

North Carolina is doing a poor job of managing its beaches. Efforts to save a small number of buildings at the coast are resulting in extensive damage to our beaches. The one currently being nourished in Emerald Isle, for example, is rich in oyster shells and mud; a stark contrast to the original beach. The end result of this nourishment project will be a shelly, aesthetically poor, dark-colored gravelly beach that will be difficult to walk on barefoot. The bigger problem for the state – and the turtles, birds, fish and tourists that expect healthy beaches - is that Emerald Isle is just one in a long line of North Carolina beaches being sacrificed for the sake of buildings.

We at the Duke University Program for the Study of Developed Shorelines have been studying the national beach nourishment experience for almost 20 years, and we can say with confidence that the overall quality of what's being pumped on North Carolina beaches, along with state oversight of beach nourishment projects, is among the worst in the nation. Let us take you on a quick tour of the North Carolina coast, where the quality of our nourished beaches says more than we ever could.

Our journey begins in Shallotte Inlet, the body of water separating Ocean Isle Beach from Holden Beach in Brunswick County. Here, in 2001, the state allowed the Wilmington District of the US Army Corps of Engineers to mine almost the entire ebb tidal delta of the inlet to get cheap sand for a beach nourishment project on OIB. The problem with mining the tidal delta is that it created a hole that will capture sand otherwise destined for the adjacent islands. No other state has allowed extensive mining of natural, unjettied inlets. As a result, both Holden Beach and Ocean Isle Beach will, in time, experience accelerated erosion, thereby increasing the erosion problem the mining project was supposed to fix.

Our second stop is Oak Island, also in Brunswick County, where the beach was nourished in 2001 with sand containing large rocks and other foreign debris. The end result of this project, the sole purpose of which was to restore sea turtle nesting habitat, is a beach full of fist-sized cobbles and a perpetual vertical cliff, called a scarp, often in excess of four feet in height; hardly prime turtle nesting habitat.

Just up the coast, in Carteret County, lie the jagged, dark, hard beaches of Indian Beach and Pine Knoll Shores. This nine-mile stretch of beach, nourished last winter, is the result of perhaps the lowest quality beach nourishment project in US history. This project, financed by a questionable loan from the US Department of Agriculture, spewed up thousands of tires and resulted in significantly less beach than the residents of these towns thought they were paying for. But this may be a blessing in disguise, since the beach contains a huge amount of sharply fragmented shell, broken-up during the dredging operation. One cannot walk into the surf zone on this beach without risking cut feet.

There are other problems, but these examples clearly show that nobody is minding our beaches. The state's coastal management program is in shambles; neither the state Division of Coastal Management nor the Coastal Resources Commission seem able to stop what is happening to our beaches. But this need not be the case.

Just last week, the Jacksonville, FL city council stopped a nourishment project that was spewing up large amounts of oyster shells. Ever conscience of its tourist industry, the city insisted that better sand be found before the project is allowed to continue. South of Sebastian Inlet, on the east coast of Florida, a beach nourishment project is pumping high quality sand, the same color and grain size as the original beach. This sand was obtained eighteen miles from the beach to be

nourished, a distance that added to the cost of the project, but was deemed essential to preserve the quality of the beach (the sediment at Emerald Isle is being obtained only a few hundred yards offshore). In Georgia, the state is requiring that material be screened before it is placed on the beaches of St. Simon's Island: a decision prompted by North Carolina's recent nourishment problems.

It's a sad fact that a handful of beachfront property owners are causing our beaches to be replaced by inferior sand, gravel and shell, seriously damaging a priceless natural resource loved by millions of North Carolinians. If you don't believe us, go and visit the beaches of Pine Knoll Shores or Emerald Isle. Just be sure to wear your shoes.