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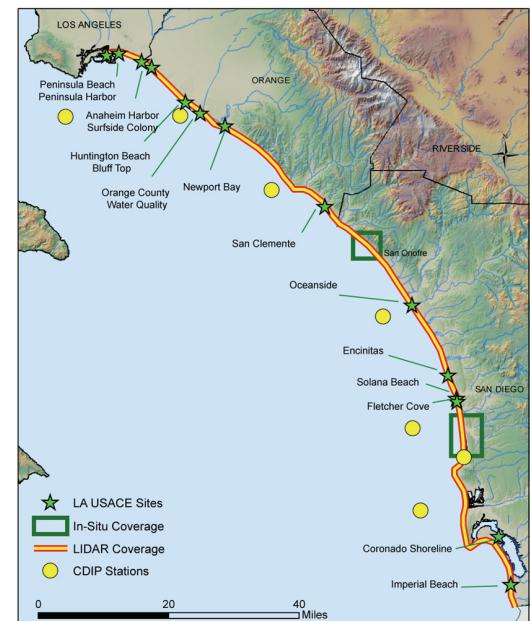
# Coastal Field Data Collection Program

## Southern California Beach Processes Study (SCBPS)

**Issue** Planning for shoreline protection, beach maintenance, coastal inlet dredging and related engineering activities requires a regional understanding of the coastal processes extending tens of miles up and down coast from an individual project. Techniques of observations and modeling that are economical and effective for small stretches of coastline are not necessarily useful for regional coastline management. There are substantial differences between coastal regions resulting from differing wave climates and geology, necessitating the evaluation of regional management tools in a variety of locations. In particular, the narrow continental shelves, swell-dominated wave climates and cliff-backed beaches of Southern California require the investigation of regional management techniques that meet the unique needs of this populous region.

### Research Approach

Coastal processes and beach changes are monitored along a 110-mile-long region extending from the Mexican border to Long Beach, CA (map at right). Since 2002, SCBPS monitoring uses airborne LIDAR to semi-annually rapidly map beach and cliff changes. At certain focus areas, in-situ surveys using GPS-equipped all terrain vehicles and jet skis are also performed. These data are combined with wave data collected by the Coastal Data Information Program (CDIP) to analyze process/response relationships and to develop analysis tools. SCBPS complements the Corps Regional Sediment Management research program and contributes to the National Coastal Mapping Program of the Integrated Ocean Observing System (IOOS).



### Partners

This project is performed by the Scripps Institution of Oceanography in collaboration with the State of California and the Engineer Research and Development Center and in partnership with the USACE.

### Products

SCBPS data are disseminated in compatible formats to the USACE, NOAA/CSC and USGS. The predictive model correlating gradients in radiation stress with shoreline change will be documented in journal and conference papers.

### Point of Contact

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