## Legislators vs. shifting sands

BY ROB YOUNG AND ORIN PILKEY Raleigh News & Observer June 20, 2011

Senate Bill 110, which would allow the construction of groins along the North Carolina shore, has been returned from a conference committee and the compromise bill passed both houses on June 14. We are disappointed that it has gotten this far.

Groins are shore-perpendicular structures designed to interrupt sediment flow along the beach. They trap sand on one side and cause erosion on the other. Proponents argue that the groins to be permitted under this bill ("terminal groins") are a different kind of animal. They hold sand but do not cause downdrift harm.

The scientific community is not buying it. In testimony presented during early iterations of the legislation, North Carolina's coastal geologists (save one) opposed permits being granted for these groins from a scientific perspective. So we have learned an important lesson about the importance of science in today's policy making.

True, the coastal engineering community supports building terminal groins. But coastal engineers sell groin designs. We do not believe that our friends in the engineering community would purposefully advocate for a structure that they believe will harm beaches. We are also firmly convinced that they are limited by the tools in their own tool kit. Ask most engineers what to do about an erosion problem and the answer will be: "Engineer it!"

We find some solace in the fact that the bill provides language for the construction of terminal groins that ensures that they could never be permitted. The most important subsection is the following: The applicant shall provide "Information to demonstrate that structures or infrastructure are imminently threatened by erosion, and nonstructural approaches to erosion control, including relocation of threatened structures, are impractical."

We think this standard will be impossible to meet. Beach nourishment or moving an inlet channel will always be a "practical" alternative to building a terminal groin. How could one argue that it is absolutely impractical to continue to nourish the beach in front of threatened properties?

In fact, we believe that paying for a terminal groin is impractical. A recent study by Andrew Coburn of the Program for the Study of Developed Shorelines at Western Carolina University concludes that any benefits that may be provided by terminal groins in protecting a small number of imminently threatened investment homes from erosion are unlikely to outweigh the costs. Coburn's report shows that using taxpayer or private funds to support the tax value of the relatively small number of threatened properties simply will not provide enough bang for the bucks.

Also, we can't wait to see a thorough economic analysis of the practicality versus impracticality of moving those "imminently threatened" structures. This idea is typically dismissed in project Environmental Impact Statements as a non-starter. A serious analysis, if required by the Coastal Resources Commission during the permit-granting process, might just show how practical the idea is. The number of imminently threatened structures is smaller than you might guess - and their monetary contributions to the community are even smaller.

The bill also requires that "Construction and maintenance of the terminal groin will not result in significant adverse impacts to private property or to the public recreational beach." Again, we believe that this is an impossible threshold to cross. We are supported in this belief by the weight of scientific expertise in North Carolina.

A state-funded study completed last year demonstrated that there are winners and losers from terminal groin construction. The bottom line is that, while it may hold the tip of an island in place, a terminal groin will do so for the benefit of only a small number of property owners, and the study showed that some down-island areas clearly experienced an increase in erosion. All the shorelines "protected" by terminal groins examined in the study still required massive beach renourishment.

We are still mystified as to why the vast majority of coastal property owners who chose to live and invest away from the obvious risk of our shifting inlets would want to spend their money (and place their own property at risk) to protect those who made a poor investment choice by building in inlet hazard areas.

For almost three decades, North Carolina has been a leader in wise, science-based coastal management. This bill abdicates that position. We hope the governor will pull out the veto pen and ask the legislature to reconsider.

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