

# Holden Beach Nourishment Project

## Town of Holden Beach

### North Carolina

#### Services Rendered

- Coastal Engineering
- Field Investigations
- Sand Source Identification
- Project Permitting and EA Support
- Bid Documents and Construction Phase Services
- Post-Construction Monitoring

#### Project Summary

ATM was retained by the Town of Holden Beach, NC in 2001 to help address long-term erosion along the Town's eight miles of shoreline. The initial Town-funded project was designed to extend and enhance the 2.5 mile USACE Section 933 project associated with the Wilmington Harbor deepening. Professional services provided by ATM to Holden Beach included project design, permitting and bid documents, construction administration and performance of the post-construction monitoring services required by federal and state regulatory agencies.

ATM completed geotechnical investigations and developed designs (plan and section views) for the beach fill and upland borrow areas. The primary objective was to utilize sand available from upland sources to design a beach nourishment project that extends the eastern and western limits of the USACE project and provides the best solution for protecting upland properties. ATM successfully completed the first phase of the project in 2002. A phase 2 beach nourishment was completed in 2004.

In 2008, approximately 200,000 cy of material was placed and in 2008-2009, ATM assisted the Town of Holden Beach with FEMA-sponsored beach mitigation due to Tropical Storm Hanna impacts which included sand placement of 190,000 cy and dune restoration. A long-term beach management plan was recently developed. Current work includes identifying new viable sand sources as well as beginning a new permitting process that will include several nourishments.

