LIDO KEY AND SARASOTA BIG PASS

QUESTIONS & ANSWERS

SUMMER 2014

1. If sand is removed from the Sarasota Big Pass shoal, how much will this increase storm surge impacts to Siesta Key?

Zero impact. The proposed project will cause no change in flood conditions during storm events. It will not cause an increase of storm surge to Siesta Key whatsoever. Engineers examined the model outputs and found no increases in wave energy off of Siesta Key.

2. What are the consequences if the Corps doesn't use Big Pass sand to renourish Lido?

From a Federal perspective, Lido Key would have no future protection against storm events because there are no other economically viable sand sources.

3. How many times has Lido Key been renourished and where did the sand come from?

Since 1998, the City of Sarasota has nourished Lido Key on four occasions in 1998, 2001, 2003 and 2009. In addition to these projects, the New Pass channel was periodically dredged since 1964 with sand placement on both Longboat Key and Lido Key. New Pass provided smaller quantities of sand that was shared between the City of Sarasota and the town of Longboat Key. The town plans to use New Pass sand for their beach.

4. Why can't the Corps dredge off-shore or find another sand source?

Dredging offshore is not an option because the sand needed is too far out (cost prohibited) or is not compatible. The cost of transporting sand from an inland mine would not meet the Federal cost-benefit ratio.

Lido Key Shore Protection Project

Completed	Volume (cubic yards)	Sand Source	Location	Length
1964	121,000 cy	New Pass	R35-R38.5	0.6 miles
1970	350,000 cy	New Pass	R35-R38.5	0.6 miles
1974	246,000 cy	New Pass	R35-R38	0.5 miles
1977	400,000 cy	New Pass	R35-R38	0.5 miles
1982	92,000 cy	New Pass	R35-R38	0.5 miles
1985	239,000 cy	New Pass	R35-R38	0.5 miles
1991	177,000 cy	New Pass	R34.5-R38	0.6 miles
1996	178,000 cy	New Pass	R34.5-R38	0.6 miles
1998	285,000 cy	Offshore	R35-R40	0.8 miles
2001	360,000 cy	Offshore	R36.5-R44.2	1.4 miles
2003	125,000 cy	New Pass	R35.5-R43.2	1.4 miles
2009	464,000 cy	New Pass	R35.5-R43.2	1.4 miles

LIDO KEY AND SARASOTA BIG PASS

5. What are the requirements for placing sand?

Sediment quality is directed by Florida Administrative Code (F.A.C.) 62B-41.007j, also known as the "sand rule." The sand rule is designed to protect the environmental functions of Florida's beaches and includes parameters such as grain size, sediment sorting, sand color, and limits shell content, beach rocks, silt content and debris. When choosing a sediment source, the objective is to match the sediments as closely as possible to the native or existing beach with respect to all the parameters. Other sediment source development criteria require that deposits have a two foot vertical buffer above poor quality material, resulting in a minimum four-foot thick deposit of compatible material to be economically feasible.

6. What are the specific sand requirements for Lido Key?

Because Lido Key is a constructed island, there are no "native" sediment parameters, but its historical grain size ranges from 0.24 to 0.49 mm. The existing beach has a grain size average of 0.21 mm, shell content ranging from 1.5% to 35%, and Munsell color values ranging from 6 to 8. For beaches (and sea turtles), the most important parameter in Munsell color is the value which determines the sediment lightness or darkness and is presented on a scale from 1 (black) to 8 (white). Following extensive offshore searching, all identified potential sediment sources were found unsatisfactory for placement on Lido Key. Deposits were excluded for color, grain size, insufficient volumes, proximity to hard bottom habitats, shell hash content, distance from Lido Key and frequently a combination of these factors.

7. Where does Lido Key sand go as it erodes from the beach?

The sand from Lido Key moves into the ebb shoal at Big Sarasota Pass, and then moves to Siesta Key through swash bars that attach to the shoreline. The quality of sediment that's placed on Lido should also concern the Siesta Key community.

8. How much sand would the Corps dredge from the Big Pass shoal?

Over the 50-year lifetime of the project, the Corps could dredge up to 6.6 million cubic yards from the Big Pass shoal.

9. How will dredging the Big Pass shoal impact the Ted Sperling Park?

Cut C was designed to minimize impact to the Ted Sperling Park. The southernmost groin is in place to protect the park in the event of a severe storm.

10. Rumor versus Fact: Why didn't the Corps use the Big Pass shoal to renourish Venice Beach in 1994?

The Corps found an offshore borrow area near the Sarasota & Charlotte County line. The sand was also going to be taken out of the system and placed on a down drift beach.

FOR MORE INFORMATION

US Army Corps of Engineers®
Jacksonville District

For comments or questions about the Lido Key Shore Protection Study, contact Aubree Hershorin via email aubree.g.hershorin@usace.army.mil or:
U.S. Army Corps of Engineers
Jacksonville District
Planning and Policy Division, Environmental Branch
Attn: Aubree Hershorin, Ph.D.
P.O. Box 4970
Jacksonville, FL 32232-0019

For more Sarasota County Hurricane and Storm Reduction Project information, contact Project Manager Millan Mora at 904-232-1454 or Millan.A.Mora@usace.army.mil. For media queries, contact Susan Jackson at 904-232-1630 or susan.j.jackson@usace.army.mil.