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HEADLINE: Army Engineers Hit the Beaches

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BODY:

The start of our **mass annual migration** to the ocean shore is as good a time as any to point out that many of our nation's beaches are in real trouble -- and getting worse fast because of the way we're treating them.

The most dramatic example of ill-advised government action is provided by the U.S. Army Corps of Engineers, which has been steadily "nourishing" the beaches of various politically connected seacoast communities that are concerned about erosion of their shores. The nourishing is done by placing new sand on the beaches, usually pumped in from an offshore source.

As with certain of the nation's rivers -- where the Corps of Engineers has over the years gradually reduced the size of flood plains and increased the potential for damage by building one dike after another -- non-engineering solutions for the beaches are never seriously considered.

And just as with the river dikes, the density of development behind an artificially rebuilt beach often increases dramatically. High rises, hotels and condos replace beach cottages, leaving more buildings than ever dangerously positioned when the next big flood or storm comes.

Beach nourishment differs from diking, however, in that it must be redone, often at three- to five-year intervals and at considerable cost, perpetually. The price is heightened by the fact that sea levels are rising and are expected to rise further due to global warming. The lifespans of artificial beaches will thus grow shorter and their costs will increase.

Already more than 300 East Coast and Gulf Coast beaches have been nourished, and more are being added to the list each year. In 1997 the nation spent \$ 150 million on beach nourishment. The cost is undoubtedly much larger now.

The recently approved (but not yet funded) 14-mile-long Outer Banks beach nourishment

project in North Carolina is projected to cost \$ 1.8 billion over 50 years. That boils down to a subsidy of \$ 30,000 per year for 50 years for each beachfront property that is supposed to be protected by the new beach.

A generation from now, we will likely reach a point at which the great lengths of nourished shoreline and the rapid loss and high costs of the artificial beaches will be unacceptable to taxpayers. Already the Bush administration is proposing to lower the federal share of nourishment cost from 65 percent to 35 percent.

Increasing the local share is a logical approach, since the local people created the erosion problem by building too close to the beaches. But few beachfront communities can afford to pay for their own beaches, and states with long shorelines are unlikely to take on the financial burden either.

I predict that in a couple of generations, the barrier islands now being nourished will fall below the horizon of the society's concern. By then, our descendants will be preoccupied with protecting Manhattan, Boston, Miami and other sea-level cities from the rising waters.

When nationwide beach nourishment is no longer feasible, one alternative will be to demolish buildings or move them elsewhere. But the expensive rows of high-rises that have been encouraged by beach nourishment may make this politically impossible. What most likely will happen instead is that the beachfront communities will protect themselves with seawalls, a coastal engineering approach that is now illegal in six states.

Seawalls destroy beaches, and many if not most of our major recreational beaches would eventually disappear if they were erected. Walls or no walls, massive destruction of beachfront property would occur in future large storms.

What ought we be doing instead of replenishing beaches? One wise move would be to take some of that beach money and use it to move development back from the shore. The Corp of Engineers' own figures show that the purchase of beachfront property would be cheaper than beach nourishment.

And if we do nourish beaches, why not then restrict the development densities, through zoning, to reduce the problem for future generations?

Whether or not all agree with this assessment, Americans should be studying and debating the future of our shorelines. The Corps shouldn't be allowed to continue "reengineering" our beaches without the nation's taking a long and hard look into the future.

The writer is a professor of geology and director of the Program for the Study of Developed Shorelines at Duke University.

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