



Staff Recommendation
REVISED February 28, 2024

Item 7

Action Item:
**Consideration and Approval to Disburse Funds to Reduce the Risk of
Whale and Sea Turtle Entanglement in Fishing Gear**

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Recommended Action: Authorization to disburse up to \$1,825,000 to Pacific States Marine Fisheries Commission (PSMFC) to support four projects that will reduce the risk of whale and sea turtle entanglement in fishing gear:

- a. Up to \$200,000 to develop a ropeless fishing management portal.
- b. Up to \$1,000,000 to purchase manufactured line to support line marking requirements for the commercial Dungeness crab fishery.
- c. Up to \$200,000 via a subaward to the National Marine Sanctuary Foundation (NMSF) to support large whale entanglement response.
- d. Up to \$450,000 via a subaward to NMSF to strengthen and expand a ropeless fishing gear library.

Total funding awarded across all projects will not exceed \$1,825,000.

Location: Statewide

Strategic Plan Goals and Objectives: Goal 3: Enhance Coastal and Marine Biodiversity; Objective 3.3: Support Sustainable Marine Fisheries and Thriving Fish and Wildlife Populations

Equity and Environmental Justice Benefits: Enhanced coastal and marine ecosystems; increased social and economic resilience for coastal fishing communities.

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 2018, which included a \$7.5 million General Fund appropriation to address whale and sea turtle entanglement; and
3. 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 \$1,825,000 to Pacific States Marine Fisheries Commission to support four projects that will reduce the risk of whale and sea turtle entanglement in fishing gear.

This authorization is subject to the condition that prior to disbursement of funds, Pacific States Marine Fisheries Commission 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:

In recent years, reports of whales entangled in fishing gear off the California coast have increased dramatically. A variety of factors may be contributing to this increase, including growing whale populations, climate-related changes in the distribution of whales, changes in fishing effort, and an increase in public awareness and reporting; changing ocean conditions appear to play a major role in increasing entanglement risk.

The 2018-2019 Governor’s Budget included a \$7.5 million General Fund appropriation to OPC to address whale and sea turtle entanglement in California fishing gear. To date, OPC has disbursed nearly \$6 million of this General Fund appropriation to support entanglement priorities in alignment with its 2019 [Strategy for Protecting Whales and Sea Turtles & Ensuring Thriving Fisheries](#). These investments have resulted in a dynamic, data-driven, collaborative approach to

fisheries management, helping to reduce entanglement risk. However, significant challenges remain, especially in relation to gear innovation.

To address these challenges, OPC staff recommends that the \$1.575 million remaining in the 2018-2019 appropriation, together with up to \$250,000 in OPC's FY 22/23 General Fund appropriation for ocean resilience projects, be disbursed to Pacific States Marine Fisheries Commission to support four projects that will reduce the risk of whale and sea turtle entanglement in fishing gear, inform management efforts, and directly benefit fishing communities: 1) development of a ropeless fishing management portal, 2) purchase of manufactured line, 3) large whale entanglement response, and 4) strengthening and expanding a community-based ropeless fishing gear library. These projects were identified in close partnership with California Department of Fish and Wildlife (CDFW) staff, based on highest priority management needs and opportunities for widespread benefit to fishing communities.

Project Summary:

Background:

In recent years, reports of whales entangled in fishing gear off the California coast have increased dramatically. A variety of factors may be contributing to this increase, including growing whale populations, climate-related changes in the distribution of whales, changes in fishing effort, and an increase in public awareness and reporting. Changing ocean conditions appear to play a major role in increasing entanglement risk; for example, warm ocean water during the 2014-2016 marine heat wave compressed whale foraging grounds closer to shore, leading to increased overlap between whales and fishing gear. In 2022, the number of reported entanglements on the U.S. West Coast continued to be higher than historical baseline prior to the 2014-2016 marine heat wave, although lower than yearly totals observed during and immediately after the heat wave (2015-2018).

Multiple fisheries have been identified as inadvertently causing whale entanglements in fishing gear. When whales become entangled in fishing gear, severe injury can result, and many entangled whales ultimately die. Sea turtle entanglement is rarer with limited reports of sea turtle entanglement in California fishing gear; in December 2023, however, a critically endangered Pacific leatherback sea turtle was observed entangled and killed in California commercial Dungeness crab gear off the Farallon Islands.

Minimizing the risk of whale and sea turtle entanglement in fishing gear is critical to ensuring the conservation of these threatened species. Simultaneously, thriving commercial and recreational fisheries are essential for providing locally caught seafood to Californians and supporting coastal

economies, fishing communities, and working waterfronts. As entanglements have increased, resource managers have implemented measures such as dynamic fisheries closures to reduce risk, however, these actions can cause economic hardship to local fisheries and communities. In particular, California’s commercial Dungeness crab fishery has suffered in recent years from delayed openings and early closures.

The 2018-2019 Governor’s Budget included a \$7.5 million General Fund appropriation to OPC to address whale and sea turtle entanglement in California fishing gear. In November 2019, OPC adopted a [Strategy for Protecting Whales and Sea Turtles & Ensuring Thriving Fisheries](#), which outlines investment priorities to help reduce entanglement risk and is one component of a more comprehensive effort to protect whales and sea turtles in California, consistent with Target 3.3.5 of OPC’s Strategic Plan.

To date, OPC has disbursed nearly \$6 million of its General Fund appropriation to support the Strategy. OPC investments have included:

- Support for the [California Dungeness Crab Fishing Gear Working Group \(Dungeness Crab Working Group\)](#), convened by the California Department of Fish and Wildlife (CDFW), OPC, and the National Marine Fisheries Service (NMFS) to address an increase in entanglements in Dungeness crab fishing gear. This working group has developed a [Risk Assessment Mitigation Program](#) (RAMP), through which CDFW assesses marine life entanglement risk for humpback whales, blue whales, and Pacific leatherback sea turtles based on the best available science.
- Improved data on whale and sea turtle population densities and distributions, oceanographic and forage patterns, and predictive models to inform risk assessments and fisheries management decisions.
- Enhanced response and rescue efforts through the [West Coast Large Whale Entanglement Response Network](#).
- Gear innovation, including the testing of ropeless gear designed to reduce or eliminate the time that buoy lines are in the water, thereby reducing entanglement risk to whales and sea turtles.

Together, these investments have resulted in a dynamic, data-driven, collaborative approach to fisheries management which has helped to reduce entanglement risk. However, significant challenges remain, especially in regard to gear innovation, monitoring, and enforcing the use of ropeless gear. Purchasing new gear can also impose a significant financial burden on fishermen. Finally, both past and currently proposed OPC investments will provide the framework for reducing entanglement risk for other fixed gear fisheries in the future.

Project Summary:

To address ongoing challenges in fishing gear innovation and efforts to reduce whale and sea turtle entanglements, OPC staff recommends that the \$1.575 million remaining of the 2018-2019 appropriation, together with up to \$250,000 of OPC's FY 22/23 General Fund appropriation for ocean resilience projects, be invested in four projects that will reduce the risk of whale and sea turtle entanglement in fishing gear, inform management efforts, and directly benefit fishing communities. These projects were identified in close partnership with CDFW staff.

This work will build on previous OPC investments to accomplish the following objectives:

- a. Ropeless Fishing Management Portal:* PSMFC will build an enforcement interoperability portal for ropeless fishing gear. This portal will allow fishermen and resource managers to track ropeless gear on the seafloor, thereby improving fishermen's ability to make decisions about where to fish while also supporting enforcement efforts. Such a system is necessary to manage on-demand ropeless fishing gear systems under the RAMP. Specific tasks will include production server development, regulatory portal integration, and project management.
- b. Purchase of Manufactured Line:* PSMFC will purchase manufactured line to support line marking requirements for the Commercial Dungeness crab Fishery. Establishing state-specific line markings will further improve the ability of CDFW and National Marine Fisheries Service to identify the fishery source of marine life entanglements and is the next step in implementing the Dungeness Crab Working Group's recommendation to establish standardized gear marking for all California fixed gear fisheries. The buoy markings currently mandated by the state are difficult to identify from a distance; line marking will improve visibility and minimize uncertainty in gear identification. CDFW is in the process of applying for an [Incidental Take Permit](#) (ITP) for the commercial Dungeness crab fishery under section 10 of the federal Endangered Species Act. As part of this ITP, CDFW has proposed to coordinate with the Oregon and Washington Departments of Fish and Wildlife to implement line marking for each state's commercial Dungeness crab fishery. Providing line to Dungeness crab fishermen will significantly reduce the economic burden on the fleet as fishermen work to meet the new requirements of the tri-state West Coast line marking agreement and the Dungeness crab fishery ITP. This investment will only cover surface gear replacement.
- c. Large Whale Entanglement Response:* PSMFC will provide a subaward to NMSF, which will work with the National Marine Fisheries Service and the National Large Whale Entanglement Response Network to further strengthen large whale entanglement response capabilities by: 1) hosting two annual trainings that will allow existing responders to refresh and update their skills, and will train new responders for emergency situations, and 2) establishing a program to allow authorized

responders who are part of the California Large Whale Entanglement Response Network to apply for reimbursement for vessel expenses.

d. Ropeless Fishing Gear Library: NMSF will purchase additional ropeless gear to expand their secure ropeless gear library for Dungeness crab fishermen. This gear will be used for outreach, demonstration, and training/testing purposes, and will provide an opportunity for fishermen to test ropeless fishing gear while significantly reducing the financial burden of testing gear. This library can also support the exploration of ropeless alternatives for other fixed gear fisheries in the future.

Up to \$250,000 of this subaward will support NMSF’s purchase of Sub Sea Sonics and Guardian Ropeless gear for the gear library. Many members of the Dungeness crab fleet have expressed interest in using this gear, which was approved for use through an Experimental Fishing Permit by the California Fish and Game Commission on February 14, 2024. Sub Sea Sonics is currently working to supply fishermen with gear to use under their recently amended Experimental Fishing Permit during the potential spring 2024 Dungeness crab fishery closure. Once OPC funds are available, Sub Sea Sonics and Guardian Ropeless gear will be purchased and added to NMSF’s gear library for further use and testing.

Equity and Environmental Justice Benefits:

Reducing the risk of whale and sea turtle entanglement in fishing gear will protect California’s marine biodiversity and enhance the health of coastal and marine ecosystems. Healthy marine ecosystems translate directly to economic, cultural, and health benefits for coastal communities. Further, by reducing the financial burden associated with line marking requirements and gear innovation, this project will support increased social and economic resilience for Dungeness crab fishermen, and coastal fishing communities more broadly.

About the Grantee(s):

PSMFC is an interstate compact agency that partners with resource agencies and the fishing industry to support sustainable management of Pacific Ocean resources. PSMFC supports California, Oregon, Washington, Idaho, and Alaska, and has no regulatory or management authority. PSMFC’s expertise includes coordinating research activities, monitoring fishing activities, collecting data, and maintaining fisheries databases.

NMSF, established in 2000, is the official non-profit partner of the National Marine Sanctuary System. The Foundation directly supports the United States’ national marine sanctuaries through their mission to protect species, conserve ecosystems and preserve maritime heritage. The Foundation accomplishes its mission through advancing community stewardship and engagement

programs, on-the-water conservation projects, public education and outreach programs, and scientific research and exploration. The Foundation fosters innovative projects that are solution-oriented, scalable and transferable, and develops strategic partnerships that promote the conservation and recovery of species and their habitats.

Project Timeline:

- February 2024: OPC approval of disbursement of funds
- June 2024: Work begins on individual projects
- March 2026: Anticipated completion of individual projects

Project Financing:

Staff recommends that the Ocean Protection Council (OPC) authorize encumbrance of up to \$1,825,000 to Pacific States Marine Fisheries Commission to administer four projects that will reduce the risk of whale and sea turtle entanglement in fishing gear.

Ocean Protection Council	\$1,825,000
TOTAL	\$1,825,000

The anticipated source of funds will be from the Ocean Protection Council’s General Fund appropriation from the Budget Act of 2018, which included \$7.5 million for whale and sea turtle entanglement. The proposed disbursement represents the remaining balance of this appropriation and the proposed projects are an appropriate use of this funding source to address whale and sea turtle entanglement. Additional funds to support this project will come 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.

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.

Compliance with the California Environmental Quality Act (CEQA):

The proposed projects are categorically exempt from review under the California Environmental Quality Act (“CEQA”) pursuant to 14 Cal. Code of Regulations Section 15306 because the projects involve only data collection, research, and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by OPC. Please note that in the case of an entanglement response, the response is conducted under a permit held by National Oceanic and Atmospheric Administration (NOAA) Fisheries’ Marine Mammal Health and Stranding Response Program (MMHSRP).