

Applying Science to Decisions:

California Ocean Science Trust

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Oregon Nearshore Research Task Force Meeting



Outline

- The California Ocean Science Trust (OST)
 - Establishment
 - Organizational Goals
 - The Ocean Protection Council and the OST
 - OPC-Science Advisory Team
 - Identification of Science Needs
 - Science Integration



The California Ocean Science Trust

501(c)(3) established based on the
California Ocean Resources
Stewardship Act (CORSAs) of 2000

Board of Trustees

10 members appointed for their experience and
expertise

- California Natural Resources Agency (1)
- California Environmental Protection Agency (1)
- Department of Finance (1)
- California University System (3)
- Ocean and Coastal Interest Groups (2)
- Representatives of the General Public (2)



Organizational Goals

Goal 1: Facilitate collaboration, to facilitate two-way connections between the world of science and that of policy and management by establishing and supporting multi-partner information systems and exchanges.

Goal 2: Institutionalize the integration of best science into California coastal ocean policy and decision-making by building new organizations, programs, and processes and catalyzing applied research.



Key Elements of Boundary Organizations*

Science and decision-making have different:

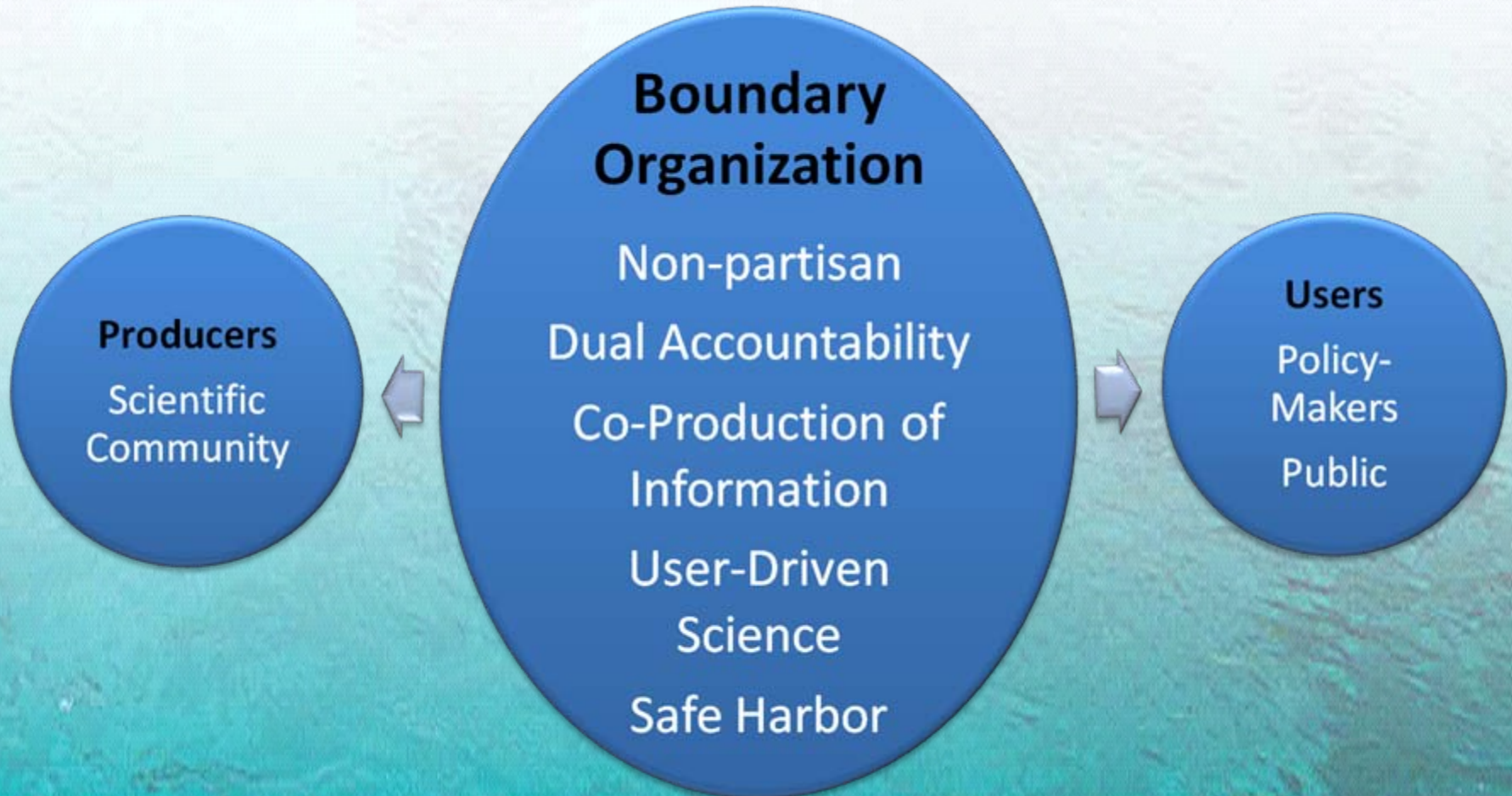
- Cultures
- Time-tables
- Conceptions of the place and value of scientific knowledge

