

From January 30, 2015 Inquirer and Mirror

Geotubes do their job against Juno

By Lindsay Pykosz

lpykosz@inkym.com After hours of strong northeast winds and pounding waves on the island's east end, parts of the geotubes at the base of Baxter Road became exposed – just as they're designed to do.

"It did its job," said Josh Posner, president of the Sconset Beach Preservation Fund, the organization that installed the 900-foot erosion-control project last January in partnership with the Town of Nantucket.

The structure is designed to protect the toe of the bluff. Waves crash up against it, removing the sand placed over the tubes and placing it back into the littoral system. The tubes prevent the waves from crashing directly into the bluff, he said.

On Wednesday afternoon, the top two tiers at the southern end of the system could be seen, but, further north, all three bags were exposed.

"This is the first time the third tier has been exposed since the system was installed," Posner said. "We've had the second tier exposed and we've had some places where the third tier has been exposed, but this is the first time it's gone all the way up to the top of the third tier."

Sand, which was delivered to the system beginning on Jan. 16, will be pushed from the top bag and down over the exposed geotubes to cover the face again, Posner said. That reserve sand is kept there for these kinds of situations, he added.

"There was a storm in early November that required us to push basically the balance of what was on top of the (sand) template," Posner continued.

"And then there was another storm in December that exposed the geotubes, so then we didn't have enough to push down to cover that so they stayed exposed for a little while."

The sand delivery was disrupted because of the storm, and Posner said they still have another 500 cubic yards, or 25 truckloads, left to deliver over the bluff from a conveyer belt located at 87 Baxter Road. When all is said and done, roughly 5,000 cubic yards of sand will have been delivered.

This is the second time sand has had to be replenished since the system was installed. The first was in April 2014.

Last week, the SBPF went before the Conservation Commission with an application to plant vegetation at the top of the bluff to help further prevent erosion.

The proposal for the geotube system, which was approved by the state Department of Environmental Protection and subsequently appealed by the island's Conservation Commission, included vegetation, but that has since been put on hold as the appeal process plays out.

"If the system that was approved by DEP but rejected by the ConCom stays under appeal, then we won't be allowed to vegetate," Posner said. "The vegetation is part of that system, so if that were to settle and we could come to an agreement on that, we wouldn't need a separate vegetation application. But that hasn't settled yet."

Posner said the planting will start with beach grass, then may consider woody plants in the future.

"It starts out as just beach grass because that grows the fastest and the roots are humungous," he said. "They really lock things in and create a really stable situation."

Ultimately, protecting the toe is the most important.

"The thing is that where the toe gets eroded, no matter what kind of beach grass you have, it all collapses. So if you don't have the toe protected, you're not going to be able to establish vegetation."



Exposed geotubes after the historic blizzard Wednesday protected the toe of Sconset Bluff.

Photo by Nicole Harnishfeger