

Eastham erosion

■ Town must form a special task force and learn from similar efforts in Falmouth.

Gloomy forecast for Eastham's bay beaches." That was our headline on a recent news story about the bayside coastline losing an average of 3.72 feet of beach per year, the highest rate of erosion on the Cape and Islands.

But here are some silver linings: Jim O'Connell, a geologist at the Woods Hole Oceanographic Institution, said the only solution to slowing the rate of erosion is to continually add new sand to the town's beaches. The sand would have to be dredged in deep water and pumped to shore.

If that happens at taxpayer expense, many of the scoured private beaches would become healthy public beaches. That's one way around the antiquated state law that allows homeowners to post "No Trespassing" signs on all those private beaches.

Secondly, the vanishing bayside beaches will create a greater demand for a new public beach on the ocean side of Eastham.

Whatever the consequences, Eastham officials would be wise to form a special task force of experts, including O'Connell, Orrin Pilkey, a retired professor of coastal geology at Duke University, state Coastal Zone Management officials and the Army Corps of Engineers, to determine the best short- and long-term solutions.

A similar group, called the Coastal Resources Working Group, was formed in Falmouth about six years ago. The group, including experts from the nearby Woods Hole scientific community, has been working to define the extent of beach erosion on the southern shores of Falmouth.

From 1975 to 1994, the group found that the average yearly erosion rate was nearly five times greater than it was over much of the last century. In that 20-year period, the southside beaches lost between 2 and 2.8 feet per year, which is still less than what the Eastham bay beaches are losing.

As a result, the Falmouth group recommended removing seawalls, riprap and revetments that line the town's south shore. Coastal geologists believe that most manmade structures built to "preserve" beaches, such as groins, jetties and riprap, actually do more harm than good. They accelerate erosion at nearby beaches.

The Falmouth group also recommended instituting a 100-foot buffer strip between new construction and the shoreline, adding new sand where appropriate, and buying private property when possible.

In 2003, the group recommended designating part of the Falmouth shoreline as a District of Critical Planning Concern. A DCPC is a regulatory planning tool, which temporarily prohibits new building in the area while the town develops a comprehensive plan to better protect the area.

The erosion problem is so serious in Eastham that town officials should consider making the bayside beaches a DCPC.

Meanwhile, town officials and residents should read the final report of the second Skidaway Institute of Oceanography Conference on America's eroding shoreline. The report, produced in 1985, is still the most significant U.S. document outlining the need for a realistic plan to address our retreating shores, Pilkey says.

"The document holds that preservation of our beaches for future generations must be the keystone of American coastal management," he said. "It concludes that in the long run, in a time of rising sea level, retreat or relocation of buildings will be required."

In a nutshell, the report urges a commitment to retreat, which would reduce the loss of property and lives by replacing high-risk development with stable, safe development away from open beaches; meet increasing demand for public beaches by improving public access; develop a more stable economic future for coastal communities; eliminate unessential government spending on private property protection; and facilitate removal of many of the defensive structures and developments that magnify the effects of erosion.

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