and future health of our beaches.”

As we did in 2011, the last time Debordieu Colony sought to construct a new groin field, we trust we will ultimately succeed in overturning the authorization for this unwise and destructive project.



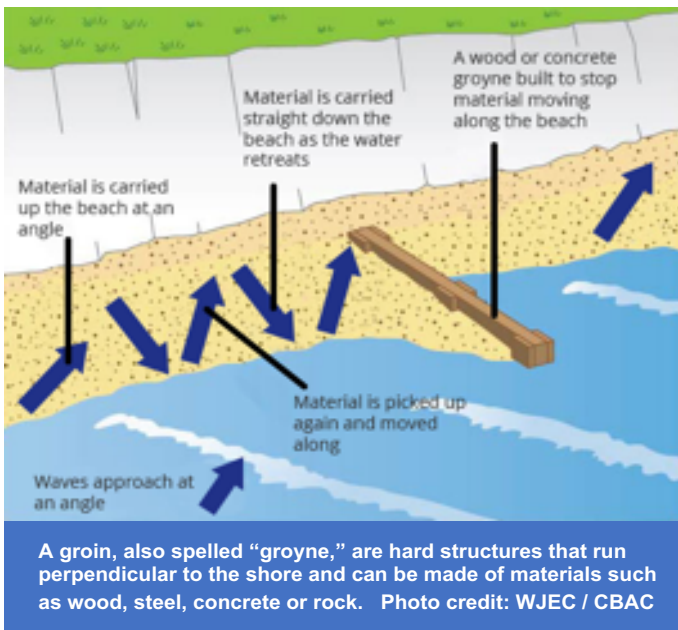
THE PROBLEM WITH GROINS

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How Groins Work

The purpose of a groin is to keep the beach in place for structures directly behind it. Working as designed, these structures trap sand and other sediment transported by the natural process of longshore drift. However, while the updrift side of a groin holds more sand, the downdrift side is deprived of its naturally replenishing sand.

In this way, **groins exacerbate erosion on downdrift beaches**, interfering with natural sand transport and increasing exposure to storm threats. What’s more, the public loses beach access and wildlife loses habitat.



Coastal Geologist Rob Young, PhD, the director of the internationally recognized Program for the Study of Developed Shorelines, states: **“Groins are costly and of dubious value. Protecting a small number of properties ... is not worth the risk to downdrift private property.”**



“Interrupting longshore transport can have disastrous results.”
— Dr. Young

A Losing Battle

Constructing groins along our beaches will not protect communities in the face of rising seas, worsening storms and extreme weather.

South Carolina’s Coastal Zone Management Act recognizes that “Erosion is a natural process which becomes a significant problem for man only when structures are erected in close proximity to the beach/dune system. It is in both the public and private interests to afford the beach/dune system space to accrete and erode in its natural cycle. This space can be provided . . . by *encouraging those who have erected structures too close to the system to retreat from it.*” S.C. Code Ann. § 48-39-250(6).

Coastal communities must be informed that hardening our beaches is not a long-term solution to a dynamic, moving shoreline, and at best only buys time between recurring renourishment projects.