



Annual Meeting
April 13, 2017

A coastal landscape with green seaweed in the foreground and waves in the background. The seaweed is a vibrant green and covers the foreground. In the background, there are waves breaking on a rocky shore under a cloudy sky.

Recent Activities Future Priorities



Krista Kamer, Director

COAST Is Broad

Umbrella organization for marine, coastal and coastal watershed related activities within the CSU

Open and coastal ocean



Coastal zones



Coastal watersheds



NOT Limited to California



Two main goals guide activities

1. Advance our knowledge of marine and coastal resources and the processes that affect them.



2. Inform decision-making and the development of responsible policy.

Priorities for 2016-2021

- Provide funding to support research
- Train students to succeed in the workforce
- Communicate with stakeholders and public
- Serve as a primary resource for informed decision-making



COAST will provide ~\$200,000 in faculty research support this year

Program	# of Awards	Award total
Grant Development Program	8*	\$155,000*
Rapid Response Funding	4	\$27,662
Seminar Speaker Series	6	\$4,379
Short Course, Workshop, Symposia Funding	1	\$10,000
Total	19	\$197,862*

* Estimate

COAST investment results in extramural funding

PI (Campus)	COAST Award		2016-17 Extramural Funding	
	Program	Year	Funder	Amount
Aiello (San Jose)	RR	2015-16	CA Marine Sanctuary Foundation	\$20,000
Boyer (San Francisco)	GDP	2015-16	CA State Coastal Conservancy	\$262,255
Carrano (San Diego)	GDP	2016-17	NSF	\$145,068
Lewison (San Diego), Hines (San Francisco)	CRS	2012-13	NOAA	\$80,000
Mackie and Okuda (San Jose), Amagata (San Francisco)	GDP	2014-15	NSF	\$1,575,073
Tomanek (San Luis Obispo)	FRIP	2011-12	NSF	\$591,476
TOTAL				\$2,673,872

Support for student research and workforce development

Program	# Students Supported	Amount
Graduate Student Research Awards	34	\$102,000
Undergraduate Student Research Support Program	75*	\$53,861
Student Travel Awards	57	\$40,428
Summer Internships	18	\$70,800 [§]
Total	184	\$267,089

* Estimate based on prior years

§ ~50% provided by Hosts

Sea Star Wasting Disease

Causes, Impacts and Recovery



Dr. Todd Anderson
Biology, SDSU



Dr. Brian Livingston
Biology, Long Beach



Dr. Sarah Cohen
Biology, SFSU

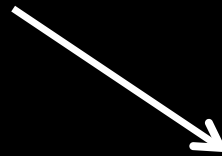


Dr. Jennifer O'Leary
Biology, SLO

Refugio Oil Spill



**Santa Barbara County
May 19, 2015**



El Niño Impacts

A close-up photograph of a large, spiral seashell with a green and white striped pattern, resting on a vibrant coral reef. The coral is a mix of pink, orange, and purple hues. The background is dark, making the shell and coral stand out.

Drs. Crow White and Ben Ruttenberg
Biology, SLO
Dr. Danielle Zacherl, Biology, Fullerton

A photograph showing a large group of white birds, likely frigatebirds, on a sandy beach. Some birds are standing on the ground, while others are in flight against a clear blue sky. The birds have white bodies, black wings, and distinctive black and white head markings.

Dr. Andres Aguilar, Biology, CSULA
Dr. Mike Horn, Biology, Fullerton

A photograph of a flooded road. Water is flowing over a concrete barrier, creating a large splash. The road is surrounded by trees and vegetation. In the background, a building and a sign for "San Diego River" are visible.

Dr. Alicia Kinoshita
Civil Engineering, SDSU

HSU helps northern CA fishing communities

- NOAA Saltonstall-Kennedy: \$271,000
 - Fishing community sustainability plans
 - Social, economic, and environmental factors



- Dr. Laurie Richmond, Environmental Sciences & Management
- Drs .Steven Hackett and William Fisher, Economics
- Dr. Brian Tissot, Biology
- Dr. Joe Tyburczy, CA SG Extension

Marine Debris and Microplastics

Dr. Ed Carpenter
Biology, SFSU

Dr. Eunha Ho
Public Health, SDSU

Drs. Sean Anderson and Clare Steele
Environmental Science & Resource
Management, Channel Islands

Dr. Erika Holland
Biology, Long Beach

Dr. Tim Davidson
Biology, Sacramento

Carpenter EJ, Smith KL Jr. 1972. *Plastics on the Sargasso sea surface*. Science. 175(4027): 1240-1.