Useful knowledge must meet 4 criteria on *both* sides:

- 1.Relevant** to the problem addressed
- 2.Timely** for the choices at hand
- 3.Credible** with a reliable basis for action
- 4.Legitimate** so that action can be taken

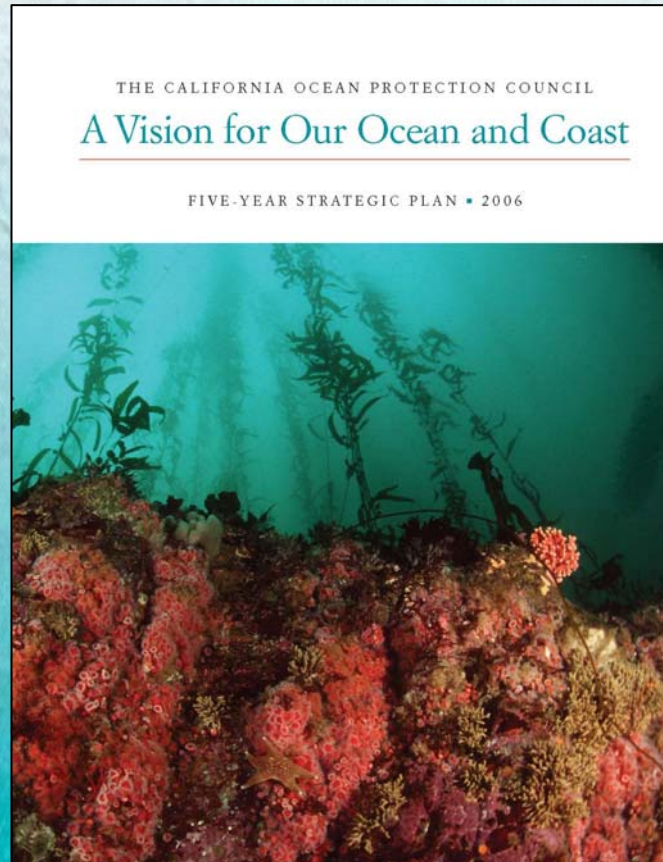
*National Research Council, Roundtable on Science and Technology for Sustainability 2006. *Linking Knowledge with Action for Sustainable Development: The Role of Program Management* – Summary of a Workshop. William C. Clark and Laura Holliday, rapporteurs. Washington: National Academic Press.

OST as a Boundary Organization*



California Ocean Protection Council

The California Ocean Protection Act (COPA) of 2004 directs the OPC to work with state agencies “to improve the effectiveness of state efforts to protect ocean resources.”



