



Staff Recommendation

June 16, 2026

Item 7

Action Item:

Consideration and Approval of the Statewide Marine Aquaculture Action Plan and Disbursement of Funds to Support the Development of the Aquaculture Science Plan

Katie Cieri, Sustainable Fisheries and Aquaculture Program Manager

Recommended Action: Adopt the Statewide Marine Aquaculture Action Plan (Exhibit A) and direct staff to work with tribal, agency, and other partners to implement the Action Plan. Authorize disbursement of up to \$500,000 to California Sea Grant to develop an Aquaculture Science Plan, which will summarize best available ecological and socioeconomic science on marine aquaculture in California and identify science needs to implement the Action Plan and inform aquaculture governance across the state.

Location: Statewide

Strategic Plan Goals and Objectives: Goal 4: Enable a sustainable blue economy that protects ocean health; Objective 4.1: Support thriving fishing communities, climate-resilient fisheries, and sustainable aquaculture; Target 4.1.6: By 2026, adopt a statewide Aquaculture Action Plan as a roadmap to improve governance, protect the environment and public health, and facilitate sustainable development of seaweed and shellfish aquaculture; by 2028, fund at least three projects to support Plan implementation.

Equity and Environmental Justice Benefits: equitable access; increased food security; resilient coastal communities; partnership with California Native American Tribes.

Exhibits:

Exhibit A: OPC Statewide Marine Aquaculture Action Plan

Findings and Resolution:

Staff recommend 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 OPC’s Proposition 68 Grant Guidelines, adopted September 10, 2024; and
3. The proposed projects are not ‘legal projects’ that trigger the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section 21068 and Title 14 of the California Code of Regulations section 15378.”

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

“OPC hereby adopts the attached Statewide Marine Aquaculture Action Plan (Exhibit A), and directs staff continue to convene the Aquaculture Leadership Team, and coordinate with California Native American tribes, the Aquaculture Development Committee, and other partners to implement the Action Plan. OPC also approves the disbursement of up to \$500,000 to California Sea Grant to develop an Aquaculture Science Plan to summarize best available ecological and socioeconomic science and identify additional science needs to inform aquaculture governance in California.

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:

Staff recommend adoption of the Statewide Marine Aquaculture Action Plan (Action Plan), which provides a roadmap for sustainable marine aquaculture in the state. Marine aquaculture can help meet growing demand for healthy seafood while supporting economic development, food security, climate resilience, and providing ecosystem benefits. The Action Plan is needed to establish a coordinated, transparent framework for permitting and interagency collaboration, environmental protection and public health safeguards, and sustainable development. It provides

clear goals and actions to ensure aquaculture is developed sustainably and in alignment with California’s ecological, cultural, and economic priorities. The Action Plan was informed by early consultation with California Native American tribes in Fall 2025 as well as further consultation on the Draft Action Plan in Spring 2026. Development of the Action Plan was also informed by a robust public process, including listening sessions, workshops with key partners, and public comment on the Draft Action Plan.

Staff further recommend the disbursement of up to \$500,000 to California Sea Grant to develop an Aquaculture Science Plan (Science Plan), which will summarize best available ecological and socioeconomic science and identify additional science needs to inform aquaculture governance in California. The development of the Science Plan is a critical next step to implement the Action Plan and enable adaptive management of aquaculture operations across the state.

Adoption of the Action Plan and development of the Science Plan will advance Target 4.1.6 of OPC’s Strategic Plan, and advance sustainable marine aquaculture in California by balancing strong ecological protections with the food security, economic, and community benefits of the industry.

Project Summary:

Background:

A thriving marine aquaculture industry in California has the potential to support healthy food production, provide economic opportunity, advance California Native American tribal priorities, and benefit coastal communities. However, the state has a responsibility to ensure that aquaculture is sustainable and protects native species, ecosystems, and important natural and cultural resources. Historically, marine aquaculture development in California has been relatively limited; growth of the industry has been constrained in part by a complex regulatory landscape and the absence of a coordinated statewide strategy to guide aquaculture development.

