

**T**his appendix provides an assessment of the OPC's activities as they compare to the September 2006, five-year strategic plan, *A Vision for Our Ocean and Coast*. This appendix is not a critique of the OPC's strategic plan.

The strategic plan included six themes:

- A. Governance*
- B. Research and Monitoring*
- C. Ocean and Coastal Water Quality*
- D. Physical Processes and Habitat Structure*
- E. Ocean and Coastal Ecosystems*
- F. Education and Outreach.*

The strategic plan identified between one and seven objectives under each theme, and between one and nine action items under each objective. In total, the strategic plan included 24 objectives, and 74 action items. For each action item, the strategic plan identified the OPC's role, lead agency, and partners.

OPC

The strategic plan provided a long list of specific activities for the OPC to undertake, or support, over the five-year strategic plan period, from 2006 through 2010. **Exhibit C-1**, starting on page C-4, provides an assessment of the status of each of the 74 strategic plan action items, and an overall assessment of each of the 24 strategic plan objectives. The final column in Exhibit C-1 provides an overall assessment of the OPC's performance, to-date, as it relates to that objective.

The 74 action items in the strategic plan were not equivalent, in terms of level of effort. For example, some action items involved comprehensive multi-year efforts, while other action items involved completing a single study. In addition, some action items involved one activity, while other action items included a series of different actions. Exhibit C-1 identifies the lead agency for each action item. The OPC was not the lead agency for many of the action items. In these cases, the OPC was to have a supporting role. In many instances, the OPC was to have a supporting role in regards to collaboration and/or policy, but a direct role in funding. Acronyms and abbreviations for lead agencies are provided at the end of this appendix.

In order to assess the OPC's performance as it relates to these action items, Exhibit C-1 identifies the action item, and describes the status of each action item. The status description identifies specific related actions that the OPC has undertaken. The status column also includes a summary descriptive word or phrase, as follows:

- Complete – the action item has been finished
- Partial complete – some, but not all, of the activities identified for the action item are complete
- Ongoing – the OPC is continuing to work in this area; many of the action items do not have a defined end-point, and thus fall into this category

- Limited action – the OPC has done some work on this action item, but has not undertaken a comprehensive effort, to-date
- No action taken, to-date – the OPC has not yet undertaken this activity.

In assessing the OPC's activities in total, the Council has, to some extent, addressed the majority of action items in the strategic plan. Given the number of action items and extremely broad scope of the plan, this represents a significant accomplishment. Most of the action items identify several specific activities for the OPC, or its partners, to undertake. In most cases, the OPC has taken steps to implement some, but not all, of the activities that fall under that action item. Many of the 74 action items involve a supporting role by the OPC, with the primary action to be taken by another agency. In these cases, the OPC could not necessarily ensure that an action item was accomplished.

The fact that the OPC accomplished many of the strategic plan action items does not necessarily mean that the OPC achieved the objectives in the strategic plan. Because of the nature of this first strategic plan, there is no viable means to assess how well the OPC has done in achieving the 24 objectives within the strategic plan. The strategic plan objectives are generally subjective, and not measurable.

**Table C-1**, on page C.19, identifies eight performance measures included in the strategic plan. Unfortunately, none of these performance measures is specific to OPC activities, and all are beyond the OPC's control. In addition, most of these performance measures are not quantifiable. These eight performance measures do not provide a gauge of the OPC's performance as it relates to its strategic plan.

Specific recommendations regarding development of the OPC's second five-year strategic plan are included in Section 3. However, this assessment

of the OPC's performance as compared to the strategic plan highlights three steps that the OPC should consider in developing its second strategic plan:

1. Reduce the number of goals, objectives, and actions to that which the OPC can reasonably and effectively address during the strategic planning period
2. Include action items that the OPC can undertake. This does not mean that OPC action items should not include other agencies, only that the OPC should be the lead agency in conducting the particular activity, and the action should specify steps that the OPC will take, rather than another agency
3. Identify performance measures specific to the problems that the OPC, and its partners, are working to solve. Performance measures should be linked to the objectives.

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.4

### Exhibit C-1

#### Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>A. Governance – A goal of the OPC is to enhance the capacity and performance of government programs to meet the goals of COPA</b>				
<b>Objective A1: Funding – Maximize the effectiveness of funding spent to protect and conserve coastal resources</b>				
A-1a	By February 2007, complete a comprehensive study of all state agency budgets for ocean and coastal protection activities. The study shall include: an assessment of existing special funds and whether those funds have been fully expended in existing operating budgets; an assessment of the range of existing and potential uses for any identified funds; and an assessment of whether there is a duplication of funding efforts.	OPC	Partial complete. Study by the National Ocean Economics Program completed May 2008. The study is a comprehensive summary of budgets for FY 2005/06 and FY 2006/07.  The study provides the budgets, but not an assessment of the implications for ocean and coastal management, or implications for OPC decision-making.	The OPC completed the two studies that were identified in the strategic plan, but still has an opportunity to improve funding for ocean-related management. This has been difficult, given the current fiscal climate in the state.
A-1b	By February 2007, complete a comprehensive study of all potential new funding sources for ocean and coastal protection.	OPC	Complete. Study by Redefining Progress completed December, 2007. The study evaluates a range of different fees, taxes, and fines.	
A-1c	By May 2007, work with all relevant state agencies to develop necessary regulations, legislation or other tools to improve the way ocean-related activities are funded.	OPC	No action taken, to-date.	
<b>Objective A2: Interagency Collaboration – Maximize the effectiveness of state agency efforts to protect and conserve ocean and coastal resources</b>				
A-2a	By December 2006, inventory laws and identify gaps or overlapping jurisdictions affecting priority ocean and coastal issues.	OPC	Partial complete. Inventory completed (no date). The study provides a thorough inventory of laws; however, there is little analysis of gaps or overlapping jurisdictions.	The OPC's work in this area has been project specific, and is developing over time. The OPC has an opportunity to develop a more comprehensive and strategic approach for its coordinating activities.
A-2b	By May 2007, work with all relevant state agencies to develop necessary legislation, regulations, or other tools to improve ocean governance. Identify and promote administrative, regulatory, and legislative measures that will enhance the effectiveness of state coastal and ocean programs by reducing gaps and conflicts in policies and programs.	OPC	Ongoing. The OPC is conducting ongoing activities in this area. Related projects include: the OPC-DFG Joint Work Plan projects, development of the Aquatic Invasive Species management plan, and supporting interagency collaboration for managing geospatial information addressing climate change, and marine debris.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.5

