

CALIFORNIA OCEAN
PROTECTION COUNCIL

Staff Recommendation
November 28, 2006

California Coastal and Marine Mapping Initiative - Augmentation

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RECOMMENDED ACTION: Augmentation of the existing California Coastal and Marine Mapping Initiative to extend the mapping of offshore benthic habitats to the area between Bolinas and Point Arena, and: 1) determination that the augmentation and expansion of the mapping project is a high priority; and 2) authorization for the Secretary to take actions needed to provide up to \$1,510,000 for its planning or implementation.

OCEAN or COASTAL LOCATION: North coast, in state waters

AGENCY OR ENTITY RECOMMENDING PROJECT: State Coastal Conservancy, with the California Department of Fish and Game

EXHIBITS

Exhibit 1: Maps of additional areas to be mapped

Exhibit 2: January 13, 2006 OPC staff recommendation

Exhibit 3: Letters of Support

RESOLUTION:

“The Ocean Protection Council finds pursuant to Sections 35600 *et seq.* of the Public Resources Code that the augmentation and expansion of the California Coastal and Marine Mapping Initiative, as herein described, is of high priority for ocean conservation, and authorizes the Secretary to take actions necessary for its planning or implementation, including the allocation of up to \$1,510,000 for the purposes of this project.”

PROJECT SUMMARY:

Staff is recommending that the Ocean Protection Council determine that the proposed augmentation and expansion of the California Coastal and Marine Mapping Initiative is a high priority for ocean conservation. The proposed augmentation would enable mapping of the state’s coastal seafloor between Bolinas and Point Arena through an additional grant of \$1,510,000 to the Monterey Bay Sanctuary Foundation (MBSF). The Council authorized the current mapping project at its January 13, 2006 meeting. (A copy of the January 13, 2006 Staff Recommendation

is attached as Exhibit 2). The existing project includes mapping between Año Nuevo and Bolinas. The proposed augmentation would fund mapping between Bolinas and Point Arena. Together, the regions comprise one of the future Marine Life Protection Act (MLPA) regions, the “North Central Coast” study region. One of the many applications of seafloor mapping data is to create marine habitat maps used in marine protected area (MPA) design.

Funding for the project would be provided from a General Fund appropriation to the Conservancy for implementation of the MLPA and the Marine Life Management Act (MLMA), pursuant to a plan (the “Joint Workplan”) developed jointly by the Ocean Protection Council and the Department of Fish and Game (CDFG). Upon approval by the Council, the Joint Workplan will be submitted to fiscal committees of the Legislature as well as the Joint Legislative Budget Committee for a 30-day review, as required by the terms of this appropriation.

Background

The California Ocean Protection Act (Public Resources Code Sections 35500, et seq.) and subsequent adopted documents of the Ocean Protection Council emphasize that it is state policy to implement ecosystem-based approaches to manage coastal and marine resources using sound science. Implementation of ecosystem-based management strategies requires consideration of interactions between species, their habitats, and human activities. Many of these interactions are not well understood, and significant data and information gaps hinder achievement of effective ecosystem-based management. Statewide, California’s resource managers and scientists must often make decisions based on a patchy picture of the habitats that lie offshore.

Accurate statewide mapping of seafloor substrate, marine habitat types, and bathymetry (underwater topography) of California’s nearshore waters is a crucial component for guiding multiple ocean management decisions. Designating marine reserves, understanding sediment transport systems, ensuring shipping safety, identifying dredging and dumping sites, regulation of offshore coastal development, and illuminating the dynamics of fisheries and other marine species, are just a few of the applications that would benefit from coastal and marine mapping data and products. Although small sections of the coast, including some adjacent federal waters, have been mapped to varying extents and resolutions, a comprehensive and seamless map of the state’s near- and offshore benthic and marine resources does not currently exist.

Implementation of Mapping Initiative and Project Description for Proposed Augmentation

The previously approved \$1.2 million grant to MBSF funded the acquisition of new mapping data between Año Nuevo and Bolinas, through various collection techniques including side-scan sonar, multi-beam, and LiDAR, and creation of processed data and map products for resource managers (Exhibit 2). Through a competitive Request for Proposals, MBSF in cooperation with the National Marine Sanctuary Program solicited collaborative, multi-institution proposals to collect, process, and interpret mapping data in the project area. The winning proposal was a joint proposal from CSUMB and Fugro Pelagos for fieldwork, and Moss Landing Marine Lab and the U.S. Geological Survey for data interpretation and data products.

The proposed augmentation of the project would be used by MBSF to augment its contract with the Foundation of California State University Monterey Bay (FCSUMB) and subcontractors, in order to expand the existing project’s geographic scope northward to include offshore seafloor

mapping between Bolinas and Point Arena (Exhibit 1). Fieldwork would focus on mapping the “offshore” area of state waters between these geographic locations, between the twenty-meter water depth and 3 nautical miles, the limit of state waters. Fieldwork would take place during winter 06/07 using a large survey vessel, the R/V Davidson. The project would include groundtruthing of multibeam mapping data and creation of Tier 1, 2 and 2.5 data products such as benthic habitat maps for use by resource managers, including CDFG and MLPA staff.

