



California Department of Fish and Wildlife Final Assessment of Marine Life Entanglement Risk and Management Recommendation for the Risk Assessment Mitigation Program

Date: October 27, 2023

An initial assessment and a preliminary recommendation were developed by California Department of Fish and Wildlife's (CDFW) Marine Region for consideration by the California Dungeness Crab Fishing Gear Working Group (Working Group) for the Risk Assessment Mitigation Program (RAMP; Section 132.8, Title 14, California Code of Regulations) regarding Management Actions to address marine life entanglement risk in the commercial Dungeness crab fishery as well as Section 29.80, Title 14, California Code of Regulations (Gear Restrictions for Recreational Take of Saltwater Crustaceans). The initial assessment was shared with the Working Group on October 23, 2023, and finalized at the conclusion of the Working Group meeting which was held on October 25, 2023. For a map of the RAMP Fishing Zones, see the [Whale Safe Fisheries webpage](#).

Recommended Management Actions

Commercial Fishery:

- Season Delay: Fishing Zones 3, 4, 5, and 6
- Fishing Zones 1 and 2 will be evaluated during the next Risk Assessment, pursuant to Fish and Game Code section 8276.

Recreational Fishery:

- Fleet Advisory: Fishing Zones 1, 2, 3, 4, 5 and 6
- Crab Trap Prohibition: Fishing Zones 3 and 4

Table 1. Fishing Zones and current management status for the California commercial and recreational Dungeness crab fisheries.

Fishing Zone	Current Management Status	Proposed Management Status - Commercial	Proposed Management Status - Recreational
1	Closed	Not Assessed	Fleet Advisory
2	Closed	Not Assessed	Fleet Advisory
3	Closed	Season Delay	Crab Trap Prohibition; Fleet Advisory
4	Closed	Season Delay	Crab Trap Prohibition; Fleet Advisory
5	Closed	Season Delay	Fleet Advisory
6	Closed	Season Delay	Fleet Advisory

Management Recommendation Summary Rationale

- *Entanglements:* Humpback whale entanglements in California commercial Dungeness crab fishing gear and Unknown Fishing Gear bring the three-year rolling average Impact Score to 3.39, which exceeds the trigger defined in RAMP for the commercial Dungeness crab fishery.
- *Marine Life Concentrations:* Based on recent Marine Life Concentration surveys for Fishing Zones 1-5 conducted by NMFS on October 4-6, 2023, humpback whale sightings exceeded the Marine Life Concentration triggers for Zones 3 and 4 for the recreational and commercial Dungeness crab fisheries.

Marine Region’s final recommendation is for the Director to delay the commercial fishery in Fishing Zones 3-6, prohibit recreational crab traps in Fishing Zones 3 and 4, and issue a Fleet Advisory for the recreational fleet in Fishing Zones 1-6 until the next Risk Assessment. These recommendations are based on exceeding Marine Life Concentration data triggers and known migration patterns for humpback whales in Fishing Zones 3 and 4. In addition, the current Impact Score for the commercial fishery is 3.39, requiring Management Action.

NMFS aerial surveys observed concentrations of humpback whales along the 50m (~27 fathoms) depth contour in Fishing Zones 3 and 4. Several humpback whales were also observed off transect in Fishing Zone 1 (roughly 8-10 nautical miles offshore). Monterey Bay Whale Watch data observed an average number of humpback whales-per-half-day-trip during the last seven days (7 - 13 October 2023) of 16.2, with a peak of 25 whales observed during a half-day trip on 12 October. Additional survey data from Cascadia Research was shared during the Risk Assessment meeting on October 25, 2023. Vessel surveys conducted in Fishing Zone 3 on October 5, 10, 13, 14, and 16

observed numerous humpback whales, ranging from 35 to 89 individuals per survey. Oceanographic models for Fishing Zones 2 and 3 show high habitat compression through September 2023, further elevating entanglement risk at this time due potential compression of available forage species across fishing grounds. For Fishing Zone 6, lack of available data prior to the season opener requires Management Action, pursuant to 132.8(c)(2)(A) and 29.80(c)(7)(A).

Note: A Fleet Advisory for the recreational fishery in Fishing Zones 1- 6 is recommended based on aerial and vessel survey data and known migration patterns of humpback whales. If the Director prohibits traps, hoop nets will still be allowed, requiring increased precaution when setting gear to avoid entanglements in vertical lines.

It is anticipated that the commercial fishery delay and recreational fishery trap prohibition will be in place until at least the next Risk Assessment, expected to occur on or before November 17, 2023. That assessment will inform a potential commercial fishery opener on December 1, 2023 for all Fishing Zones, and/or a lifting of the trap restriction for the recreational fishery.

For additional information, see the Entanglement and Marine Life Concentration sections of the [Available Data & Preliminary Assessment document](#).

Alternatives Considered but Rejected

Alternative Recommendation

- The Working Group provided broad support for Marine Region's management recommendation (above) and no alternatives were considered or provided by the Group.

Alternatives Considered by Rejected

- Gear Reduction - given the current exceedance of the Impact Score and elevated risk due to concentrations of humpback whales across Fishing Zones 3 and 4, this was not the recommended Management Action.
- Depth Restriction - will not sufficiently provide protections due to distribution of humpback whales across depths and may concentrate trap gear thereby increasing entanglement risk.
- Alternative Gear - can only be authorized after April 1st.