



California Ocean Protection Council (OPC) Executive Director's Report February 2012

The Executive Director's Report provides an update on OPC outcomes and accomplishments since the previous OPC meeting. This report covers December 2011 to February 2012. This report is divided into four sections: Coordinated Governance, Policy Informed by Science, Innovative Solutions, and Supporting our Partners.

Coordinated Governance of Coastal and Ocean Management

Many different government agencies implement ocean and coastal management in California, and, consequently, multi-agency approaches are essential for complex management issues such as climate change, coastal water quality, and emerging industrial ocean uses. The OPC coordinates actions across all relevant agencies to improve the development and delivery of successful management solutions.

OPC Strategic Plan Update:

The Ocean Protection Council staff have released the draft final strategic plan for consideration at the February OPC meeting. Over the last year, this plan has been developed and revised based on substantial input from OPC members, the OPC Steering Committee, OPC Science Advisory Team, federal, tribal, industry, and NGO partners, and the public. It has been a truly valuable process to engage directly with so many partners and hear firsthand about their respective priorities. Through this dialog we have learned a great deal and strengthened communication, which is essential to successful collaboration and policy development and ultimately to effective ocean and coastal resource management and protection. The comments clarified the need to have a plan that is both strategic as well as responsive to broad array of partner priorities. Each comment was considered carefully and the revised draft reflects OPC staff's effort to address the comments to the best of our ability.

This plan identifies the complex challenges to our ocean that can be addressed by OPC's leadership as a science-informed policy and coordinating body. The plan provides vision, context, and objectives that offer useful guidance for the OPC to address these mounting challenges. It recognizes the economic value of our ocean and coastal resources to the state of California and honors the OPC mission to protect and preserve the health of marine ecosystems. This plan identifies both opportunities and responsibility; it is intended to be a roadmap for the Council to apply its leadership, expertise, and resources.

Marine Renewable Energy Working Group:

The OPC established the Marine Renewable Energy Working Group (MRE Working Group) in March 2010 to enhance collaboration and consistency among state agencies in their approaches to addressing the development of offshore renewable energy. The working group's scope includes addressing issues related to permitting, planning, and managing marine renewable energy projects, and implementation of the Federal Energy Regulatory Commission (FERC) /California Memorandum of Understanding (MOU). The working group membership consists of state agencies, however potential developers, stakeholders and federal agencies (National Marine Fisheries Service, U.S. Fish and Wildlife Service, the U.S. Navy, the Federal Energy Regulatory Commission, and the Bureau of Ocean Energy Management, Enforcement and Regulation), all regularly participate in the meetings and discussions.

Table 3. Marine Renewable Energy Working Group Members

Laura Engeman (Co-chair) – Ocean Protection Council
Joe O'Hagan (Co-chair) – California Energy Commission
Cy Oggins, Kenneth Foster, Ninette Lee, Jennifer DeLeon, Sarah Sugar, Madhu Ahuja –State Lands Commission
Tom Luster, Alison Dettmer – Coastal Commission
Vicki Frey, Steve Ingram, Annie Manji, Bill Paznokas, Afifa Awan –Department of Fish and Game
Jaclyn Marks – California Public Utilities Commission

In December 2011, OPC staff completed and made widely available a statewide regulatory guidance document for test and pilot ocean renewable energy projects. During the OPC December meeting, OPC adopted a resolution recommending an ocean renewable energy policy to be considered by the California Energy Commission (CEC) as part of their Integrated Energy Policy Report update for 2012. The CEC is just finishing up their 2011 update, so they will be discussing the policy resolution in February as they define the 2012 update scope.

Working Group members have also attended several meetings on a proposed San Onofre project to clarify state permitting for the project and seek improved coordination with FERC per the MOU. The next Working Group meeting is scheduled for February 9, 2012.

Sharing Geospatial Data and Information:

The California Coastal and Marine Geospatial Working Group (CCMG-WG) was established in February 2010, in response to a 2009 OPC resolution. OPC and NOAA Coastal Services Center co-chair the group, which is mainly comprised of technical users of geospatial data. The CCMG-WG facilitates the exchange and analysis of geographic information to assist in resource protection, support environmental assessments, and improve comprehensive planning. The California Geographic Information System (GIS) Council formally recognized the working group in October 2010.

