



Tracking Number: ( 2025-06 )

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: **Ben Grundy, Center for Biological Diversity.**

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested:**

#### **- California Constitution ARTICLE IV LEGISLATIVE, Section 20**

- (a) The Legislature may provide for division of the State into fish and game districts and may protect fish and game in districts or parts of districts.
- (b) There is a Fish and Game Commission of 5 members appointed by the Governor and approved by the Senate, a majority of the membership concurring, for 6-year terms and until their successors are appointed and qualified. Appointment to fill a vacancy is for the unexpired portion of the term. The Legislature may delegate to the commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. A member of the commission may be removed by concurrent resolution adopted by each house, a majority of the membership concurring.

#### **- CA Fish and Game Code, Division 1, Chapter 2. Authority, Section 205**

- Any regulation of the commission pursuant to this article which relates to fish, amphibia, and reptiles, may apply to all or any areas, districts, or portion thereof, at the discretion of the commission, and may do any or all of the following as to any or all species or subspecies:
  - (a) Establish, extend, shorten, or abolish open seasons and closed seasons.
  - (b) Establish, change, or abolish bag limits, possession limits, and size limits.
  - (c) Establish and change areas or territorial limits for their taking.
  - (d) Prescribe the manner and the means of taking.

#### **- California Fish and Game Code, Division 1. Fish and Game Commission, Chapter 2. Regulation of Take and Possession Generally, Article 1. Authority, Section 219**

- **219.** Any regulation adopted pursuant to this article may supersede any section of this code designated by number in the regulation, but shall do so only to the extent specifically provided in



the regulation. A regulation which is adopted pursuant to this section shall be valid only to the extent that it makes additions, deletions, or changes to this code under one of the following circumstances:

- (a) The regulation is necessary for the protection of fish, wildlife, and other natural resources under the jurisdiction of the commission.
  - (b) The commission determines that an emergency exists or will exist unless the action is taken. An emergency exists if there is an immediate threat to the public health, safety, and welfare, or to the population or habitat of any species.
  - A regulation which is adopted pursuant to this section shall be supported by written findings adopted by the commission at the time of the adoption of the regulation setting forth the basis for the regulation.
  - A regulation adopted pursuant to this section shall remain in effect for not more than 12 months from its effective date.
- **California Fish and Game Code, Division 1. Fish and Game Commission, Chapter 3. Other Regulatory powers, Article 1. Generally.**
    - **301.** The commission may adopt regulations that it deems necessary for the disposition of birds or mammals that are killed accidentally.
    - **314.** The commission at any time may close to the taking of any species or subspecies of bird or mammal any area newly stocked by the department with resident or migratory game birds or game or fur-bearing mammals, or any area where, in the judgment of the commission, added protection for birds or mammals is needed to properly conserve the birds or mammals, for such time as the commission may designate, or until such time as new legislation thereon enacted by the Legislature may become effective.
  - **California Fish and Game Code, Division 6. Fish, Part 1.7. Conservation and Management of Marine Living Resources, Chapter 5. Fishery Management Plans-General Policies, Section 7071**
    - (c) On and after January 1, 2000, the commission may adopt regulations as it determines necessary, based on the advice and recommendations of the department, and in a process consistent with Section 7059, to regulate all emerging fisheries, consistent with Section 7090, all fisheries for nearshore fish stocks, and all fisheries for white seabass. Regulations adopted by the commission may include, but need not be limited to, establishing time and area closures, requiring submittal of landing and permit information, regulating fishing gear, permit fees, and establishing restricted access fisheries.

### **3. Overview (Required) - Summarize the proposed changes to regulations:**

The California Fish and Game Commission (FGC) must adopt regulations that prevent whales from being seriously injured and killed in commercial coonstripe shrimp fishing gear. The State of California's authorization of the fishery violates federal laws because it is causing take of protected species. This petition urges the FGC to immediately promulgate regulations that prevent entanglements by implementing gear restrictions and closures in hot spots where whales are most likely to interact with fishing gear.

Existing regulations are insufficient to prevent marine life entanglements in the California commercial coonstripe shrimp fishery. Prior to 2002, the fishery was largely unregulated. The regulations adopted by the FGC in 2002 established some regulatory oversight of the fishery: general trap requirements, vessel



permit requirements, prohibitions on trawling, a fishery season closure, and a control date.<sup>1</sup> Importantly, there are no limits on the amount of gear set. In 2025, the FGC adopted emergency regulations with a stated goal of limiting potential increase in entanglement risk.<sup>2</sup> The regulations set a new control date of February 13, 2025, create a management boundary for the fishery at the Sonoma/Mendocino County border, and establish restrictions on the number of vertical lines set per vessel, traps per string, and maximum depth for coonstripe shrimp fishing gear. These regulations sunset on October 7, 2025. Because of the persistent, serious risk of marine life entanglements, the FGC must promulgate permanent regulations that eliminate entanglement risk.

This petition urges the FGC to adopt gear restrictions and closures for the California coonstripe shrimp fishery that remove vertical lines from the water in areas, and during the seasons, when animals are likely to interact with gear. Specifically, the FGC must:

**Amend Title 14 California Code of Regulations Section 180.15 (c) to**

- **restrict the use of trap gear with conventional vertical buoy lines in seasonal Biologically Important Areas for feeding large whales and sea turtles;<sup>3</sup> and**
- **clarify existing authority and explicitly authorize pop-up fishing gear with submerged buoys.**

**4. Rationale (Required) - Describe the problem and the reason for the proposed change:**

The FGC must adopt regulations to prevent the California commercial coonstripe shrimp fishery from entangling protected species. Officials have documented that this fishery takes humpback whales, which means that the state's authorization of the fishery is in violation of the federal Endangered Species Act and Marine Mammal Protection Act. The FGC should adopt regulations that seasonally close commercial coonstripe shrimp fishing in biologically important areas that support threatened and endangered animals by:

Amending Title 14 of the Cal. Code of Regs. § 180.15 (c) to restrict the use of trap gear with conventional vertical buoy lines in seasonal Biologically Important Areas (BIAs) for feeding large whales and sea turtles, and clarify existing authority and explicitly authorize the use of pop-up fishing gear with submerged buoys

The proposed regulations are necessary to reduce the risk of serious injury and mortality of protected whales and sea turtles. In support of the proposed regulations, Petitioner describes (1) the entanglement problem that the regulations address, (2) the legal basis and authority for the regulations, (3) the scientific basis for the proposed time-area restrictions, and (4) the data supporting the efficacy of alternative gear.

