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***Exploring California's Amazing Seafloor - the Visionary
California Seafloor Mapping Program***

The California Seafloor Mapping Program (CSMP) is a collaborative effort to develop comprehensive bathymetric, geologic, and habitat maps for all of California's State Waters. CSMP began in 2007 when the California Ocean Protection Council (OPC) allocated funding for high-resolution bathymetric mapping, largely to support the California Marine Life Protection Act. Subsequent support from the OPC, NOAA, USGS, and other partners has led to development of one of the world's largest seafloor-mapping datasets. CSMP data stimulates and enables research, raises public education and awareness, and is essential for coastal and marine spatial planning. Specific applications include:

- *Documenting coastal geologic framework*
- *Hazard assessments – earthquakes and tsunamis*
- *Sea-level rise impacts, coastal erosion*
- *Regional sediment management*
- *Forecasting coastal flooding – storm inundation*
- *Baselines for long-term monitoring, climate change*
- *Designation of marine protected areas*
- *Defining habitat, ecosystem-based management*
- *Siting infrastructure (e.g., renewable ocean energy)*
- *Safer navigation and commerce*

Dr. Samuel Johnson is a Research Geologist in the U.S. Geological Survey Pacific Coastal and Marine Science Center in Santa Cruz. He currently designs, coordinates, and conducts research projects that focus on seafloor mapping, coastal and marine geomorphology and geologic framework, coastal evolution, and coastal earthquake and tsunami hazards. He is the USGS lead for the California Seafloor Mapping Program, an ambitious cooperative program to create a comprehensive coastal/marine bathymetric, geologic and habitat base map series for all of California's State waters.