

COASTAL CONSERVANCY

Staff Recommendation
November 9, 2006

CENTRAL COAST MARINE PROTECTED AREA MONITORING

File No. 06-082
Project Manager: Marina Cazorla

RECOMMENDED ACTION: Authorization to disburse up to \$2,275,000 to California Sea Grant College Program for the Central Coast Marine Protected Area Monitoring project, involving fieldwork, data acquisition, monitoring and socio-economic research in Central Coast marine protected areas designated under the Marine Life Protection Act.

LOCATION: Central coast, in state waters

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection, Ocean Protection Council, and Ocean Program

EXHIBITS

Exhibit 1: Maps of Central Coast marine protected areas

Exhibit 2: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed two million dollars (\$2,275,000) to the Regents of the University of California for the California Sea Grant College Program to fund fieldwork, data acquisition, monitoring and socio-economic research in Central Coast marine protected areas designated under the Marine Life Protection Act, as shown in Exhibit 1 of the accompanying staff recommendation, pursuant to a joint workplan developed by the Ocean Protection Council and the Department of Fish and Game.

This authorization is subject to the condition that no funds shall be disbursed until:

1. The Ocean Protection Council has approved the Joint Workplan developed with the Department of Fish and Game for implementation of the Marine Life Protection Act and the Marine Life Management Act, and the Workplan provides for implementation of the proposed project.

2. The Ocean Protection Council has determined that the proposed project is a high priority for ocean conservation.
3. Thirty days have passed after the Ocean Protection Council approved Joint Workplan has been submitted to the relevant legislative committee.
4. The Executive Officer of the Conservancy has approved a work plan, budget, project schedule, and any contractors to be employed to carry out the project.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with Chapter 5.5 of Division 21 of the Public Resources Code (Section 31220) regarding integrated coastal and marine resource protection.
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.”

PROJECT SUMMARY:

The proposed project would support initial or baseline monitoring fieldwork for Central Coast marine protected areas (MPAs) pending their designation under the Marine Life Protection Act. Staff is recommending that the Conservancy authorize a grant of \$2,275,000 to the California Sea Grant College Program (Sea Grant) to oversee and contract for the completion of fieldwork and data acquisition for Central Coast MPAs, including socio-economic research. Data will be collected in priority habitat types, inside MPAs and in appropriate control areas, using various geo-referenced methods and technologies. The focus will be on acquisition of baseline data for Central Coast MPAs that can be used in the future for adaptive management and to assess compliance with the goals and objectives of the Marine Life Protection Act.

Funding for the project would be provided from a General Fund appropriation to the Conservancy for implementation of the Marine Life Protection Act. At its November 28th meeting, the Ocean Protection Council will consider a joint workplan developed by staff to the Conservancy, the Council and the Department of Fish and Game (CDFG) for implementation of the Marine Life Protection Act which provides for this baseline fieldwork as well as ongoing monitoring and adaptive management of MPAs. Upon approval by the Council, the joint workplan will be submitted to fiscal committees in each house of the Legislature as well as the Joint Legislative Budget Committee for a 30-day review, as required by the terms of this appropriation. The Ocean Protection Council will also consider the proposed project at its November 28th meeting to determine whether it is a high priority for ocean protection. The recommended Conservancy authorization will not proceed unless and until all of these actions have occurred and can only proceed consistent with those actions. (If, as a result of these actions, any substantially significant deviations from the project as described in this recommendation are required, staff will return to the Conservancy as necessary.)

Background

The Marine Life Protection Act was passed by the California legislature in 1999 (Chapter 10.5 of the California Fish and Game Code, Sections 2850 - 2863) and required CDFG to develop a plan for establishing a network of MPAs in California waters to protect habitats and preserve ecosystem integrity, among other things. The MLPA required a comprehensive master plan which approaches MPA selection and design on a regional basis through “study regions.” The Central Coast (Pigeon Point to Point Conception) was selected as the first MLPA study region.

In August 2004, the California Resources Agency, CDFG, and the Resource Legacy Fund Foundation signed a Memorandum of Understanding launching the MLPA Initiative, which in turn established the MLPA Blue Ribbon Task Force, a Science Advisory Team (SAT), and a stakeholder group. Following an extensive public process, in April 2006 the MLPA Blue Ribbon Task Force formally transmitted a set of Central Coast MPA packages and a preferred alternative to the Fish and Game Commission. On August 15, 2006, the Fish and Game Commission voted for a “preferred alternative” package of Central Coast MPAs. (Exhibit 1) These MPAs are expected to be implemented by CDFG in 2007, pending completion of administrative law proceedings and California Environmental Quality Act review.

Figure 1

Individual MPAs in Commission Preferred Package (8/15/06 version)			
MPA Name ^A	Size (mi ²)	Along-shore Span (mi) ^B	Depth Range (ft)
Año Nuevo SMR	11.07 mi ²	8.4 mi	0-175 ft
Greyhound Rock SMCA (*)	11.81 mi ²	3.1 mi	0-216 ft
Natural Bridges SMR	0.58 mi ²	4.1 mi	3-21 ft
Soquel Canyon SMCA (****)	23.41 mi ²	7.8 mi	247-2113 ft
Portuguese Ledge SMCA (****)	10.91 mi ²	5.4 mi	302-4838 ft
Elkhorn Slough SMR	1.48 mi ²	4.4 mi	0-10 ft
Elkhorn Slough SMP (^)	0.09 mi ²	1.4 mi	0-10 ft
Moro Cojo SMR	0.46 mi ²	5.0 mi	0-10 ft
Edward F. Ricketts SMCA (*)	0.22 mi ²	1.0 mi	0-74 ft
Lovers Point SMR	0.30 mi ²	1.0 mi	0-88 ft
Pacific Grove SMCA (*)	0.93 mi ²	1.5 mi	3-151 ft
Asilomar SMR	1.51 mi ²	2.3 mi	0-172 ft
Carmel Pinnacles SMR	0.53 mi ²	1.0 mi	69-223 ft
Carmel Bay SMCA (*)	2.12 mi ²	3.1 mi	0-471 ft
Point Lobos SMR	5.36 mi ²	4.7 mi	0-408 ft
Point Lobos SMCA (**)	8.85 mi ²	3.2 mi	268-1858 ft
Point Sur SMR	9.72 mi ²	5.4 mi	0-183 ft
Point Sur SMCA (****)	9.96 mi ²	5.4 mi	139-824 ft
Big Creek SMCA (**)	10.11 mi ²	2.5 mi	0-1964 ft
Big Creek SMR	12.35 mi ²	3.3 mi	0-2393 ft
Piedras Blancas SMR	10.40 mi ²	6.4 mi	0-157 ft
Piedras Blancas SMCA (****)	8.76 mi ²	4.9 mi	94-337 ft
Cambria SMP (^)	6.26 mi ²	5.8 mi	0-105 ft
Cambria SMR	2.32 mi ²	3.5 mi	0-99 ft
Morro Bay SMRMA (*northern portion, *** southern portion)	3.01 mi ²	9.4 mi	0-22 ft
Morro Bay East SMR	0.30 mi ²	1.4 mi	0-10 ft
Point Buchon SMR	6.66 mi ²	2.9 mi	0-208 ft
Point Buchon SMCA (****)	11.55 mi ²	5.9 mi	191-377 ft
Vandenberg SMR	32.84 mi ²	14.3 mi	0-127 ft

A. Listed north to south. Symbols following proposed MPA name indicate level of protection as determined by the MLPA Master Plan Science Advisory Team (SAT). (****) indicates SMCA High, (**) indicates SMCA Moderate, (*) indicates SMCA Low, and (^) indicates SMP Low. Level of protection was used in the SAT evaluation.

B. Alongshore span measured as direct line from one end of the MPA to the other.

Central Coast marine protected areas

The areas that the Commission voted to make its “preferred alternative” for Central Coast MPAs fall into three categories with varying degrees of protection: state marine park (“SMP”); state marine conservation area (“SMCA”); and state marine reserve (“SMR”). The specific MPAs and their proposed level of protection are shown in the maps in Exhibit 1. In addition to these maps, the Commission document “Detailed description, maps, objectives and rationale for the Commission's preferred alternative” describes each of the MPAs in detail, including proposed regulations, habitat type, and MPA objectives under the MLPA.¹ Figure 1 below lists and summarizes each proposed Central Coast MPA, its size, length and depth range.

