Jefferson County, TX – Low Volume Beach Fill
Project fronts the McFaddin NWR – area is characterized by a broad salt marsh with a muddy substrate.
Project Features

2500 ft dune
½ sand
½ sand/clay
Geotube Groins
5 Nourishment Cells
Experiment Groin Cells with Low Volume Beach Fill
Project Objectives

- Evaluate effectiveness of the dune at reducing overwash and retaining sand in the swash zone
- Assess performance of clay-cored dune and sand dune at both nourished and unnourished sites
- Determine effectiveness of low volume beach fill to reduce erosion of underlying clay layers
- Evaluate effectiveness of different grain sizes and nourishment rates
- Evaluate effectiveness of groins at retaining sand in cells and performance of geotextile structures
Project Performance – Hurricane Ivan
Hourly Water Levels
Pleasure Pier, Galveston

Wave Heights
NDBC 42035
Post construction and post event profile data for Cell #1
Post construction and post event profile data for Cell #3
Dune Response
Sand-cored Dune
Dune Response
Clay-cored Dune
Volume change calculations from digital terrain models, August 14, 2004 and January 14, 2005