

Oceanography Program Project Summaries 2018-19

Summary Title	PIs (UCSD/SIO)	Summary Description
CDIP - Buoys	Merrifield, Terrill, Feddersen, Behrens, Guza	Six to eight wave buoys along the CA coast supporting wave and beach research, NWS wave now- and forecasts, and boating safety. <a href="http://www.cdip.ucsd.edu">www.cdip.ucsd.edu</a>
CDIP - Waves & Beaches		Ongoing beach change measurements and waves research to improve wave and shoreline change modeling and prediction. Focus on State Beaches and boating facilities and safety.
Toxics in Marinas	Neira-Levin	Impacts of multiple contaminants on marina soft-bottom organisms from Cu, PAHs, and PCBs using existing, multi-year data of biodiversity and community structure to inform science-based management of impacted marinas, especially hull paint pesticide regulation.
Sea Level & Storm Surge	Bromirski	Trends in coastal storm surge and the relationship to large waves that cause erosion, flooding, and damages, and the changes anticipated from sea level rise, to improve facilities design and safety.
Shore Stations	Flick-Terrill-Carter	Ongoing long-term manual temperature and salinity measurement, analysis, and dissemination at 10 CA coastal stations, including Scripps Pier since 1916.
State Beach & Cliff Erosion	Young-Guza	Ongoing monitoring and modelling of beach and cliff erosion at San Diego-area State Beaches from survey and remotely-sensed topographic data to identify current hazards and anticipated worsening due to sea level rise.
State Beaches & Estuaries	Giddings-Gallien	Monitor inlet and beach at Torrey Pines and San Elijo State Beaches with surveys and aerial drone providing information on facilities or infrastructure impacts from inlet closures and large erosion events.
Facilities Flood Modeling	Gallien (UCLA)	Determine evolving flood risks at State Beaches and marinas using hydrodynamic flood models and high resolution mapping from DBW-funded unmanned aerial vehicle (UAV) to reliably address impacts of sea level rise.