

Sand Key Monitoring, Florida

coastal engineering



Coastal Systems International, Inc. as a subconsultant to Burns and McDonnell, provided first and second year project performance monitoring services for the Sand Key 1998/1999 Pinellas County Beach Erosion Control Project. Pre- and post-construction monitoring surveys consisting of hydrographic and aerial photographic surveys of the entire 13.9 mile Sand Key shoreline, and the project borrow area were analyzed. Changes in shoreline position and fill volume provided a qualitative assessment of the project performance. Based upon these changes a comparison of predicted versus actual performance was performed. In addition, erosion rates, longshore/cross-shore sand movement, and the influence of nearshore structures, bathymetry, and inlets on the project's performance and expected future shoreline response was described.



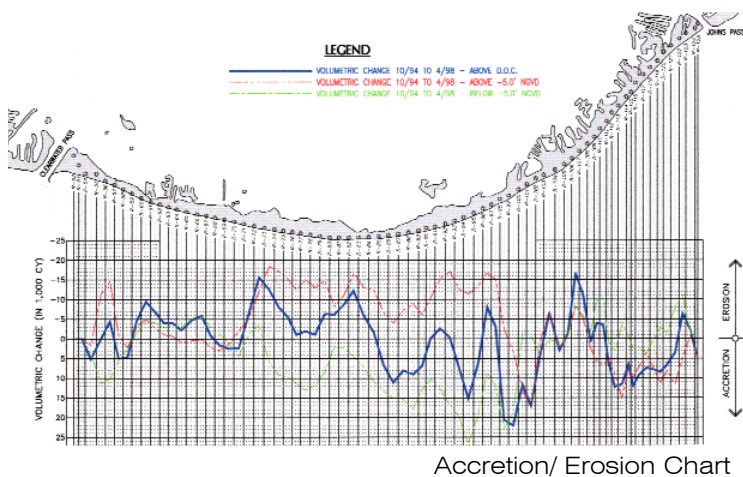
Pre-Nourishment Conditions



Beach Nourishment in Progress



Post Nourishment Conditions



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| Client: | U.S. Army Corps of Engineers, Jacksonville District |
| Location: | Sand Key, Pinellas County, Florida |
| Date of Completion: | 2001 |
| Construction Cost: | \$22,800,000 |