California Ocean Protection Council

OPC Members:

- **Lester Snow** Secretary for Natural Resources, Council Chair
- **Linda Adams** Secretary for Environmental Protection
- **John Chiang** State Controller & Chair, State Lands Commission
- **Susan Golding** Public Member
- **Geraldine Knatz** Public Member
- **Fran Pavley** State Senator
- **Pedro Nava** State Assemblymember

State Coastal Conservancy's Executive Officer is the Council Secretary
California Ocean Science Trust's Executive Director is the Science Advisor



OPC and OST recognize a need to:

- **Identify Science Needs for Decision-Makers**
- **Produce Relevant Science**
- **Translate Results for Decision-Making**
- **Link End-users with Science and Information**
- **Integrate Science into Decision-Making**



OPC, OST, and OPC-SAT Coordination

**Ocean Protection Council
– Science Advisory Team
(OPC-SAT)**

Provides science advice to
OPC via science advisor

**Ocean Science
Trust (OST)**

Provides science
services and science
advisor

Provides governance
and oversight

**Ocean Science
Trust Board**

**Ocean Protection Council
(OPC)**

- CA Resources Agency
- California EPA
- State Lands Commission
- Legislature
- Public

Provides
staff

**State Coastal
Conservancy
(SCC)**

OPC Science Advisory Team

Richard Ambrose	University of California, Los Angeles
Alexandra Boehm	Stanford University
Mark Carr	University of California, Santa Cruz
Dan Cayan	Scripps Institution of Oceanography, University of California, San Diego
Francisco Chavez	Monterey Bay Aquarium Research Institute
Kenneth Coale	Moss Landing Marine Laboratories, San Jose State University
Christopher Costello	University of California, Santa Barbara
John Field	National Marine Fisheries Service, Santa Cruz Laboratory, Southwest Fisheries Science Center
Steve Gaines	University of California, Santa Barbara
Gary Griggs	University of California, Santa Cruz
Frances Gulland	Marine Mammal Center
Madeleine Hall Arber	Massachusetts Institute of Technology
Tony Haymet	Scripps Institution of Oceanography, University of California, San Diego
Sam Johnson	U.S. Geological Survey
Karen McLeod	Oregon State University/ Communication Partnership for Science and the Sea
Mark Moline	California State Polytechnic University, San Luis Obispo
Steve Murray	California State University Fullerton
Karina Nielsen	Sonoma State University
Jeff Paduan	Naval Postgraduate School
Harry Scheiber	University of California, Berkeley
Jerry Schubel	Aquarium of the Pacific
John Jay Stachowicz	University of California, Davis
Bill Sydeman	Farallon Institute for Advanced Ecosystem Research
Steve Weisberg	Southern California Coastal Water Research Project



OPC Science Advisory Team

- Responds to information requests;
- Evaluates projects proposed;
- Provides suggestions for peer review of documents and RFPs
- Assists in convening or participating in technical working groups;
- Assists in ranking and refining annual priorities; and
- Identifies critical emerging science issues of concern to the OPC.



Identifying Science Needs

2009 Research Priority Issue Areas

*Focused Research and Outreach Initiative,
part of Sea Grant Call for Proposals*

- Climate Change
- Harmful Algal Blooms (HABs)
- Land-Ocean Interactions and Water Quality
- Wave and Tidal Energy
- Salmon-Ocean Conditions



Identifying Science Needs

Research Priority Example: Harmful Algal Blooms (HABs)

Management Questions

- What causes HAB events?
- Can we better predict HAB events?
- How do we reduce the frequency and intensity of or prevent future HAB events?
- How do we improve response to HAB events?
- How do we manage and mitigate impacts of HAB events?



Producing Relevant Science

Study to Provide Information Related to Oil and Gas Platform Decommissioning Alternatives in California

Goals of the Study:

- Assemble/examine scientific and legal information on decommissioning alternatives
- Inform future state policy discussions on platform decommissioning

OST's role:

- Review and revise RFP
- Form Expert Advisory Committee (EAC)
- Hire consulting team
- Ensure results are credible, unbiased, and useful to the state





Prioritization Criteria

- ***Relevance***
- ***Emerging issue***
- ***Potential to make a difference***
- ***Timeliness***
- ***Feasibility***
- ***Measurability***