

The Urban Ocean Program USC Sea Grant 2022-2024 Highlights



The University of Southern California (USC) Sea Grant program has been part of the National Oceanic and Atmospheric Administration (NOAA)'s National Sea Grant network for over 50 years. USC Sea Grant serves the greater Los Angeles (LA) region, one of the nation's most populous areas, with nearly 19 million residents speaking over 140 languages, and home to the largest port complex in the nation.

With our **Urban Ocean** programmatic focus, USC Sea Grant has been and will continue to be a leader in pioneering solutions for the challenging issues in one of the nation's most urbanized coastal environments. The following are selected highlights within our four strategic focus areas. Learn more about our program: **dornsife.usc.edu/uscseagrant/**

Healthy Coastal Ecosystems

- Improved understanding of health impacts of ocean pollution through new research and public meetings about deep ocean DDT contamination
- Won an award for work with Channel Islands Nat.
 Marine Sanctuary and the Blue Whales Blue

 Skies Initiative, incentivizing shipping companies to slow their speed, reducing whale strikes and air contamination
- Conducted first-of-its-kind research investigating whether street sweeping and trash capture devices capture microplastics to optimize their capture from stormwater runoff
- Facilitated a pilot project to develop bioplastics, a promising alternative for manufacturing
- Led a pilot community needs assessment in Los Angeles to guide efforts to reduce ocean litter across California





Safe and Sustainable Seafood

- Coordinated a Youth Fishing Program with local fish clubs to introduce more kids to the joys of fishing while educating them about ocean conservation
- Brought CA-grown seafood to new food markets in LA in partnership with local aquaculture producers and community organizations
- Enhanced the future economic viability and environmental safety of seaweed farms through cutting-edge research and public education
- Supported shellfish farmers in applying new techniques to maximize their harvests and extend the shelf life of their products
- Improved public awareness of how seafood is harvested in the US through research and outreach



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Resilient Communities and Economies

- Advanced planning efforts for changing coastlines for 17 jurisdictions through the AdaptLA program
- Helped organize two regional workshops on population shifts in response to hazards
- Published the **first legal guidebook** providing clear guidance for adaptation in the coastal zone
- Facilitated the development of a public model of sea level rise-induced **flooding impacts**, which is being used by state and local managers
- Conducted the 4th iteration of a statewide survey—the only comprehensive, longitudinal assessment of coastal adaptation in the country—to assess management needs in adapting to sea level rise
- Restored 50 acres of beach sand dunes, proving the effectiveness of restored sites for protection in the face of increasing storms

Environmental Literacy and Workforce Development

- Received a 2024 Champion of Girls Award for work with the EmpowHer Institute, educating, training, and mentoring girls interested in science careers
- Reached over 20,000 kids each year through formal & nonformal programming
- Integrated ocean themes into early childhood education using our co-written kids' kids' marine biology book
- Facilitated the expansion of the Los Angeles
 Conservation Corps' aquarist training in schools
- Facilitated creation of a standards-aligned Pacific Coast Sea Shores **Beach Guide** for public education

