Houma firm pitches rock-barrier idea

By Kathrine Schmidt Staff Writer Houma Today Published: Wednesday, November 17, 2010 at 11:17 a.m.

HOUMA — Rock barriers could provide a cheaper and more effective alternative to traditional sediment restoration proposed for the barrier islands of Terrebonne and Lafourche, a prominent local engineer told business leaders Tuesday.

Kenny Smith of the T. Baker Smith engineering and environmental firm in Houma pitched his idea of adding more "breakwaters" to those already in place near Raccoon Island off Terrebonne and near Grand Isle and Port Fourchon off the Lafourche coast. But the method has in the past encountered opposition from a range of scientists who say the barriers would disrupt natural tidal flows.

His idea was born out of frustration with an August report from the Army Corps of Engineers that estimated it would cost \$689 million to restore Raccoon, Timbalier, Trinity and Whiskey islands by building them up with sand and sediment. That would be financially impossible for the parish, which would have to pay a share of the cost, and the corps suggested the option of restoring just one island instead.

But when it comes to restoring an important natural defense for his home parish, Smith said he wanted to continue to explore other options. His proposal would cost closer to \$240 million to build and \$100 million to maintain, he said. It would also help extend the existence of the islands and provide storm protection when, in time, they disappear entirely.

"The corps said it's too expensive," Smith told about 200 people assembled for the general membership luncheon of the South Central Industrial Association, the regional business group. "I don't disagree. But that's not an acceptable place to stop."

The idea is relatively simple. Instead of a complex dredging operation that requires precise engineering, the breakwaters consist more or less of a rock wall about 300 feet away from the island they're supposed to protect. The idea is that the barriers help absorb some of the force of the storm surge and therefore lessen the impact of erosion.

A set of eight rock barriers built in 1997 around Raccoon Island have surpassed expectations for helping to rebuild land there. A chain of the breakwaters has also helped provide crucial storm protection for Port Fourchon during the explosive chain of hurricanes including Katrina, Rita, Gustav and Ike, said Chett Chiasson, director at the port, who also attended the meeting. Reggie Dupre, Terrebonne's levee director, calls it a "cost effective" option. An flight over the island chain directly after hurricanes Gustav and Ike convinced him the breakwaters had done their work.

"Every island that had a rock barrier survived much better," he said.

But the technique has also generated its fair share of controversy among many scientists, who contend that a barrier island is by nature fluid and placing a solid wall to interfere with that disrupts the natural processes. And because it works it one place doesn't mean it will work elsewhere.

In an August interview, Rob Young, director of the Program for the Study of Developed Shorelines at Western Carolina University, called the rock method "brute-force engineering" that would cause drastic changes to the coast.

"The thing about monkeying around like this is that there are unintended consequences," Young said. "What we do know for sure is that projects like this will change wave patterns, they'll change the way the sand and the sediment moves, and there will be negative impacts."