



California Ocean Protection Council (OPC) Executive Director's Report August 2011

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

NOTE: The majority of staff effort since the May meeting has focused on engaging with key partners to craft a draft vision and strategic action plan for the next 5-years to improve management and protection of California's ocean and coastal resources and to serve as a roadmap for the Council to apply its leadership, expertise, and resources.

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 OPC staff have developed this draft plan in cooperation and consultation with Ocean Protection Council members, the OPC Steering Committee, and the OPC Science Advisory Team (OPC-SAT). The plan has also been informed by an evaluation of the OPC's first five years. The strategic action plan identifies the complex challenges to our ocean systems that can be addressed by the OPC's leadership and core strengths as a science-informed coordinating body.

This draft plan recognizes that the OPC will not be able to address every ocean issue facing the state of California. With this constraint in mind, this plan has been crafted to strategically guide the OPC's efforts so that they have maximal effect on the most important issues given the OPC's core competencies as well as funding and staffing constraints.

The plan focuses on four substantive areas that will comprise the core of the OPC's efforts over the next five years, including:

- 1) Climate change
- 2) Fisheries and marine ecosystems
- 3) Coastal and ocean impacts from land

4) industrial uses of the ocean.

The plan also identifies a fifth area—improved use and sharing of scientific information to support ocean governance and management—that cuts across all of these focal areas.

This plan outlines specific goals, objectives, and actions that the OPC will implement in each area to protect ocean and coastal resources. The OPC staff are soliciting feedback from the public on this draft action plan. The plan is available on the OPC website and open for public comment through 12 September 2011.

To facilitate a dialogue with constituents, the OPC staff will host 3 workshops throughout California:

Southern California -- Monday, August 22, 2011 (10:00 a.m. – 1:00 p.m.)

Southern California Coastal Water Research Project Facility, Main Conference Room
3535 Harbor Blvd., Suite 110, Costa Mesa, CA

Northern California -- Friday, August 26, 2011 (10:00 a.m. – 1:00 p.m.)

Arcata City Hall Chambers
736 F Street, Arcata, CA

Central California -- Monday, August 29, 2011 (2:00 – 5:00 p.m.)

The Alameda County Training Center, Hayward Room
125 12th Street, Oakland, CA

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
Eugenia Laychak (Co-chair) – California Energy Commission
Cy Oggins, Kenneth Foster, Ninette Lee, Jennifer DeLeon, John Dye, Madhu Ahuja –State Lands Commission
Tom Luster, Alison Dettmer – Coastal Commission
Vicki Frey, Steve Ingram, Annie Manji, Bill Paznokas–Department of Fish and Game
Jaclyn Marks – California Public Utilities Commission

The Working Group last met on April 25, 2011; however the Working Group support for the development of a white paper describing state regulatory guidance for test and pilot hydrokinetic projects in California will be discussed at the August OPC meeting. OPC staff anticipates hosting a

workshop with the Working Group in September and working with members of the Working Group throughout the fall to develop a statewide regulatory guidance document for test and pilot hydrokinetic energy projects.

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. Working group members include technical users of geospatial data. Staff from the OPC and NOAA Coastal Services Center co-chair the group. 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.

California Coastal and Marine Geospatial Data Information Management System Scoping Study:

The CCMG-WG and OPC staff recently embarked on a scoping study to identify specific needs and potential investments in information management systems that the state can support to improve geospatial data access, viewing, and sharing. This project originated from comments about challenges to interagency data sharing in the state and is designed to be a major step in addressing this challenge. The study will deliver a prioritized accounting of the workflows of state agencies and specify the ideal functional requirements for an ocean and coastal geospatial data information system. This system should maximize the state agencies' capacity to share, access, download and view these data. The Scoping Study contractor, Kearns & West/The Spatial Collaborative, conducted in-depth consultations with state agency staff and managers between May and July. The final scoping study will be completed by September 30, 2011.

Policy Informed by Science:

A key purpose of the OPC, identified in its authorizing legislation, relates to ensuring that the state's decisions about coastal and marine management are based on the best available science. The OPC's key partner for accomplishing this science integration is the California Ocean Science Trust (OST), which helps facilitate science-based decision-making by connecting science to policy and management. OST serves as an objective translator, identifying the best scientific knowledge and expertise available to inform ocean policy decisions. It also leverages state support with extramural funding and provides an institutional home to incubate specific programs that respond to state science, data, and information needs. While an independent organization, OST works alongside the OPC and in coordination with state agencies that have coastal and ocean resource management responsibilities.