Over the last few months, the CCMG-WG provided oversight and substantial input for the California Coastal and Marine Geospatial Data Information Management System Scoping Study that was completed in September 2011. The study conducted a detailed assessment of the coastal and ocean

data needs of state agencies and provided several recommendations for better meeting the needs of these agencies. A key recommendation of the study is to develop a web-based information management system, or geoportal, that would provide an easy-to-use interface and system for discovering and accessing California coastal and ocean data. The full report can be found on the OPC website at: <http://www.opc.ca.gov/2011/04/coastal-and-marine-geospatial-data/>

As a follow-up to this study, OPC and the CCMG-WG began discussions with the State's Geographic Information Officer (GIO), who presented plans for developing a state geoportal in early 2012. The GIO's geoportal project provides substantial opportunity for meeting the coastal and ocean needs of the state agencies and the recommendation of the Scoping Study. OPC staff are currently developing a workplan and budget to undertake several actions to assist the GIO with integrating coastal and ocean data into the portal, to customize the geoportal to further advance the use and sharing of these data, and to develop funding and governance strategies to ensure that the geoportal continues to serve as a long term resource. A discussion of the work plan and proposed next steps are anticipated to be presented to the Council at the May 2012 meeting.

Multi-agency Permit Guidance Document for Work in Marine Waters

Several state agencies with permitting authorization in state marine waters have identified the need for a comprehensive permitting guidance document based on questions received from applicants seeking to conduct work (ex. scientific research, habitat restoration) in the marine environment. OPC staff is coordinating development of this document with assistance from state and federal permit agencies, California Natural Resources Agency, and California Ocean Science Trust staff. The document will describe state and federal permit agencies' relevant authorities and permit review process, and provide a "road map" for permit applicants based on the type of activity they wish to conduct.

OPC staff convened a meeting of relevant state agencies in November, and will convene a subsequent meeting to review an annotated document outline in February. A final document is expected to be available in late 2012.

Policy Informed by Science:

OPC-Supported Scientific Studies

Final Report Released: *Turning Data into Information: Making Better Use of California's Ocean Observing Capabilities (formerly the Synthesis for Coastal Ocean Observing Products)* This report assesses California's current ocean observing capabilities, identifying opportunities for critical information products to better support the state's ocean resource management and regulatory agencies. Focusing specifically on five topic areas (ocean energy, oil spills, coastal discharges, salmon recovery, and harmful algal blooms), specific management decisions were analyzed to identify the effective development and use of our ocean observing system. The report concludes that developing and sustaining this capacity is neither solely an institutional nor a technical challenge, but requires

coordinated, statewide, strategic direction based on clearly defined management information needs to succeed. Funding models are briefly addressed. The report can be downloaded from the OPC's website: http://www.opc.ca.gov/webmaster/ftp/pdf/docs/SCOOP_report_12-20-11.pdf

Aquatic Invasive Species Vector Risk Assessments, ONGOING: OST continues to coordinate the Aquatic Invasive Species Vector Risk Assessments. This project is a scientific assessment of the relative risks of commercial fishing, recreational boating, aquaculture, live bait, live imported seafood, and aquariums and aquascaping to help determine the appropriate policy actions that will help to prevent introduction of invasives and support early detection and rapid response efforts. The teams are currently continuing to collect data on their vectors. They have also outlined each of the vector risk assessments and are actively working with OST and the project science coordinator to design the final phase, where the individual vector risk assessments will be synthesized. As part of this final phase, it is likely an expert judgment process will be implemented to provide recommendations to the state on the relative risks of the individual vectors.

Technical Advice and Coordinated Peer Reviewed Studies

Institutionalizing science-based decision-making requires ensuring the OPC relies on authoritative sources and that the science used by the OPC is vetted through established processes for ensuring the accuracy of technical information.