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective A3: Enforcement – Improve the enforcement efforts of California's ocean and coastal protection laws</b>				
A-3a	By December 2006, identify all ocean protection enforcement authorities, programs, and budgets, and convene a task force to provide recommendations to OPC on more efficient ways of conducting and coordinating enforcement, including integrating enforcement actions across agencies.	OPC	Limited action. The OPC convened an enforcement working group with the Los Angeles RWQCB and DFG. The project was discontinued.	The OPC has had limited success in improving enforcement efforts. Because the OPC has no enforcement authority, its actions must be achieved through coordination and/or funding.
A-3b	By May 2007, work with all relevant state agencies to develop necessary legislation, regulations, or other tools to improve the enforcement of ocean protection laws.	OPC	Limited action.	
<b>Objective A4: Ecosystem-Based Management (EBM) – Develop practical approaches to implementing ecosystem-based management and encourage implementation throughout the state</b>				
A-4a	By May 2007, work with all relevant state agencies to develop proposed legislation, regulations, or other tools to integrate EBM principles into agency operations.	OPC	Limited action. OPC funded several efforts to gather socio-economic data to support ecosystem based management (EBM) in decision-making. These projects included: socio-economic studies of north coast and a Non-Market Ecological Valuation of Coastal and Marine Resources in California.	The OPC has only minimally addressed this objective, to-date. The WCGA EBM action team and the EBM network were already working to develop tools and approaches for incorporating EBM into agency operations.
A-4b	Support the development of ecosystem-based management pilot programs in several regions throughout California.	OPC, SCC	Limited action. The OPC funded a pilot project in Morro Bay, and has funded ecosystem-based management research through the Sea Grant program.	
<b>Objective A5: Federal Influence – Engage federal government support for California's priorities</b>				
A-5a	Actively engage on the following issues by working with the President, Congress, Council on Environmental Quality, National and Western Governors' Associations, and Coastal States Organization to: <ul style="list-style-type: none"> <li>■ Maintain California's moratorium on offshore oil and gas leasing</li> <li>■ Support California's non-point source pollution program</li> <li>■ Call for the ratification of the Law of the Sea Treaty</li> <li>■ Support California's ocean observing systems</li> <li>■ Reauthorize a strong Coastal Zone Management Act</li> <li>■ Support adequate funding for state and federal coastal programs.</li> </ul>	OPC	Ongoing. The OPC is conducting ongoing outreach and work in these areas, including support for specific objectives of House of Representatives bill Oceans Conservation, Education, and National Strategy for the 21 <sup>st</sup> Century Act (H.R. 21), and adoption of comments on the draft National Policy and Implementation Strategy from President Obama's Interagency Task Force on Ocean Policy	The OPC has successfully engaged and influenced federal ocean policy on a number of different levels. The OPC has been particularly engaged in building California's ocean observing systems.

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.6

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective A6: Regional Coordination – Pursue regional governance approaches to improve coordination of ocean management along the West Coast</b>				
A-6a	By September 2006, adopt a tri-state agreement between the states of California, Oregon and Washington that focuses on initiatives by all three states to improve ocean and coastal management.	OPC, RA	Ongoing. The WCGA was adopted in September, 2006 and the action plan was released in July, 2008. The WCGA completed eight work plans in May, 2010.	The WCGA was established, and continues to move forward to complete and implement work plans in specific areas. The OPC has been integrally involved in these activities.
<b>Objective A7: Performance Metrics – Build the foundation for identifying outputs and outcomes for objectives and actions supported by the OPC</b>				
A-7a	Identify outputs and outcomes for at least one objective under each goal and evaluate activities in producing that outcome over the next five years.	OPC	Limited action. There has been no additional identification of outputs and outcomes. This OPC evaluation provides an assessment of OPC activities.	This strategic plan includes many specific outputs, but few measurable outcomes. The current OPC evaluation includes an overall assessment of the OPC's performance, but not specific performance metrics.

