



October 17, 2016

Dear Council Members and Partners:

With unprecedented changes in our oceans and along our coast, as well as transitions at the OPC, across the state, and looming in our federal government, this has been a decidedly meaningful and important few months for us. As a recent transplant to the ocean community, I have enthusiastically applied my experience working on climate and environmental problems to enable OPC to confront ocean challenges with optimism and creativity. The attached report gives you a sense of the work OPC staff and our partners have tackled since our last Council meeting in June. This is just a snapshot, but you'll see our work consistently spans the diverse areas of our strategic plan, while also relying on guidance documents, legislation, agency leadership, consensus scientific documents, and a wide range of expert and stakeholder partnerships to guide our work.

What has been most rewarding to me over the past few months is to see the commitment, passion, and unwavering resilience of my team. We have experienced tremendous success in and across every program area. Two examples in different stages of development include ocean acidification and marine debris. Two years ago, OPC helped spearhead the convening of the West Coast Ocean Acidification and Hypoxia Science Panel. In just the past few months, OPC's work has led to two pieces of signed legislation, an international alliance to address the environmental and economic threats posed by ocean acidification, recognition at the Our Ocean conference hosted by the U.S. Department of State, an invitation to COP 22 in Marrakesh to present the West Coast's ocean acidification strategy, a state/federal interagency partnership on water quality monitoring stretching from Alaska to California, and a host of scientific projects to help elucidate impacts and strategies to address OA. OPC's work on marine pollution is at the beginning stages, similar to where we were with ocean acidification two years ago. Staff is working tirelessly to create a marine pollution program after a several year lapse. OPC is developing a comprehensive strategy and a broad vision that encompasses not just marine debris, but pollution, contaminants of emerging concern, and land use impacts.

I would also like to take this opportunity to recognize the Ocean Science Trust as another key player on the OPC's team. Through our novel partnership, we have worked closely with OST and the OPC Science Advisory Team to address tough questions and provide scientific guidance related to issues ranging from ocean acidification to harmful algal blooms to MPA management. OST is uniquely situated to leverage additional support to benefit California's marine resources management. OPC and OST are currently discussing opportunities to strengthen our strategic, mutually beneficial partnership. We will bring these ideas before the Council in December.

I am looking forward to a productive fall and continuing to make progress on our shared ocean priorities through discussion, problem solving, and innovative, transparent and iterative approaches. On behalf of myself and the OPC staff, thank you for your steadfast commitment and guidance for the work we do.

Deborah Halberstadt



**California Ocean Protection Council (OPC)
Executive Director's Report
October 17, 2016**

The Executive Director's Report provides an update on OPC outcomes and accomplishments since the previous OPC meeting. This report covers June to October 2016¹.

Water Quality, Supply and Infrastructure Improvement Act of 2014 (Proposition 1): Staff are currently working with grantees to execute grant agreement for the eight projects approved by the Council on June 29, 2016.

Staff are currently scoping key dates for the second round of Proposition 1 funding which we anticipate will be appropriated with the FY17-18 budget. Staff are currently determining whether changes to the grant guidelines are needed, based upon lessons learned from the first round; if necessary changes are identified, staff will return to the Council in 2017 for approval. Staff are also scoping public outreach efforts with particular emphasis on urban disadvantaged communities. The available funding for the second round of Proposition 1 funding is expected to be \$10.9 million.

Staffing: OPC is advertising for a new Deputy Director. The announcement was posted on October 6, 2016 and is available through a link on OPC's website, www.opc.ca.gov.

Strategic Plan Issue Area 1: Science-Based Decision-making

California Seafloor and Coastal Mapping Program: The OPC, U.S. Geological Survey (USGS), and NOAA formed a state-federal California Seafloor and Coastal Mapping Program Steering Committee in April 2015 to advise these agencies on the priorities for the future of the program. Through the steering committee process, it was identified that lack of training is one obstacle to state and federal agency use of a suite of seafloor mapping products produced by the USGS. In spring 2016, the USGS (with support from OPC) conducted trainings with the Department of Fish and Wildlife, the California Coastal Commission, and the Mineral Resource

¹The present ED report contains descriptions of OPC grants or contracts that have closed since the last OPC meeting. Each grant or contract is described under the header of the OPC strategic plan issue the work is intended to address.