**The California Commercial Coonstripe Shrimp Fishery Harms Protected Species**

Commercial fishing gear used in the commercial coonstripe shrimp fishery is entangling, injuring, and killing protected marine animals. The vertical buoy lines that run from a trap set on the seafloor through the water column to a buoy at or near the surface puts swimming marine animals at risk of

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<sup>1</sup> McVeigh, Brooke A.B., Status of the Fisheries Report. California Department of Fish and Game. (2008). P. 1. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=34427>.

<sup>2</sup> *Id.* at 8.

<sup>3</sup> Calambokidis J. et al., Biologically Important Areas II for cetaceans within U.S. and adjacent waters - West Coast Region. Front. Mar. Sci. 11:1283231. (2024). P. 7-17. <https://doi.org/10.3389/fmars.2024.1283231>.



entanglement. When they get entangled, heavy fishing rope—often still connected to even heavier traps—can wrap around the animal’s head, mouth, flippers, or tail, sometimes preventing the animal from resurfacing, resulting in drowning. If entangled animals do not immediately drown, the remaining entangling line often impedes basic movement, feeding, and reproduction, and causes chronic infection and damage to bone and muscle.

Entanglements not only cause these animals immense suffering but threaten the very existence of numerous imperiled species such as critically endangered North Pacific right whales<sup>4</sup> and Pacific leatherback sea turtles<sup>5</sup>. Fishing gear is also a primary threat endangering blue whales,<sup>6</sup> humpback whales,<sup>7</sup> fin whales,<sup>8</sup> sperm whales,<sup>9</sup> and other sea turtles. In 2024, along the U.S. West Coast, there were a total of 36 whale entanglements, marking the highest number of confirmed entanglement reports since 2018.<sup>10</sup> Off the coast of CA alone, the National Marine Fisheries Service (NMFS) confirmed reports of 21 humpback whale entanglements and three gray whale entanglements in 2024.<sup>11</sup> Moreover, these entanglements are likely only a fraction of the actual number of animals that are seriously injured or killed in California fishing gear because most entanglements go unobserved.<sup>12</sup>

Since 2017, there have been four whale entanglements in coonstripe shrimp fishing gear. In 2017, a humpback whale was observed entangled concurrently in sablefish gear and commercial coonstripe shrimp gear. The coonstripe shrimp gear found on the whale is believed to have been set in the northern portion of the fishery (north of the Sonoma/Mendocino County border). In 2024, two humpback whale entanglements in commercial coonstripe shrimp gear were confirmed in the southern portion of the fishery (south of the Sonoma/Mendocino County border). In 2025, preliminary data from the National Marine Fisheries Service shows that one humpback whale was entangled in coonstripe shrimp gear.<sup>13</sup> Given the number of vessels participating in the fishery, the occurrence of three entanglements in a two year period is especially concerning.

Historically, effort in the fishery has been stable with less than 10 vessels participating in the fishery; and, the California Department of Fish and Wildlife (CDFW) has noted a recent increase in fishery participants.<sup>14</sup> As one of California’s remaining open-access fisheries, the commercial coonstripe shrimp fishery’s season is from May 1 until October 31 which coincides with high levels of whale activity along the California coast.<sup>15</sup> Because the coonstripe shrimp fishery uses conventional trap gear with persistent

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<sup>4</sup> NOAA Fisheries. 2023 Stock Assessment Report: Right Whale (Eastern North Pacific Stock). NMFS (2024). p. 289. [https://www.fisheries.noaa.gov/s3/2024-12/2023\\_SAR\\_North\\_Pacific\\_Right\\_Whale\\_Eastern\\_NP\\_Stock.pdf](https://www.fisheries.noaa.gov/s3/2024-12/2023_SAR_North_Pacific_Right_Whale_Eastern_NP_Stock.pdf).

<sup>5</sup> CDFW. A Status Review of Pacific Leatherback Sea Turtle in California. CDFW (2021). p. 38-40. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=193844>.

<sup>6</sup> NOAA Fisheries. 2023 Stock Assessment Report: Blue Whale (Eastern North Pacific Stock). NMFS (2024). p. 207. <https://www.fisheries.noaa.gov/s3/2024-12/2023-sar-blue-whale-enp.pdf>.

<sup>7</sup> NOAA Fisheries. 2021 Stock Assessment Report: Humpback Whale (California-Oregon-Washington Stock). NMFS (2022). p. 178-179. <https://media.fisheries.noaa.gov/2022-08/2021-HumpbackWhale-CaliforniaOregonWashington%20Stock.pdf>.

<sup>8</sup> NOAA Fisheries. 2023 Stock Assessment Report: Fin Whale (California-Oregon-Washington Stock). NMFS (2024). p. 215. <https://www.fisheries.noaa.gov/s3/2024-12/2023-sar-Fin-CAORWA.pdf>.

<sup>9</sup> NOAA Fisheries. 2023 Stock Assessment Report: Sperm Whale (California-Oregon-Washington Stock). NMFS (2024). p. 158-159. <https://www.fisheries.noaa.gov/s3/2024-12/2023-sar-sperm-whale-CAORWA.pdf>.

<sup>10</sup> NOAA Fisheries. 2024 West Coast Whale Entanglement Summary. NMFS (2025), p. 1. <https://www.fisheries.noaa.gov/s3/2025-04/2024-whale-entanglements-report.pdf>.

<sup>11</sup> *Id.*

<sup>12</sup> Derville, S. et al., Exposure of whales to entanglement risk in Dungeness crab fishing gear in Oregon, USA, reveals distinctive spatio-temporal and climatic patterns, 281 Biological Conservation 109989 (2023). <https://doi.org/10.1016/j.biocon.2023.109989>.

<sup>13</sup> Information received via email from Lauren Saez, Take Reduction Team Coordinator for the West Coast Take Reduction Team at NMFS (May 2025).

<sup>14</sup> California Department of Fish and Wildlife. Commercial Coonstripe Shrimp Emergency. CDFW (2025). p. 3. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=229514&inline>.

<sup>15</sup> Calambokidis, J. 2024 at 7-17.



vertical buoy lines (VBLs), increasing participation in the fishery can lead to more vertical lines in the water which increases the risk of whales or sea turtles becoming entangled in fishing gear.

According to FGC Analyst Jenn Bacon, “Increased participation in the coonstripe shrimp trap fishery elevates the risk of marine life entanglement, primarily by increasing the amount of trap gear in the water. More participants mean more vertical lines and a broader spatial distribution of fishing activity during the peak whale migration period, raising the chances of marine animals encountering and becoming entangled in the gear. Animals such as whales can become entangled when they make contact with the lines and become weighed down by the heavy metal traps, leading to injury or death.”<sup>16</sup>

The coonstripe shrimp fishery does not have coverage to take any ESA or MMPA protected species, making it critical that the CA coonstripe shrimp fishery adopts regulations that will help it reach zero entanglements.

### **Federal Law Prohibits Take of Marine Mammals and Sea Turtles**

Congress enacted the Endangered Species Act “to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such . . . species.”<sup>17</sup> Section 9 of the ESA prohibits any “person” from “taking” or causing take of any member of an endangered species, including endangered whales and sea turtles.<sup>18</sup> This take prohibition also applies to threatened whales.<sup>19</sup>

The ESA broadly defines “take” to include “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” or to attempt to engage in such conduct.<sup>20</sup> “Take” includes both direct and indirect harm and it need not be purposeful.<sup>21</sup> The take prohibition applies to any “person,”<sup>22</sup> including state, county, or municipal agencies and/or officials in their official capacity.<sup>23</sup> The ESA further makes it unlawful for any person, including state agencies and/or state officials in their official capacity, to “cause to be committed” the take of a listed species.<sup>24</sup> Similarly, the failure to regulate in a way that avoids take of listed species can also constitute a prohibited section 9 take.<sup>25</sup>

Congress enacted the Marine Mammal Protection Act to address the concern that “certain species and population stocks of marine mammals are, or may be, in danger of extinction or depletion as a result of man’s activities,” and to help “protect[ ] and encourage[ ]” marine mammals “to develop to the greatest extent feasible.”<sup>26</sup> “The interest in maintaining healthy populations of marine mammals comes first” under the statute.<sup>27</sup> To promote its objectives, the Act establishes a general moratorium on the taking of marine mammals,<sup>28</sup> expressly prohibiting the unauthorized take of a marine mammal by any person.<sup>29</sup>

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<sup>16</sup> Bacon, Jenn. California Fish and Game Commission Finding of Emergency and Statement of Proposed Emergency Regulatory Action. Fish and Game Commission (2025). p.1 <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=229514&inline>.

<sup>17</sup> 16 U.S.C. § 1531(b).

<sup>18</sup> See 50 C.F.R. § 17.11(h).

<sup>19</sup> *Id.* § 223 Subpart B.

<sup>20</sup> 16 U.S.C. § 1532(19); see also *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687, 704-05 (1995) (finding that the ESA’s legislative history supports “the broadest possible” reading of the prohibition against take).

<sup>21</sup> *Sweet Home*, 515 U.S. at 704.

<sup>22</sup> 16 U.S.C. § 1538(a)(1).

<sup>23</sup> *Id.* § 1532(13).

<sup>24</sup> *Id.* § 1538(g).

<sup>25</sup> *Animal Protection Inst. v. Holsten*, 541 F. Supp. 2d 1073, 1078-1080 (D. Minn. 2008).

<sup>26</sup> 16 U.S.C. § 1361(1), (6).

<sup>27</sup> *Kokechik Fishermen’s Ass’n v. Sec’y of Comm.*, 839 F.2d 795, 800, 802 (D.C. Cir. 1988).

<sup>28</sup> 16 U.S.C § 1371(a).

<sup>29</sup> *Id.* § 1372(a).





Prohibited takings include actions that kill or injure marine mammals and those that disrupt migration, breathing, breeding, or feeding patterns.<sup>30</sup>

In summary, California’s authorization of fisheries that take protected whales and sea turtles without valid take authorization from the federal government violates the ESA and MMPA.

### **The California Fish and Game Commission’s Duty to Protect Wildlife and Habitat**

California has not only a duty, but also the authority to issue the proposed regulation. The FGC must immediately promulgate robust mitigation measures that prevent entanglements of marine life. The state has a duty to prevent its fisheries from taking protected species. Not only must the FGC come into compliance with the ESA and MMPA, it also has an independent duty under state law to protect wildlife.

The FGC holds a foundational role in the stewardship of the state’s fish and wildlife resources. As one of the oldest wildlife conservation agencies in the United States, the Commission is charged with ensuring the long-term sustainability of California’s fish and wildlife populations and the habitats upon which they depend. Division 5.8 of the California Public Resource Code (PRC) codifies that “[w]ildlife, coastal, and park land conservation is in the public interest’ and is necessary to “protect significant environmental and scenic values of wildlife and plant habitat, riparian and wetland areas, and other open-space lands.”<sup>31</sup> The California Endangered Species Act (CESA) declares “that it is the policy of the state to conserve, protect, and enhance any endangered species or any threatened species and its habitat.”<sup>32</sup> Moreover, Section 2053 of the CESA makes it a policy of the state that public agencies “should not approve projects as proposed which would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species.”<sup>33</sup> The duty and responsibility of the FGC to protect the public interest and “conserve, protect, and enhance” any endangered or threatened species includes the protection of threatened and endangered whales and sea turtles and the proactive management of fisheries to prevent harm to these vulnerable populations. Section 7050 of the Fish and Game Code establishes that it is a state policy “to ensure the conservation, sustainable use, and, where feasible, restoration of California’s marine living resources for the benefit of all citizens of the state.”<sup>34</sup>

The Commission’s mandate is not limited to facilitating fishing and hunting opportunities—it also includes conserving biodiversity, protecting ecological integrity, and responding to emerging threats such as climate change and entanglement risk. It is the policy of the FGC to “protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems.”<sup>35</sup> These duties are reflected in the California Fish and Game Code and supported by decades of conservation precedent. Section 205 of the Fish and Game Code grants the Commission the authority to establish, extend, or shorten seasons and determine the manner, means and areas in which a species may be taken.<sup>36</sup> In its regulatory role, the Commission has the authority to adopt measures that reduce harm to marine wildlife, including the implementation of gear modifications and time-area closures to prevent entanglements.

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<sup>30</sup> 16 U.S.C. § 1362(13), (18).

<sup>31</sup> PRC § 5905.

<sup>32</sup> FGC § 2052.

<sup>33</sup> FGC § 2053.

<sup>34</sup> FGC § 7050(b)

<sup>35</sup> FGC. Miscellaneous Policies: Marine Protected Areas. (2005). <https://fgc.ca.gov/About/Policies/Miscellaneous#MPAs>.

<sup>36</sup> FGC §205



The FGC has authority to authorize pop-up gear in the coonstripe shrimp fishery. The Commission’s authority to enact the proposed regulatory amendments—including the authorization of pop-up gear—is clearly established in Division 1, Chapter 2, Section 205 and Division 6, Part 3, Article 17 of the California Fish and Game Code. Section 205 empowers the Commission:

Any regulation of the commission pursuant to this article which relates to fish, amphibia, and reptiles, may apply to all or any areas, districts, or portion thereof, at the discretion of the commission, and may do any or all of the following as to any or all species or subspecies:

- (a) Establish, extend, shorten, or abolish open seasons and closed seasons.
- (b) Establish, change, or abolish bag limits, possession limits, and size limits.
- (c) Establish and change areas or territorial limits for their taking.
- (d) Prescribe the manner and the means of taking.

(Enacted by Stats. 1957, Ch. 456.)

Section 8587.1 empowers the Commission:

- (a) The commission may adopt regulations as it determines necessary, based on the advice and recommendations of the department, to regulate nearshore fish stocks and fisheries. Regulations adopted by the commission pursuant to this section may include, but are not limited to, requiring submittal of landing and permit information, including logbooks; establishing a restricted access program; establishing permit fees; and establishing limitations on the fishery based on time, area, type, and amount of gear, and amount of catch, species, and size of fish.
  - (b) Regulations adopted by the commission pursuant to this section may make inoperative any fishery management statute relevant to the nearshore fishery. Any regulation adopted by the commission pursuant to this subdivision shall specify the particular statute to be made inoperative.
  - (c) The circumstances, restrictions, and requirements of Section 219 do not apply to regulations adopted pursuant to this section.
  - (d) Any regulations adopted pursuant to this section shall be adopted following consultation with fishery participants and other interested persons consistent with Section 7059.
- (Amended by Stats. 2002, Ch. 559, Sec. 10. Effective January 1, 2003.)

These provisions give the Commission broad discretion to regulate fisheries in a way that protects both target species and non-target wildlife, including endangered whales and sea turtles.

In the context of the coonstripe shrimp fishery, this authority includes the ability to close the fishery in biologically important areas and to prohibit the use of gear types—such as traps with persistent vertical buoy lines—that pose a high risk of entanglement. It also includes the authority to authorize alternative gear types, such as pop-up systems, that reduce or eliminate this risk.

There is no statutory or regulatory language in Title 14 of the California Code of Regulations that prohibits the use of pop-up gear. While Fish and Game Code Sections 9005 and 9006 require that traps be marked with buoys, these provisions have been interpreted flexibly in other fisheries. For example, in the California commercial spiny lobster fishery, submerged buoys using timed-release devices (commonly called “pop-ups”) are explicitly allowed after the first Tuesday in October under CCR Title 14 § 122.1. This regulation predates the adoption of the Spiny Lobster Fishery Management Plan and demonstrates that a “marked buoy” does not need to be on the surface at all times.



Moreover, the coonstripe shrimp fishery already allows the use of trap strings marked with buoys only at the ends, not on every individual trap. This practice aligns with the language in FGC § 9005, which refers to “every trap or string of traps,” and supports a consistent interpretation of § 9006. Therefore, the use of pop-up gear on trap strings is not only legally permissible—it is consistent with current regulatory practice.

In summary, the Commission has both the legal authority and the conservation responsibility to authorize the use of pop-up gear in the coonstripe shrimp fishery. Doing so would align with its statutory mandate to protect California’s marine wildlife and habitats, while also supporting the continued viability of the fishery through innovation and adaptive management.

### **Seasonal Closures of Biologically Important Areas Will Reduce Entanglement Risk**

Removing vertical lines from the water is the only way to significantly reduce entanglement risk while allowing fishing to continue. The Commission must prioritize removing vertical lines in areas of high biological importance to whales and sea turtles.

The best available science should be used to identify seasonal closures of the California commercial coonstripe shrimp fishery in areas of biological importance. Whales and sea turtles can be found all along the U.S. West Coast. In the waters off California’s coastline, the highly productive California Current Ecosystem supports several species of whales, sea turtles, and other marine animals.<sup>37</sup> Of the many species that depend on California’s nutrient rich waters, several are considered threatened or endangered under the Endangered Species Act (ESA): blue whales (endangered), humpback whales (endangered and threatened populations), Southern Resident killer whales (endangered), and Pacific leatherback sea turtles (endangered) and other sea turtles (threatened and endangered).

Biologically important areas for cetaceans off the California coast are well documented. As part of a national process coordinated by the National Marine Fisheries Service, scientists examined the best available science to identify Biologically Important Areas for cetaceans off the West Coast.<sup>38</sup> Using sightings data, satellite tag data, and multi-year averaged habitat-density data, Calambokidis et al. identified biologically important feeding areas.<sup>39</sup> The purpose of BIAs is to inform management decisions, including fisheries management.<sup>40</sup> Figure 1 below highlights three of the species most frequently encountered or sighted off the coast of California: blue whales, humpback whales, and fin whales.

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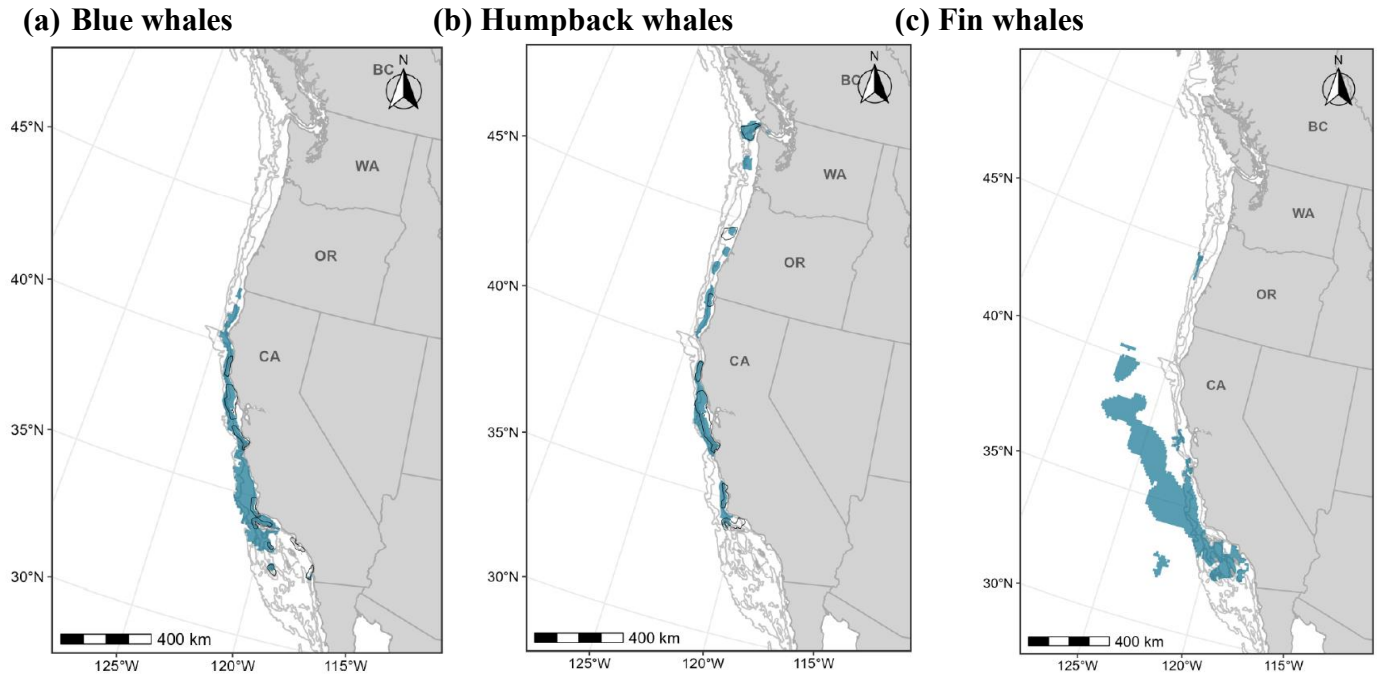
<sup>37</sup> Calambokidis 2024 at 2.

<sup>38</sup> Calambokidis 2024.

<sup>39</sup> Id.

<sup>40</sup> BIAs have been used in federal rulemaking, for example, to inform restrictions on the use of military sonar that may harm whales.





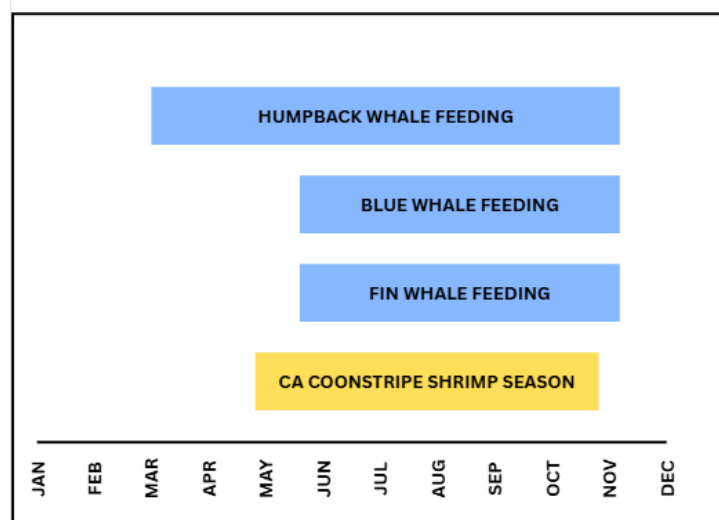
**Figure 1:** Core boundary delineation for Biologically Important Areas for feeding: (a) blue whales, (b) humpback whales, and (c) fin whales on the West Coast. Previous BIA boundaries from 2015 are outlined in black, and depth contours (200 m, 1,000 m, and 2,000 m) are shown in light grey lines.<sup>41</sup>

For these species, the waters off the U.S. West Coast provide core biologically important areas for feeding from the months of June-November for fin whales and blue whales and from March to November for humpback whales.<sup>42</sup> Morphological and behavioral features of humpback whales make these whales particularly susceptible to entanglements in fishing lines. Humpback whales have long pectoral flippers and rigid structures on their head and pectoral flippers contribute to gear becoming caught on an individual. Moreover, foraging behaviors like bubble net feeding or lunge feeding can also increase the chances of a humpback whale becoming entangled since this feeding behavior involves side-rolls and twisting while foraging in the water column.

The CA commercial coonstripe shrimp fishery operates from May 1 through October 31 in waters within the BIA boundaries and in areas that are known to have a high likelihood of interactions between fishing gear and whales. Understanding that a large numbers of whales travel to these BIAs each year to engage in feeding behaviors that put them at increased risk of entanglement highlights the urgent need to remove vertical lines from these areas.

<sup>41</sup> *Id* at 11, 15, 17.

<sup>42</sup> *Id.* at 7.



**Figure 2: Overlap of core biologically important feeding time**

Sea turtles migrate to the California coast seasonally, and their presence overlaps with the operational period of the California commercial coonstripe shrimp fishery. Among the most vulnerable are the Pacific leatherback and loggerhead sea turtles, both of which are listed under the Endangered Species Act. Pacific leatherback sea turtles, which are critically endangered, are known to forage off the California coast from May through November, primarily targeting jellyfish in nearshore and offshore waters.<sup>43</sup> These turtles undertake one of the longest migrations of any marine species, traveling across the Pacific Ocean from nesting beaches in Indonesia to feeding grounds off the U.S. West Coast. Their reliance on California waters for foraging makes this region a critical habitat for their survival. Entanglement in vertical fishing lines poses a significant threat to leatherbacks, as their large size and flipper movements can easily lead to entrapment, injury, or death. The entanglement of even one leatherback sea turtle can jeopardize their continuing existence.<sup>44</sup> In 2001, the National Marine Fisheries Service established the Pacific Leatherback Conservation Area, which prohibits fishing with drift gillnets during leatherback foraging off California from August 15 to November 15 each year.<sup>45</sup> Records document that the Dungeness crab fishery takes leatherbacks in trap pots, there is significant risk in the coonstripe shrimp fishery as well. This area should also be closed to persistent vertical lines during the same season,

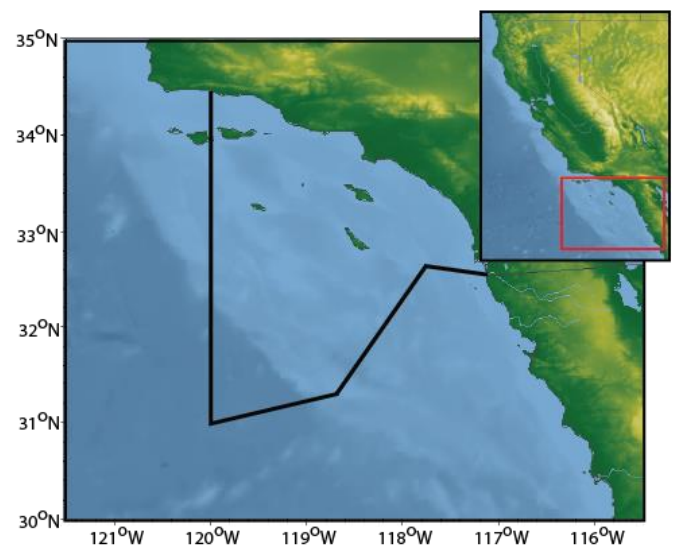
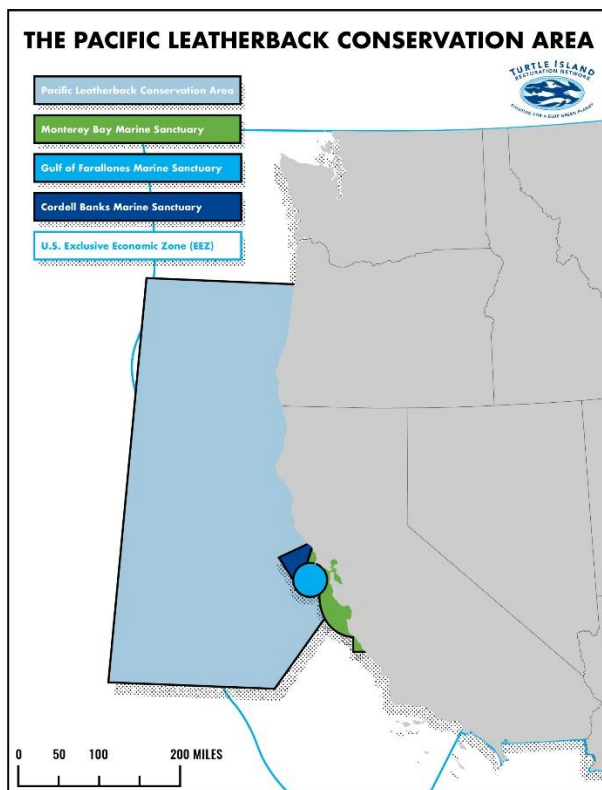
Loggerhead sea turtles, while generally found further offshore, are seasonally present off Southern California, particularly during El Niño events when warm water currents bring their prey closer to shore. During these periods, the risk of interaction with fishing gear increases substantially, and federal law already requires a closure of the California drift gillnet fishery in the Loggerhead Conservation Area when risks are high. Forecasted or occurring El Niño conditions should therefore trigger closures in the California commercial coonstripe shrimp fishery from June through August to mitigate this risk.<sup>46</sup> These closures are supported by the best available science that shows increased loggerhead presence during such events.

<sup>43</sup> Benson, Scott, Biology of Leatherback Turtles off California: Movements, Foraging Ecology, Abundance, and Status. NMFS (2019). [https://opc.ca.gov/wp-content/uploads/2019/10/D\\_Crab\\_working\\_group\\_3-5Sep2019\\_Leatherback.pdf](https://opc.ca.gov/wp-content/uploads/2019/10/D_Crab_working_group_3-5Sep2019_Leatherback.pdf).

<sup>44</sup> Curtis, K. A. et al., Estimating Limit Reference Points for Western Pacific Leatherback Turtles (*Dermochelys coriacea*) in the U.S. West Coast EEZ. PLoS One (2015), <https://doi.org/10.1371/journal.pone.0136452>.

<sup>45</sup> NMFS. Leatherback Turtle Research. 2023. <https://www.fisheries.noaa.gov/west-coast/science-data/leatherback-turtle-research>.

<sup>46</sup> To prevent jeopardy to Pacific loggerhead sea turtles the California drift gillnet fishery implements a similar closure. See e.g. 50 CFR 660.713(c)(2); Welch et al. (2018) Environmental indicators to reduce loggerhead turtle bycatch offshore of Southern California. Ecological Indicators. 98 (2019) 657–664. 10.1016/j.ecolind.2018.11.001



**Figure 3 (left): Map of Pacific Leatherback Conservation Area.<sup>47</sup>**

**Figure 4 (right): Loggerhead Conservation Area.**

Implementing seasonal closures in biologically important areas for sea turtles is essential to reduce the risk of entanglement and support the recovery of these imperiled species. The best available science—including satellite tracking, oceanographic modeling, and long-term stranding data—should guide the timing and location of these closures. Protecting these migratory species during their critical foraging periods not only fulfills legal obligations under the ESA but also contributes to the broader goal of maintaining biodiversity and ecosystem health in the California Current.

### **Alternative Fishing Gear Can Reduce the Impact of Closed BIAs on the Fishery**

Pop-up fishing gear—also known as "on-demand" or "ropeless" gear—has emerged as a promising solution to prevent the entanglement of whales and sea turtles in vertical buoy lines. The commercial coonstripe shrimp fishery uses ropes that extend from the seafloor to surface buoys, creating a persistent entanglement hazard for endangered species. Pop-up systems eliminate this risk by storing the rope and buoy with the trap on the ocean floor, only releasing them to the surface when the fisher is ready to retrieve the gear.

Field trials and pilot programs have demonstrated the effectiveness of pop-up gear in reducing entanglement risk. In California, at-sea trials showed that pop-up systems can be reliably deployed and

<sup>47</sup> Bouley, K., It's Pacific Leatherback Conservation Day October 15th: Help TIRN Save the Species from Extinction (2022). <https://seaturtles.org/its-pacific-leatherback-conservation-day-october-15th-help-tirn-save-the-species-from-extinction/>.



retrieved, even under commercial fishing conditions.<sup>48</sup> Indeed, in 2024, the largest trial of pop-up fishing gear on the West Coast proved a success—for fishers and whales. Tested by 19 commercial California Dungeness crab fishermen on over 277 fishing trips, the gear had a 98% success rate and fishers landed 229,000 lbs of crab worth \$1.6 million.<sup>49</sup>

The benefits of pop-up gear extend beyond conservation. By enabling fishing to continue in areas that would otherwise be closed to protect endangered species, pop-up systems offer economic resilience to fishing communities. They also reduce gear loss—since there are no surface buoys to be struck by vessels or removed by poachers—and help minimize marine debris, a growing concern in coastal ecosystems.<sup>50</sup>

Pop-up gear has also been tested successfully in other regions and fisheries. In Australia, rock lobster fishers already use pop-up gear. The South Atlantic Fishery Management Council is in the process of authorizing pop-up gear. And, in the North Atlantic, ropeless gear trials have been conducted in the American lobster fishery to protect the critically endangered North Atlantic right whale. These trials have shown that acoustic release systems and virtual gear marking technologies can be integrated into existing fishing operations with minimal disruption, while significantly reducing the risk of entanglement.

For this reason, the petitioner recommends that the FGC clarify its existing authority and explicitly authorize pop-up gear for use in this fishery, so that fishers may continue to fish in areas with vertical line gear restrictions in BIAs as proposed in this petition for regulations.

## **Conclusion**

The Fish and Game Commission has a responsibility and duty to protect threatened and endangered species and the habitats that they depend on. The authorization of projects and activities that jeopardize the continued existence of an endangered or threatened species undermines the California Endangered Species Act. The California coonstripe shrimp fishery is illegally harming protected marine wildlife and action must be taken to prevent whales and sea turtles from becoming entangled in fishing gear. The coonstripe shrimp fishery currently operates in waters known to be biologically important feeding and/or migratory areas for humpback whales, gray whales, fin whales, Pacific leather back sea turtles, and blue whales. With three confirmed and one suspected entanglement since 2017, coonstripe shrimp fishing gear is undoubtably harming whales, and its use must be restricted until the fishery can operate with zero take or the state receives an incidental take permit from the National Marine Fisheries Service.

To prevent further entanglements in the coonstripe shrimp fishery, the FGC should amend CCR Title 14, Section 180.15 to Title 14 California Code of Regulations Section 180.15 (c) to restrict the use of trap gear with conventional vertical buoy lines in seasonal Biologically Important Areas for feeding large whales and sea turtles and clarify existing authority and explicitly authorize pop-up fishing gear with submerged buoys.

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<sup>48</sup> Sub Sea Sonics. Large-Scale Testing of Pop-up Fishing Gear Successfully Demonstrates Potential to Re-Open the California Commercial Dungeness Crab Spring Fishery While Protecting Whales from Entanglement. (2024). [https://www.subseasonics.com/\\_files/ugd/edbdafe9716e39474ae4f57a833972d1deb0bb8.pdf](https://www.subseasonics.com/_files/ugd/edbdafe9716e39474ae4f57a833972d1deb0bb8.pdf).

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*



## **SECTION II: Optional Information**

**5. Date of Petition: May 28, 2025.**

**6. Category of Proposed Change**

☐ Sport Fishing

☒ Commercial Fishing

☐ Hunting

☐ Other, please specify: [Click here to enter text.](#)

**7. The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

☒ Amend Title 14 Section(s): **180.15**

☐ Add New Title 14 Section(s): [Click here to enter text.](#)

### **Title 14, § 180.15, Coonstripe Shrimp (*Pandalus Danae*) Fishing**

(a) No person shall use a vessel to take, possess or land coonstripe shrimp for commercial purposes unless the owner of that vessel has been issued a coonstripe shrimp vessel trap permit for that vessel that has not been suspended or revoked.

(b) The applicant for a permit shall submit the fees and the completed application, as specified in Section [705](#), to the address listed on the application.





- (c) Coonstripe shrimp may only be taken for commercial purposes by traps pursuant to this section and sections 180, 180.2, and 180.5, Title 14, CCR.
- (1) Coonstripe shrimp may not be taken from November 1 through April 30.
- (2) All coonstripe shrimp taken during the closed season shall immediately be returned to the water. No coonstripe shrimp shall be possessed or landed aboard any commercial fishing vessel during the closed season.
- (3) Coonstripe shrimp traps may be set and baited no earlier than noon on April 30.
- (4) All traps must be removed from the water prior to November 1, weather and sea conditions permitting. In the event that a permittee is unable to comply with this subsection, then the permittee must notify an officer from the department's Enforcement Branch in the nearest department office via telephone or fax not later than noon on October 31. The permittee must state the reason for the delay and the anticipated date of removal. Notification does not relieve the permittee of the responsibility for complying with this subsection unless approved by the department.
- (5) The Commission shall prohibit the take of coonstripe shrimp in Biologically Important Areas (BIA), except with authorized pop-up fishing gear pursuant to subsection (d).
- (a) A Biologically Important Area: An area or time in which threatened, endangered, or otherwise protected cetaceans or sea turtles are known to concentrate for activities related to reproduction, feeding, and migration, as well as the known ranges of small and resident populations.
- (b) The Commission shall review BIAs every two years to ensure that boundaries align with the best available science.
- (d) Pop-up Gear Authorization
- (1) Pop-up gear authorized as alternative gear in the Dungeness crab fishery pursuant to the Risk Assessment and Mitigation Program (FGC § 8276.1) shall be permitted for use in the commercial coonstripe shrimp fishery.
- (2) Within 30 days of the effective date of this regulation, and at least once per year thereafter, the department shall publish a list of authorized pop-up gear to take coonstripe shrimp for commercial purposes.
- (3) Once the department authorizes pop-up gear, it shall post a current list of all authorized pop-up gear on its website.
- (e) A control date of November 1, 2001, is established for the purpose of considering a future restricted access coonstripe shrimp trap fishery. Landings on or after this date may not apply toward a permit in a future restricted access program for the coonstripe shrimp trap fishery if one is developed.

☐ Repeal Title 14 Section(s): [Click here to enter text.](#)

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)  
Or ☐ Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency:  
**January 1, 2026 or soon after.**



**10. Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

- Alkire, C., Decline in on-demand fishing gear costs with learning. *Front. Mar. Sci.* 9:943552 (2022). <https://doi.org/10.3389/fmars.2022.943552>.
- Calambokidis J. et al., Biologically Important Areas II for cetaceans within U.S. and adjacent waters - West Coast Region. *Front. Mar. Sci.* 11:1283231. (2024). P. 7-17. <https://doi.org/10.3389/fmars.2024.1283231>.
- California Department of Fish and Wildlife. A Status Review of Pacific Leatherback Sea Turtle in California. CDFW (2021). p. 38-40. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=193844>.
- California Department of Fish and Wildlife. Commercial Coonstripe Shrimp Emergency. CDFW (2025). P. 3. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=229514&inline>.
- Derville, S. et al., Exposure of whales to entanglement risk in Dungeness crab fishing gear in Oregon, USA, reveals distinctive spatio-temporal and climatic patterns, 281 *Biological Conservation* 109989 (2023), <https://doi.org/10.1016/j.biocon.2023.109989>.
- Fisheries Off West Coast States; the Highly Migratory Species Fishery; El Nino Pacific Loggerhead Conservation Area Closure. <https://www.federalregister.gov/documents/2024/05/31/2024-11989/fisheries-off-west-coast-states-the-highly-migratory-species-fishery-el-nino-pacific-loggerhead>.
- Fluech, B and Baker, S, South Atlantic Black Seabass Ropeless (On-Demand) Gear Workshop Report, August 22-23, 2023, (2023). <https://repository.library.noaa.gov/view/noaa/67608>.
- Matzen, E. et al., Working with Northeastern United States lobster harvesters to develop acoustic trap retrieval in place of buoys and persistent vertical lines to reduce whale entanglements, 82 *ICES Journal of Marine Science* 2 (2025), <https://doi.org/10.1093/icesjms/fsaf015>.
- Meyers, H. et al., Ropeless fishing to prevent large whale entanglements: Ropeless Consortium report, 107 *Marine Policy* 103587 (2019), <https://doi.org/10.1016/j.marpol.2019.103587>.
- National Marine Sanctuary Foundation, Putting Gear to the Test: Helping Fishers Adapt Through Innovation, May 2, 2025, <https://marinesanctuary.org/blog/gear-innovations-protect-wildlife-and-help-communities-thrive/>.
- NOAA Fisheries. 2023 Stock Assessment Report: Right Whale (Eastern North Pacific Stock). NMFS. 2024. p. 289. [https://www.fisheries.noaa.gov/s3/2024-12/2023\\_SAR\\_North\\_Pacific\\_Right\\_Whale\\_Eastern\\_NP\\_Stock.pdf](https://www.fisheries.noaa.gov/s3/2024-12/2023_SAR_North_Pacific_Right_Whale_Eastern_NP_Stock.pdf).
- NOAA Fisheries. 2023 Stock Assessment Report: Blue Whale (Eastern North Pacific Stock). NMFS (2024). p. 207. <https://www.fisheries.noaa.gov/s3/2024-12/2023-sar-blue-whale-enp.pdf>.
- NOAA Fisheries. 2021 Stock Assessment Report: Humpback Whale (California-Oregon-Washington Stock). NMFS (2022). p. 178-179. <https://media.fisheries.noaa.gov/2022-08/2021-HumpbackWhale-CaliforniaOregonWashington%20Stock.pdf>.
- NOAA Fisheries. 2023 Stock Assessment Report: Fin Whale (California-Oregon-Washington Stock). NMFS (2024). p. 215. <https://www.fisheries.noaa.gov/s3/2024-12/2023-sar-Fin-CAORWA.pdf>.
- NOAA Fisheries. 2023 Stock Assessment Report: Sperm Whale (California-Oregon-Washington Stock). NMFS (2024). p. 158-159. <https://www.fisheries.noaa.gov/s3/2024-12/2023-sar-sperm-whale-CAORWA.pdf>.
- NOAA Fisheries. 2024 West Coast Whale Entanglement Summary. NMFS (2025), p. 1. <https://www.fisheries.noaa.gov/s3/2025-04/2024-whale-entanglements-report.pdf>.
- Northeast Fisheries Science Center. On-Demand Gear Guide Development and Implementation of On-Demand Fishing in the Greater Atlantic Region. NOAA Fisheries (2021). P. 21. <https://doi.org/10.25923/dhd6-n688>.
- Seary, Rachel, et al. Revenue loss due to whale entanglement mitigation and fishery closures. *Scientific Reports* 12.1: 21554 (2022), <https://www.nature.com/articles/s41598-022-24867-2>.



- Status of the Fisheries Report. California Department of Fish and Game. (2008). P. 1. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=34427>.
- Sub Sea Sonics, Large-Scale Testing of Pop-up Fishing Gear Successfully Demonstrates Potential to Re-Open the California Commercial Dungeness Crab Spring Fishery While Protecting Whales from Entanglement, 2024. [https://www.subseasonics.com/\\_files/ugd/edbdaf\\_9716e39474ae4f57a833972d1deb0bb8.pdf](https://www.subseasonics.com/_files/ugd/edbdaf_9716e39474ae4f57a833972d1deb0bb8.pdf).
- Welch et al. (2018) Environmental indicators to reduce loggerhead turtle bycatch offshore of Southern California. Ecological Indicators. 98 (2019) 657–664. <https://doi.org/10.1016/j.ecolind.2018.11.001>.
- §226.207 Critical habitat for leatherback turtles (*Dermochelys coriacea*). <https://www.ecfr.gov/current/title-50/section-226.207>.

**11. Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

The proposed regulation change could have a fiscal impact on individuals participating in the coonstripe shrimp fishery. The goal of the proposed changes is to allow fishing to continue without interruption due to whale and sea turtle entanglement risk. Often reducing entanglement risk includes management measures that restrict fishing effort. The revenue loss seen in other fisheries due to closures<sup>51</sup> should motivate the use of the pop-up gear solution in the coonstripe shrimp fishery because it maximizes whale protection while allowing fisheries to continue.

The cost of pop-up gear systems are typically more expensive than conventional lines and pots used to catch coonstripe shrimp; however, the cost of pop-up gear is expected to continue to decrease as production increase and gear becomes available for commercial use.<sup>52</sup> The National Marine Sanctuary Foundation has established a gear lending library to reduce financial barriers and allow fishermen to borrow and test a range of pop-up systems on their vessels.<sup>53</sup>

Adopting these regulations that move the state towards zero-mortality in the coonstripe shrimp fishery could also prevent the state from having to expend resources on emergency regulations or a permanent, more expensive risk-management regulatory scheme in response to entanglements of whales and sea turtles.

**12. Forms:** If applicable, list any forms to be created, amended or repealed:

[Click here to enter text.](#)

**SECTION 3: FGC Staff Only**

Date received: [Click here to enter text.](#)

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<sup>51</sup>

Seary, Rachel, et al. Revenue loss due to whale entanglement mitigation and fishery closures. Scientific Reports 12.1: 21554 (2022), <https://www.nature.com/articles/s41598-022-24867-2>.

<sup>52</sup> Northeast Fisheries Science Center. On-Demand Gear Guide Development and Implementation of On-Demand Fishing in the Greater Atlantic Region. NOAA Fisheries (2021). P. 21. <https://doi.org/10.25923/dhd6-n688>; Alkire, C., Decline in on-demand fishing gear costs with learning. Front. Mar. Sci. 9:943552 (2022). <https://doi.org/10.3389/fmars.2022.943552>.

<sup>53</sup> National Marine Sanctuary Foundation, Putting Gear to the Test: Helping Fishers Adapt Through Innovation, May 2, 2025, <https://marinesanctuary.org/blog/gear-innovations-protect-wildlife-and-help-communities-thrive/>.



FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition \_\_\_\_\_

Tracking Number

- ☐ Granted for consideration of regulation change