



Staff Recommendation

September 10, 2024

Item 8

Action Item:

**Consideration and Approval of Disbursement of Funds for the
Development of a California Artificial Reef Program Plan**

Michael Esgro, Senior Biodiversity Program Manager & Tribal Liaison

Recommended Action: Authorization to disburse up to \$550,000 to California Sea Grant to support the development of a California Artificial Reef Program Plan.

Location: Statewide

Strategic Plan Goals and Objectives: Goal 3: Enhance Coastal and Marine Biodiversity;
Objective 3.1: Protect and Restore Coastal and Marine Ecosystems

Equity and Environmental Justice Benefits: Improved habitat and environmental quality; improved access and recreational opportunities; strengthened resilience for coastal communities, including frontline communities, e.g. through sea-level rise adaptation and shoreline stabilization.

Exhibits:

Exhibit A: Letters of Support

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 project is consistent with the purposes of Division 26.5 of the Public Resources Code, the California Ocean Protection Act;
2. The proposed project is consistent with OPC’s Proposition 68 Grant Guidelines, adopted May 2019 and the 2024 Proposition 68 Grant Guidelines Update, pending adoption September 10, 2024;

3. The proposed project is consistent with the Budget Act of 2024, which included a \$27 million Greenhouse Gas Reduction Fund appropriation for ocean protection and resilience to climate change; and
4. The proposed project is not a ‘legal project’ that triggers 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 \$550,000 to California Sea Grant to support the development of a California Artificial Reef Program Plan.

This authorization is subject to the condition that prior to disbursement of funds, 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:

Artificial reefs are human-made structures on the seafloor that may mimic some of the characteristics of a natural reef. As California seeks to achieve its ambitious goals related to climate and biodiversity, requests to construct artificial reefs to support a broad suite of ecological and socioeconomic benefits are increasing. However, knowledge gaps remain regarding the potential benefits and impacts of artificial reefs, as well as best practices for siting, design, establishing performance metrics, and monitoring. Resource managers therefore urgently require a consistent, science-based plan to inform the permitting and placement of artificial reefs in state waters.

A California Artificial Reef Program Plan will inform a consistent, statewide, science-based, and community-informed approach for the potential placement of artificial reefs in state waters. This proposed investment will fund California Sea Grant, in partnership with the California Department of Fish and Wildlife (CDFW) and OPC, to 1) administer scientific technical writing groups and stakeholder listening sessions to inform development of a draft CARP Plan for tribal consultation and public comment, 2) develop a draft CARP Plan, 3) facilitate scientific peer review of the draft CARP Plan, and 4) develop a final CARP Plan incorporating results from tribal consultation, scientific peer review, and public comment.

Project Summary:

Background:

Artificial reefs are human-made structures on the seafloor that may mimic some of the characteristics of a natural reef. In California, artificial reefs have traditionally been constructed to increase invertebrate and fish populations, and thereby enhance fishing opportunities. Artificial reefs have also been used as mitigation for coastal development projects. The Wheeler North Reef in southern California, for example, provides hundreds of acres of habitat for marine life to help offset environmental impacts of the San Onofre Nuclear Generating Station.

As California seeks to achieve its ambitious goals related to climate and biodiversity, requests to construct artificial reefs to support a broad suite of ecological and socioeconomic benefits – e.g. kelp restoration, native oyster population enhancement, shoreline protection, or to mitigate for coastal development or lost fishing opportunities – are increasing. However, knowledge gaps remain regarding the potential benefits and impacts of artificial reefs, as well as best practices for siting, design, establishing performance metrics, and monitoring. Resource managers therefore urgently require a consistent, science-based plan to inform the permitting and placement of artificial reefs in state waters.

CDFW has undertaken extensive analyses to determine next steps and resources required to develop a CARP Plan, including online surveys and listening sessions held with stakeholders from 2017-2020. With this background, CDFW and OPC are prepared to leverage existing partnerships across agencies, stakeholder groups, California Native American tribes, and the scientific community to support the development of a science-based, community-informed CARP Plan to guide the siting, design, and monitoring of artificial reefs in California.

Project Summary:

This project will accomplish the following objectives:

- *Facilitate scientific and stakeholder input to inform development of a draft CARP Plan.*
Working with OPC and CDFW, California Sea Grant will administer technical expert writing groups to inform the development of the CARP Plan. This will include expert groups focused on siting, habitat conversion, materials and design, and mitigation. Additionally, California Sea Grant will hold three public listening sessions to receive input on the draft CARP Plan prior to beginning development. These listening sessions will provide an important venue for impacted community members, such as fishermen and divers, to offer their perspectives in the development of the draft CARP Plan. Another round of three listening sessions will occur with stakeholders at the 50% completion stage to share out

current progress and solicit additional input and direction. Finally, California Sea Grant will provide support to OPC and CDFW in conducting formal and informal tribal outreach on the CARP Plan.