Management Division of the State Lands Commission. By early 2017, USGS will have completed the suite of seafloor maps for the areas between Sonoma County and the Monterey Peninsula and the area between Point Conception and Pt. Hueneme (maps/shapefiles available for download at <http://walrus.wr.usgs.gov/mapping/csmp/progress.html>). “Raw” bathymetric and acoustic backscatter data for all of mainland California state waters is available at http://seafloor.otterlabs.org/SFMLwebDATA_SURVEYMAP.htm.

Strategic Plan Issue Area 2: Climate Change

International Alliance to Combat Ocean Acidification (Alliance): On June 1st, the Pacific Coast Collaborative (PCC) leaders signed and announced a new Climate Leadership Action Plan, which committed the PCC to: *“Initiate the development of an international network of countries, states, provinces and cities that will work together to address the threat of changing ocean conditions with a particular focus on ocean acidification.”* The PCC Ocean Acidification (OA) Subcommittee is launching an [International Alliance to Combat Ocean Acidification \(Alliance\)](#)². In the Alliance’s Call to Action, PCC leaders reaffirm their support for actions to reduce greenhouse gas emissions, and to implement regional strategies that reduce ocean acidification and adapt to future changes to the ocean. PCC leaders call for a similar commitment to action by the international community. Representatives from the PCC jurisdictions, including OPC staff, attended Secretary Kerry’s Our Ocean Conference in Washington, D.C. on September 14-15 to [announce the Alliance](#)³ and to discuss the Call to Action with interested nations and subnational governments. At the conference, there was great support for the Alliance from countries such as France and Chile and organizations such as Ocean Conservancy and the Monterey Bay Aquarium.

Interagency Working Group on Ocean Acidification (IWG-OA) and Pacific Coast Collaborative (PCC) Ocean Acidification and Hypoxia Monitoring Task Force (Task Force): On June 1st, the PCC leaders signed and announced a new Climate Leadership Action Plan, which committed the PCC to: *“In partnership with federal agencies (U.S. and Canada) and key stakeholders, design and implement coordinated, effective West Coast ocean acidification monitoring and research.”* The Pacific Coast Collaborative (PCC) and the Interagency Working Group on Ocean Acidification (IWG-OA) have partnered to convene an Integrated Ocean Acidification and Hypoxia (OAH) Monitoring Task Force (Task Force). The establishment of this Task Force directly addresses Recommendation 7: “Build out and sustain a West Coast monitoring program that meets management needs” in the [West Coast Ocean Acidification and Hypoxia \(OAH\) Science](#)

² www.oaalliance.org

³ <http://ourocean2016.org/commitments/#commitments-main>

[Panel's Executive Summary](#)⁴. The Task Force will build upon results from multi-year and multi-institution efforts, such as the West Coast Ocean Acidification and Hypoxia Science Panel and the Global OA Observing Network (GOA-ON), to guide monitoring that increases our understanding of how OAH is impacting the west coast, enabling adaptation and mitigation responses. The Task Force is charged with developing and completing an inventory of West Coast monitoring of chemical, physical and biological parameters that inform our understanding of long-term oceanic change. Further, the Task Force will work jointly with PCC and IWG-OA to help identify key management questions that can inform current and future observing asset investments, and to facilitate an enhanced partnership between the PCC, IWG-OA, and the Integrated Ocean Observing System (IOOS) regional associations.

Ocean Acidification & Hypoxia Legislation: Recent legislation elevates the issue of ocean acidification and hypoxia for the first time within our legislature. AB 2139 (Williams) was signed by Governor Brown on September 14 and calls out many of the recommendations and actions from the West Coast Ocean Acidification and Hypoxia Science Panel, and charges OPC staff to report out to the Council on an annual basis on progress and recommendations for next steps in reducing and further understanding ocean acidification. SB 1363 (Monning), which was signed by Governor Brown on September 29, highlights actions that can be taken at local and regional scales through eelgrass restoration, protection, and associated monitoring to implement strategies and consider carbon dioxide removal and hypoxia reduction in future habitat planning.

