



Staff Recommendation

December 12, 2023

Item 7

Action Item:

**Consideration and Approval of Disbursement of Funds for 2024-2026
MPA Long-Term Monitoring**

Michael Esagro, Senior Biodiversity Program Manager and Tribal Liaison

Recommended Action: Authorization to disburse up to \$9,421,162 to the Regents of the University of California San Diego (UCSD)/California Sea Grant (CASG) to fund statewide academic research consortiums for continued ecological monitoring of California’s Marine Protected Area (MPA) network from 2024-2026, as described below. Up to \$300,000 of this total will support CASG’s administration of these monitoring projects:

- Up to \$1,402,200 to the University of California Santa Cruz for rocky intertidal habitats;
- Up to \$3,982,878 to UC Santa Barbara for kelp forest/shallow rocky reef habitats;
- Up to \$1,547,850 to UC Santa Barbara for sandy beach/surf zone habitats;
- Up to \$2,188,234 to San Jose State University for estuary habitats.

Location: Statewide

Strategic Plan Goals and Objectives: Goal 3: Enhance Coastal and Marine Biodiversity; Objective 3.1: Protect and Restore Coastal and Marine Ecosystems; Target 3.1.1 and associated actions.

Equity and Environmental Justice Considerations: Project outcomes will improve management of marine protected areas, many of which are located in close proximity to and utilized by members of communities burdened by environmental and social justice issues.

Findings and Resolution:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:

“Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:

1. The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the California Ocean Protection Act;
2. The proposed projects are consistent with the Budget Act of 2023 which included a \$2.5 million General Fund appropriation for MPA monitoring; and
3. The proposed projects are consistent with the Budget Act of 2022 which included a \$50 million General Fund appropriation for grants or expenditures for resilience projects that conserve, protect, and restore marine wildlife and healthy ocean and coastal ecosystems; and
4. The proposed projects are not ‘legal projects’ that trigger the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15378.”

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

“OPC hereby approves the disbursement of up to \$9,421,162 to the Regents of the University of California San Diego (UCSD)/ California Sea Grant (CASG) to fund statewide academic research consortiums for continued ecological monitoring of the Marine Protected Area (MPA) network from 2024-2026, as described below. Up to \$300,000 of this total will support CASG’s administration of these monitoring projects:

- Up to \$1,402,200 to the University of California Santa Cruz for rocky intertidal habitats;
- Up to \$3,982,878 to UC Santa Barbara for kelp forest/ shallow rocky reef habitats;
- Up to \$1,547,850 to UC Santa Barbara for sandy beach/ surf zone habitats;
- Up to \$2,188,234 to San Jose State University for estuary habitats

This authorization is subject to the condition that prior to disbursement of funds, the Regents of the University of California San Diego/California Sea Grant shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery.

Executive Summary:

Staff recommends that OPC approve the disbursement of \$9,421,162 for continued long-term monitoring of California’s MPAs in four key habitats (rocky intertidal, kelp forest, sandy beach/surf

zone, and estuary). Since 2019,^{1,2} guided by California’s MPA Monitoring Action Plan, OPC has funded MPA long-term monitoring of key habitats and human uses to inform the adaptive management of the MPA network. OPC investments of over \$21 million for MPA monitoring directly informed the first-ever [Decadal Management Review](#) (Review) of the MPA network, published by the California Department of Fish and Wildlife (CDFW) in January 2023. While this represents a significant milestone, OPC’s continued investment is vital to support ongoing long-term monitoring of the MPA network to inform adaptive management and contribute to broader state priorities such as sustainable fisheries and climate resilience.

Project Summary:

Background:

Since 2019, guided by California’s [MPA Monitoring Action Plan](#), OPC has invested over \$21 million in monitoring of key coastal and marine habitats to inform the adaptive management of the MPA network. This investment has resulted in a series of seven [technical monitoring reports](#), as well as an [Estuary Marine Protected Area Monitoring Program Implementation Blueprint](#) (EMPA Blueprint), which were critical in informing the first-ever [Decadal Management Review](#) of the MPA network published by the California Department of Fish and Wildlife (CDFW) earlier this year. This groundbreaking document provides updates on the four pillars of the MPA Management Program, including Research & Monitoring, as well as a science-based evaluation of the network’s progress towards meeting the goals of the [Marine Life Protection Act](#). In the Review, monitoring results provided strong evidence that, for many habitats and species across the state, MPAs are working to improve ocean health.

As part of the Decadal Management Review process, CDFW and OPC developed a [prioritized list of adaptive management recommendations](#) that was informed by public comment and tribal consultation. This list includes a recommendation to improve and sustain cost-effective long-term MPA monitoring (Recommendation #16). To advance this recommendation, in summer-fall 2023, OPC and CDFW hosted habitat-specific workshops to discuss monitoring results, incorporate lessons learned, and discuss ways to drive innovation and improve equity outcomes in California’s MPA monitoring program. Building upon the MPA Monitoring Action Plan, these workshops produced concrete plans to guide monitoring in the following four habitats for the next three years: rocky intertidal, sandy beach/surf zone, kelp forest/shallow rocky reef (0-30 meters depth), and estuary.

¹ OPC 2019 [staff recommendation](#) for initial MPA long-term monitoring funding

² OPC 2019 [staff recommendation](#) for initial monitoring and assessment of estuarine MPAs

OPC staff recommend that additional funding for monitoring be awarded to statewide research consortiums of Principal Investigators (PIs) from multiple institutions or organizations, organized around the habitats described above. Continuing and expanding this partnership-based approach will leverage existing capacity and allow for statewide data collection. Monitoring teams will continue to collect critical biological, ecological, and environmental data during the 2024-2026 field seasons. Continued monitoring is vital for adaptive management of the MPA network, as it provides necessary information to assess MPA network performance as well as broader state priorities such as fisheries management and climate resilience.

