



## The National Shoreline

**NOAA's National Geodetic Survey (NGS)** produces the national shoreline which provides critical baseline data for updating nautical charts; defining our nation's territorial limits, including the Exclusive Economic Zone; and managing our coastal resources. The national shoreline contributes to our nation's economy by supporting: maritime trade and transportation, coastal and marine spatial planning, coastal engineering, academic research, and insurance activities, to provide a means for enhancing our global competitiveness and more efficiently managing our resources.

### **An accurate, consistent, and up-to-date national shoreline can provide and improve:**

- Official nautical charts for maritime navigation,
- Data to model sea level change, storm surge, coastal flooding, and pollution trajectories,
- Contemporary ocean management plans,
- Wave and wind energy site selection,
- Land and marine geographic information system base layers, and
- Environmental analysis and monitoring.

**NGS delineates the shoreline through various photogrammetric sources**, including tide-coordinated stereo aerial photographs, commercial satellite imagery, Light Detection and Ranging (LiDAR), and related remote sensing technologies. The data-gathering



*Image of Jones Inlet, Long Island, NY using Applanix Digital Sensor System. The green line represents marsh (apparent) shoreline, and red line represents mean-high water shoreline.*

process results in a vector database of the national shoreline and products such as high-resolution aerial frame photographs, orthoimagery, and coastal LiDAR data sets.

Additionally, **NGS is exploring the use of emerging remote sensing technologies and methodologies to map the shoreline.**

### **For more information, contact NGS:**

- **On the Web:**  
<http://geodesy.noaa.gov/RSD/cmp.shtml>
- **By Email:**  
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