Update to State Sea-level Rise Guidance Document: OPC is coordinating with the Governor's Office of Planning and Research and other policy and technical experts on updating the State Sea-level Rise Guidance Document, which was last updated in 2013. The update will make the document relevant to local governments, as SB 379 (Jackson) requires local governments to address climate impacts as part of General Plans and Local Hazard Mitigation Plans. The update will also reflect the changing science on sea-level rise.

Strategic Plan Issue Area 3: Sustainable Fisheries and Marine Ecosystems

Dungeness Crab Working Group on Whale Entanglements: Last fall, the OPC and CDFW convened an informal working group to further explore short and long-term strategies to reduce the risk of whale entanglements in Dungeness crab fishing gear. The working group met in July and September 2016, and has provided refined recommendations to the fishing industry

⁴ <http://westcoastoah.org/wp-content/uploads/2016/04/OAH-Panel-Key-Findings-Recommendations-and-Actions-4.4.16-FINAL.pdf>

that specify recommended lengths of rope for surface gear setups. The working group is also expanding its outreach efforts to the Dungeness crab fleet to ensure that the recommendations are widely known and that the fleet is trained to act as first responders to whale entanglements. Finally, the working group has developed research projects to fill information gaps in the distribution and movement of both whales and fishing gear. Currently, whale distribution data is collected when the Dungeness crab fishing season is closed; the working group is working with the National Marine Fisheries Service to accurately predict whale locations along the California coast using ocean conditions data and is exploring tools to develop information on fishing gear distribution and movement during the Dungeness crab fishing season.

Harmful Algal Blooms (HABs): On August 5th, the *Frequently Asked Questions (FAQ): Harmful Algal Blooms and California Fisheries* document was released by the Ocean Science Trust (OST), and the OPC, with input from the Interagency HAB Task Force. This document was designed to serve as a resource to build common understanding across all engaged in this issue, and provide clarity on the State's current practices (through July 2016) to harmful algal bloom (HAB) monitoring and management, and seafood toxin sampling and testing protocols. The FAQ document was developed in response to the 2015-16 domoic acid event and was informed by questions submitted to OST by the Interagency HAB Task Force, along with input from the California Dungeness Crab Task Force Executive Committee, Commercial Fishermen of Santa Barbara, the office of California Senator Mike McGuire, and the Joint Committee on Fisheries and Aquaculture. Ocean Science Trust will continue to work with the Ocean Protection Council Science Advisory Team (OPC-SAT) working group to develop a HAB scientific guidance document, which will be delivered to the Interagency HAB Task Force in late October 2016.

MPA Monitoring Program: Selection has been completed for three post-doctoral researchers who will be co-mentored by UC Davis Coastal Marine Sciences Institute and California Department of Fish and Wildlife Senior Scientists for 18 month positions. This innovative program will engage leading faculty at UC Davis and staff at CDFW, with outstanding early career researchers to develop key products to advance the MPA Monitoring Program in California. The selected Remotely Operated Vehicles (ROV) Data Integration Fellow will lead the development of innovative approaches to analyzing spatially explicit visual data currently being collected by CDFW and others in statewide surveys of MPAs using ROVs. The selected Statewide Monitoring Fellow will focus on the development of novel sampling plans and predictive models to compare monitoring data to model projections to inform effective adaptive management of the MPA Network. The selected MPA and Fisheries Integration Fellow will focus on the development of effective methods for the integration of MPAs into fisheries

management under the [Marine Life Management Act](#)⁵. These Fellowships will be foundational elements in informing future monitoring to evaluate the performance of the MPA Network at meeting the goals of the MLPA.

The core management team of the MPA Monitoring Program (CDFW, OPC and Ocean Science Trust) in consultation with the MPA Statewide Leadership Team and other partners has developed priority spending categories for the FY 16/17 General Fund spending. Project development is underway with the primary focus being on the creation of a data/information management system (IMS) for the MPA Monitoring Program data. The IMS will include all MPA Monitoring Program data, a map visualization interface and the ability to harvest and display other relevant data from existing scientific sampling programs to provide a scientifically robust tool to assess the performance of the MPA Network at meeting the goals of the MLPA.