Project Summary:

This project will accomplish the following objectives within each habitat monitoring program with data collection occurring from 2024-2026:

- **Rocky Intertidal:** Collect additional biological and environmental data in Tier I MPAs³ and at associated reference sites, according to standardized protocols established by the Multi-Agency Rocky Intertidal Network (MARINE), which has been monitoring rocky intertidal habitats on the U.S. west coast since the 1980s.
- **Kelp Forest:** Collect biological data via SCUBA transect surveys in Tier I MPAs and at associated reference sites, according to standardized protocols established by the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), a long-term ecosystem-based scientific monitoring program involving marine scientists from U.S. west coast university partners.
- **Sandy Beach & Surf Zone:** Conduct standardized transect surveys at beaches inside Tier I MPA sites and associated reference sites to collect key biological and environmental data, including the following: abundance, species composition, and size structure of birds, macrophyte wrack, and surf zone fishes; physical characteristics of beach and surf zone habitats; and human uses, including shore-based fishing.
- **Estuary:** Continue and expand estuarine monitoring based on the [EMPA Blueprint](#) at 21 estuary sites statewide, including sites at California’s estuary MPAs (EMPAs) and associated reference sites. Sampling will assess conditions and trends of key metrics including: abundance, distribution, and conditions of habitats; populations of native, culturally important, and special-status species; populations of invasive species; and climate change, including sea level rise, ocean acidification, and flow/sediment delivery.

³ Tier 1: required long-term monitoring sites as described in the [MPA Monitoring Action Plan](#)

Equity and Environmental Justice Considerations:

Monitoring of the MPA network is essential to ensure that the network functions effectively to protect biodiversity and marine habitats, and thereby improve overall ecosystem health. Healthy marine ecosystems translate directly to economic, cultural, and health benefits for coastal communities. Many of California’s MPAs are located within or near communities burdened by environmental and social injustice. Moreover, many of the habitats contained within MPAs provide needed ecological benefits that in turn improve the well-being of nearby human communities. For example, ecosystem services from estuary habitats include water filtration for toxins and heavy metals, buffering impacts of coastal erosion and sea-level rise to infrastructure, and providing refuge for fish communities. Kelp forest habitats offer coastline protection, trap and store carbon dioxide to help combat climate change, and provide foundational habitat for many important food species such as rockfishes, abalone, and urchins. Sandy beach habitats are the most intensively used coastal ecosystems for human recreation and provide essential habitat for numerous harvested fish species. Rocky intertidal habitats provide accessible opportunities for the public to observe marine life, protect against shoreline erosion, and harbor harvested species.

About the Grantee:

CASG has an established, highly respected process for evaluating, prioritizing, and administering research grants related to coastal and ocean resources and has a proven track record of supporting state agencies’ research efforts. CASG is experienced at managing large contracts and grants, has excellent knowledge of and familiarity with the state’s scientific community, and has successfully managed other solicitation and award efforts on behalf of OPC, including OPC’s previous investments in long-term MPA monitoring.

Project Timeline:

Spring 2024 to Spring 2027. Field monitoring will take place 2024 through 2026 with data analysis and reporting to be completed by Spring 2027.

Project Financing:

Staff recommends that the Ocean Protection Council (OPC) authorize encumbrance of up to \$9,421,162 to the Regents of the University of California San Diego/ California to support marine protected area (MPA) long-term monitoring for adaptive management of the MPA network.

Ocean Protection Council	\$9,421,162
TOTAL	\$9,421,162

The anticipated source of funds will be from the MPA General Fund appropriation (Fiscal Year 2023-24) which included \$2.5 million to support MPA monitoring. The monitoring and analysis projects are consistent with the goals of the state’s MPA monitoring program by continuing monitoring efforts and subsequent data analyses. Additional funds are anticipated to be contributed from the Budget Act of 2022, which included a \$50 million General Fund appropriation to OPC for grants or expenditures for resilience projects that conserve, protect, and restore marine wildlife and healthy ocean and coastal ecosystems. The proposed disbursement is an appropriate use of this General Fund appropriation because this project is an investment in continued monitoring of MPAs which will create data projects and analysis that will allow for adaptive monitoring of the MPA network and allow the state to effectively conserve marine wildlife. The proposed investment of \$6,861,162 from this General Fund appropriation additionally supports OPC’s commitment to protecting marine biodiversity.

Consistency with California Ocean Protection Act:

The proposed project is consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because it is consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b)(2) as projects which:

- Eliminate or reduce threats to coastal and ocean ecosystems, habitats, and species.
- Improve the management of fisheries and/or foster sustainable fisheries.
- Improve management, conservation, and protection of coastal waters and ocean ecosystems.
- Provide monitoring and scientific data to improve state efforts to protect and conserve ocean resources.
- Protect, conserve, and restore coastal waters and ocean ecosystems.
- Provide funding for adaptive management, planning coordination, monitoring, research, and other necessary activities to minimize the adverse impacts of climate change on California's ocean ecosystem.

Compliance with the California Environmental Quality Act (CEQA):

The proposed project is not a ‘legal project’ that triggers the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section 21068 and Title 14 of the California Code of Regulations section 15378. If the project were determined to be a ‘legal project’ under CEQA, it is categorically exempt from review under the California Environmental Quality Act (“CEQA”) pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource.