

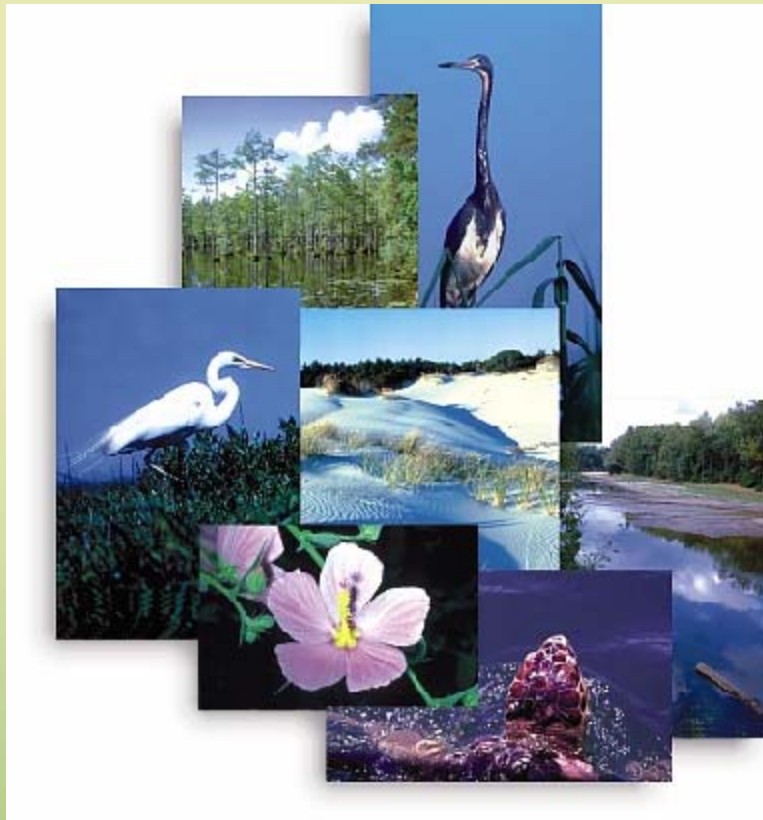


North Carolina Coastal Federation

CITIZENS WORKING TOGETHER FOR A HEALTHY COAST



North Carolina Coastal Federation



- *Founded in 1982*
- *10,000 Citizen Members*
- *200 Affiliated Groups*
- *Staff of 18*
- *28 Board Members*
- *One of NC's Largest Coastal Non-Profit Conservation Organizations*

• *Advocacy* • *Education* • *Restoration/Preservation*



North Carolina Coastal Federation

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Mission: To provide citizens and groups with the assistance needed to take an active role in the stewardship of North Carolina's coastal water quality and natural resources.

Citizens Working Together for a Healthy Coastal Environment



North Carolina Coastal Federation

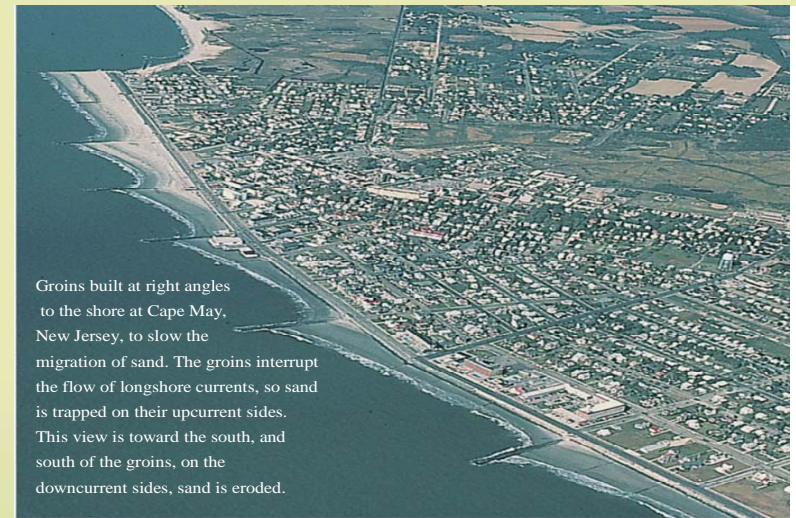
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Beach Erosion



- Erosion is a natural part of our coast and barrier island complex
- Need a coast-wide strategy that combines resources and planning
- Re-nourishment of sand just a stop gap
- Sand sources and costs are limiting factors
- Need strategy for incentives to relocate to more stable areas
- Need to discourage building in high hazard areas like inlet zones

Terminal Groins



Groins built at right angles to the shore at Cape May, New Jersey, to slow the migration of sand. The groins interrupt the flow of longshore currents, so sand is trapped on their upcurrent sides. This view is toward the south, and south of the groins, on the downcurrent sides, sand is eroded.

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Fig. 12-16b, p. 326

Coastal Resources Commission on Terminal Groins

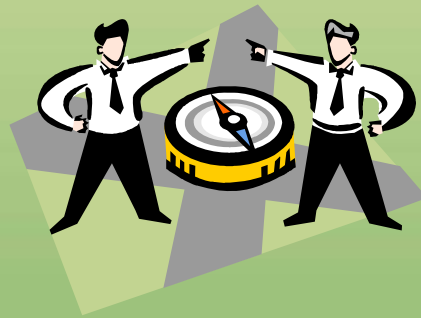
- Hardened structures have been banned along NC's ocean coast since 1984
- \$300,000 CRC study resulted in no recommended change in law
- Does not eliminate the need for beach renourishment
- Any structure designed to trap sand will deprive another location
- Change in law opens doors for coastwise groin fields, rock and bulkheads
- The costs (\$10 million for construction: \$2.2 million for yearly maintenance)
- These costs far exceed any benefit to protect a selected number of properties

What the CRC Study Really Said

The Study was not definitive in its findings and the Commission could not make a determination that terminal groins would or would not cause adverse affects on the environment or adjacent properties.

The Commission gives preference to non-structural responses to erosion including the following strategies:

- Relocation of threatened structures
- Beach nourishment
- Inlet Channel relocation
- Temporary use of sandbags for short-term shoreline stabilization
- The preference towards non-structural responses to erosion should be maintained.



Economic Issues: The reality of groins on our public beaches.

- Groins are very expensive-as much as \$10-12 million and counting.
- Will not eliminate the need for massive beach nourishment projects.
- Expensive to maintain or re-build if damaged by a major hurricane.
- State and federal funding is drying up and most likely will not be available.
- Local tax-payers have already decided they do not like the price tag.
- Will pit beachfront property owners against everyone else.
- Last vote for the beach nourishment project funding failed in North Topsail.
- How will towns explain to constituents that millions of dollars will be used to protect just a few ocean front homes when viable options are available?



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Table VI-10. Total Project Costs

Initial Costs	Cost	Short (450')	Long (1500')
Initial Cost (LS)	--	\$1,000,000	\$6,000,000
Initial Beach Nourishment (LS)	--	\$1,200,000	\$3,600,000
Permitting and Design	LS	\$1,250,000	\$1,250,000
Total Initial Costs	Total	\$3,450,000	\$10,850,000

Removal (\$/LF)	\$1,000	\$450,000	\$1,500,000
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Annual Costs			
Annual Structure Maintenance (\$/yr)	12.5%	\$125,000	\$750,000
Annual Beach Nourishment (\$/yr)	LS	\$300,000	\$1,200,000
Annual Monitoring (\$/yr)	LS	\$300,000	\$300,000
Total Annual Maintenance Costs	Total	\$725,000	\$2,250,000

* Does not include costs for required easements, inlet channel maintenance or mitigation costs.



Economic Issues: The Hidden Costs



- Permitting agencies will require extensive pre and post project analysis and monitoring.
- Management of the inlet channel will add millions of dollars every time the inlet moves and could threaten the groin structure itself.
- Groups will be geared up to challenge any permit in court delaying the project for years and adding millions in costs to the taxpayer.
- The Courts will end up making policy decisions on beachfront issues.
- Taxpayers will foot the bill for expensive bonding requirements and to pay for any damages that expensive monitoring and maintenance reveals.
- As the state and local governments struggle to pay for health care, teachers and regular services can the towns afford millions to protect a few homes?

