

# BEACH FILL MATERIAL GUIDELINES

Client: Department of Environmental Protection – Beaches & Coastal Systems



## Key Elements

- ① Literature Review
- ② Establishment of Standards and Procedural “Checklist”
- ③ Assistance with Integration into Department GIS Database

**Date:** 2004

**Cost:** \$85,000

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Beach restoration projects are not designed based solely on the engineering performance of the fill. Borrow sand must also meet the aesthetic expectations of the public and function in an environmentally sound manner. Coastal Tech was retained by the Florida Department of Environmental Protection (FDEP) to develop guidelines that could be used statewide by design professionals and Department staff to help assure that these goals are met.

Our efforts were designed to result in a procedural reference that standardizes sand search methodologies, borrow versus native sand compatibility analyses, and data reporting formats. It also would address QA/QC issues during subsequent construction of a beach nourishment project.

The intent of these guidelines was to recommend specifications for the content and format of geological and engineering information to be submitted to the Department and for documentation of the due diligence used by the design professional in conducting the investigation and design.

As part of the recommendations for compatibility analyses, guidelines were produced for characterization of native beach sediments. This work included the establishment of standards for the determination of a wide range of aesthetic and environmentally important native beach characteristics such as mineralogy, shape, color, grain size and size distribution descriptors.



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