<b>B. Research and Monitoring – A goal of the OPC is to improve understanding of ocean and coastal ecosystems</b>				
<b>Objective B1: Research – Improve scientific understanding of our ocean resources</b>				
B-1a	Implement the IRO recommendations and information and research priorities: <ul style="list-style-type: none"> <li>■ Make research part of the council's funding strategy</li> <li>■ Make California's ocean observing system a national model</li> <li>■ Seek federal support for California's research needs.</li> </ul>	OPC	Ongoing. Research has been a primary focus of the OPC's funding strategy. OPC has helped make California's OOS system a national model. The OPC has also sought and obtained federal funds for research, supported the OST, and developed a partnership with California Sea Grant to support California's research needs.	The OPC has, and continues to, work to support scientific research critical to understanding and managing California's coast and oceans. This has been one of the OPC's most successful activity areas.
B-1b	Work with the California Sea Grant Programs to review and award grants that meet the OPC guidelines and priorities. Support or collaborate with the research activities by agencies, universities, and programs that seek to provide a better scientific understanding of impacts to ocean and coastal ecosystems.	Sea Grant	Ongoing. The OPC has been actively working with the Sea Grant programs, and has provided approximately \$5 million to Sea Grant to fund research that jointly meets OPC and academic priorities. The OPC has also funded a number of related academic research, including: UC Marine Council Graduate Fellowships, Sea Level Rise Assessments, Sea Otter Recovery Research, and Nutrient Loading in the Southern California Bight.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.7

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective B2: Monitoring – Monitor and map the ocean environment to provide data about conditions and trends</b>				
B-2a	Create state-sponsored ocean observing programs that will work with the federal Integrated Ocean Observing System (IOOS), the Regional Associations (RAs), and other entities to plan and build an integrated ocean observing system in California.	SCC, UC, CSU, NOAA	Ongoing. The OPC is working with California's two IOOS systems, and federal and regional entities, to support IOOS.	The OPC has been directly engaged in building the regional OOS programs and in developing tools for translating OOS data into formats that are easily accessible to local, state, and federal resource managers. The OPC has also supported the development of more comprehensive monitoring programs, through the OOS systems and the MPA Monitoring Enterprise. The OPC has supported mapping of the California seafloor.
B-2b	Complete a statewide management information needs assessment that will guide the development of future ocean observing systems. Develop and implement a comprehensive state or regional approach for acquiring, managing, and disseminating observing data in a way that is responsive to management priorities and numerous stakeholders. Work to integrate data collection techniques between the California RAs, and among the Californian systems, the Pacific regional systems, and the national IOOS. Complete installation of the Coastal Ocean Currents Monitoring Program (COCMP) and ensure it is fully maintained and coordinated with other state and regional observing system components.	SCC, UC, CSU, NOAA	Ongoing. The OPC is currently funding an evaluation of IOOS, Synthesis for Coastal Ocean Observing Products, which is intended to improve information dissemination and access for resource managers. OPC is also seeking additional funding for the COCMP.	
B-2c	Support and expand existing ocean observing and monitoring programs, data management capabilities, and continued operations and necessary improvements. Support monitoring programs such as Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), Cooperative Research and Assessment of Nearshore Ecosystems (CRANE), California Cooperative Oceanic Fisheries Investigation (CalCOFI), the Water Boards' Surface Water Ambient Monitoring Program (SWAMP), the Statewide Wetlands Monitoring Program, and other regional, long-term data collection efforts. Integrate the data generated from these different systems.	SCC, UC, CSU, DFG, SWRCB, NMFS, NOAA	Partial complete and Ongoing. Activities in this area are part of the OPC's general support of ocean observing and monitoring programs. The OPC has supported the integration of data into the regional OOS programs and funded the development of MPA Monitoring Enterprise which integrates PISCO and other data collection efforts to gauge changes in the MPAs.	
B-2d	Pursue funding and partnerships to complete sea floor maps of all state waters. Ensure the distribution of marine habitat and substrate maps to promote effective management of fisheries, design of marine protected areas, and other management efforts. Mapping includes data acquisition, interpretation, and creation of habitat maps. Work with the federal government to map essential areas of federal waters. Implement the recommendations from the December 2006 Statewide Marine Mapping Planning Workshop and Report, and require all future mapping projects to use standards identified in the Workshop Report.	OPC	Ongoing. The OPC and partners have nearly completed seafloor mapping, and are moving to the map production and distribution phases. OPC recently funded coastal mapping (LiDAR) for the near-shore mapping component.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.8

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective B2: Monitoring – Monitor and map the ocean environment to provide data about conditions and trends (continued)</b>				
B-2e	Develop and maintain state and federal partnerships to leverage investment in mapping projects.	OPC	Ongoing. The OPC worked closely with state and federal partners to fund seafloor mapping, leveraging almost \$18 million in OPC funding (including the pilot phase) with an additional \$14.5 million in mostly federal funds, to-date. Mapping partners include USGS, NOAA, CSU Monterey Bay, DFG, and the National Marine Sanctuary Foundation.	(see above)
B-2f	Develop and implement a system for data management and a standardized approach to the format and distribution of mapping products.	OPC, DOC/CGS	Ongoing. In-progress, as the seafloor mapping focus shifts from data collection to map production.	
B-2g	Support the establishment of a comprehensive monitoring program focused on MPAs established under the MLPA and structured to be beneficial to other programs, including the MLMA. Ensure that this monitoring effort is integrated with other state and federal monitoring programs.	DFG, OPC	Ongoing. The OPC has provided \$16 million to support baseline monitoring for the MPAs. The OPC provided \$2 million in funding to the OST to support development of the MPA Monitoring Enterprise. OST completed a monitoring plan for the North Central Coast, and is beginning work on a South Coast plan. Additional related OPC funded projects include: Channel Islands ROV and SCUBA projects, and Cooperative Kelp Monitoring.	
B-2h	Develop a set of statewide standardized indicators for biological, physical, social, and economic disciplines.	DFG, CalEPA, SWRCB, JPAs, LA	No action taken, to-date.	
B-2i	Establish a mechanism or organization to provide data synthesis services with the goal of assembling scientific results from state and national efforts and producing products for diverse scientific, public, and policy audiences.	SCC, UC, CSU, NOAA	Ongoing. The MPA Monitoring Enterprise works with the OOS and others to produce data produces useful for ocean and coastal managers.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.9

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>C. Ocean and Coastal Water Quality – A goal of the OPC is significant improvement in ocean and coastal water quality</b>				
<b><i>Objective C1: Enforce Pollution Controls – Coordinate and support the personnel and programs needed to enforce existing water quality standards</i></b>				
C-1a	By December 2006, evaluate the efforts of all agencies that enforce water quality laws.	OPC	No action taken, to-date.	The OPC has faced challenges in implementing this objective. The OPC has no enforcement authority, and must rely on coordination and/or funding to improve enforcement. Water quality enforcement is largely the responsibility of the Water Boards.
C-1b	By May 2007, work with all relevant agencies to develop regulations, legislation or other tools to improve and streamline enforcement efforts.	OPC	No action taken, to-date.	
C-1c	Support funding for additional enforcement personnel as warranted.	OPC	Limited action. The OPC considered funding for a DFG position to work on enforcement with the Los Angeles RWQCB, but the position was not funded due to administrative and budget constraints.	
C-1d	Establish Special Protections to eliminate or limit waste discharges into Areas of Special Biological Significance (ASBS). These Special Protections will require, by 2011: 1) the elimination of dry weather flows from municipal storm drains into ASBS, and 2) that pollutants in municipal storm runoff will be minimized in order to protect beneficial uses in ASBS.	SWRCB	No action taken, to-date.	
C-1e	Support local governments in addressing land use planning issues affecting ocean and coastal water quality, including updating local coastal programs.	CCC, BCDC	Ongoing. The OPC's low impact development (LID) resolution and a study on LID Regulatory Assessment and LID Implementation in California contribute to this action. The OPC's climate change activities may also address this area in the future.	
C-1f	Prepare policy responses and address conflicts between state and federal authorities as necessary relating to offshore development proposals impacting ocean and coastal water quality. Review proposals for co-locating other offshore industries with existing offshore oil platforms and for decommissioning aging platforms to determine potential impacts to ocean and coastal resources.	OPC	Limited action. The OPC provided funding to the OST to conduct an evaluation of alternatives for offshore oil platform decommissioning.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities c.10

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective C2: Innovation – Support the development of new technologies and approaches to reduce non-point source pollution</b>				
C-2a	Work with the Coastal Nonpoint Pollution Control Program to develop and implement innovative approaches to address nonpoint source pollution. Encourage innovative approaches to improve storm water management (such as increased permeable surfaces that allow storm water and urban runoff to percolate into the soil rather than flow to the ocean). Promote source control through improved public information and low impact development. Support the development of consistent statewide procedures for monitoring emerging pollutants, such as endocrine disrupters and PBDE.	SWRCB, RWQCB	Partial complete. The OPC passed a resolution on low impact development in May 2008, and funded the study identified under C-1e.	The OPC has undertaken limited activities under this objective, to-date. Many other entities were already working on LID.
C-2b	Reduce sediment, nutrient, and chemical laden runoff due to forestry, viticulture, and agricultural operations through implementation of the State Water Board's nonpoint source pollution program, and acquisition of property interests, voluntary certification programs, and grant programs to install source controls.	SWRCB, SCC, WCB	No action taken, to-date.	
<b>Objective C3: Once-through Cooling – Work to eliminate the harmful environmental impacts of once-through cooling at coastal power plants</b>				
C-3a	Implement OPC's "Resolution Regarding the Use of Once-Through Cooling Technologies in Coastal Waters" as follows: <ul style="list-style-type: none"> <li>■ By December 2007, complete an engineering study of the existing coastal power plants to assess the possibility of implementing alternative technologies and operational changes</li> <li>■ Urge the State Water Resources Control Board to implement the most protective controls to achieve a 90-95 percent reduction in impacts of entrainment and impingement</li> <li>■ Establish an interagency coordinating committee to coordinate the activities of regulatory authorities that address once-through cooling</li> <li>■ Investigate possible non-regulatory incentives that can accelerate desirable conversions away from once-through cooling.</li> </ul>	OPC	Complete. The OPC funded two studies to support OTC: Energy Grid Reliability and Engineering and Operational Study, both completed in 2008. The OPC's resolution and actions related to OTC contributed to ongoing discussions on OTC. The SWRCB approved new regulations to phase out OTC in May 2010.	With the SWRCB's adoption of regulations to phase out OTC, the OPC has successfully met this objective.

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.11

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective C4: Water Quality Testing – Improve water quality testing programs and warning systems</b>				
C-4a	Develop and implement rapid indicators of pathogen contamination to provide for more timely notice of beach closures and openings.	SWRCB	Limited action. The OPC provided funding to SWRCB research in this area in 2006, and approved \$10 million in joint projects with the SWRCB to help protect and restore coastal water quality. A pilot project in Orange County is testing rapid indicators.	The OPC has conducted limited activities under this objective. The authority for water quality lies with the SWRCB. The OPC has focused its efforts on scientific research gaps and coordinating OOS systems to help inform managers with monitoring and forecasting.
C-4b	Investigate options for detection and treatment of pharmaceuticals, pathogens, and endocrine disruptors in wastewater and runoff.	SWRCB	Limited action. The OPC co-sponsored a workshop on chemicals of emerging concern.	
C-4c	Promote improved monitoring and forecasting of harmful algal blooms to provide advance warning of possible beach closures.	SWRCB	Ongoing. The OPC funded research on harmful algal blooms through the Sea Grant program, and the Southern California Bight Nutrient Loading Study included the effects of associated algal blooms. The OOS information is also focused on harmful algal bloom detection.	
C-4d	Investigate solutions to methyl-mercury contamination in the food chain and improve public education on the potential health risks.	SWRCB	No action taken, to-date.	
<b>Objective C5: Marine Debris – Reduce ocean and coastal debris and its impacts to ocean ecosystems</b>				
C-5a	Support the implementation of the 2006 California Marine Debris Action Plan—A Plan of Action to Reduce Land-based Discharges of Marine Debris in California—including the creation of a state Interagency Task Force on Litter and Marine Debris.	CCC, DBW	Partial complete. The Task Force was created, and the OPC passed a resolution on marine debris that brought widespread attention to the topic. The OPC funded two related studies: Toxicological Profiles, and Toxic Substances Flow Account, to evaluate the impact of plastics in the ocean. The Task Force developed an implementation strategy, there has been limited activity in implementing the strategy.	The OPC has been very successful in increasing awareness about marine debris, and less successful in implementing policies to reduce marine litter.
C-5b	Promote and expand the Adopt-a-Beach program and Coastal Cleanup Day, including expanding these programs inland to include coastal watersheds.	CCC	No action taken, to-date.	
C-5c	Support and expand the California Derelict Fishing Gear Program, in cooperation with the fishing community, to reduce impacts from lost commercial and recreational fishing gear.	SCC	Complete. The OPC funded a pilot project for derelict fishing gear removal. Other state and federal entities are now funding the program.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.12

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective C6: Vessel Pollution – Reduce or eliminate point source pollution from vessels</b>				
C-6a	Work with the US EPA and NOAA to prohibit sewage, sewage sludge, graywater, and all other waste disposal from ocean-going ships and large passenger vessels (greater than 300 gross registered tons).	OPC	No action taken, to-date.	The OPC has not addressed this objective.  The US EPA recently announced new rules that will support a 2005 California law banning dumping of sewage from cruise ships and large commercial ships in California water.
C-6b	Promote the development of alternatives to antifouling chemicals in hull paints used on vessels that would continue to be effective growth inhibitors of vessel fouling organisms.	SWRCB	No action taken, to-date.	
C-6c	Support clean marinas and improve water quality at harbors. Improve boater education programs.	DBW	No action taken, to-date.	
C-6d	Assist ports by developing innovative and/or beneficial disposal of dredge materials, and support efforts to improve water and air quality.	LG, LA	No action taken, to-date.	

<b>D. Physical Processes and Habitat Structure – A goal of OPC is to significantly improve the quantity and quality of ocean and coastal habitat in California</b>				
<b>Objective D1: Habitat Restoration – Restore and maintain valuable ocean and coastal habitats and resources</b>				
D-1a	Fund priority restoration projects, including those involving wetlands, eelgrass, kelp, and native oysters. Implement ten subtidal restoration projects including eelgrass, kelp, native oyster or other subtidal habitats.	SCC, NOAA, DFG	Limited action. The OPC funded two restoration projects: the San Francisco Bay Native Oyster Restoration Plan, and San Francisco Eelgrass Restoration.	The OPC has undertaken limited activities to implement this objective. Most activities in this area have been undertaken by other entities, particularly the SCC.
D-1b	Implement actions to remove barriers to fish passage identified in the CalFish database and work toward measuring and monitoring stream flows on key coastal streams.	SCC, NOAA, DFG	Ongoing. The OPC funded three in-stream flow studies in the Santa Maria, Shasta, and Big Sur rivers. The projects were delayed due to the bond funding freeze, but have just been reinitiated. The OPC also funded three related salmon projects: the Southern Steelhead Resources Project, Salmon Report, and Facilitation of Salmon Meetings.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.13

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective D1: Habitat Restoration – Restore and maintain valuable ocean and coastal habitats and resources (continued)</b>				
D-1c	Support efforts to restore riparian corridors including the Ventura River, Klamath River, and San Francisco Bay-Delta, focusing on restoration of habitat connectivity and quality within coastal watersheds. Complete planning for the restoration of rivers and stream corridors to promote the recovery of native salmonid species. Support large scale dam removal and associated watershed restoration projects that require additional funds to complete, such as Matilija Dam, Rindge Dam, and San Clemente Dam. Examine the removal of dams on the Klamath River to determine future state roles, and consider restoring the Klamath River as a keystone project.	DFG, SCC, WCB, SWRCB, ACOE, LG, DOI, tribes	Limited action. The OPC funded a Klamath River Sediment study, and Matilija Dam Ecosystem Restoration Project.	(see above)
D-1d	Complete planning and begin implementation for restoration of at least 30,000 acres of coastal or San Francisco Bay wetlands. Complete planning and begin ecosystem-scale wetlands restoration projects (e.g., South Bay Salt Ponds), including adaptive management and monitoring.	SCC	No action taken, to-date.	
D-1e	Test different management regimes for protecting coastal strand ecosystems, including tide pools and rocky intertidal habitat, and establish best management practices based on these investigations.	DPR	Limited action. The OPC is funding related research through the Sea Grant program and research on rocky intertidal zones for MPA mitigation.	
D-1f	Complete the San Francisco Bay Subtidal Habitat Goals Project by June 2008 and support full implementation of its recommendations. Initiate similar restoration planning projects in key bays and estuaries at representative locations along the coast, such as Humboldt Bay or Tomales Bay. Integrate the San Francisco Bay Subtidal, Baylands, and Uplands Habitat Goals projects to develop a comprehensive protection and restoration plan for the Bay Area.	NOAA, BCDC, SCC	Limited action. The OPC funded a San Francisco Bay Subtidal Habitat Goals Study, which provided recommendations for research and restoration, as well as the San Francisco Bay Native Oyster Restoration Plan and San Francisco Eelgrass Restoration.	
D-1g	Support the work of the Southern California Wetlands Recovery Project, San Francisco Bay Joint Venture, Pacific Coast Joint Venture, and other regional restoration coordination efforts.	SCWRP, SFBJV, PCJV	No action taken, to-date.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities C.14

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b><i>Objective D1: Habitat Restoration – Restore and maintain valuable ocean and coastal habitats and resources (continued)</i></b>				
D-1h	Develop rapid assessments or inventory procedures for watersheds to facilitate prioritization of watershed projects where a comprehensive assessment is not feasible. Investigate and recommend future policies to protect streams and watersheds.	SWRCB	No action taken, to-date.	(see above)
D-1i	Install and establish a system for long-term maintenance of stream gauges statewide. Determine flow rates necessary to protect water quality in coastal lagoons and estuaries consistent with the water pollution control policies of the Regional Water Boards.	SWRCB, DWR	Limited action. The three in-stream flow studies in the Santa Maria, Shasta, and Big Sur rivers will support this action.	
<b><i>Objective D2: Regional Sediment Management – Support the implementation of regional sediment management throughout California as a means of protecting, restoring and enhancing California's coastal sediment/beach resources</i></b>				
D-2a	Work with the CSMW (California Coastal Sediment Management Workgroup) and local partners to complete and implement the California Coastal Sediment Master Plan.	RA, ACOE	Limited action. The SCC and Resources Agency provided some funding for the Plan, which is still in development. The US Army Corps of Engineers and Resources Agency are co-chairing this effort. The OPC has funded studies that contribute to sediment management, including: Tijuana Estuary Sediment Fate and Transport Study, Klamath River Sediment Study, and San Francisco Bay Hydrodynamic and Sediment Transport Modeling.	The OPC has funded some projects, but had a limited role in this objective.
<b><i>Objective D3: Impacts of Climate Change – Support state efforts to detect the impacts of climate change and to develop strategies to respond to them</i></b>				
D-3a	Work with the Climate Action Team to investigate the long-term impacts of sea level rise and develop statewide adaptive management policies that will help agencies deal with these impacts.	OPC	Ongoing. The OPC adopted a resolution on climate change, led the Coastal and Ocean Working Group for the Climate Change Action Team in developing an adaptation strategy and implementation plan, and is now working on implementing the plan. The OPC funded studies including: California Sea Level Rise Projections, Climate Change Adaptation Report, National Academies Sea Level Rise Risk Assessment, and ocean acidification research through the Sea Grant program.	The OPC has been actively involved in achieving ongoing objective.

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities c.15

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>E. Coastal and Ocean Ecosystems – A goal of the OPC is to significantly increase healthy ocean and coastal wildlife populations and communities in California</b>				
<b><i>Objective E 1: Marine Life Protection Act – Help complete and implement a statewide network of Marine Protected Areas (MPAs)</i></b>				
E-1a	Identify and fill critical needs in executing the MLPA Initiative. Support DFG and the Fish and Game Commission in implementation of the MLPA beyond the Central Coast region to include other areas in the State, and help secure funds that DFG will need to manage a statewide network of MPAs.	DFG	Ongoing. The OPC provided \$16 million for baseline MLPA monitoring and \$4.4 million in funding to the DFG for MLPA implementation. In addition, many activities in the \$8 million joint DFG-OPC work plan further support the MLPA.	Through monitoring and funding support, the OPC has played a valuable role in implementing the MLPA.
E-1b	Make resources available to design and implement a comprehensive MPA monitoring program that can be implemented statewide, and that will measure changes in these ecosystems and inform future management decisions.	DFG	Ongoing. The OPC has provided \$16 million in funding for baseline monitoring to support MPA development. The OPC provided \$2 million in funding to the OST to support development of the MPA Monitoring Enterprise. The OST completed a monitoring plan for the North Central Coast, and is beginning work on a South Coast plan. The OPC has also funded ROV vessel support for monitoring.	
<b><i>Objective E2: Marine Life Management Act – Help establish ecologically and economically sustainable fisheries</i></b>				
E-2a	Support implementation of FMPs adopted under the MLMA and the development of new FMPs for priority fisheries. Complete priority stock assessments and FMPs, and promote the enforcement of associated regulations. Support cooperative research and facilitate data sharing among fishers, academics, and agency personnel to enhance DFG stock assessments and other regulatory decisions.	DFG	Ongoing. The OPC funded the MLMA Lessons Learned study to evaluation implementation of the MLMA. The OPC may provide future funding specifically for FMPs. The OPC also funded several DFG joint projects that obtained data needed for stock assessments.	The OPC has, and continues to, provide support for this objective through a variety of different activities.
E-2b	Make resources available to support DFG's work on the MLMA.	DFG	Complete. The OPC funded projects related to MLMA implementation through the joint DFG-OPC work plan, including development of an electronic fish logbook system and upgrades to DFG data systems for fisheries.	
E-2c	Investigate regulatory and legislative changes that may be needed to restructure DFG's fee system.	OPC, DFG	Limited action. The OPC's Dungeness Crab Task Force addresses broader regulatory and legislative changes in one fishery.	
E-2d	Install new technologies for permitting, such as electronic licensing for commercial and recreational fishermen, and investigate and implement new technologies for enforcing regulations.	DFG	No action taken, to-date.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities c.16

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>Objective E3: Invasive Species – Significantly increase the capacity of government agencies and the private sector to reduce and respond to invasive species</b>				
E-3a	By November 2006, complete the California Aquatic Invasive Species (AIS) Management Plan and the State Rapid Response Plan. Support the full implementation of those plans and the California Noxious and Invasive Weed Action Plan.	DFG, SCC	Partial complete. The OPC provided funding to complete the AIS Management Plan. The OPC provided funding for a vector analysis, one of the plan's priority recommendations. The project was postponed due to the bond freeze, and has recently been reinstated.	The OPC played a valuable role in funding the completion of the AIS Management Plan, and in bringing agencies together to work on this issue. Lack of funding for invasive species has hampered further progress.
E-3b	Improve regulatory coordination and enforcement to prevent or quickly respond to invasive species introductions. Establish a rapid response emergency fund for coastal invasive species in areas determined to be a high priority for response.	DFG, SLC, DFA	No action taken, to-date.	
E-3c	Improve research and data collection on invasive species and coordinate information dissemination on coastal invasions.	NGO, DFG	Limited action. The vector study noted in E-3a, above, will address the research and data component of this action.	
<b>Objective E4: Market-Based Fisheries – Support market-based fishery management approaches</b>				
E-4a	Develop a California Fisheries Fund or similar strategy that will facilitate a transition to improved fisheries management and sustainable fishing practices, including new fishing techniques to reduce bycatch.	NGO	Complete. The OPC's \$2 million investment in the CFF was leveraged with another \$3 million in private funding. The CFF has issued three loans to-date.	The OPC has, and continues to be, heavily involved in supporting market-based fishery management approaches, and in advancing market-based fisheries in the state.
E-4b	Investigate the feasibility of various sustainable fishery management approaches, such as vessel buybacks, different quota systems, and limited entry programs. Encourage the development of sustainable fishing gear.	NGO, DFG	Ongoing. The OPC passed a resolution on sustainable fisheries, and has funded a number of projects under this action, including: the Central Coast Groundfish Project, San Diego Sea Urchin Fishery, California Fisheries Evaluation, San Luis Obispo Sustainable Fisheries Support, Collaborative Fisheries Research Organization, and Dungeness Crab Task Force.	
E-4c	Investigate the potential for consumer-oriented market approaches, such as a California sustainable seafood certification program or direct-to-consumer sustainable seafood markets.	NGO, DFG	Ongoing. The OPC is coordinating a Sustainable Seafood Initiative, and has funded the Moss Landing Fish Market Feasibility Study, San Diego Sea Urchin Fishery, and San Francisco Fisherman's Wharf Sustainable Seafood Market Study.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities c.17

### Exhibit C-1

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b><i>Objective E5: Encourage Sustainable Economic Activity – Encourage emerging coastal and ocean economic activities that will provide new economic opportunities for the state, can be conducted in a sustainable manner, and are consistent with the goals and objectives of the COPA</i></b>				
E-5a	Encourage and support new and innovative economic activities that can be conducted in a sustainable manner along or off the California coast.	SCC, NGO	Ongoing. The OPC funded two related studies, the Ocean Energy Study, and Aquaculture Programmatic Environmental Impact Report.	The OPC has undertaken few initiatives in this area, to-date. Some ongoing activities, such as ocean energy, have significant potential.
E-5b	Preserve working harbors through investments in infrastructure such as small-scale fish processing facilities.	DBW, LG, LA, SCC, NGO	Limited action. The OPC funded the Moss Landing Fish Market Feasibility Study and San Francisco Fisherman's Wharf Sustainable Seafood Market Study.	
E-5c	Inventory existing commercial leases of state-owned submerged tidelands and assess the adequacy of standards, practices, and resource protection for these areas. Recommend changes as necessary to current laws and regulations that will ensure adequate protection and valuation of these resources.	SLC	No action taken, to-date.	
E-5d	Develop and implement strategies to balance increasing recreational beach access with resource protection. Implement three projects to determine the impacts of various management techniques in representative locations.	DPR	No action taken, to-date.	
E-5e	Complete the San Francisco Bay Area Water Trail Plan by January 2008 and begin construction of associated infrastructure. Investigate options for water trails in other coastal locations.	BCDC, SCC, DBW, NGO	No action taken, to-date. The SCC is undertaking this action.	

## C. Crosswalk Comparison of OPC's Strategic Plan and OPC Activities c.18

**Exhibit C-1**

Summary of the OPC's Accomplishments as Compared to the September 2006, Five-Year Strategic Plan *(continued)*

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Number	Strategic Plan Action	Lead Agency	Status	Assessment of Objective
<b>F. Education and Outreach – A goal of the OPC is to promote ocean and coastal awareness and stewardship</b>				
<b>Objective F1: Public Awareness – Increase public awareness of ocean and coastal issues and encourage individual stewardship</b>				
F-1a	Implement the recommendations and priorities on outreach in the IRO Strategy, including: <ul style="list-style-type: none"> <li>■ Improve access to and coordination of ocean and coastal information through a comprehensive ocean and coastal web portal</li> <li>■ Incorporate ocean and coastal science into K-12 and adult education programs by supporting Cal/EPA's Education and the Environment Initiative</li> <li>■ Build a public media campaign with the National Marine Sanctuary Program and the Ocean Communicators Alliance.</li> </ul>	OPC, CalEPA, CCC, NMS, RA, OPC	Partial complete. The OPC has provided \$250,000 in funding for the Ocean Awareness Campaign and Thank You Ocean public media campaign.	The OPC has provided some funding for education, but has not focused on this objective.
F-1b	Support targeted outreach to decision-makers and state elected officials on the impacts of stewardship decisions (e.g., impacts of land use on ocean and coastal resources). Coordinate an Oceans Forum to discuss issues and brainstorm solutions to problems, similar to the national Ocean Week held annually in Washington, DC.	OPC	Limited action.	
F-1c	Support environmental education for children and adults, including docent programs, nature and interpretive centers, bilingual education, live webcasts to schools, and on-the-water ocean experiences.	CCC, DPR, NGO, SCC	No action taken, to-date.	

**Table C-1**  
**OPC Performance Measures**

Category	Performance Measure	Performance Measure Assessment
A. Governance	1. By 2011, ecosystem-based management approaches guide government policies and programs that affect ocean and coastal ecosystems	<p>None of the eight performance metrics is specific to the OPC, and most of the performance metrics are not quantifiable.</p> <p>The SWRCB does monitor beach closures (#4); however, beach closures have not declined in recent years. The number of over-exploited species (#7) could potentially be measured through state and federal lists of threatened and endangered species, although there is no such specification in the metric, and no definition of “significantly reduce”. The polling data (#8) could be measured, although it has not been recently.</p>
B. Research and Monitoring	2. By 2011, the state has sufficient scientific understanding of biological, physiological and socio-economic processes to implement ecosystem-based management statewide 3. By 2011, consistent monitoring data is accessible to resource managers and the public	
C. Ocean and Coastal Water Quality	4. By 2011, water quality is improved such that the number of beach closures is decreased by 75 percent from 1999 5. By 2011, tonnage of debris along the coastline and in coastal waters is decreased by 50 percent from 1999	
D. Physical Processes and Habitat Structure	6. By 2011, there will be measurable and significant improvements in the quantity and quality of the state’s ocean and coastal habitat types	
E. Coastal and Ocean Ecosystems	7. By 2011, California will have significantly reduced the number of over-exploited species	
F. Education and Outreach	8. By 2011, as measured by polling data, a majority of Californians: are aware of their individual impact on the coast and ocean; and practice conservation principles in their home, work, and recreational activities	

### Lead Agency Acronyms and Abbreviations in Exhibit C-1

- |           |   |            |   |
|-----------|---|------------|---|
| 1. ACOE   | United States Army Corps of Engineers                     | 19. NMFS   | National Marine Fisheries Service                           |
| 2. BCDC   | San Francisco Bay Conservation and Development Commission | 20. NMS    | National Marine Sanctuaries                                 |
| 3. CalEPA | California Environmental Protection Agency                | 21. NOAA   | National Oceanic and Atmospheric Administration             |
| 4. CCC    | California Coastal Commission                             | 22. OOS    | Ocean Observing Systems                                     |
| 5. CGS    | California Geological Survey                              | 23. OPC    | Ocean Protection Council                                    |
| 6. CSU    | California State University                               | 24. PCJV   | Pacific Coast Joint Venture                                 |
| 7. DFA    | California Department of Food and Agriculture             | 25. PISCO  | Partnership for Interdisciplinary Studies of Coastal Oceans |
| 8. DFG    | California Department of Fish and Game                    | 26. RA     | California Natural Resources Agency                         |
| 9. DOC    | California Department of Conservation                     | 27. RWQCB  | Regional Water Quality Control Boards                       |
| 10. DPR   | California Department of Parks and Recreation             | 28. SCC    | California State Coastal Conservancy                        |
| 11. DWR   | California Department of Water Resources                  | 29. SCWRP  | Southern California Wetlands Recovery Project               |
| 12. EBM   | Ecosystem based management                                | 30. SFBJV  | San Francisco Bay Joint Venture                             |
| 13. FMP   | Fishery Management Plan                                   | 31. SLC    | California State Lands Commission                           |
| 14. JPAs  | Joint Powers Authorities                                  | 32. SWRCB  | California State Water Resources Control Board              |
| 15. IOOS  | Integrated Ocean Observing Systems                        | 33. Tribes | Sovereign Tribal Nations                                    |
| 16. LA    | Local Authorities   | 34. UC     | University of California                                    |
| 17. LG    | Local Governments   | 35. WCB    | California Wildlife Conservation Board                      |
| 18. NGO   | Non-Governmental Organizations                            | 36. WCGA   | West Coast Governors' Agreement on Ocean Health             |