

Will We Ever Learn?

What have we learned as a result of multiple hurricanes striking Alabama and Florida? Apparently very little, judging from media reports.

Where no development exists, we see natural barrier islands and beaches surviving, and even thriving, after the hurricanes. In a year or two, any evidence of the passage of these storms will be almost invisible, except that the islands may have been pushed into a slightly more landward position.

On developed islands storm response is a different picture. The artificial (nourished) beaches on both sides of the Florida Peninsula have disappeared en masse – at a much faster rate of sand loss than their undeveloped, natural counterparts. We see once again that buildings constructed immediately adjacent to the beach have a much higher level of damage than the second row and beyond. We see high-rise buildings that have collapsed.

Some reasonable people might conclude that it is irresponsible to build next to an eroding beach subject to huge storms, and downright stupid to build next to an eroding beach on a barrier island migrating landward in response to a rising sea level. Others might conclude that it is time to move buildings back from the beach – far enough, at least, to be away from the immediate impact of breaking storm waves. But neither has happened.

Instead, sympathy and cash flow into storm-ravaged beach communities. Partly because the Federal Emergency Management agency (FEMA) has learned that if it doesn't help rebuild immediately, the local representatives in Washington will heap abuse on the administration in power at the time, and partly because local politicians, closely tied to the beach economy, want things right back where they were ASAP.

Nobody will rain on this parade and talk future storms, nourished beach costs and quality of life. In fact, there's more money to be made after a storm than ever before. Along the Florida panhandle and Alabama coast, hit hard by Hurricanes Frederic (1979), Opal (1995) and now Ivan, each storm proved to be an urban renewal project - just as Hurricanes Hugo (1989) and Fran (1996) were in the Carolinas. Bigger buildings were built on shrinking beachfront lots.

But there's a new element that will become evident in the coming months - FEMA will pay to put sand back on the beach in communities like Gulf Shores, AL which was nourished with federal funding in 2001 and again by FEMA following Tropical Storm Isadore in 2003. Ivan damage to Gulf Shores was immense, in spite of these artificial beaches. And yet, another nourishment project is now in the wings.

We expect the federal government to spend more than a hundred million dollars over the next couple of years just to replace artificial beaches lost to storms - an invisible aspect of "storm recovery" that assures that beach front development will be right back where it was before.

North Carolina can, and should, learn several important lessons from what we see in Florida and Alabama. The questions we must now ask are:

- Why do we continue to encourage beachfront development when it's only a matter of time before we get our own Ivan that will cause immense damage in spite of nourished beaches?
- Why should state and federal taxpayers pay millions of dollars every year on beach nourishment when all it does is encourage more and bigger buildings to jam up against our shoreline?
- Why aren't we removing threatened buildings from the oceanfront (like the Comfort Inn at Whalebone Junction in Nags Head that is sitting on the beach) when their time comes?
- If we do continue to nourish our beaches, will the NC Coastal Resource Commission and Division of Coastal Management step up and ensure the quality of sand placed on our beaches? They have not done so in recent years.
- If the state continues to fund nourishment, can we at least prevent the construction of big buildings next to the beach, so we can maintain some degree of flexibility in responding to a rising sea level a few decades down the road?

Why are we spending so much money saving the property of so few people, when the process is so environmentally damaging over the long run? The answer, of course, lies in the politics of greed.

Dr. Orrin Pilkey, James B. Duke Professor Emeritus of Earth Sciences

Author: *A Celebration of the World's Barrier Islands* and *How to Read a North Carolina Beach*

Andrew Coburn, Associate Director

Program for the Study of Developed Shorelines
Nicholas School of the Environment and Earth Sciences
Duke University
Campus Box 90228
Durham, NC 27708-0228
Tel: 919-684-4238
Fax: 919-684-5833
<http://www.env.duke.edu/psds>