Ongoing peer reviews include:

- *Instream Flow Studies* – Prepared for the Department of Fish and Game, on behalf of the OPC:
 - Santa Maria Instream Flow Study: Flow Recommendations for Steelhead Passage
 - Fisheries and Habitat Assessment of the Big Sur River Lagoon, California
 - Shasta River Interim Instream Flow Assessment

The OPC Science Advisory Team (OPC-SAT)

OST coordinates the OPC-SAT to provide technical advice on OPC reports, evaluate the technical merits of scientific projects proposed to the OPC, and recommend outside experts to serve as peer reviewers for OPC proposals and projects, thus ensuring their quality. OST also coordinates semi-annual meetings between the OPC-SAT and the OPC management team. The most recent meeting was held on September 30, 2011 in San Francisco.

Joint OPC-SAT/OPC Management Team Meeting - OST has identified April 18, 2012 in San Francisco as the date for our next joint meeting.

Spotlight on Science - A regular agenda item at OPC quarterly meetings, Spotlight on Science is a presentation by OPC-SAT members or scientists they recommend on a variety of marine issues important to the state.

To correlate with Governor Brown's Conference on Extreme Climate Risks and California's Future held just days before, the most recent Spotlight on December 16, 2011 was a panel discussion on the vulnerability of the California coast to extreme events related to climate change.

"Coastal Vulnerability to Climate Change: Looking Beyond Sea Level Rise

- Dr. Gary Griggs, Professor of Earth Sciences, Director, Institute of Marine Sciences, Co-Chair Emeritus, OPC Science Advisory Team, University of California, Santa Cruz. *"The Vulnerability of the CA Coast to Climate Change and Extreme Events"*
- Dr. Patrick Barnard, Coastal Geologist, USGS Pacific Coastal and Marine Science Center. *"Storminess and Extreme Water Levels: Historical Observations and Future Projections for the CA Coast"*
- Rebecca Smyth, West Coast Regional Director, Regional Coastal Services Division Chief, NOAA Coastal Services Center. *"Applying Science to Coastal Adaptation"*

Seafloor and Shoreline Mapping:

Accurate mapping of the coast and seafloor is vital for the sustainable management of California's highly productive coastal and marine resources. The OPC is developing these maps in partnership with state and federal agencies and academic institutions.

- Seafloor data collection in state waters (10m water depth out to 3 nautical miles) is now completed along the outer coast, and progress has been made in ground-truthing the seafloor data, as well as producing final map products. The program's first folio map series is now available in the Santa Barbara region. Staff has continued discussions with resources managers on data acquisition priorities for San Francisco Bay and anticipates data collection will begin in spring 2012.
- High-resolution coastal LiDAR and aerial imagery has been collected throughout California in collaboration with ACOE, NOAA, USGS and others. Final map products are now available through NOAA's Digital Coast website (<http://www.csc.noaa.gov/digitalcoast/>).
- A team of state and federal agencies are discussing how to merge the offshore seafloor bathymetry with the onshore topography data to make one complete coastal elevation map series (prioritizing sea level rise, storm surge, and flooding analysis). A state-federal funding partnership has been formed and consultants are working initially on merging data in a pilot area to refine an effective approach. Results from the pilot area are expected in mid-2012.

Innovative Solutions to Coastal and Ocean Challenges

The OPC is a national and international leader in the design and implementation of innovative solutions for ocean and coastal management issues. Below are highlights of a few key projects OPC is working on with its partners.

The MPA Monitoring Enterprise

The keystone program of the Ocean Science Trust is the Monitoring Enterprise, created in 2007 to lead development of monitoring of the statewide MPA network established under the Marine Life Protection Act (MLPA). Working at the boundary between science and management, the Monitoring Enterprise provides a unique combination of science and policy expertise to develop and test a realistic way to take the pulse of ocean ecosystems and evaluate the performance of the emerging statewide network of MPAs. The Monitoring Enterprise's approach is designed to draw on the rich scientific expertise available throughout the state combined with leveraged funding to deliver a scientifically sound program that is also cost-effective.

