

Shifting sands plague Cape towns

■ Local efforts to address beach erosion reflect difficulties faced by coastal communities statewide.

By **DOUG FRASER**
STAFF WRITER

As local, state and federal officials try to figure out a plan to get sand where it's most needed, several town-by-town efforts already under way show the complexities of making it work.

Sandwich

The natural migration of sand from northwest to southeast - that replaces sand taken from Sandwich's beaches by erosion - has been interrupted by the Cape Cod Canal.

The barrier beaches along the town's shoreline are critically important because they protect salt marshes that, in turn, protect a heavily developed marsh shore dotted with houses and the town's police and fire stations.

Both the U.S. Army Corps of Engineers and the Mirant Canal Generating Plant routinely dredge the canal to make it deep enough for shipping, including the large oil tankers that bring fuel to the plant.

It's just a short trip, and relatively inexpensive, to dump sand into shallow waters off the Sandwich beaches that someday will wash up along the barrier beach. But the state Division of Marine Fisheries denied that request, ruling the area is potential lobster habitat. So the sand goes to a deepwater offshore disposal site in Cape Cod Bay, unless the town decides on the more expensive option of mixing sand with water and pumping it onto the beach itself.

Rebuilding the Sandwich barrier beach dunes is further complicated by state regulations that consider washover areas, where waves have removed a dune, as vital habitat for plover and least tern.

"It's important to bolster this barrier," said Sandwich Director of Natural Resources Mark Galkowski, who is skeptical that any quick solution will be found.

"I've been here 20 years, and it's been going on the whole time I was here," he said.



ROB BENCHLEY

A mid-April storm left one house close to - and another one over - the bank along Sheep pond Road on Nantucket's South shore.

Harwich and Chatham

When it comes to beaches, towns increasingly have found allies in waterfront property owners.

In Harwich, harbor master Tom Leach is looking to dredge sand bumps that have accumulated in the channel leading into Saquatucket Harbor. Two homeowners contributed \$40,000 toward the dredging as long as the sand was used to rebuild the beaches in front of their homes on Saquatucket Bluffs. In time, the sand on those beaches will get washed away, but it will get deposited on the public beaches nearby, replacing eroded sand there.

Even that cooperation comes with restrictions. State law required that any sand dredged with public money must go to public beaches first. When

it does go on private beaches; the property owners were required to sign a waiver allowing the general public the right to walk across their property below the high tide mark.

While Chatham coastal resources director Ted Keon supports the intent of those regulations, he wishes there was some flexibility. Sometimes, he said, the most appropriate site to put sand is on private land so that it will erode and drift onto public beaches.

Chatham is the endpoint for an enormous conveyor belt, dragging material off the bluffs and beaches of the Outer Cape, and dumping sand into its bays, channels and harbors. So, it's no surprise that they spend a lot of money and time on dredging. Chatham has \$75,000 to \$100,000 earmarked each year for the next five years for its dredging and beach rebuilding program.

And town officials seek town meeting approval for specific projects such as \$300,000 set aside two years ago that paid for dredging in Stage Harbor. The sand was pumped onto Cackle Cove Beach.

Should the town decide to fill in the new breach in North Beach, the cost could run into the millions, said Robert Duncanson, Chatham's director of health and the environment. That may require the cooperation, and money, of homeowners along the shores of North Chatham who could experience erosion if the channel remains open.

That kind of cooperation was evident this month as Chatham Bars Inn paid to have 6,600 cubic

yards of sand taken from Aunt Lydia's Cove in the Barnstable County dredge and sprayed onto their eroding private beach.

