

**California Ocean Protection Council
Joint Science Advisory Team (OPC-SAT)/Management Team Meeting**

Hosted by California Ocean Science Trust

Monday, January 31, 2011

988 Broadway, Suite A

Oakland, CA

10:00 a.m. - 5:00 p.m.

OPC-SAT Members Present: R. Ambrose, A. Boehm, M. Carr, F. Chavez, K. Coale, J. Field, G. Griggs, F. Gulland, M. Hall-Arber, S. Johnson, K. McLeod, K. Nielsen, J. Paduan, J. Schubel, J. Stachowicz, B. Sydeman, S. Weisberg

Ocean Science Trust (OST) Staff Present: M. Colton, T. Freidenburg, E. Knight, S. McAfee, A. McGregor, L. Rogers, L. Whiteman

Ocean Protection Council (OPC) Management Team Present: B. Baird, CA Natural Resources Agency; A. Mace, OPC; M. McEnespy, OPC/State Coastal Conservancy; S. Schuchat, OPC/State Coastal Conservancy; M. Small, OPC/State Coastal Conservancy

Guests: A. Doherty, OPC; J. Eckman, CA Sea Grant; L. Engeman, OPC; S. Flores, OPC; J. Laird, CA Natural Resources Agency; T. Mizerek, Communication Partnership for Science and the Sea; P. Rittelmeyer, OPC; E. Saarman, UCSC; L. Snow; V. Termini, OPC

OPC-SAT Members Absent: D. Cayan, C. Costello, T. Haymet, S. Gaines, M. Moline, S. Murray, H. Scheiber

SUMMARY ACTIONS:

- **ACTION:** The OST will continue to provide monthly updates to the SAT.
- **ACTION:** The climate change letter will be extensively revised by the OPC-SAT climate change working group. The letter will be reworked into a science statement on climate change, or some aspect thereof, with the potential to include an additional cover letter clarifying audience and intent. Once revised, the letter will be circulated to the full SAT, as well as OPC staff for additional comment.
- **ACTION:** The OST will communicate with the SAT and OPC concerning points of intersection on the California Sustainable Seafood Initiative (CSSI).



- **ACTION:** The OPC, OST and SAT will coordinate to further develop background analyses for the OPC strategic planning process. SAT working group co-chairs will be liaisons between OPC managers and SAT working group members.

MEETING MINUTES:

1. Welcome & Introductions, Meeting Objectives, Agenda Review

G. Griggs, OPC-SAT Co-Chair, opened the meeting by welcoming attendees and highlighting the attendance of former and current California Secretary for Natural Resources L. Snow and J. Laird, respectively. Tracing the SAT's progression from 2008 to the present, Griggs expressed the growing momentum and relevance of the SAT in California and beyond.

S. McAfee reiterated Griggs' statements, emphasizing the opportunity for SAT members and the OPC management team to build on their dialogue from past meetings. McAfee's introductory statements were followed by an overview of meeting objectives and a run-through of the agenda.

MEETING OBJECTIVES

- Highlight OPC-SAT accomplishments and growing relevance in California;
- Discuss governance changes, membership, and new business;
- Provide high-level scientific guidance on ongoing OPC and OST projects;
- Identify emerging science issues and inform OPC's strategic planning process; and
- Discuss opportunities to foster California's leadership in science integration

Before turning the floor over to J. Laird, CA Secretary of Natural Resources, McAfee expanded on the roles, far-reaching expertise and eagerness of the SAT to assist the Secretary in stewarding California's ocean and coastal resources. Each SAT member gave a brief introduction to familiarize the Secretary.

Secretary Laird opened his remarks by stating his awareness of the SAT and the important role it maintains in California's science and policy arenas. The Secretary noted his support for coastal and ocean management, referencing his involvement with the MLPA, MLMA, AB32, offshore oil regulation, and stormwater management among others.

The Secretary referenced the MLPA as a salient example of science influencing the public process, highlighting the value of science that is communicated in a timely and effective manner. The integration of science into public policy is a process, noted Secretary Laird. Assembly Bill 32, for example, provided a framework for reducing greenhouse gases without specifying all the regulations. By establishing goals and objectives, public policy allows for actors to get together to define a plan for going from point A to point B. The Secretary further noted that going from

point A to point B requires funding; funding that is currently limited. The budget is a real issue, Secretary Laird explained, requiring the Governor to make difficult program cuts. However, Governor Brown is attempting to ensure that funding cuts have an end goal in mind.