- *Develop a draft CARP plan.* California Sea Grant will leverage outcomes of scientific and stakeholder conversations to develop a draft CARP plan in collaboration with CDFW and OPC. The draft Plan will be made available for tribal consultation and public comment and will include, at a minimum:
 - Brief history of artificial reefs in California
 - Summary of knowledge regarding artificial reefs in California and globally
 - General criteria for design, materials, and location
 - Proposed requirements for various types of artificial reefs, including reefs constructed for restoration, species enhancement, recreational opportunities, compensatory mitigation, shoreline protection and multi-benefits projects
 - Potential benefits and risks of artificial reefs
 - Monitoring recommendations
 - Governance framework
- *Facilitate scientific peer review of the draft CARP Plan.* California Sea Grant will coordinate and administer external peer review of the CARP Plan. This will include the identification of reviewers from related disciplines, development of review criteria, hosting of a virtual panel meeting, compilation and synthesis of reviews for delivery to OPC and CDFW, and stipend administration.
- *Develop a final CARP Plan.* California Sea Grant will develop a final designed version of the CARP plan, incorporating results from tribal consultation, scientific peer review, and public comment.

Equity and Environmental Justice Benefits:

A science-based, community-informed CARP Plan will support improved habitat and environmental quality, improved access and recreational opportunities, and strengthened resilience for coastal communities, e.g. through sea-level rise adaptation and shoreline protection.

By meaningfully and intentionally prioritizing tribal and community input in the development of a CARP Plan, the work proposed supports OPC Equity Plan Goal 1 (“Establish and implement more equitable and sustainable community engagement and funding methods to expand and enhance opportunities for ocean and coastal projects, policies, and research”), specifically Strategy 1.4.2 (“Continue to require OPC projects to identify, budget for, and include community engagement

opportunities, when appropriate, and be informed by local community needs, such as by tribes, community-based organizations, or impacted individuals”).

The scientific aspects of this work also support Equity Plan Goal 4 (“Lead the state in a comprehensive and interdisciplinary approach to coastal and ocean science through intentional investments in research and monitoring that value and integrate broader knowledge sources”), specifically Objective 4.2 (“Collaborate with California Native American tribes, environmental justice communities, and community partners such as: community-based organizations, colleges and universities, research organizations, including community science groups, and local stakeholders, to include Traditional Ecological Knowledges, tribal expertise, local knowledge, social science, historical context, and lived experiences into ocean and coastal science, and research”).

About the Grantee:

California Sea Grant is a unique partnership that unites federal, state, and university resources across California to create knowledge, products, and services that benefit the economy, the environment, and the citizens of California. California Sea Grant has an established, highly respected process for administering work related to science needs for coastal and ocean resource management. California Sea Grant is experienced at convening and facilitating large groups, synthesizing complex scientific information, and administering peer review processes. Recently, California Sea Grant was awarded OPC funding to support the integration of best available science into the state’s Kelp Restoration and Management Plan through convening of a science advisory committee and a structured peer review process.

Project Timeline:

November 2024-December 2026

Project Financing:

Staff recommends that the Ocean Protection Council (OPC) authorize encumbrance of up to up to \$550,000 to California Sea Grant to support the development of a California Artificial Reef Program Plan.

Ocean Protection Council	Up to \$550,000
TOTAL	Up to \$550,000

The anticipated source of funds will be from Proposition 68 Chapter 9 Fund, provided by The California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act of 2018, Fiscal Year 2020/2021. Chapter 9 funds (Section 80120) may be used to support projects that “conserve, protect and restore marine wildlife and healthy ocean and coastal ecosystems with a focus on the state’s system of marine protected areas and sustainable fisheries.” The proposed project supports the goals of Proposition 68, Chapter 9 to restore and protect marine wildlife and healthy ocean and coastal ecosystems by informing and enhancing habitat for marine life.

An alternate funding source may be from the Budget Act of 2024, Greenhouse Gas Reduction Fund appropriation to OPC (Fiscal Year 2024/2025) for projects that advance ocean protection and resilience. The proposed project supports the purpose of this appropriation to restore and increase the resilience of marine wildlife and ocean and coastal ecosystems.

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:

- Improve the management of fisheries and/or foster sustainable fisheries.
- Allow for increased public access to, and enjoyment of, ocean and coastal resources, consistent with sustainable, long-term protection and conservation of those resources.
- 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 proposed project were to trigger CERA, the project would be 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.