- **Implementing the South Coast MPA Baseline Program:** In collaboration with California Sea Grant, Department of Fish & Game and OPC, the Monitoring Enterprise continues to move forward with implementation of a South Coast MPA Baseline Program. The OPC has allocated approximately \$4 million to support 10 individual projects. Teams of researchers, citizen-scientists, and fishermen are surveying the South Coast region's coastal and marine habitats, including human uses, inside and outside MPAs to characterize baseline conditions and document initial changes. Project summaries are available on the Monitoring Enterprise website (www.monitoringenterprise.org).
- **Implementing the North Central Coast MPA Baseline Program:** The Monitoring Enterprise continues to oversee implementation of the North Central Coast MPA Baseline Program in collaboration with California Sea Grant, Department of Fish & Game, and OPC. For this region, approximately \$4million was allocated to 16 individual projects. Year two of the monitoring program is drawing to a close and researchers, citizen-scientists, and fishermen are completing baseline data collection in the region. Project summaries are available on the Monitoring Enterprise website and 2010 progress reports can be found on the Sea Grant website at www-csgc.ucsd.edu/RESEARCH/NCCMPA_Summaries_and_Reports.html.
- **Communicating Central Coast MPA Baseline Results:** The Monitoring Enterprise is working closely with the Department of Fish and Game, Central Coast baseline project principal investigators and other partners to develop and communicate MPA baseline results from in California's Central Coast region. MPAs in the Central Coast region took effect in September, 2007, and OPC-funded baseline monitoring of select ecosystems and human uses commenced the same year. Baseline data are now being analyzed and results will be available late in 2012. These results will provide a benchmark that future MPA performance can be measured against, and a more thorough understanding of the condition of ocean ecosystems to help inform management decisions and prioritize ongoing MPA monitoring.
- **Developing a new online community platform called OceanSpaces:** The Monitoring Enterprise is designing and building a first version of an online community platform to steward and share MPA monitoring data, information and results. An initial round of software development is now complete providing a foundation for launching a collaborative process to foster an online community. The Monitoring Enterprise is preparing to engage the MPA monitoring community in this coming month to solicit early feedback, build community membership and gather new ideas.
- **Linking climate and MPA monitoring:** Future evaluations of MPA performance will occur in the context of a changing climate and associated changing oceanographic environment. Working with climate change experts and other partners, the Monitoring Enterprise has developed an approach

to efficiently and effectively augment MPA monitoring with metrics that can track climate change effects, understand the effects on MPA performance and evaluate climate change adaptation measures. The recommended framework and approach are described in technical report, "Monitoring climate change effects in temperate marine ecosystems – a test-case using California's MPAs", which can be found on the Monitoring Enterprise website.

- **Advancing expert judgments of ecosystem condition:** The Monitoring Enterprise has recently launched a project exploring the use of expert judgment in assessing ecosystem condition. As a first step of this project, we recently convened a workshop at the National Center for Ecological Analysis and Synthesis (NCEAS) to develop principles and good practice for using expert judgment. This workshop brought together decision-makers, managers and scientists, to identify and evaluate the process steps, external drivers and communications tools that can contribute credibility and legitimacy to ecosystem condition assessments produced by expert judgment processes. More information is available on the Monitoring Enterprise website.

Collaborative Fisheries Research

At least a third of California's fisheries are considered "data poor", meaning there is a lack of essential fishery information (EFI), both biological and socioeconomic, on which to base management decisions. Because sustainable fisheries management is heavily data-dependent, in 2008 the OPC partnered with Pacific States Marine Fisheries Commission (PSMFC) and the DFG to create a collaborative fisheries research (CFR) organization, focused on forming research partnerships between local fishermen, scientists, and resource managers. These collaborative partnerships would benefit from the expertise of the local fishing communities and increased access to ocean resources, while simultaneously improving data accessibility, and building more trust in fisheries management. CFR West, a program currently housed at PSMFC, is now functional and soliciting its first round of research projects (www.cfr-west.org).