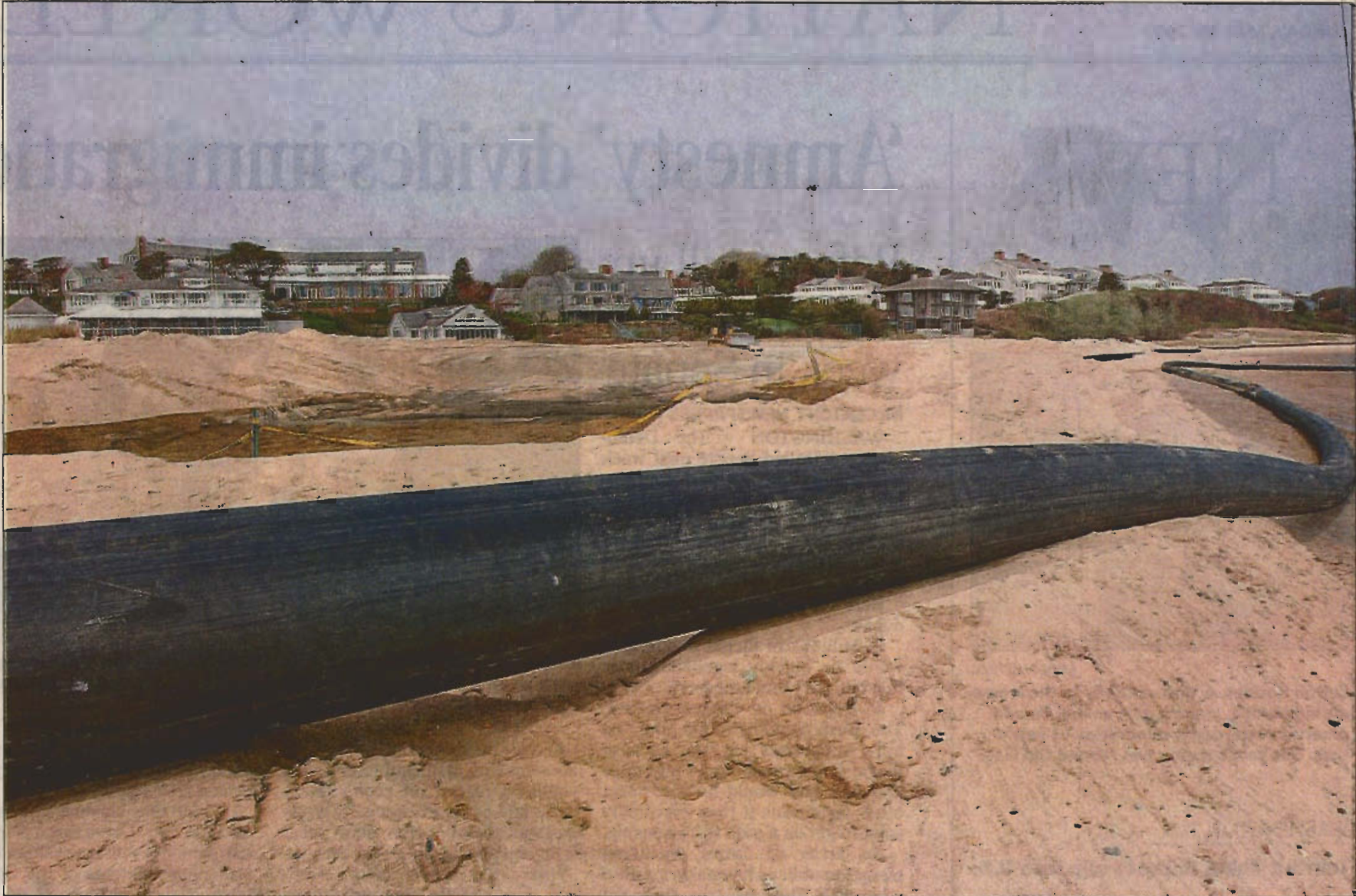
Nantucket

The largest privately-funded beach restoration project in the state is on Nantucket. Homeowners along a rapidly eroding bluff in Siasconset are attempting to transport 2.6 million cubic yards of sand from an offshore sandbar to a 2- to 3-mile stretch of beach. At \$25 million, it's not cheap, but won't cost the town anything. The benefits, argue homeowners, among whom are some of the wealthiest families in America, are the project would protect a public road and maintain access to more than 50 homes valued at between \$5 million and \$10 million each. The properties represent nearly 5 percent of the island's tax base. The beach itself also covers a town sewer bed, and homeowners have guaranteed public access to the beach area.

But local fishermen say that silt from the dredging during the summer months could hurt striped bass fishing in the area, and the sandbar itself has been designated as essential fish habitat for winter flounder that spawn from February to May.

While agreeing with the need for fish protection, Keon and others say something needs to be done to create an expanded dredging season.

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STEVE HEASLIP/Cape Cod Times

A pipe carries sand to the beach in front of the Chatham Bars Inn. The sand comes from a dredging project near the Chatham Fish Pier.