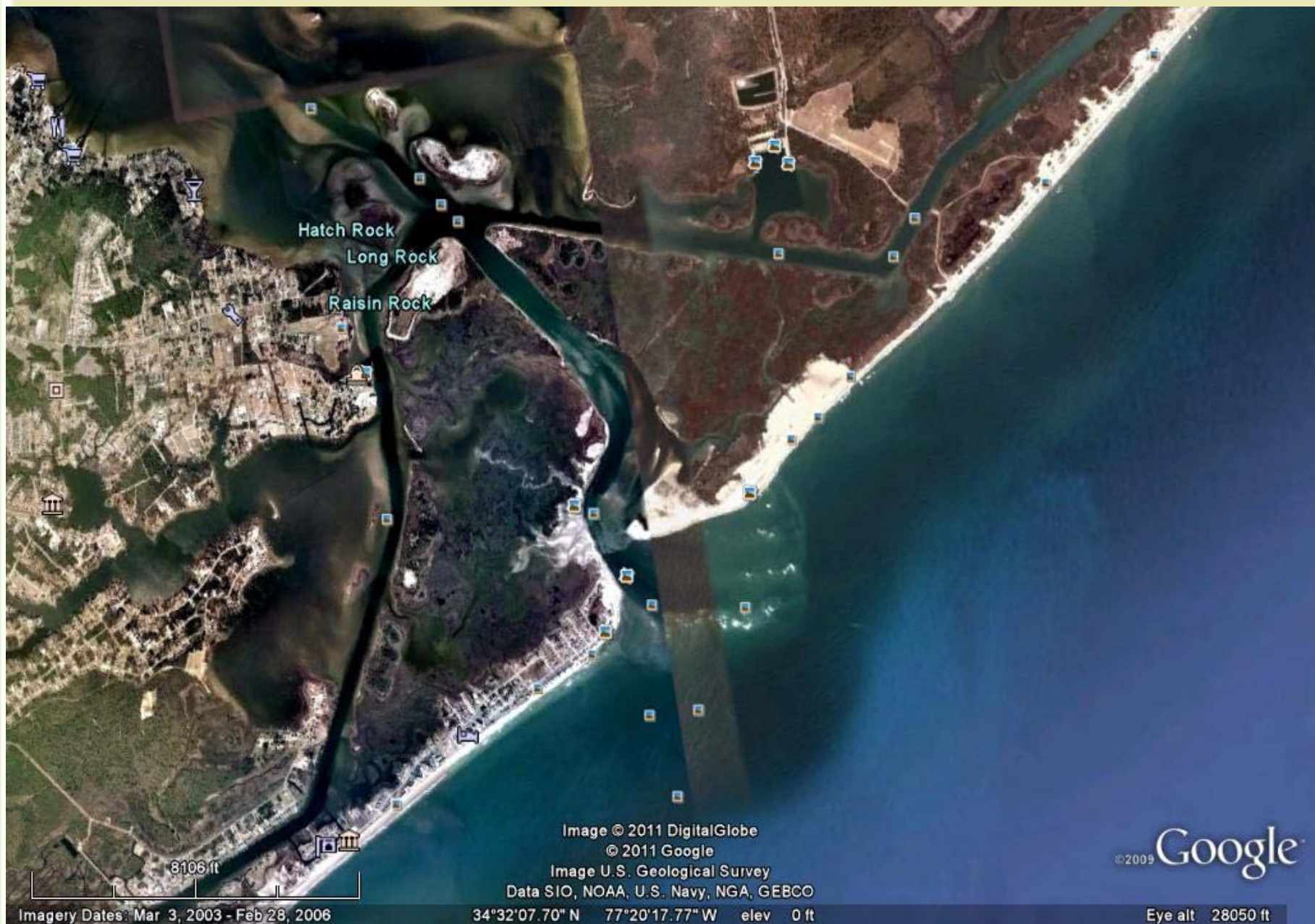


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Image U.S. Geological Survey
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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Imagery Dates: Mar 3, 2003 - Feb 28, 2006

34°32'07.70" N 77°20'17.77" W elev 0 ft

Eye alt 28050 ft



Wherever groins are allowed lawsuits soon follow

GROINS ARE GOOD FOR LAWYERS

- They beget lawsuits.
- Property owners will sue the town or state for damage to their properties from groins.
- Boaters will sue when the groins are involved in accidents.
- Swimmers and fishermen will sue if caught in rip currents caused by groins.



Property owners sue each other, the local town or the state or federal governments either because they want a structure to protect their property or want to be paid for the damage done to their property by a structure. Towns and counties open themselves to liability lawsuits if boats hit the groin or swimmers drown near them.



A Courtroom Sampling

Here's just a few of the types of lawsuits we can expect if you allow groins on our beaches:

- 18 homeowners in Montauk, N.Y., recently filed a \$25 million lawsuit against local and state governments, claiming that jetties blocked the flow of sand and exacerbated the erosion in front of their homes.
- Officials in St. Petersburg, Fla., decided to remove a groin after a teenager died in a boating accident at the structure and his family sued the city.
- A father sued Pinellas County, Fla., after he and his children nearly drowned while swimming near a groin.



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