To address these challenges, OPC convened a state interagency Aquaculture Leadership Team (Leadership Team) in 2021 to increase coordinated and transparent decision making for aquaculture governance in California. The Leadership Team is made up representatives from state agencies with policy or regulatory oversight of aquaculture activities including the California Coastal Commission (CCC), California Department of Fish and Wildlife (CDFW), California Fish and Game Commission (CFGC), State Lands Commission (SLC), California State Coastal Conservancy (SCC), California State Water Resources Control Board and Regional Water Quality Control Boards (Water Boards), California Department of Public Health (CDPH), and the California Department of Food and Agriculture (CDFA). In June 2021, the Leadership Team published a set of [Guiding Principles for Sustainable Marine Aquaculture](#), which established a vision for marine aquaculture in California and laid the groundwork for a future Aquaculture Action Plan. The Statewide Marine

Aquaculture Action Plan (Action Plan), as called for in Target 4.1.6 of OPC’s 2026-2030 Strategic Plan, is the Leadership Team’s next step to establish marine aquaculture as a sustainable and viable industry in the state.

Project Summary:

Action Plan Development

In 2023 and 2024, OPC staff worked with the Leadership Team to develop the goals and actions of the Action Plan, which were informed in part by community listening sessions held in 2022. OPC staff invited early consultation with tribes on the Action Plan in October 2025 and held two virtual tribal roundtables. OPC staff also presented draft goals and actions to the [Aquaculture Development Committee](#) (ADC), an advisory body group made up of aquaculture industry, agency, academic, and legislative representatives. Later that winter, OPC staff and California Sea Grant hosted two virtual workshops with members of the marine aquaculture industry and conservation organizations to receive feedback on draft goals and actions. Based on the feedback heard during tribal consultation and these engagement efforts, OPC staff worked with the Leadership Team to develop a Draft Action Plan. In Spring 2026, OPC staff invited a second round of tribal consultation specifically focused on the Draft Action Plan and held two virtual tribal roundtables. OPC staff also gave a [presentation](#) to the Fish and Game Commission’s [Marine Resources Committee](#) and the ADC. In April 2026, OPC staff published the Draft Action Plan for public comment and hosted a virtual listening session.

During consultation on the Draft Action Plan, tribes identified key tribal priorities for aquaculture, as well as actions that will require further consultation during implementation. Tribes expressed that tribal aquaculture projects may serve purposes beyond commercial profit, including cultural revitalization, food sovereignty, ecosystem restoration, supporting community food systems, restoring culturally significant species, and advancing tribal stewardship of coastal ecosystems. Tribes recommended that the state consider mechanisms to provide technical assistance, funding opportunities, and regulatory pathways that support tribally led aquaculture development consistent with tribal cultural values and environmental stewardship practices. Tribes expressed that siting of aquaculture operations should not interfere with tribal access or impact tribal cultural landscapes, traditional fishing and gathering areas, and species culturally significant to tribes, and requested consultation during planning and siting of individual aquaculture projects. Tribes conveyed that they should have opportunities to participate in monitoring programs and collaborative research efforts, particularly where aquaculture operations may affect tribal resources. Finally, tribes requested meaningful tribal engagement and consultation throughout the implementation of the Action Plan, as well as clearer mechanisms for government-to-government coordination with tribes pursuing marine aquaculture operations.

OPC staff received 197 public comments on the Draft Action Plan from conservation organizations, marine aquaculture practitioners, aquaculture industry organizations, academic institutions, federal partners, and members of the public. These comments indicated broad support for the Draft Action Plan, expressed satisfaction with the development process, and highlighted the economic, ecosystem, and food-security benefits of seaweed and shellfish aquaculture. Numerous comments emphasized that sustainable aquaculture development must be balanced with strong environmental protection. Many commenters noted the importance of meaningful implementation of the Action Plan and called for the state to ensure adequate funding and agency capacity to accomplish the Action Plan’s ambitious goals. Numerous comments provided resources, guidance, and considerations for implementation of the Action Plan. Overall, the following broad recommendations emerged from public comment:

- Prioritize best available science
- Identify how community engagement and public process will factor into implementation
- Accelerate the development of an aquaculture monitoring framework (Action 1.5), and clearly identify what this framework will include
- Maintain and improve water quality (Action 2.7) through watershed management, ecosystem-based management approaches, and pollution reduction
- Accelerate the evaluation of a Pilot-Scale Aquaculture Permit Program (Action 3.3)
- Acknowledge and leverage the range of partners in the marine aquaculture space

The majority of these recommendations are directly reflected in the final Action Plan.

Content of the Action Plan

The purpose of the Action Plan is to establish a strong foundation for sustainable marine aquaculture development in California by increasing coordination among state agencies and improving consistency, transparency, and efficiency in planning, facilitating, permitting, and managing aquaculture. The Action Plan outlines the state’s approach to improving aquaculture governance, regulation, and oversight; protecting the environment and public health; and supporting the sustainable development of marine aquaculture. The Action Plan provides a roadmap for local, state, and federal resource managers, California Native American tribes (tribes), the academic community, industry participants, fishermen, conservation organizations, and members of the public.