In conclusion, Secretary Laird reaffirmed his commitment to work with the SAT to ensure proper management of California's ocean and coastal resources. A few minutes were designated for questions and comments.

2. OPC Management Team Update

B. Baird, Assistant Secretary for Ocean and Coastal Policy at the CA Natural Resources Agency, noted the election of new governors in California and Oregon and their support of the existing West Coast Governor's Agreement (WCGA) structure and vision. He further commented on the WCGA recent submission of two proposals to NOAA. The proposals are pursuant to \$20 million (the total amount pending the upcoming budget) in funds that will be distributed between nine regions for coastal and marine spatial planning (CMSP). Additionally, Baird noted that a process to create a WCGA planning body composed of state and tribe representatives is in place, but will be difficult to navigate especially due to the diversity of tribes in California as well as west coast wide.

Baird provided an overview of CA 2010 Fiscal Year Appropriations, noting that funds were recently secured and will be distributed for shallow water mapping, climate change adaptation, regional sediment management and public awareness projects. Near the conclusion of Baird's update, he discussed the Pacific Coast Collaborative (PCC), a regional body comprised of California, Oregon, Washington, British Columbia and Alaska. The PCC focus is on energy, transportation and ocean policy. Baird noted PCC's three action items for oceans: ocean observing, eradicating non-native species (i.e., spartina) and forming a marine debris alliance.

Baird concluded with a summary of the California and the World Ocean 2010 Conference. He urged everyone to visit the conference website where webcasts of almost every concurrent session and plenary may be found: <http://www.cce.csus.edu/conferences/cnra/cwo2010/index.htm>

A. Mace, Executive Director of the CA Ocean Protection Council, noted the OPC Five Year Program Evaluation, reiterated the success of the California and the World Ocean Conference, approval of the Sea Grant Research Priorities, development of the Collaborative Fisheries Research organization and the draft status of the OPC sea-level rise resolution that was framed in part by SAT guidance on sea-level rise projections and associated uncertainties.

Mace discussed the upcoming OPC meeting on March 11th, highlighting potential changes in the Council's composition. Secretary John Laird will be chair. Senator Fran Pavley will remain on the Council. Joining, in place of State Controller John Chiang, will be Lt. Governor Gavin Newsom. Additionally, there will be a yet to be appointed CA Assemblymember. As for the remaining seats, there are only six months left on Geraldine Knatz's and Susan Golding's terms.

Whether or not the Governor will reappoint them is yet to be known. There is also uncertainty over the status of Linda Adams (Secretary of Cal EPA).

S. Schuchat, OPC Secretary and Executive Officer of the State Coastal Conservancy, provided an overview of the OPC's primary funding sources: (1) bond revenue, and (2) the Environmental License Plate fund. OPC remaining bond monies, which were secured with the passing of Proposition 84, total \$19 million. The Environmental License Plate fund currently provides the OPC with an upwards of \$1.5 million annually.

Schuchat noted that there is a water bond likely in the pipeline for 2012. As it stands, the OPC would be a beneficiary if the bond were to pass. However, the Legislature plans to rewrite the bond, leaving the possibility for the OPC to be excluded from the monies. Schuchat also discussed the OPC's missed opportunity for \$20 million in annual funding from Proposition 21. In conclusion, Schuchat noted that the OPC is almost fully staffed. Mary Small has filled Neal Fishman's role as Deputy Executive Officer and Ocean Program Supervisor and Moira McEnespy has replaced Christine Blackburn as OPC Program Manager.

3. OST Update

S. McAfee, Executive Director of the Ocean Science Trust, reflected on the Oil and Gas Platform Decommissioning study that was conducted by the OST. This product directly impacted state legislation. A manuscript was drafted by former OST Program Manager Diana Pietri et al. tracing the influence of science, politics and the public on the study's production. The article, which was recently accepted (with revisions) by the Journal of Coastal Management, has provided the OST a platform to reflect on its role as an organization charged with informing policy with the best available science. McAfee expressed her interest in empirically determining the efficacy of science in policy decisions. To further evaluate the role of science integration, McAfee expressed her intention to hold a summit where science and policy bridging organizations gather to discuss and publish on their findings. She welcomed the SAT's input as the ideas evolve.