The Monterey Bay Sanctuary Foundation

The Monterey Bay Sanctuary Foundation (MBSF) is a 501(c)(3) non-profit organization, whose mission is to advance the understanding and protection of the Monterey Bay National Marine Sanctuary and other coastal and ocean resources in California. MBSF oversees the Sanctuary Integrated Monitoring Network (SIMoN), which monitors and reports on the health of the ocean ecosystem; promotes ocean conservation education for underserved communities; promotes water quality; supports Marine Protected Area efforts; and serves as fiscal sponsor for a variety of federal and state grants and contracts. MBSF is experienced at managing large contracts and grants, and offers a reasonable overhead of 10 percent for administration.

PROJECT FINANCING

Funding Sources:

Funding Sources – Existing Project:

Ocean Protection Council	\$1,200,000
National Marine Sanctuary Prog. In-Kind Contribution (est.)	<u>\$ 550,000</u>

Total Existing Project **\$1,750,000**

Funding Sources – Expanded Project:

Coastal Conservancy (Ocean Protection Council)	\$1,510,000
California Department of Fish and Game	<u>\$1,000,000</u>

Total Expanded Project **\$2,510,000**

TOTAL PROJECT COST **\$4,260,000**

For the proposed augmentation of the expanded project, staff anticipates using \$1,510,000 of the total of eight million dollars appropriated from the General Fund to the Conservancy in fiscal year 2006/2007 for projects implementing a workplan 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 appropriation requires the workplan to be submitted to the Legislature at least thirty days prior to any expenditure of these funds. In order to comply with these requirements, use of funding for the proposed augmentation will be conditioned on Ocean Protection Council approval of the Joint Workplan and its submission to the Legislature.

CONSISTENCY WITH OCEAN PROTECTION COUNCIL STRATEGIC PLAN: The project is consistent with Section II, Priority Goals and Objectives, Goal E, Objective 1 of the OPC Five-Year Strategic Plan (adopted by the Council in June 2006) which states that OPC should “identify and fill critical needs in executing the MLPA” and “make resources available to

design and implement a comprehensive MPA monitoring program.” The project is also consistent with Section II, Priority Goals and Objectives, Goal B, Objective 2 which states that OPC should “pursue funding and partnerships to complete seafloor maps of all state waters.”

CONSISTENCY WITH OCEAN PROTECTION COUNCIL’S INTERIM PROJECT SELECTION CRITERIA & GUIDELINES:

Mandatory Criteria

- 1. Furthers the following statutory purposes and policies of the Ocean Protection Act:**
 - **Improves management, conservation, and protection of coastal waters and ocean ecosystems:** This project will provide essential data to support ecosystem-based management of marine resources and marine protected areas.
 - **Improve monitoring, data gathering, and advances in scientific understanding of the ocean and coastal environment:** The main objective of this project as expanded is to acquire new scientific data to manage marine resources and marine protected areas.
 - **Improves the health of fish and fosters sustainable fisheries in ocean and coastal waters:** This project as expanded will support sustainable fisheries management by creating additional benthic habitat maps.
 - **Helps to coordinate the collection and sharing of scientific data:** This expanded project will benefit from and support collection and sharing of scientific data by promoting multi-institutional scientific cooperation and making project data public.
- 2. Consistent with the purposes of the funding source:** See Project Financing Section above.
- 3. Has demonstrable support from the public:** This project has support from the Department of Fish and Game, and the MLPA Initiative. See Exhibit 3 for letters of support. In addition, letters of support for the original project were submitted by the National Marine Sanctuary Program, the California Coastal National Monument, the National MPA Center, the Scripps Institution of Oceanography, Point Reyes National Seashore, Seagrant, the California Department of Fish and Game, and the California Coastal Commission (Exhibit 2).
- 4. Relates directly to the ocean, coast, associated estuaries, and coastal-draining watersheds:** This project will promote ocean and coastal marine resource management and conservation by creating new habitat maps.
- 5. Has greater-than-local interest:** This mapping project will generate new data that promote statewide scientific research and marine resource management.

Additional Criteria

The project would not occur without Council participation: This project would not occur without Council funding because there is currently no other effort to map state waters.

The project helps resolve more than one issue: This project will support scientific research, ecosystem-based management, MPA design, and regulation of offshore development.

The project is ready to implement (grantee or contractor will start and finish the project in a timely manner): Monterey Bay Sanctuary Foundation, CSUMB and all subcontractors are ready to begin implementing the proposed project as soon as funds are available.

The project involves a combination of local, state, or federal agencies or is a public/private partnership: This project is a partnership with the Department of Fish and Game and California State University, and includes a private partner Fugro Pelagos.