The OPC's investments in CFR were intended to seed the development of a stand-alone CFR organization, as well as provide funding for the initial round of collaborative projects. However, after analyzing various organizational alternatives, it now appears that creating an independent CFR organization would be too challenging in the current fiscal climate. Although the justifications for this are still sound (perhaps even more given state and federal agency budget and staffing cuts), organizational development of CFR West has been suspended, and funding shifted to CFR projects. OPC and CFR West staff will work diligently to highlight the management benefits enabled by these first projects to hopefully attract more funding in the future.

Request for Proposals: Collaborative teams of fishermen, resource managers and scientists were invited to apply for funds to conduct applied research on California fisheries during the 2012–2014 biennium. Letters of intent were due by midnight PST on January 5, 2012, and are now being reviewed. The full RFP can be found at:

<http://www-csgc.ucsd.edu/FUNDING/APPLYING/CFR2012.html>

California Voluntary Sustainable Seafood Program

Assembly Bill 1217 (Monning, 2009) directed the OPC to develop and implement a voluntary sustainable seafood certification program for California commercial fisheries, which includes developing a protocol, developing a competitive grant and loan program (in years in which funds are appropriated by the Legislature) to assist qualifying fisheries in becoming certified, designing a label to identify seafood certified under the California program, and implementing a marketing assistance program.

At its December 16, 2011 meeting, the OPC adopted a California protocol to guide entities on how to become independently certified to internationally-accepted standards for sustainable seafood. The protocol describes how fisheries will be certified and how the OPC will consider funding fisheries seeking certification, and is designed to be periodically reviewed and updated as new information becomes available.

The California voluntary sustainable seafood program protocol consists of meeting the following standards:

1. The Marine Stewardship Council (MSC) fishery certification program for sustainable seafood.
2. A higher-than-MSC standard with respect to two performance indicators: 1) stock status and 2) by-catch of ETP (endangered, threatened, and protected) species. California-certified fisheries will have to obtain a score of at least 80 for these two performance indicators.
3. Additional independent scientific review.
4. Additional traceability and consumer information components.

In addition, although not specifically called for in AB 1217, staff will work with partner agencies to ensure that the best information available on marine fisheries toxicity is made accessible to the public because toxicity is an important part of consumer choice.

Other Sustainable Fisheries Efforts

- San Francisco Fisherman's Wharf Sustainable Seafood Market: The OPC funded a pilot project in November 2010 in which Ecotrust, the San Francisco Crab Boat Owners Association and the San Francisco Community Fishing Association (SFCFA) are partnering on an innovative venture to create incentives for conservation of ocean resources through creation of a sustainable wholesale, and eventually a retail, seafood market along San Francisco's Fisherman's Wharf. The market is up and running, is having a successful crab and herring season, and anticipates a robust salmon season this year.
 - Dungeness Crab Task Force: SB 369 (Evans, 2011) re-establishes the Dungeness Crab Task Force to review and evaluate Dungeness crab management measures, including the crab trap limit program, and make management recommendations to regulators. The bill requires the OPC to develop and administer the task force with the assistance of a consultant, for which staff has begun contracting.
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Supporting Our Partners

OPC staff are actively engaged in supporting the work of partner organizations such as the following programs of the Natural Resources Agency.

West Coast Governor's Alliance (WCGA) – Action Coordination Team (ACT) Updates

The West Coast Governors Agreement on Ocean Health was signed on September 18, 2006 and a subsequent Action Plan was released in mid 2008. The Action Plan includes 26 actions, agreed upon by all three governors working in collaboration with federal counterparts in NOAA, DOI, and the USEPA. The WCGA Executive Committee established workgroups (Action Coordination Teams or ACTs) to coordinate and develop work plans for coast-wide implementation of the actions identified in the Action Plan. Ten ACTs are presently in place; nine of which have finalized implementation plans to carry out specific actions in the 2008 plan. Each team includes representatives with subject level expertise from each of the three states, federal, and tribal governments; and in some cases, industry, academia, and NGOs. OPC staff serve on five of the ten ACTs: Seafloor Mapping, Renewable Energy, Sustainable Coastal Communities, Regional Sediment Management, and Climate Change.

Notable accomplishments of the five ACTs that include OPC participation include:

Renewable Energy: Several areas potentially suitable for wave and tidal energy development occur along the West Coast. All three states need methods to evaluate and manage these types of emerging industries. The Renewable Energy ACT secured \$100,000 to support the development of an online "Guidebook for Marine Renewable Energy Planning". Much of the guide has now been developed and is available online at: <http://www.advancedh2opower.com/framework/default.aspx>. These include information on regulatory permitting, environmental baseline research, potential environmental and socioeconomic effects, and some resources on phased development approaches.

Sustainable Coastal Communities (SCC): The SCC ACT completed and released its final work plan in January 2012. This work plan comprises six focal areas: West Coast planning and economic development, sustainable fisheries, sustainable aquaculture, non-consumptive recreation and tourism, green ports, and clean marine programs. To achieve some of the deliverables in this work plan, the SCC ACT is supporting West Coast Sea Grant programs to help plan the third annual National Working Waterfronts and Waterways Symposium, which will seek to increase awareness of the economic, social, cultural, and environmental values of waterfronts, and the important role of water-dependent uses in sustainable coastal communities.

Climate Change: The intern hired by the OPC and State Coastal Conservancy utilizing WCGA funds is finalizing work-products developed during his internship which will fully complete one of the goals outlined in the Climate Change Action Plan. His work focused on characterizing anticipated climate change-related impacts and hazards to coastal areas along the West Coast, by identifying ecological changes from sea level rise, changes in storm intensity, and other climate related physical processes. The Climate Change ACT recently received a grant from the Packard Foundation to host a series of regional workshops (in each state CA, OR, and WA) to deliver the results of the soon to be released

National Academy of Sciences study on Sea Level Rise. These workshops will help translate the results of the NAS study into meaningful recommendations for planners and managers.

Thank You Ocean Campaign:

The California Thank You Ocean (TYO) Campaign is a nonprofit partnership supported by the State of California (Natural Resources Agency and OPC), the NOAA Office of National Marine Sanctuaries, and the Ocean Communicators Alliance. Its mission is to raise awareness of the benefits the ocean provides to us and to identify ways each of us can help protect the ocean in our everyday lives.

New Marine Protected Areas web page: The Thank You Ocean campaign recently partnered with the Department of Fish and Game, Department of Parks and Recreation, and Monterey Bay Sanctuary Foundation, to develop the content for an educational web-page on marine protected areas (MPAs) in California. This page describes what MPAs are, the importance of MPAs, provides opportunities for public involvement, and describes what the state and federal governments are doing to move forward with designing and maintaining the networks of MPAs. This web resource is also available in Spanish. To visit Thank You Ocean's new MPA web page please visit: www.thankyouocean.org/mpas.

Santa Barbara public outreach campaign raised awareness by 35%: The Thank You Ocean team launched a special "Don't Trash the Beach" English and Spanish radio media campaign, featuring actor Edward James Olmos, during the summer of 2011 in Santa Barbara. Pre- and post-campaign surveys revealed a 35% increase of respondents stating they heard the radio advertisement about the issue of marine debris and trashing the beach (the partnering advertising agency said a public outreach campaign of this size and scope can deem itself successful with only a 3-5% increase in awareness).

Photography Contest Winner Selected: This year, the Thank You Ocean Campaign partnered with the California Coastal Commission to sponsor the 13th annual ocean and coastal photo contest. Contestants were encouraged to submit photographs that reflect the importance that the coast and ocean has for California residents and the role that the Coastal Commission, Natural Resources Agency, and Ocean Protection Council have played in preserving coastal and marine resources. Contest winners were selected among the 1,400 photos submitted by online vote and a panel of judges, and received various prizes donated by the Fairmont Hotels of California. The winning photos can be found on the contest's website, www.mycoastalphoto.com. Thank You Ocean and the California Coastal Commission plan on partnering again on the photo contest in the summer of 2012.
