

Ocean Protection Council Science Advisory Team Workshop

The Science of Climate Adaptation in California

10:00 AM - 5:00 PM
Tuesday, May 23, 2017
Elihu M. Harris State Building, Room 1
Oakland, CA

About the Workshop

At this workshop, the Ocean Protection Council Science Advisory Team (OPC-SAT), California Ocean Science Trust, the California Ocean Protection Council (OPC), other state decision-makers and partners will come together to:

- **Scan the Horizon:** Inform OPC's strategic planning and priorities through a horizon scanning exercise, identifying current and emerging science issues and research that the SAT sees as important for California in the near- and longer-term.
- **Inform a Statewide Ocean and Coastal Climate Change Roadmap:** Discuss the formation of an OPC-SAT Working Group to develop a Statewide Ocean and Coastal Roadmap Report as part of California's 4th Climate Change Assessment.

The public is invited to attend.

OPC Science Advisory Team

The OPC-SAT is composed of 26 esteemed scientists, convened to serve the science policy needs of California. Ocean Science Trust hosts annual workshops of the OPC-SAT, state partners and interested members of the public to inform important issues facing California's ocean and coast.

Agenda Overview

9:30 AM Coffee and Light Breakfast provided

I. Introduction and Opening Remarks

10:00 AM - 10:15 AM Welcome Remarks
10:15 AM - 10:30 AM OPC-SAT Business
10:30 AM - 11:00 AM OPC-SAT Working Procedures

II. Horizon Scanning: Identifying Salient Ocean & Coastal Science for California

11:00 AM - 11:15 AM Overview and Presentation: Scanning the Science Horizon in California
11:15 AM - 12:30 PM Discussion: Prioritizing Science and Aligning with State Needs
12:30 - 1:30 PM Lunch

III. California's 4th Climate Change Assessment

1:30 - 1:50 PM Helping the State Prepare for Climate Change
1:50 - 2:00 PM Setting the Stage: California's 4th Climate Change Assessment and Request for an Ocean and Coastal Report
2:00 - 2:40 PM Panel Discussion and Q&A: Adaptation Planning in California and the Role of Science
2:40 - 4:00 PM Breakout Work Session: Scoping a Report Outline
4:00 - 4:30 PM Group Discussion and Wrap-up
4:30 - 5:00 PM Workshop Wrap-Up

Agenda

I. Introduction and Opening Remarks

10:00 AM - 10:15 AM - Welcome Remarks

Tom Maloney, California Ocean Science Trust

Jennifer Eckerle, California Ocean Protection Council

10:15 AM - 10:30 AM - OPC-SAT Business

Tom Maloney

- Executive Committee outgoing member and election results
- Outgoing member, new member selection procedure

10:30 AM - 11:00 AM - OPC-SAT Working Procedures

Steve Murray, OPC-SAT Executive Committee co-chair

- OPC-SAT Working Procedures draft update and discussion on key outstanding items

II. Horizon Scanning: Identifying Salient Ocean & Coastal Science for California

Request: Identify Emerging Ocean Science

The OPC-SAT has been asked to identify emerging ocean and coastal science issue areas that California should prioritize in both the near-term and longer-term. To begin this discussion, Ocean Science Trust conducted a survey of OPC-SAT members who were asked to contribute their top 5 emerging science questions or challenges, along with a rationale and potential opportunities for each. Survey results will form the basis for this discussion, as well as identifying knowledge gaps and potential solutions.

Following the workshop, Ocean Science Trust and OPC will explore the intersection between the OPC-SAT's recommendations and the research questions identified by state coast and ocean management agencies, and begin to identify issues that are feasible to act on. Ocean Science Trust will develop a brief report for the August OPC meeting that summarizes the highest priority ocean and coastal science issues.

Our Goal

- *Develop a list of emerging management-relevant ocean and coastal science questions or challenges and associated actions from across the scientific and management communities in order to inform needs within OPC's current program areas, as well as their next 5-year strategic plan and beyond.*

11:00 AM - 11:15 PM - Overview and Presentation: Exploring California's Science Needs

Hayley Carter, Ocean Science Trust, and Jennifer Eckerle, Ocean Protection Council

Ocean Science Trust and OPC will present an overview of the request and pre-workshop SAT member survey responses.