OPC-Supported Scientific Studies

Plastic Debris in the California Marine Environment: A Summary of Current Research and Data Gaps

Final Report: As plastic debris accumulates in the Pacific Ocean, one urgent concern is the potential impacts on marine species, including ingestion, entanglement, and toxic releases as plastics degrade in

seawater. To understand the status of this issue, the OPC coordinated with the Department of Toxic Substances Control (DTSC) to initiate a report that would serve as a place-marker for the current state of research on the sources, abundance, pathways, and impacts of plastic debris in California, including the emerging field of research: the toxicology of plastics in the marine environment. OST partnered with USC Sea Grant to undertake a revision and update. The final report is expected in August, and OST and the OPC are committed to ensuring that all relevant policy-makers and stakeholders are alerted.

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:

- *Synthesis for Coastal Ocean Observing Products (SCOOP)* - This report aims to assess opportunities to help ensure that current and future coastal ocean observing systems in California effectively support both the missions of the state's ocean resource management and regulatory agencies, and other primary users and stakeholders.
- *Plastic Debris in the California Marine Ecosystem: A Summary of Current Research and Data Gaps* – see above.

Completed peer reviews include:

- *Economic Costs of Sea Level Rise to California Beach Communities* - Prepared for the California Department of Boating and Waterways.
- *Aquaculture Programmatic Environmental Impact Report (PEIR)* – Prepared for the Department of Fish and Game.
- *State Lands Commission Geophysical Permitting Program Proposal*: A proposal prepared for the OPC. ** OPC staff will bring this funding proposal before the Council at the upcoming August 11 meeting.

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 January 31, 2011 in Oakland.

Joint OPC-SAT/OPC Management Team Meeting - OST has scheduled the next Joint OPC-SAT/OPC management team meeting for September 30, 2011 at the BCDC offices in San Francisco.

OPC Strategic Planning Process – In addition to actively assisting the OPC in identifying and articulating science and information needs for the next five years, the OPC-SAT has also reviewed the first draft of the OPC's new five-year strategic plan.

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.

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 nearly complete. This field season now focuses on ground-truthing the seafloor data. Staff will continue discussions with resources managers on data acquisition priorities for San Francisco Bay in the fall.
- A tri-state effort with OR and WA continues to explore ways to map the nearshore coast (depths less than 10m). CSU Monterey Bay has recently completed initial testing of a new jet ski equipped with a multi-beam sonar and LiDAR to collect data in 2 of the central coast marine protected areas. Initial results are very good.
- High-resolution coastal LiDAR and aerial imagery is being collected throughout California in collaboration with ACOE, NOAA, USGS and others. OPC-sponsored data collection was completed in December 2010, and those data are being processed, with delivery expected in late fall. OPC data will be combined with federal datasets and will be delivered to the public in late 2011.
- A team of state and federal agencies are discussing product development from these data sets (prioritizing sea level rise, storm surge, and flooding analysis). Because merging comprehensive onshore-offshore elevation data has never been done before, staff will be working with NOAA and Department of Water Resources to test various approaches this fall, hopefully resulting in a defensible, cost effective plan for merging statewide data in late 2011.

Ocean Observing:

The Coastal Ocean Currents Monitoring Program (COCMP) is a collaborative statewide program to monitor and map the surface currents off the coast of California. This unprecedented program is a partnership of academic and government institutions working with industry and non-governmental organizations to design a real time monitoring system along the state's 1,100 miles of coastline.

The implementation phase of COCMP is now complete, with a network of more than 50 shore-based HF Radar (high frequency radar) operating along the coast. During the past five years, COCMP data have

proven useful in oil spill response, wastewater discharge monitoring, beach water quality monitoring, plume tracking at urban rivers during storm events, search and rescue efforts, climate change analysis, harmful algal bloom (HAB) tracking and forecasting, and coastal inundation modeling. NOAA is currently funding a portion of the operational costs of this system through grants to the CA Regional Associations (RAs; the Southern CA Coastal Ocean Observing System and the Central and Northern Coastal Ocean Observing System). However, if additional funds are not identified, the RAs will be unable to retain trained staff and HF Radar sites will be shut down. Additional federal funding is unlikely before 2013.

If HF radar installations are decommissioned, the consequences for California will be immediate (e.g. will not be able to track discharge plumes from outfalls and manage beach water quality) to long-term (e.g. cannot effectively evaluate the impacts of climate change on critical coastal habitats). As was the case in the Gulf of Mexico, in the event of an oil spill, California will not be able to respond effectively to minimize impacts.

A consultant report evaluating the effective and efficient use of ocean observing data for ocean management (the Synthesis of Coastal Ocean Observing Products) is now in peer review and will be released for review in fall of 2011.

Sea Grant Research Program 2011:

California Sea Grant and USC Sea Grant recently reviewed preliminary proposals submitted for the 2011 round of OPC funding for research projects to improve management decisions affecting the ocean and coastal environment. Research proposals must address one of the research priority issue areas that were developed by resource managers and scientists convened by OST. Preliminary proposals were reviewed by scientists and the Natural Resources Agency Sea Grant Advisory Panel in April, and several full proposals were received which will undergo subsequent scientific and state agency review in August and September. Final recommendations for research project funding will be presented for OPC concurrence at the December meeting prior to award of the subgrants.

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). Through a consultative process, this program led the development of a new framework for assessing MPA performance against the goals of the MLPA and informing adaptive management. 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.

- **Planning South Coast MPA Monitoring:** The Monitoring Enterprise completed development of a draft South Coast MPA Monitoring Plan to guide long-term monitoring of the regional MPA network. On June 29, the plan was presented to the Fish and Game Commission. The Commission will consider adopting the plan as an appendix to the Draft Marine Life Protection Act Master Plan at their meeting on August 3. The draft plan can be downloaded from the Monitoring Enterprise website (www.monitoringenterprise.org).
- **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 development and implementation of a South Coast MPA Baseline Program. The OPC has allocated approximately \$4 million to support the Baseline Program in this region. Thirty eight proposals were received in response to the Request for Proposals issued in February. Following a two-step peer review process, ten proposals were selected for funding. A [press release](#) announcing the selected projects was issued by California Sea Grant on July 15. Over the next three years, teams of researchers, citizen-scientists, and fishermen will survey the South Coast region's coastal and marine habitats, including human uses, inside and outside MPAs to characterize baseline conditions and document initial changes. South Coast region MPAs are expected to take effect on October 1, 2011.
- **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. Now into year two of the monitoring program, researchers, citizen-scientists, and fishermen continue to compile baseline data on the region. The North Central Coast MPA Monitoring Plan can be found at <http://monitoringenterprise.org/where/northcentralcoast.php>

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 Agreement (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; eight 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, Sediment, and Climate

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 develop an online "Guidebook for Marine Renewable Energy Planning" that will establish preliminary principles for planning at a regional scale, identify baseline information essential for this planning, as well as critical data gaps that could undermine informed and effective decisions. The contractor, Pacific Energy Ventures, has started developing the baseline information chapters and will continue developing this resource throughout 2011.

Sustainable Coastal Communities (SCC): The SCC ACT is presently finishing edits to this section of the WCGA and will begin implementation of the actions identified in the plan. Actions include addressing sustainable fisheries, aquaculture, green ports, clean marinas, recreation and tourism, and economic development along our coast. The final report should be released by fall 2011.

Climate Change: The OPC and State Coastal Conservancy, working in conjunction with Ocean Science Trust, have selected and hired an intern utilizing WCGA funding who is working to complete goals outlined in the Climate Change Action Plan. He is 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.

Regional Sediment Management: On May 9, the Regional Sediment Management ACT held a Coastal Sediment Management Workshop in Portland, OR, to share case studies and compile lessons learned on regional sediment management, thereby completing another goal from the Action Plan. The Sediment ACT is also implementing the Governors Charge regarding Action 7.4: "Develop regional sediment management plans that increase beneficial use of sediment in an environmentally responsible manner to protect and maintain critical community economic and environmental infrastructure." The final report is available on the WCGA website at <http://westcoastoceans.gov/teams/>.

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.

CIAP Grant Awarded to Thank You Ocean Campaign: On July 19th, the Thank You Ocean Campaign was awarded a \$200,000 Coastal Impact Assistant Program (CIAP) grant from the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to raise awareness of ocean and coastal issues. The grant will fund radio and outdoor advertising and the development of informational material for distribution at California aquaria and science centers. The grant will also support programming and maintenance for the campaign's bi-weekly podcast series and bilingual website.

Photography Contest Underway: This year, the Thank You Ocean Campaign partnered with the California Coastal Commission to sponsor the 13th annual ocean and coastal photo contest. Contestants are 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. The contest opened July 18th, and will remain open until September 2, 2011. Contest winners, selected by public vote and a panel of judges, will be announced by the end of October 2011 and will receive various prizes donated by the Fairmont Hotels of California. For more information please visit: www.mycoastalphoto.com .