The Action Plan addresses marine aquaculture: the culture and husbandry of marine algae and shellfish in marine waters, and marine algae, shellfish, and finfish in land-based operations occurring along the coast. The Action Plan focuses on commercial marine aquaculture; aquaculture intended for harvest for sale. However, the Action Plan also acknowledges that tribes

may have multiple goals for aquaculture projects in addition to commercial profit including food sovereignty, preservation of cultural lifeways, and ecosystem and/or species restoration.

The Action plan is centered around three goals:

- Goal 1: Improve California’s aquaculture governance framework through increased interagency coordination and transparency
- Goal 2: Maximize environmental sustainability and continue to protect and enhance public health.
- Goal 3: Facilitate sustainable development of marine aquaculture in state waters

Within each of these goals are specific, time-bound actions that state agencies will undertake. Examples of key actions include the development of a consolidated permit application process, a standardized monitoring framework, siting guidance and tools, local/regional programmatic environmental impact reports, and a Science Plan, as well as prioritizing strategies that maintain high water quality standards.

Next Steps:

Action Plan Implementation

Upon adoption of the Action Plan, OPC will continue to convene the Leadership Team and coordinate with tribes, the ADC, and other partners to implement the plan (Action 1.1). The pace of Action Plan implementation will depend on multiple factors, including agency capacity and the availability of resources and funding. To foster accountability and transparency in aquaculture governance, OPC staff, in close partnership with the Leadership Team, will provide a high-level progress report to the Council every three years to summarize advancement towards accomplishing the actions of this Action Plan and identify additional priorities, as needed.

Development of an Aquaculture Science Plan

One of the priority actions (Action 3.2) within the Action Plan calls for the development of an Aquaculture Science Plan (Science Plan) to identify best available existing ecological and socioeconomic information science related to aquaculture and identifies knowledge gaps and science needs. To accomplish this action, CASG will partner with tribes, the Leadership Team, academic institutions, research networks, and conservation organizations to develop the Science Plan. As part of this effort, CASG will also address Action 3.3 of the Action Plan (evaluate the development of a Pilot-Scale Aquaculture Permit Program informed by frameworks from other states) by performing a landscape analysis to identify potential pathways and barriers to implementing pilot-scale aquaculture in California.

To accomplish these objectives, the project will convene in-person workshops with key partners and conduct a series of interviews to identify ecological and socioeconomic considerations for aquaculture governance. The project team will review and summarize scientific literature and convene additional in-person workshops with partners to report their findings and identify further gaps in scientific understanding. CASG will then convene a scientific panel to develop the Science Plan, which will include research and monitoring recommendations to address identified gaps. CASG will also produce a white paper outlining the key concepts, opportunities, and barriers for developing a pilot-scale aquaculture program in California.

Equity and Environmental Justice Benefits:

Successful implementation of the Action Plan will result in more equitable access to marine aquaculture opportunities, increased food security, and direct economic benefit to coastal communities, including through workforce development. Action Plan implementation will also advance OPC Strategic Plan Objective 2.1 (Strengthen partnerships with California Native American tribes) by elevating tribal aquaculture priorities and supporting tribal stewardship.

The Action Plan and the Science Plan directly support 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) as well as OPC Equity Plan Goal 3 (Lead equitable ocean and coastal policymaking in California).

Project Timeline:

- Action Plan: Implementation Ongoing
- Science Plan: Fall 2026- Fall 2028

Project Financing:

Staff recommend that the Ocean Protection Council (OPC) authorize encumbrance of up to \$500,000 to California Sea Grant to support implementation of the Aquaculture Action Plan through the development of an Aquaculture Science Plan.

California Sea Grant	\$500,000
TOTAL	\$500,000

The anticipated source of funds will be from the 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 2022/2023. Proposition 68 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 promote the protection and restoration of California’s coastal and marine ecosystems, reduce the negative impacts of land-based activity on coastal and marine ecosystems, communities, and the state’s coastal and ocean economy, and ensure continued protection of California’s fisheries through responsible aquaculture operations.

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 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.
- 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 categorically exempt from review under the California Environmental Quality Act (“CEQA”) pursuant to 14 Cal. Code of Regulations 15262 as a planning study. Further, the proposed project and associated activities are exempt under 14 Cal. Code of Regulations Section 15306 because the project may involve information collection, consisting of data collection, research, and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource.