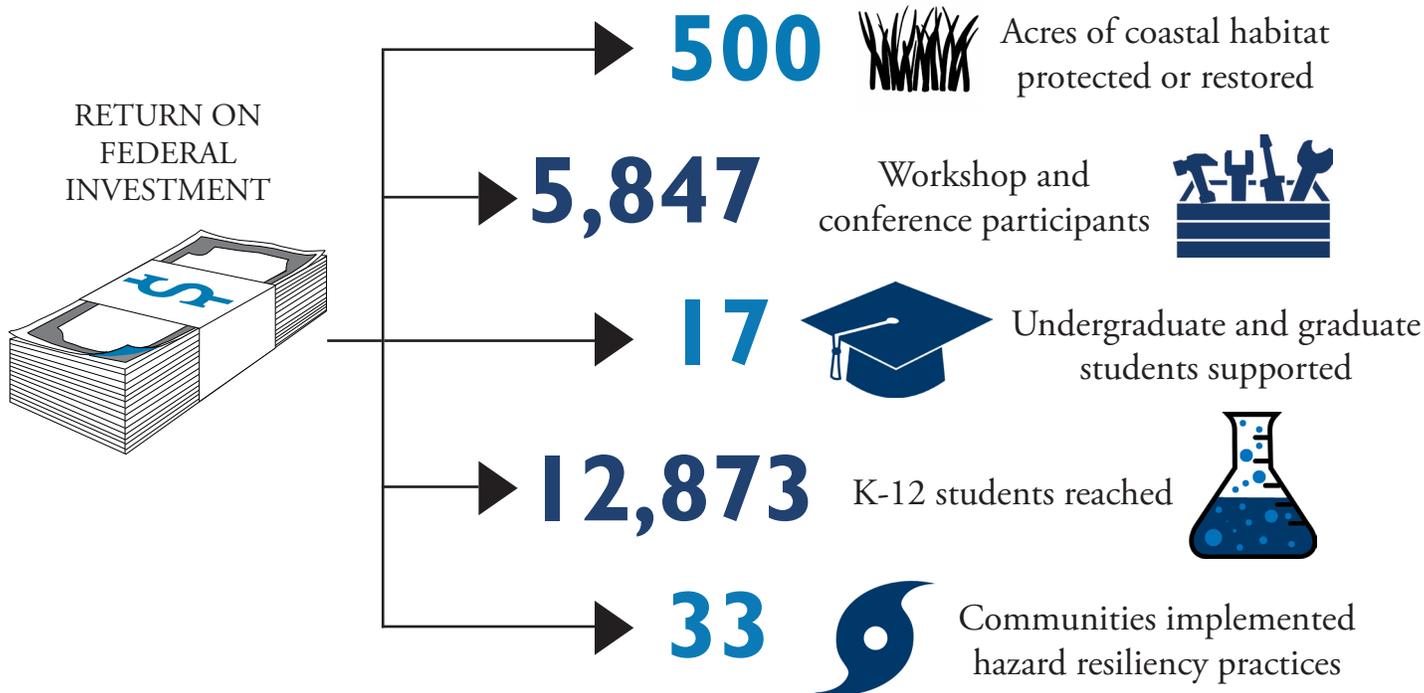


UNIVERSITY OF SOUTHERN CALIFORNIA SEA GRANT

\$3.1 M
economic impact in 2015

Economic impact calculated after 2016 annual reports completed, not included in national Sea Grant total economic impact of \$575 million. Metrics below reported to National Office in June 2016 for work completed Feb 2015 to Jan 2016.



Sea Grant research leads to innovative technology that advances aquaculture

“Bringing hands on experiences to the classroom helps students recognize their own potential for future careers, empowers them to design solutions and to become informed decision makers.”

- Linda Chilton,
USC Sea Grant

Marine finfish aquaculture production has significant growth potential, but is largely limited by the need for improved husbandry protocols to prevent disease and maintain healthy aquaculture systems. University of Southern California (USC) Sea Grant funded research that led to the development and testing of the first self-cleaning aquaculture tank in the United States. Public demonstrations of the pilot project have been shared at meetings, and a version of the new tank system has been incorporated into the Seabass in the Classroom program at the Port of Los Angeles High School.

dornsife.usc.edu/uscseagrant/seabass-in-the-classroom

Sea Grant uses citizen science and storm modeling to engage communities, help them plan for and adapt to coastal hazards



Sea Grant engages citizen scientists to monitor erosion along urban beaches. Credit: USC Sea Grant

Sea Grant helps communities prepare for coastal hazards, like flooding, erosion, and severe storms. Impacts along urban coastlines include damage to infrastructure such as roads and sewage treatment plants, erosion of beaches and cliffs, and loss of habitat for wildlife. The Urban Tides Community Science Initiative is building resilience in coastal communities with citizen science program. Launched in 2015, Urban Tides links the tide observations of community members across Southern California with scientists and city leaders. The tide observations contribute to a monitoring database that ground truths model data and informs planning.

Through the AdaptLA program, USC Sea Grant trained 424 stakeholders and 30 communities to use a model that provides region-specific flood hazard projections to identify vulnerabilities of coastal communities to a suite of coastal storms, in combination with sea level rise. The new scientific modeling tool was developed by the U.S. Geological Survey. It is being used to inform planning in Los Angeles and San Diego Counties as part of their land-use and hazard mitigation planning efforts. dornsife.usc.edu/uscseagrant/urban-tides-initiative

Sea Grant project increases understanding of biofilters as urban water management tool in Los Angeles

Maintaining adequate water supply in southern California is a high priority for all. Large quantities of water are wasted as stormwater runoff. Additionally, urban stormwater carries numerous contaminants from residential and commercial activity and has a significant impact on coastal water quality and public health. In 2015, USC Sea Grant funded a project that catalogued the locations, designs, and ecosystem benefits of biofilters in Los Angeles. The project is aimed at not only cataloguing biofilters but also assigning monetary valuation to the ecosystem services provided by biofilters. The information will help managers develop cost-benefit analyses of biofilters during planning. The goal of the study is to provide relevant information on the feasibility of biofilters to capture, treat, and harvest urban stormwater runoff in southern California.

dornsife.usc.edu/uscseagrant/levin-2015



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