



CALIFORNIA OCEAN PROTECTION COUNCIL

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MEMORANDUM

TO: Ocean Protection Council

FROM: Sonke Mastrup, Executive Director, Fish and Game Commission
Clare O'Reilly, Project Manager
Ken Wiseman, Executive Director, Marine Life Protection Act Initiative

DATE: September 13, 2012

RE: Ocean Protection Council and partner contributions to California Marine Life Protection Act implementation

ATTACHMENTS: Exhibit 1. California Seafloor Mapping Program data used in South Coast MPA planning process

BACKGROUND:

California recently completed approval and adoption of regulations for a network of marine protected areas (MPAs) in the state's open coastal waters, as called for in the landmark Marine Life Protection Act (MLPA) of 1998. The statewide network of MPAs is the first of its kind in the United States. California accomplished this major milestone through a public planning process, culminating with Fish and Game Commission approval of north coast MPAs at their June 6, 2012 meeting. With the MLPA Initiative design phase now complete, approximately 16 percent of California's open coastal waters are covered by the statewide MPA network.

The OPC and its partners contributed significantly to MLPA implementation, as described below. The major focus of the OPC's investment has been in data collection and monitoring to provide scientific information critical to MLPA design and implementation. These data will also continue to benefit ongoing management and decision making processes. The OPC's investments will inform MLPA implementation as enactment transitions into its next phase, with OPC coordinating MPA governance and ongoing partner engagement with tribes, agencies, and stakeholders. The OPC's direct and indirect investments in MLPA implementation are being significantly leveraged, both in matching funds and in-kind services, by partner organizations.

OPC CONTRIBUTIONS TO MLPA IMPLEMENTATION:

	OPC Investment
California Seafloor Mapping Program	\$15,400,000
MLPA Planning and Implementation grant to Department of Fish and Game	\$2,566,473
OPC-DFG Joint Work Plan	\$5,725,000
MPA Monitoring Enterprise	\$4,420,000
MPA Baseline Monitoring Programs	\$15,978,750
TOTAL	\$44,090,223

OCEAN PROTECTION COUNCIL AND PARTNER CONTRIBUTIONS TO MLPA IMPLEMENTATION

California Seafloor Mapping Program

Over the past five years, the OPC helped lead a comprehensive mapping of the seafloor all along the coast of California. This effort is a national model and has provided new details about our ocean ecosystem, geology and bathymetry. Recognizing that this information is essential for effective marine management, seafloor mapping has been one of the OPC's major initiatives. The OPC provided significant funding for the [California Seafloor Mapping Program](#) and played an important role in leading the collaboration of experts from state and federal agencies, academia, and private industry that planned and implemented this ambitious and comprehensive mapping effort.

The OPC invested \$15,400,000, leveraged nearly one to one from partnering organizations, to map the seafloor of California's state waters. This partnership grew out of a pilot study to develop seafloor and marine habitat maps for the MLPA north central coast study region, resulting in accurate benthic habitat maps critical to the selection, design and analysis of the MPA network in that region. Additional data derived from mapping efforts, including high resolution bathymetry and seafloor geology, were used in subsequent study regions to inform the stakeholder-driven design process, and will continue to inform evaluations of MPA health. Mapping to inform MPA design and management is one of the goals of the California Seafloor Mapping Program, and reflects an indirect contribution by OPC and partners in support of MLPA implementation.

MLPA Planning and Implementation grant to Department of Fish and Game

In support of MLPA planning and implementation activities, the OPC provided a grant for \$2,566,472.52 to the Department of Fish and Game (DFG) during fiscal year 09/10. With these funds, DFG staff participated in regional MPA planning processes in the south coast and north coast study regions, and participated in a range of activities to collect needed information for MPA reviews and to conduct public outreach. OPC funds were substantially leveraged by DFG in kind services and private foundation funds during the term of this grant.

OPC-DFG Joint Work Plan

California's 2006 Budget Act appropriated \$8 million to the OPC for the implementation of the MLPA and Marine Life Management Act (MLMA). The Budget Act called for these funds to be expended "pursuant to a work plan developed jointly by the OPC and the California Department of Fish and Game (DFG)." An additional \$2 million was appropriated to DFG to fulfill these same goals. To maximize the effectiveness of these associated appropriations, [OPC and DFG created a joint work plan](#) that set forth priorities for the complete \$10 million. Work plan projects focused on three activities: (1) improving methods and collection of fishery-dependent and fishery-independent data; (2) monitoring to inform the management of marine protected areas (MPAs); and (3) equipment improvements to ensure capacity to collect and manage data.

Funded projects included:

- Baseline Monitoring of California's Central Coast MPAs (year 1) - \$2,275,000
- Seafloor and marine habitat maps for the north central coast study region - \$1,200,000
- SCUBA surveys of the Channel Islands Marine Reserves - \$581,855
- Trap surveys of the Channel Islands Marine Reserves - \$407,000
- ROV-based deep water monitoring of the Northern Channel Islands MPAs - \$660,000

OCEAN PROTECTION COUNCIL AND PARTNER CONTRIBUTIONS TO MLPA IMPLEMENTATION

- Nearshore ichthyoplakton data baseline - \$500,000
- Socioeconomic information for the MLPA North Central Coast Study Region - \$200,000
- Improving management of California coastal fisheries - \$150,000
- Upgrades to DFG equipment, vessels, and fishery data management systems - \$1,702,571

MPA Monitoring Enterprise

The OPC provided funds for launching a statewide MPA monitoring program, now known as the [MPA Monitoring Enterprise](#), to lead the development and implementation of impartial, scientifically rigorous and cost-effective MPA monitoring. The Monitoring Enterprise, a program of the California Ocean Science Trust (OST), is a team of scientists, outreach and information systems specialists who work closely with DFG and OPC staff, and MPA stakeholders to provide timely and useful information through innovative means to support MPA management decisions. Monitoring Enterprise activities include development and implementation of MPA monitoring, analyzing and distributing monitoring data, and communicating the results and findings to resource management agencies, the Legislature, stakeholders and the public. Since 2007, the OPC has granted \$4,420,000 to OST in support of the Monitoring Enterprise, with substantially leveraged in-kind staff services and matching funds from a wide array of partners.

MPA Baseline Monitoring Programs

The OPC has granted funds for baseline data collection in each of the designated regional MPA networks to assess ecological and socioeconomic conditions near the time of MPA implementation, and to measure initial ecological changes and impacts to user groups following MPA implementation. Building off an initial investment of approximately \$4,000,000 for baseline monitoring of the central coast MPAs, the OPC authorized \$12,000,000 for the remaining outer coast study regions. Prior to initiating data collection, MPA-ME and DFG develop monitoring plans to prioritize data collection needs and approaches within each region. In the regional baseline programs, OPC staff work with MPA-ME, DFG, and the California Sea Grant Program to decide priority protocols, solicit and review applications from scientists to carry out this work, and collect and disseminate the data to resource managers and others. This collaboration leverages significant resources from all of the partners and several other entities, such as California's Ocean Observing Systems and National Marine Sanctuaries. Baseline data collection is ongoing in the north central and south coast regions, and will begin next year in the north coast study region.

California has successfully implemented a science based, regional approach to redesigning MPAs along its 1,100 mile coastline, developing a cohesive statewide network. One of the requirements of this effort was to use the best readily available science to reevaluate and redesign California's MPA network. The OPC significantly supported science-based decision making during the regional MPA planning processes by funding collaborative mapping and data collection efforts, and helped establish mechanisms to ensure ongoing informed decision making. These investments will continue to inform adaptive management of the new statewide MPA network and the next phase of MLPA implementation, as well as ongoing management challenges.

OCEAN PROTECTION COUNCIL AND PARTNER CONTRIBUTIONS TO MLPA IMPLEMENTATION

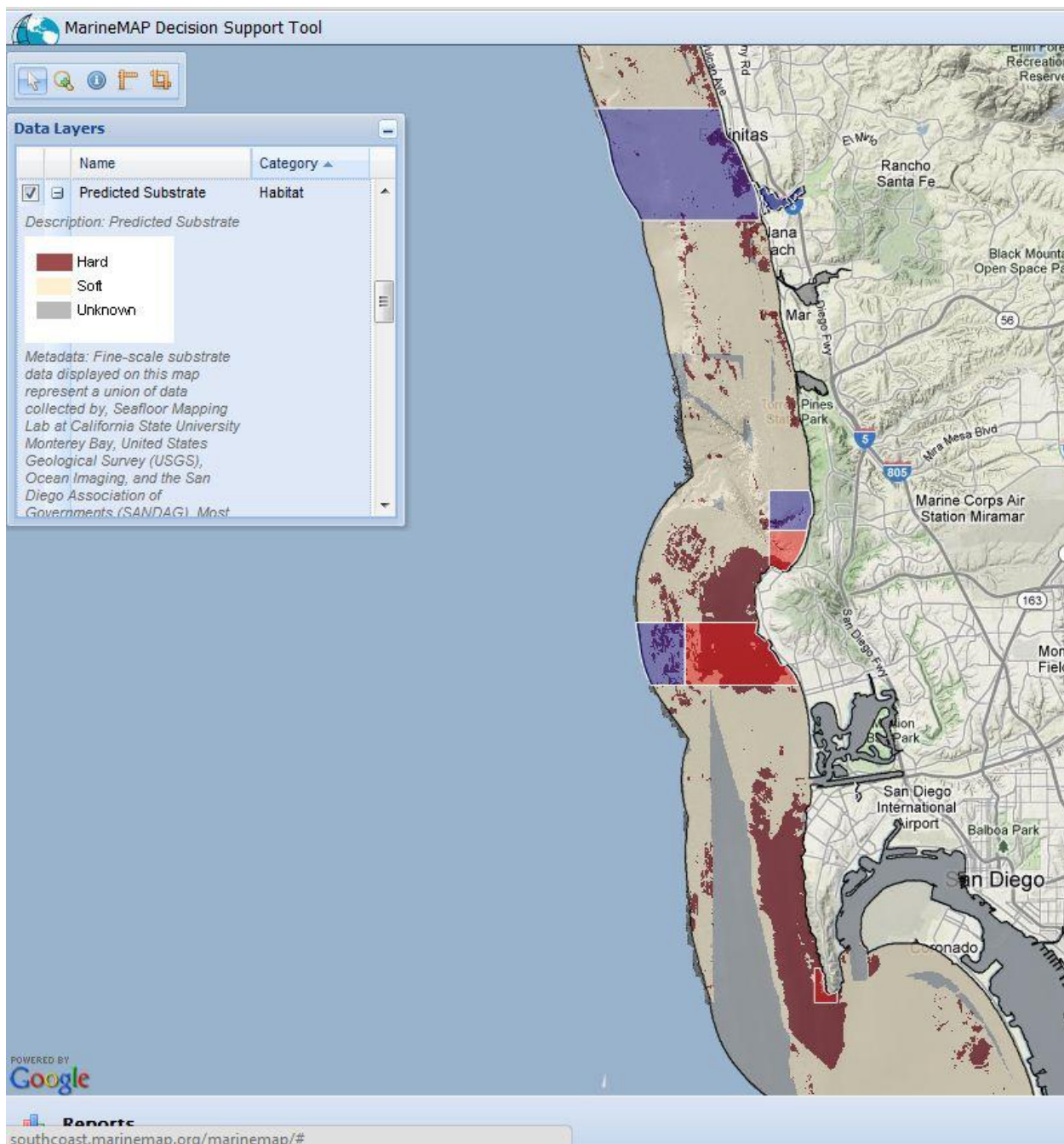


Exhibit 1. California Seafloor Mapping Program data used in South Coast MPA planning process