

Experts, residents talk PI sand solutions

By Victor Tine
Staff writer

PLUM ISLAND — A short-term solution to the severe beach erosion at Plum Island Center is likely to be a 9-foot-tall, sand-filled tube that will cost between \$250,000 and \$500,000, if it wins approval of state environmental authorities.

The associate technical director of the Army Corps of Engineers Coastal and Hydraulics Laboratory said a device called a geotextile tube, or geotube, appears to make the most sense for slowing the erosion that has already undermined decks at the Center and northward along the beach.

Speaking to an audience of more than 100 at Plum Island Taxpayers and Associates Hall, William Curtis said a series of 200-foot-long tubes could be erected in a matter of days once environmental permits were obtained.

Curtis was one of a panel of Army Corps experts who spent the day assessing the beach erosion problem on Plum Island and Salisbury Beach, then participated in a two-hour public meeting, moderated by state Sen. Bruce Tarr. The session was organized by the private Plum Island Foundation and the Washington, D.C., lobbying firm Marlowe & Company, which is working for the foundation.

Curtis said the tube is filled with and covered by sand and could provide a soft barrier against the wave action causing the erosion. He said tubes are stable and easily repaired if damaged.

But he also wanted to make a point about beach stabilization measures.

"Low-cost alternatives simply don't exist," he said.

Tarr said the state Department of Environmental Protection is "thinking about" geotextile tubes as an erosion protection measure. He said DEP would be highly unlikely to approve any type of hard structure, such as a Jersey barrier or seawall.

He said the area's state legislative delegation was exploring ways to get the funding for the geotube.

While the tube would provide protection for the short term — Curtis estimated the tubes would last a few years — Tarr and other Army Corps staffers outlined midrange and long-term goals.

Ed O'Donnell, chief of the Army Corps New England District's Navigation Section, which handles channel dredging operations, said he hoped to dredge the Merrimack River channel in summer 2009. That dredging operation would yield 100,000 to 150,000 cubic yards of sand.

Mark Habel, chief of the Navigation Section's Engineering and Planning Division, outlined a process for getting all that sand deposited on the beach — rather than the less expensive option of offshore dumping.

In what is called a "Section 204" study, the Army Corps assesses whether the potential public benefit of an operation outweighs the added cost. He said he hoped to have the Section 204 study completed in time for it to be incorporated into the dredging operation.

O'Donnell said it will cost about \$1.5 million — all federal funds — to dredge the channel with offshore disposal. Habel estimated the onshore disposal option would add another \$1 million to the price tag. Federal funds could cover 65 percent of that premium cost.

The Army Corps has an allocation of about \$650,000 toward the dredging operation and has asked for the remainder in the federal budget that takes effect Oct. 1.

Tarr said he was also trying to see if the state could pick up the tab for the nonfederal match. He said it may be difficult to secure funding for a short-term solution like a geotube when legislative leaders know that they would soon be asked to also put up the nonfederal share.

Several people in the audience asked why homeowners couldn't return to the practice of bulldozing sand up the shore at low tide, a practice Curtis called "beach scraping," which is now apparently banned by the DEP.

"You don't have enough beach to scrape," Curtis said.

Salisbury selectmen Chairman Jerry Klima offered two pieces of advice to his Plum Island counterparts. He said Newbury should start the permitting process for the short-term solution at the Center now, rather than waiting for funding. He also said the once the beach is replenished, the sand must be held in place with dune grass and snow fencing.

Also participating in the meeting were state Reps. Harriett Stanley, D-West Newbury, and Michael Costello, D-Newburyport; Newburyport Mayor John Moak; and Newbury Selectmen Joseph Story and Jennifer Wright.

Beach erosion has become a major problem on Plum Island, especially since an April 2007 storm.

The damage is most evident near the Center, where Plum Island, Northern and Southern boulevards meet.

The Plum Island Foundation is also seeking money for the repair of the south jetty, which some local officials think is actually accelerating the erosion.