4. OPC-SAT Business

Griggs highlighted the soon to be finalized SAT Charter, the new SAT logo, the new Co-Chair elect, Mark Carr, ongoing monthly OPC-SAT updates, the OPC project list illustrating SAT involvement, SAT involvement on Sea Grant research priorities, the ongoing OPC strategic planning process and the division of SAT members into working groups surrounding the five focal areas (climate change, sustainable fisheries, emerging and industrial uses, land/sea interactions, and coastal and marine spatial planning) being proposed by the OPC.

Griggs provided an overview of member attrition; all SAT members chose to extend their service for 2 or 3 years. While it is a positive sign that all SAT members chose to continue their service,

Griggs noted that membership requires participation. A dialogue was initiated between the SAT and the OPC Management Team as to how SAT members could become more involved. It was noted that the OPC focal area working groups would create further opportunity for SAT involvement. The SAT membership process was also discussed. McAfee noted that there are a number of individuals who would like to join the SAT. She further discussed the composition of the SAT, emphasizing that the SAT should represent all disciplines and mirror California's needs. There were suggestions by many SAT members that fixed terms ought to be considered to allow for periodic turnover, as well as building in a mechanism (i.e., SAT Emeritus) to allow continued involvement for past SAT members.

Griggs brought attention to the climate change consensus letter that was recently drafted by the SAT Executive Committee. The letter initiated a conversation on the difference between position and advocacy statements. Both addressing the letter to Congress and the inclusion of advocacy-based language was noted as a conflict of interest for some SAT members. SAT members further stressed the need for the letter to be overseen by climate change experts as represented by the climate change working group. SAT members discussed the potential for refocusing the letter on the science of climate change, and cutting out any kind of advocacy and/or policy.

- **ACTION:** The climate change letter will be extensively revised by the OPC-SAT climate change working group. The letter will be reworked into a science statement on climate change, or some aspect thereof, with the potential to include an additional cover letter clarifying audience and intent. Once revised, the letter will be circulated to the full SAT, as well as OPC staff for additional comment.

5. From Crest to Coast: Perspectives on Integrating Science and Policy to Manage our Natural Resources

McAfee introduced L. Snow, former CA Secretary of Natural Resources, stressing his commitment to science-based management of California's natural resources. Snow's opening remarks brought attention to the fact that sound and/or accurate information is not required to create a policy or pass a bill; in many cases great science is overlooked in the policy world. While the policy process often disregards scientific knowledge, Snow noted the efficacy of the OPC, OST and OPC-SAT, acknowledging that other states (e.g., Oregon) are attempting to emulate California institutions that promote science-based decision making. Science-informed decision making is gaining traction in places like California, however Snow acknowledged there are limiting factors including, but not limited to: (1) insufficient funding for research and monitoring; (2) a small supply of individuals that can effectively analyze, synthesize and communicate scientific knowledge in a meaningful manner; and (3) the short terms of CA legislators that limits the ability to develop sufficient knowledge of a particular issue to make an informed decision.

Snow fielded a number of questions, highlighted by the following themes:

- *Increasing the effectiveness of SAT communication:* It is critical for the SAT to produce translational pieces (e.g., consensus statements) on coastal and ocean themes.
- *Provide independent science not advocacy:* For long-term credibility of the SAT, it is important to avoid taking advocacy-based positions. Other organizations can translate SAT works to the advocacy field.
- *Moving science into the decision making process at a more rapid rate:* The resilience of California's natural systems is at a tipping point.
- *Introducing regulatory reform:* Resource management occurs at varying jurisdictional levels, receives funding with different stipulations from numerous sources and is dictated by a range of permitting regulations. Collectively, these factors present significant obstacles to resource managers. Without regulatory reform (e.g., streamlining the permitting and regulating), it will remain difficult to design natural resource policies that are proactive.

6. California Sustainable Seafood Initiative

V. Termini provided an overview of the California Sustainable Seafood Initiative, an OPC project. The initiative, which was prompted from AB 1217, has four primary objectives at this time: (1) create a public-process certification protocol; (2) develop a marketing program in consultation with the Dept of Food and Agriculture; (3) craft a grant and loan program to assist fisheries in the certification process; and (4) the development of a logo (branding).

Termini suggested a number of avenues for SAT involvement including, but not limited to, (1) identifying a team of individuals to work on the pre-assessments; (2) evaluating CA fishery standards with Marine Stewardship Council (MSC) as the base; and (3) reviewing the full certification process. McAfee noted that the sustainable fisheries working group could help guide the OPC in this endeavor.

- **ACTION:** The OST will communicate with the SAT and OPC concerning points of intersection on the California Sustainable Seafood Initiative (CSSI)

7. OPC 5-Year Strategic Planning Process

Mace noted that the OPC 5-year strategic planning process is an opportunity for the OPC to (1) develop a vision for addressing the management needs of California's ocean and coastal resources, and (2) chart a framework for achieving that vision. By drawing on the OPC's strengths - funding innovative projects, building partnerships, leveraging funds, integrating science into policy – Mace stressed that the SAT can play a pivotal role in identifying where the OPC can have the greatest impact and ways to measure and/or trace the OPC's footprint.

Spelling out the OPC vision with strategic planning documents will provide a transparent forum for the OPC to build relationships and buy-in from donor groups, governmental agencies and non-governmental organizations, Mace explained. Currently, the OPC staff is working with outside agencies and the SAT to develop goal statements. Goal statements will roll into background analyses that evaluate information needs and gaps, actors, and opportunities. Information detailed in background analyses will further guide the OPC in identifying where they will direct their resources, both staff and funding.

Mace transitioned from her discussion of OPCs strategic planning process into an overview of breakout sessions for working groups. She noted OPC project managers will lead each focal group to further the development of problem /goal statements. Prior to dismissing SAT members to their working groups, Mace discussed how MRIPP, led by E. Knight of the OST, complements the objectives of the OPC's background analyses in its effort to understand information needs of science managers in order to reduce uncertainty.

A summary of working group breakout sessions can be found in the appendix of this document

- **ACTION:** The OPC, OST and SAT will coordinate to further develop background analyses for the OPC strategic planning process. SAT working group co-chairs will be liaisons between OPC managers and SAT working group members.

8. MPA Monitoring Enterprise (ME)

L. Whiteman, Lead Scientist for the MPA Monitoring Enterprise, discussed the changing concept of MPAs over time. Previously focused on isolated places and species, MPAs now embrace a wider ecosystems focus in order to promote broader goals than just enhancing economically valuable species. Whiteman noted that dynamics have shifted from science driving the policy of MPAs to science becoming more reactive to policy and managers' and stakeholders' questions on the ground. Whiteman noted that California has a grand task when it comes to monitoring California's MPAs. With the equivalent of 100 MPAs in the statewide network, California needs a framework that is systematic, aligned with management needs, informative, feasible and adaptable. Further, MPAs should efficiently evaluate network performance, facilitate adaptive management and improve understanding of marine ecosystems, explained Whiteman. Only then will the dynamic be reversed where science once again drives the policy. Whiteman noted that while management concepts for MPAs have evolved, there are many questions left unanswered: what are the most efficient forms of monitoring (e.g., partnerships between groups); how does one arrive at an overarching conclusion on ecosystem condition; how do you monitor human-ecological interactions that impact the environment? Whiteman informed that SAT of possible points of intersection with the MPA Monitoring Enterprise in the future.

Whiteman fielded a number of questions highlighted by the following themes:

- *Examples and status of funding:* Funding is primarily leveraged to establish baseline inventories. Mark Carr and Karina Nielsen are both active on MPA funded research. There is \$4 million dedicated per region. Funding will be directed to meet the needs of each region (e.g., data collection, data integration).
- *Plans for future MPA evaluations:* Comparing baseline inventories to future inventories is contingent on funding.
- *Baseline data uses:* MPA data will be made publicly available, but the medium for distribution has yet to be decided upon.

9. Open Issues/Tabled Items; Wrap-Up and Meeting Evaluation

McAfee thanked the OST staff, SAT Executive Committee, SAT members and OPC Management Team for coming to the meeting. At the conclusion, SAT members specifically asked to include on the agenda for future SAT meetings additional time to discuss meeting review. She provided a summary highlighting the following: continuance of the monthly updates, re-evaluating the climate change letter, and increasing the opportunity for SAT dialogue at future meetings.

10. Meeting Adjourned

APPENDIX: Working Group Summaries

Coastal and Marine Spatial Planning (CMSP):

OPC Lead: L. Engeman

SAT Members: M. Carr, S. Johnson, K. McLeod, J. Schubel,

Other Attendees: P. Rittelmeyer, L. Rogers, L. Whiteman

Summary:

L. Engeman provided an overview of CMSP, detailing why it is one of the OPC's strategic plan focal areas. The OPC has hired a contractor to produce a background analysis of CMSP at the regional and national scale. Additionally, the OPC issued an RFQ for a scoping study to evaluate the information systems in use by agencies. The study will focus on identifying information gaps, technology-based constraints, and methods to bridge communication and facilitate the sharing of resources between users; one end goal will be the development of a centralized coastal

and marine database. Upon completion, both studies will be disseminated to respective SAT members for scientific input.

Because of limited funding, the OPC will not be able to carry out an extensive CMSP stakeholder process. The OPC's primary clients, State agencies, will be the focus of the needs assessments. Evaluating California's needs will assist the OPC in developing CMSP objectives and policies at the statewide and possibly regional scale.

Engeman noted that the OPC is charged with developing a working definition of CMSP for California. Discussion highlighted that CMSP should inform current decision making through the collection and objective presentation of spatial datasets. While it is important to sketch out a working definition of CMSP, SAT members stressed one should avoid reinventing the wheel. Engeman discussed that there is a national framework for CMSP and the State's goal is to not create another level of bureaucracy. Rather, the focus is directed at changing agency perspectives in how they manage competing ocean uses now and in the future. The OPC is looking into feasible actions over a 5-year period, focusing on incremental developments on an annual basis.

Engeman also noted that the OPC is overseeing the State's interagency working group that is evaluating the role of science, methods for data integration and how CMSP in CA could be integrated in a regional framework among others. One meeting has been held thus far; Engeman will provide respective SAT members with meeting notes. Between now and August there will likely be two additional meetings, phone conferences and feedback via email.

Land-Sea Interaction:

OPC Lead: M. Small

SAT Members: A. Boehm, R. Ambrose, Steve W., and Jay S.

Other Attendees: E. Knight

Summary:

M. Small and M. McEnespy drafted round one of the problem/goal statement. SAT members reviewed the draft statement, providing recommendations on overlapping topics and the potential benefits of prioritizing topical areas.

Focal areas within land-sea interaction include:

1. *Pollution from land-based sources* (e.g., marine debris, toxics and contaminants, nutrients, bacteria);
2. *Impacts to physical processes from coastal land uses* (e.g. brine falling out of water column and accumulating in sediments);
3. *Ecosystem interactions across the land-sea interface* (e.g., fish passage and habitats); and

4. *Management of resources at land-sea interface* (e.g., public access of coastal and ocean resources)

Small noted that the OPC often runs into some barriers on this issue because it does not have jurisdiction over many land-based issues. Given the extensive science that characterizes land-based impacts on oceans, SAT members noted that the OPC ought to come out strong on the land-based side to promote a true ecosystem approach. Discussion highlighted that poorly defined cross-agency coordination is a barrier to action. For the OPC to be an effective actor in land-sea issues it must clearly identify the relationships of outside agencies, focusing on evaluating agency roles and mandates. The significant research gaps on land-based mitigating techniques like low impact development was also noted. The OPC could potentially play a role in identifying research needs on the land-based side of the equation.

Sustainable Fisheries:

OPC Lead: V. Termini

SAT Members: J. Field, M. Hall-Arber, K. Nielsen

Other Attendees: M. Colton, S. Flores

Summary:

V. Termini provided the group with a draft list of 10 goals that were a byproduct of the first OPC lead interagency fisheries working group:

1. *Current definition of sustainable fisheries in the Fish and Game Code;*
2. *Developing a definition of sustainable fisheries that is used by all the relevant state agencies*
3. *Agency coordination on related topics and goals* (e.g. common events that agencies aren't connecting on);
4. *Improved coordination with appropriate agencies on toxic fisheries testing and outreach*
5. *Proactively managing data-poor fisheries* (e.g., what data exists; what data is needed):
6. *Economically self-sustaining Fisheries and fisheries management;*
7. *Efficient and timely MPA monitoring;*
8. *FGC/DFG management of some fisheries* (except federally or legislative managed);
9. *Zero% runoff in fisheries* (e.g., what are the impacts of herbicides; how does runoff impact MPAs);
10. *Update approach to fisheries management* (e.g., optimize for efficiency)

SAT members discussed the goals, highlighting the following:

- *Goal one:* It is worth evaluating and redefining, but not worth spending too much time on. Goal one could be merged with goal two.
- *Goal five:* Most California fisheries are data poor, directing the need to identify novel ways to collect and analyze data (e.g., conducting stock assessments, collapsed fisheries)
- *Goal nine:* This issue is better suited for the land-sea working group; runoff is a problem for fisheries, but fisheries can't act to reduce runoff.

It was noted that aquaculture could play a role in supplying California's fisheries. Given this potential, SAT members expressed their interest in discussing aquaculture unless it fell outside the context of AB 1217. Aquaculture was discussed in the context of encouraging greater production and less importation in order to encourage diversity in fisheries and enable communities to diversify their portfolio (e.g., Chile's aquaculture system).

The importance of data collection and forecasting was also discussed. The need for inside/outside time series catch data to evaluate the impacts of fishing and MPAs and additional products for addressing take limits was highlighted as priority interests.

SAT members also stressed that fisheries need assistance to comply with sustainable fisheries premises (e.g., knowledge of the impact a fishery has on all prey and predator species present). The costly and potentially unattainable MSC fishery certification process will likely elevate the demand for a CA certification.

Climate Change Adaptation:

OPC Lead: A. Doherty

SAT Members: F. Chavez, G. Griggs, B. Sydeman

Other Attendees: T. Freidenburg, A. McGregor

Summary:

Doherty expressed that sea-level rise and associated impacts (e.g., flooding, erosion) are State coastal priorities. The State in general and OPC in particular will focus on improving the accessibility of data so local governments can develop adaptation strategies. The CO-CAT produced a sea-level rise interim guidance document with the assistance of the SAT. The document provides an overview of the risks posed by sea-level rise as well as 21st century sea-level rise scenarios that should be considered in future planning efforts. The guidance document outlines the concepts of risk tolerance and adaptive capacity, providing a framework for agencies to consider what sea-level rise scenarios should be modeled on a case-by-case basis.

The group discussed challenges providing local communities with reliable data. For example, there is a need for additional tidal gauges along the California coast, yet NOAA has recently

stopped funding the San Francisco's tidal gauge that has been in service for over 150 years. NOAA's actions provide the SAT an opportunity for potential involvement (e.g., letter).

SAT members discussed how the State's emphasis on sea-level rise should not result in a paralysis of action in other ocean-based climate change issues (e.g., acidification). It was expressed that there is a need for the SAT to address a wide range of coastal and ocean issues related to climate change.

Emerging Industrial Uses:

OPC Lead: M. McEnespy

SAT Members: J. Paduan

Other Attendees: None

Summary:

M. McEnespy expressed that the SAT could assist the OPC by providing input on management issues and needs and research and information needs. SAT members were provided a draft of the problem and goal statement prior to the meeting. Discussion was focused on the following topical areas:

- *Marine Renewable Energy:* With a significant increase in R&D (e.g., tidal, wave, offshore wind) funded by the DOE and the BOEMRE over the last few years, the industry is expected to continue to be interested in CA waters, particularly for wave and offshore wind energy production. Marine renewable energy has the potential to become part of the nation's alternative energy portfolio, but poses environmental and economic uncertainties. Management and regulatory regimes for this industry are still developing and frequently cross multiple agency jurisdictions (both at the state and federal level) which pose challenges to government, project applicants, and stakeholders.
- *Biofuel:* California agencies have recently granted an offshore lease for and permitted a proposal to cultivate giant kelp in submerged lands in order to develop and evaluate a process to produce butanol biofuel. Other proposals entail siting containment vessels in the ocean in order to grow algae for biofuel production. It is possible/likely that additional requests to explore these technologies will be upcoming.

Desalination, ports and shipping and aquaculture were also discussed as likely focal areas in the strategic plan.