11:15 AM - 12:30 PM - Discussion: Prioritizing Science and Aligning with State Needs

Moderated by Hayley Carter

Ocean Science Trust will facilitate a discussion with SAT members and workshop participants focused on:

- The role and function of a "horizon scan"
- Identifying gaps
- Prioritizing near-term and longer-term science questions
- Discuss potential solutions, actions and next steps

Guiding questions for the group to consider:

- *What does the SAT see as a horizon scan? What time scales should be considered (recognizing management timescales are likely to be on a 5-10 year range)?*
- *Is anything missing? Should additional experts contribute to the survey?*
- *What issue areas may have near-term opportunities (5 year)? What are some longer issues to keep on the State's radar (10+ years)?*

12:30 PM - 1:30 PM - Lunch

III. California's 4th Climate Assessment: Developing a Statewide Ocean and Coastal "State of the Science" Report

Request: Statewide Ocean and Coastal "Roadmap" Report

As a component of California's ongoing 4th Climate Assessment, the State has identified the need for Regional Reports for all areas of the State, including the ocean and coast. Thus the California Ocean Protection Council (OPC) is asking Ocean Science Trust to convene a working group of the Ocean Protection Council Science Advisory Team (OPC-SAT) to develop a Statewide Ocean and Coastal Roadmap Report that:

- synthesizes knowledge of the impacts of climate change across ocean and coastal ecosystems and human communities;
- recommends science-based solutions to inform ecological and social resilience planning; and
- identifies priority knowledge gaps and science needs to advance the State's ongoing adaptation research agenda.

The Regional Reports, including the Ocean and Coastal Roadmap, should get underway in 2017, and completed by the fall of 2018. Individual research projects to be incorporated into California's 4th Climate Assessment are now underway, and set to be completed by the end of 2017.

Our Goals

We will discuss convening an OPC-SAT Working Group to work with Ocean Science Trust and the OPC to develop the Ocean and Coastal Roadmap. Our goals are to:

- *Deepen the OPC-SAT's understanding of the goals and ongoing efforts related to climate adaptation planning in California.*
- *Identify and prioritize an initial array of topics and concepts that can form the basis for the Ocean and Coastal Report.*
- *Discuss the formation of an OPC-SAT Working Group to collaborate with the OPC and Ocean Science Trust in writing the report over the next year.*

Discussions today will allow Ocean Science Trust to work with the OPC to craft a report scope and outline, and scope an OPC-SAT working group. Main messages from today's agenda item will also be captured in the workshop proceedings.

1:30 - 1:50 PM - Introduction: Helping the State Prepare for Climate Change

Karina Nielsen, San Francisco State University, Romberg Tiburon Center for Environmental Studies, OPC-SAT Co-chair

Karina Nielsen will walk through the agenda item, and the potential leadership opportunity for the OPC-SAT to participate in developing a Roadmap Report as part of California's 4th Climate Assessment.

1:50 - 2:00 PM - Setting the Stage: California's 4th Climate Change Assessment and Request for an Ocean and Coastal Report

Jennifer Phillips, California Ocean Protection Council

Jennifer Phillips will present an overview of the 4th Climate Assessment, the context, need, and timing for a statewide ocean and coastal Roadmap Report, and the potential for Ocean Science Trust and an OPC-SAT Working Group to address this request.

2:00 – 2:40 PM - Panel Discussion and Q&A: Adaptation Planning in California and the Role of Science

Facilitated by Tom Maloney

Panelists: Jamie Anderson, Department of Water Resources, Louise Bedsworth, Office of Planning and Research

Each panelist will present their role in state adaptation planning, provide initial thoughts on the State's goals related to ocean and coastal adaptation planning, and how the Roadmap Report can be most impactful for decision-makers. We will also have a discussion related to the Roadmap Report, and hold open Q&A between workshop participants and the panel.

2:40 – 4:00 PM - Breakout Work Session: Scoping a Report Outline

Facilitated by Emily Knight, California Ocean Science Trust

We will break out into four groups (composed of an interdisciplinary mix of scientific experts and decision-makers) to discuss ecological and social resilience for each of four theme areas. We will also engage public attendees as a 5th breakout group to share feedback and input on all themes. The purpose of this exercise is to begin gathering your knowledge and ideas on:

- impacts of climate change to species, ecosystems, and human communities;
- solutions to promote ecological and social resilience;
- priority science needs and gaps; and
- scope and/or areas of expertise for an OPC-SAT Working Group

Breakout Groups

We will have four breakout groups to discuss ecological and social resilience related to the following themes:

Group #1: Food provisioning (e.g., commercial and recreational fisheries, aquaculture)

Group #2: Shoreline change (e.g., coastal development, natural and built infrastructure, shoreline erosion)

Group #3: Coastal and marine ecosystem structure and function (e.g., physical and biogenic coastal and marine habitats, associated species assemblages, Marine Protected Areas)

Group #4: Water quality (e.g., pollution, co-occurring stressors)

Group #5: Public attendee discussion among all themes

4:00 – 4:30 PM - Group Discussion & Wrap-up

Moderated by Karina Nielsen

We will close with a full group discussion, calling upon various members of breakout groups to share their perspectives on key ideas that emerged from the breakout discussion. Participants will also be encouraged to share ideas for areas of expertise that should be represented on an OPC-SAT Working Group to support the 4th Climate Assessment effort in 2017-2018.

4:30 - 5:00 PM - Group Discussion: Workshop Wrap-up

Moderated by Tom Maloney