MPA Milestones and MPA Statewide Leadership Team

The Final MPA Milestones meeting of 2016 was held September 27, in Sacramento. The meeting reviewed the significant accomplishments of the [MPA Statewide Leadership Team](#)⁶ and MPA Management Program to date in 2016. In addition to the MPA Monitoring Program accomplishments above, highlights included progress updates on the creation of an MPA Toolkit for outreach and education, upcoming MPA regulation packages and notable enforcement cases including the increased use of an infraction citation option by wardens. The next Milestones Meeting will be held in March of 2017.

Strategic Plan Issue Area 4: Coastal and Ocean Impacts from Land-Based Sources

Marine Pollution Program: OPC staff has been working with a variety of partners, including Federal, state, and local agencies, and conservation organizations to build out a marine pollution program. As part of this effort, staff has expanded the program from marine debris to marine pollution, which includes plastic pollution, emerging contaminants, and other land-based water quality impacts. For the first time in many years, staff is bringing several proposals before the Council under Proposition 84 to address marine pollution, and further develop the program in an inclusive and strategic way. These proposals were selected collaboratively with our partners. Working with our partners enabled OPC staff to select projects that are timely, impactful, and have broad support from a number of stakeholders. These proposals have the support of our partners at the NOAA Marine Debris Program, US Environmental Protection Agency, the California Coastal Commission, and a number of conservation organizations including Surfrider, Oceana, and Earthjustice.

⁵ <https://www.wildlife.ca.gov/Conservation/Marine/MLMA>

⁶ <http://www.opc.ca.gov/programs-summary/marine-protected-areas/partnerships/>

The projects proposed for funding at this meeting include updating the Ocean Protection Council Litter Strategy to provide a road map of projects and priority actions for the next several years, implementation of the Dungeness Crab Fishing Gear Working Group's projects⁷, and "unpackaging" a community to reduce a community's reliance on single-use disposable items.

Coastal Sediment Management Workgroup: In September the Coastal Sediment Management Workgroup (CSMW) which is co-chaired by staff from the OPC and the U.S Army Corps of Engineers finalized Coastal Regional Sediment Management (RSM) Plans for the Eureka Littoral Cell (Humboldt Bay Region). During the course of developing the plan, the CSMW provided several opportunities for public input and discussion. In a nutshell, RSM Plans create strategies and identify projects to beneficially re-use sediment for beach and environmental restoration, enhancing recreation, promotion of tourism, increasing natural shore protection, and maintaining coastal resilience.

Strategic Plan Issue Area 5: Existing and Emerging Ocean Uses

Marine Renewable Energy: At the request of Governor Brown, the director of the federal Bureau Ocean Energy Management (BOEM) established a BOEM California Task Force to facilitate education, coordination and consultation on leasing and permitting for, as well as the monitoring and evaluation of, renewable energy projects on the California outer continental shelf. OPC staff assisted the Governor's office and BOEM staff in organizing the kick-off meeting for the task force which was held on October 13th in Sacramento. Future OPC activities relative to the task force and marine renewable energy in general, include but are not limited to, collaborating with the California Energy Commission on a series of meetings with stakeholders, data collection, and state marine renewable energy planning.

Related Initiatives

18th Annual California Ocean and Coastal Amateur Photography Contest: The winners of the 18th Annual California Ocean and Coastal Amateur Photography Contest have been announced (<http://mycoastalphoto.com/winners/2016-winners/>). The Judge's First Place Winner is Gary O'Neill for his photo of a wave taken north of San Simeon, California. The contest pays tribute to the amazing California coast and ocean by featuring photos of the scenic coast and Pacific Ocean off California, people and the California coast, or California ocean and coastal wildlife. The contest was sponsored by the Thank You Ocean Campaign (staffed by OPC and NOAA), the California Coastal Commission, and the Fairmont Hotels and Resorts.

⁷ Please see Strategic Plan Issue Area 3 for an update on the Dungeness Crab Fishing Gear Working Group Activities.



Judge's First Place Winner, Gary O'Neill. North of San Simeon, California.