

# Showcase Summary: Integrated Ocean Observing for a Changing California Coastline

Hosted by SCCOOS & CeNCOOS



SCCOOS and CeNCOOS joint showcase in Sacramento, CA on November 19, 2019 at the Library Galleria. Photo credit: Fred Bahr, CeNCOOS.

The California Ocean Observing Systems (CeNCOOS and SCCOOS) held a joint meeting in Sacramento on 19 November 2019 to showcase the Systems' capabilities and to promote a shared vision for the future of ocean and coastal observing in the State of California. The goals of the meeting were to:

1. Improve awareness of the California Ocean Observing Systems' accomplishments, capabilities, and end-user applications;
2. Increase coordination between the California Ocean Observing Systems and State of California monitoring activities; and,
3. Provide strategic guidance for ocean observing priority investments in 2020-2025.

The meeting began with a session on observing needs and strategic and policy directions from the perspective of the State of California, including the Ocean Protection Council and the California State Assembly. This highlighted several areas of existing and potential future partnerships on climate change-related issues (e.g., ocean acidification and assessing and managing marine protected areas) and on public safety issues (e.g., harmful algal blooms and sea level rise and inundation). Another key issue raised from the State perspective was the integration and delivery of information to support the development of an ocean health 'report card.' Information accessibility and synthesis to support indicators of ocean and ecosystem health is a priority for state and Federal managers as well as the West Coast Ocean Alliance.



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CeNCOOS and SCCOOS Principal Investigators and collaborators presented perspectives on priority strategic initiatives and observing capabilities, and the future of ocean observing including climate change, biology, and ecosystem assessments. These presentations were followed by an observing partnership panel discussion and breakout session that highlighted both areas of success of the Regional Associations, as well as areas that need improvement. Successes included recognition of the robust achievement of several aspects of our core visions and missions, including the provision of a diverse array of data touching on many key societally linked themes, such as fishers making decisions on a daily basis, developments of harmful algal bloom information capability for real-time and forecast model output, and understanding ocean conditions that threaten marine mammals.

The need to increase biology and ecology observing to meet policy demands was made clear (e.g. the Marine Life Protection Act). Gaps in terms of observations also touch on many themes including co-located physics, biogeochemistry, biology, and ecology, as well as specific spatial monitoring gaps like ocean acidification and measurements for the area between Bodega Bay and Humboldt Bay. Areas for improvement included the need to continually improve our products and tools for making data discoverable, accessible, and usable for less technical audiences. Our data management systems have a growing catalog of data and some additional work is needed to ensure the tools are well used.

CeNCOOS and SCCOOS will continue to train and engage key partners and new stakeholders on existing information products and to develop new tools to ensure ready access and viewing of specific data for specific needs. This includes convening small focus groups to initiate ‘data product sprints’ to frame requirements and share information about our DMAC capabilities to make our data/information product development process more efficient and output more useful. These small meetings should include a lead facilitator-- someone familiar with the stakeholders’ information needs and can translate between data providers and product developers. The need to also preserve our current capabilities, including through recapitalization of equipment and infrastructure, and to expand capacity surrounding emerging issues around sea turtle and whale entanglement, microplastics, kelp and seagrass restoration, OAH and coastal inundation, among several other issues, was also crystallized from several perspectives.

The meeting agenda including links to the presentations is enclosed.

Sincerely,



Clarissa Anderson,  
SCCOOS Executive Director



Henry Ruhl,  
CeNCOOS Director





# Integrated Ocean Observing for a Changing California Coastline

Hosted by SCCOOS & CeNCOOS

Tuesday, November 19th, 2019 | 8 AM - 6 PM  
 Tsakpoulos Library Galleria, Main Floor  
 828 I Street, Sacramento, CA 95814



## Objectives:

1. Improve awareness of California's Ocean Observing System's accomplishments, capabilities, and end-user applications.
2. Increase coordination between California's Ocean Observing System and State of California monitoring activities.
3. Provide strategic guidance for ocean observing priority investments in 2020-2025.

*Speaker presentations linked below.*

Welcome	
8:00	Breakfast & Coffee - breakfast sandwiches and quiche bites
8:30	Welcome, Meeting Objectives and Goals - <i>Henry Ruhl, CeNCOOS</i>
8:40	<a href="#">Opening Remarks</a> - <i>Mark Gold, CNRA Ocean Protection Council</i>
8:50	<a href="#">California Ocean Protection Council Strategic Plan and Observing Priorities</a> - <i>Justine Kimball, CNRA Ocean Protection Council</i>
9:05	Legislative Priorities - <i>Catherine Freeman, California State Assembly, Committee on Water, Parks, and Wildlife</i> and <i>Keith Cialino, California State Assembly, Committee on Water, Parks, and Wildlife</i>
9:20	<a href="#">SCCOOS &amp; CeNCOOS Overview and Future Vision</a> - <i>Clarissa Anderson, SCCOOS and Henry Ruhl, CeNCOOS</i>
9:35	Break

## Session 1: Priority Strategic Initiatives and Observing Capabilities

Moderator: Clarissa Anderson, SCCOOS

9:45	<a href="#">Capturing Ocean Heat, Oxygen and Nutrient Content and Circulation</a> - Jack Barth, OSU
10:00	<a href="#">Documenting long-term change with moorings and other fixed platforms</a> - Uwe Send, UCSD
10:15	<a href="#">Surface Current Mapping - High Frequency Radar Network</a> - Lisa Hazard, UCSD
10:30	<a href="#">Advances Water Quality and Harmful Algal Bloom Monitoring</a> - Raphe Kudela, UCSC
10:45	<a href="#">Integrated Ocean Models to Assess Impacts from Changing Conditions</a> - Chris Edwards, UCSC
11:00	Break

## Session 2: The Future of Ocean Observing: Climate Change, Biology and Ecosystem Assessments

Moderator: Henry Ruhl, CeNCOOS

11:10	All Hands on Deck - Partnerships and leveraged investments to sustain climate observations - Henry Ruhl, CeNCOOS
11:15	<a href="#">Ocean Climate Impacts on Biology</a> - Francisco Chavez, MBARI
11:30	<a href="#">Nearshore &amp; Estuarine Ecosystem Health</a> - Karina Neilsen, SFSU
11:45	<a href="#">Shoreline Inundation Forecast and Validation</a> - Mark Merrifield, UCSD
12:00	<a href="#">Ocean Acidification</a> - Todd Martz, UCSD
12:15	Group Discussion
12:30	Lunch - Gourmet sandwiches and salad

## Session 3: Ocean Observing Partnership Panel

Moderator: Liz Whiteman, OST



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1:30	<p>Panelists:</p> <ol style="list-style-type: none"> <li>1. Andrew DeVogelaere, NOAA Monterey Bay National Marine Sanctuary</li> <li>2. Mary Miller, San Francisco Exploratorium</li> <li>3. Tenaya Norris, The Marine Mammal Center</li> <li>4. Noah Oppenheim, Institute for Fisheries Resources</li> <li>5. Debbie Aseltine-Neilson, California Department of Fish and Wildlife</li> </ol>
2:15	Break
<p><b>Session 4: Future Collaboration - Working Session</b>  Moderators: Clarissa Anderson, Henry Ruhl, and Liz Whiteman</p>	
2:30	<p><u>Breakout session</u></p> <ol style="list-style-type: none"> <li>1. Choose your Own Adventure! - Three Breakout Groups</li> <li>2. Collaboration and Leveraging Fill the Gaps</li> <li>3. Develop Recommendations</li> <li>4. Report Out</li> </ol>
<p><b>Reception and Informal Discussion</b></p>	
4:00	Beer, Wine and Cheese Reception - Sponsored by CODAR
6:00	Adjourn
<p>Henry Ruhl, Director, CeNCOOS - <a href="mailto:hruhl@mbari.org">hruhl@mbari.org</a>  Alex Harper, Program Manager, CeNCOOS - <a href="mailto:aharper@mbari.org">aharper@mbari.org</a>  Clarissa Anderson, Executive Director, SCCOOS - <a href="mailto:cra002@ucsd.edu">cra002@ucsd.edu</a>  Megan Hepner-Medina, Program Coordinator, SCCOOS - <a href="mailto:mhepner@ucsd.edu">mhepner@ucsd.edu</a></p>	



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