Marine Protected Areas

Regions

[JOIN OUR COMMUNITY](#)[LOGIN](#)

oceanSPACES

Q SEARCH GO

About ▼

Community ▼

Blog

State Priorities ▼

MPA Monitoring ▲

Map

Regions

Ecosystems + Human Uses

Data

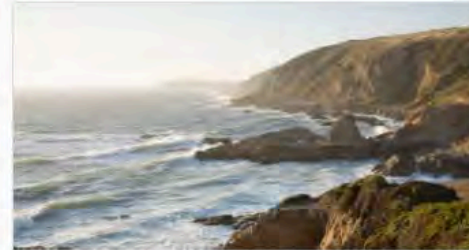
A PROGRAM OF

CALIFORNIA
OCEAN SCIENCE TRUST

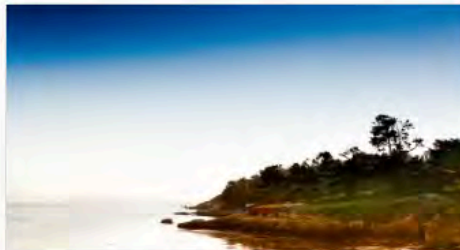
California is home to the largest scientifically based network of marine protected areas in the nation. This statewide network, which stretches the entire length of the California coast, is implemented and managed in four coastal regions. Scientific monitoring is underway in each region, beginning with baseline monitoring to establish a benchmark of ocean condition and then transitioning to long-term assessments of ocean health and MPA performance.



North Coast



North Central Coast



Central Coast



South Coast

Biological Climate Change Impacts

Ocean acidification, hypoxia, thermal stress



Mytilus californianus
(California mussel)



Haliotis cracherodii
(black abalone)



Sebastes spp (rockfish)

Physical Climate Change Impacts

Erosion, sea level rise, storms



Venice Beach



Living shorelines project
in San Francisco Bay



Beach Sustainability Index
Workshop

Fisheries Management



Informing data poor fisheries



Evaluating fishing practices for more efficient management

Sustainable Aquaculture

- Finalizing MOUs with industry partners
- Extensive stakeholder engagement
- Significant student involvement
- Actively seeking external funding
 - CA SG, NOAA, DOE



Ecophysiology

“Putting the animal back together”

- June 2016 workshop
 - Channel Islands, East Bay, Fresno, Long Beach, Monterey Bay, San Francisco, San Jose, San Luis Obispo, Sonoma
- August 2016 NSF RCN submission (\$500K)
 - Positive reviews, encouraged to resubmit



2016-2021 Strategic Plan

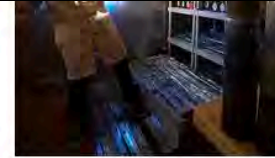


- Amplify success
 - News
 - Publications
 - Funding
- Inform decision-making

Share your news!

CSU Fullerton researchers have published a study about evidence of abrupt sinking of the wetlands near Seal Beach caused by ancient earthquakes that shook the area at least three times in the past 2,000 years. The team includes Dr. Matthew Kirby, Dr. Brady Rhodes, and his former student, and previous COAST awardee, Robert Leeper.

[more >>](#)



Share Your News with COAST!

We want to hear about your news - please share it with us! We will post your story on the COAST website and/or Facebook page. Please paste a link to your news story below.

*Link to News Story

*E-mail Address

Submit

Open Funding Opportunities

- [Short Course, Workshop, and Symposia Funding Program](#)

Announcements

- [COAST 2016 Annual Report Available Online](#)
- [COAST Annual Meeting: April 13, 2017](#)

Get Involved

- [Become a Member](#)
- [Sign up for the Student Email List](#)
- [Sign up for the Faculty Email List](#)

Scholars In Training

Research opportunity for first and second year undergraduates

- Dept. of Education HSISA funding (CSUMB)
- 1st and 2nd year undergrads will assist MLML graduate students with thesis work
 - First hands-on research opportunity
- Eligible for funding for independent research in 3rd or 4th year



State and Federal Engagement

- Understand state and federal needs for data and information
 - Legislators and staff —→ Decision-making
 - Agencies —→ Policy and management actions
- Determine how CSU can meet needs
 - Supports faculty research
 - Trains students