Role and need for MPA monitoring

The MLPA requires adaptive management to ensure that a system of MPAs meets its stated goals [Section 2853 (c) (3)]. The MLPA defines adaptive management as “a management policy that seeks to improve management of biological resources, particularly in areas of scientific uncertainty, by viewing program actions as tools for learning. Actions shall be designed so that, even if they fail, they will provide useful information for future actions, and monitoring and evaluation shall be emphasized so that the interaction of different elements within marine systems may be better understood” (Section 2852 (a)). According the MLPA *Final Draft Adaptive Management and Monitoring and Evaluation Framework*, “adaptive management requires learning from current experience to improve the process of achieving the goals of the MLPA over time. Success requires: (a) Appropriately scaled, sustained institutional capacity to make legitimate choices; (b) Possession, broad communication, and use of relevant information; and, (c) Use of (a) and (b) to effect desired changes in policies, programs, and human behaviors intended to achieve the goals of the MLPA.”

In order to meet these requirements, a well-designed monitoring, evaluation, and adaptive management program must be implemented in California. The first step in implementing such an effort is to ensure proper acquisition of quality baseline data for the Central Coast study region, so that future monitoring efforts have reliable reference points for evaluating changes that may occur over time inside and outside of the MPAs.

Project description

The Central Coast Marine Protected Area Monitoring project will focus on fulfilling the immediate need for baseline and some initial monitoring for the proposed Central Coast MPAs. The monitoring will have both bio-physical and socio-economic components. Of the bio-physical monitoring, fieldwork will be completed in the following priority habitats:

Deepwater canyon, coral and rocky reef habitats. Fieldwork would assess distribution, diversity, relative abundance, and sizes of species and habitat attributes for deep canyons, coral, and rocky reef habitats. Submersible submarine surveys to study deepwater species and habitats inside and outside of designated MPAs in the Central Coast. Surveys will focus on approximately 60-80 species of fish and 20-30 species of invertebrates at depths ranging from 50-300 meters.

Kelp forest habitats. Fieldwork would assess distribution, diversity, relative abundance, and

¹ See <http://www.dfg.ca.gov/mrd/mlpa/pdfs/commission082206.pdf>

sizes of species and habitat attributes for kelp forest habitats. SCUBA surveys will study kelp forest species and habitats inside and outside of designated MPAs in the Central Coast. Surveys will focus on approximately 25 species of fish, 30 species of invertebrates, and 10 species of algae. Another method, fishing gear surveys, will compare kelp forest species inside and outside of designated MPAs in the Central Coast. Surveys would focus on approximately 25 species of fish and would require multiple days of surveys at each location.

Soft bottom habitats. Fieldwork would assess distribution, diversity, relative abundance, and sizes of species and habitat attributes for soft bottom habitats. Sled or ROV surveys will study soft bottom species and habitats, focusing on fish, inside and outside of designated MPAs in the Central Coast.

Rocky intertidal habitats. Fieldwork would assess distribution, diversity, relative abundance, and sizes of species and habitat attributes for rocky intertidal habitats. Visual surveys will study rocky intertidal species and habitats inside and outside of designated MPAs in the Central Coast. Surveys will focus on algae and invertebrates.

Other habitats and survey types may be added to the project description as needed and identified. Human use and socio-economic research may also be included in the scope of the project. Such research could include analysis of commercial consumptive use, recreational consumptive use, and non-consumptive use.

Grantee Description

Nationally, the Sea Grant College Network consists of 30 university-based programs funded primarily by the National Oceanic and Atmospheric Administration and is dedicated to the understanding, conservation, and sustainable use of coastal and marine resources. The California Sea Grant College Program is the largest of the 30 Sea Grant programs, and works along the entire state coastline and coastal watersheds. It is administered by the University of California and is based at Scripps Institution of Oceanography in San Diego.

The California Sea Grant College Program will coordinate the request for proposals, the review process, and post-award administration of contracts for data collection and research projects funded through this proposed grant. Sea Grant has an established, highly respected process for evaluating, prioritizing and administering research grants related to coastal and ocean resources. The California Sea Grant College Program is experienced at managing large contracts and grants, and has excellent knowledge of and familiarity with the state's scientific community.

PROJECT FINANCING:

Funding Sources:

Coastal Conservancy	\$2,275,000
Total Project Cost	\$2,275,000

Staff anticipates using \$2,275,000 of the funds appropriated to the Coastal Conservancy in the California FY 06/07 State Budget for projects implementing a workplan (\$8 million total) jointly developed by the Ocean Protection Council and the California Department of Fish and Game to implement the Marine Life Protection Act and the Marine Life Management Act. The budget

item requires the workplan to be submitted to the Legislature at least thirty days prior to any expenditure of these funds. At its next scheduled meeting on November 28th, the Council will consider approval of the workplan and a determination of whether the proposed project is a high priority for ocean conservation and use of this funding source. The workplan will be submitted to the Legislature immediately following Council approval.

An unknown but likely significant contribution of matching funds and/or in-kind resources will come from respondents to Sea Grant's request for proposals from the state's scientific and academic institutions.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 5.5 (Section 31220) of Division 21 of the Public Resources Code, which allows the Conservancy to carry out projects that protect and/or restore marine habitat and promote integrated coastal and marine resources protection. Under Section 31220 of the Public Resources Code, the Conservancy may undertake projects that meet any of the objectives specified in subsection (b) of that section. Consistent with Section 31220(b), subsection 5, the proposed project will provide for monitoring of marine protected areas in order to facilitate the protection and enhancement of resources within the coastal zone. In addition, the proposed project is consistent with 31220(b), subsection 10, since it will promote sustainable management through improved knowledge about the location and nature of the state marine resources, a major objective of the California Ocean Protection Act.

The Department of Fish and Game has been consulted with regard to this project, as required by Section 31220(b)(5). As also required by Section 31220(c), the project includes a monitoring and evaluation component and is consistent with adopted state and regional watershed planning as described below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan." Finally, as required by Section 31220(a), Conservancy staff has consulted with the State Water Resources Control Board in the development of this project in order to ensure consistency with the Clean Beaches Program under Chapter 3 of Division 20.4 of the Public Resources Code.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

The purpose of local coastal watershed management plans and the California Ocean Plan is to prevent water quality degradation and to protect the beneficial uses of coastal waters. Water quality control plans adopted by the State Water Resources Control Board are designed to focus resources on key issues, promote the use of sound science, and promulgate cooperative, collaborative efforts in coastal areas to protect and enhance coastal waters. As a scientific monitoring project that includes coastal waters of California, the proposed project will promote the sustainable use of coastal resources and protection of marine habitat. For the same reasons, the proposed project is also consistent with the policies of the 2001 California Ocean Plan that states "the beneficial uses of the ocean waters of the State that shall be protected include...water contact and non-contact recreation; aesthetic enjoyment; commercial and sport fishing; ...preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; (and) fish migration."

**CONSISTENCY WITH CONSERVANCY'S
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 6, Objectives A & B**, the proposed project will benefit coastal marine resources through the monitoring of marine protected areas in the Central Coast, which will promote sustainable use and management of coastal and marine resources.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The proposed project is supported by the Ocean Conservancy, Natural Resources Defense Council, and the University of California. Letters of support are located in Exhibit 2.
4. **Location:** State waters off the Central Coast.
5. **Need:** The proposed work is needed to fulfill the requirements of the Marine Life Protection Act, and the current state budget identified implementation of the Marine Life Protection Act as a priority objective in a special line item providing funding for this purpose.
6. **Greater-than-local interest:** The citizens of California throughout the state will benefit from this project through informed, sustainable management of coastal and marine resources that will result from the monitoring of newly established marine protected areas.

Additional Criteria

Resolution of more than one issue: Marine protected areas monitoring will improve management of marine protected areas, benefit scientific understanding of Central Coast fish populations, and inform other fisheries management efforts.

Leverage: See the "Project Financing" section above.

Readiness: California Sea Grant is ready to commence an RFP process immediately upon approval of the proposed project, and to oversee acquisition of baseline monitoring data during and after the period in which the administrative and environmental review processes necessary to final designation of Central Coast MPAs are taking place. Immediate action is needed to ensure that baseline data are obtained in a timely manner in relation to the date that Central Coast MPAs become effective and enforced.

Cooperation: The proposed project will involve the cooperation of state agencies, academic institutions, and researchers.

COMPLIANCE WITH CEQA:

The proposed project is categorically exempt from review under the California Environmental Quality Act (CEQA), pursuant to 14 Cal. Code of Regulations, Section 15306 (data collection, research and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource). The proposed project will not result in disturbance to the marine environment or its wildlife, as the survey methods to be used for the proposed project will not harm or disturb marine life. Staff will file a Notice of Exemption upon approval.