



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

Date: April 28, 2023

An initial assessment and a preliminary recommendation were developed by California Department of Fish and Wildlife (CDFW) Marine Region staff 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 April 26, 2023 and finalized at the conclusion of the Working Group meeting which was held on April 28, 2023.

A. Confirmed Entanglements and Marine Life Concentration Triggers for Management Action, RAMP subsection (c)

Entanglements:

As of April 24, 2023, two entanglements have been reported to CDFW by NOAA for the 2022-23 season that involved unidentified gear that is of the type that is used in the commercial Dungeness crab fishery resulting in an in-season Confirmed Entanglement Impact Score of 0.76. The Impact Score for calendar year 2021 is 1.89 for humpback whales. The total Impact Score for the calendar year 2022 is 5.28 for humpback whales. Therefore, the current running 3-year average Impact Score is 2.64 for humpback whales for the years 2021-2023, which exceeds the triggers in Section 132.8(c)(1)(C)(1). Note: Entanglement data are subject to revision based on review and verification by NOAA.

Marine Life Concentrations:

CDFW and USCG aerial surveys for Fishing Zones 1, 2 and 3 did not observe humpback whales, blue whales, or leatherback sea turtles. Surveys conducted by Oregon State University across Fishing Zones 1 and 2 observed 28 humpback whales in depths ranging from 42 to 546 fathoms; a majority of those sightings occurred in Zone 1 (27 humpbacks). Monterey Bay Whale Watch data documented 25 humpback whales during a single trip and an average of 9.2 humpback whales per trip during the most recent seven-day period in Fishing Zone 4. In addition, two blue whales were observed during one of those trips on April 21, 2023. Based on historical migration patterns, blue and humpback whale migration arrivals will increase over the coming weeks and remain across California waters through at least November.

For additional details, see the Available Data document prepared for this Risk Assessment.

B. Recommended Management Action from options identified in subsection (e)

Recreational Fishery:

- **Continue statewide Fleet Advisory**
- **Effective May 15, 2023 at 12:00pm, prohibit the use of recreational traps in Fishing Zones 3-6**

Commercial Fishery:

- **Continue Fleet Advisory for Fishing Zones 1 and 2**
- **Depth Constraint of 30 fathoms effective May 15, 2023 at 12:00pm (noon)**

Management Recommendation Summary Rationale:

Two recent entanglements involving humpback whales with unknown fishing gear bring the total three-year average Impact Score to 2.64 which exceeds the Calendar Year Impact Score trigger as defined in RAMP for the commercial Dungeness crab fishery. In addition, based on recent Marine Life Concentration surveys for Fishing Zone 1, 2, 4, and 5, humpback whale sightings continue to increase and humpback whales are expected to continue to migrate into all Fishing Zones over the coming weeks. The increasing numbers of migrating whales and recent entanglements support additional management actions across the California Fishing Grounds to reduce the overall risk of entanglement.

The implementation of further management action is particularly important for the commercial fishery in Fishing Zones 1 and 2 because fishing effort remains high based on the most recent bi-weekly reporting period. As of April 16, 2023, 80 permits were active with more than 24,000 traps reported in Fishing Zone 1 and 16 permits were active reporting more than 3,000 traps in Fishing Zone 2. It should also be noted that bi-weekly reporting has not achieved 100% compliance from permitted vessels, so trap numbers are likely underestimated (bi-weekly reporting period through April 16, 2023 only achieved a 54% compliance rate). Without further restrictions in the commercial and recreational fishery, entanglement risk will increase as well as the potential for additional in-season entanglements of Actionable Species.

Therefore, CDFW Marine Region staff's final recommendation is to prohibit the use of recreational traps in Fishing Zones 3-5 effective May 15, 2023 at 12:00pm (noon). Staff also recommend implementing a 30-fathom Depth Constraint for Fishing Zones 1 and 2 effective May 15, 2023. Traps used in the commercial fishery would thereby be prohibited in waters seaward of the 30-fathom contour as defined in Title 50 of the Federal Codes of Regulations, Part 660, Section 660.71. Humpback whales are known to

migrate across a broad range of depths as they forage in the Fishing Grounds. Therefore, it is necessary to implement a Depth Constraint to limit areas where foraging humpback whales may be present. Based on historical data, humpbacks are often observed in all depths, including areas inside the 40-fathom depth contour which is often fished by the commercial fleet in the spring months. Moving gear inside the 30-fathom contour will also support a more rapid removal of gear if additional entanglements occur or if Marine Life Concentrations triggers are reached in the coming weeks. The recommendation is to also continue the Fleet Advisory for both the recreational and commercial fishery in all Fishing Zones until Fishing Zone closures/trap prohibitions are in effect statewide.

Effective May 15, 2023, at 12:00pm (noon), any commercial Dungeness Crab vessel fishing in or transiting Fishing Zones 1-2, is subject to the 30 fathom Depth Constraint. Vessels fishing shoreward of 30-fathoms as defined in Title 50 of the Federal Codes of Regulations, Part 660, Section 660.71 must carry onboard an electronic monitoring system capable of recording the vessel's location using GPS coordinates at a frequency of no less than once per minute during fishing operations. Electronic monitoring data must be made available to CDFW upon request for the duration of the fishing period and 60 days thereafter.

The above recommendations are informed by input from the Working Group, historical migration patterns, recent entanglements, and exceedance of the running three-year average entanglement Impact Score for humpback whales which requires CDFW to implement precautionary management actions to avoid additional entanglements. Both commercial and recreational fleets should be prepared to modify fishing operations to minimize risk of entanglement. Currently, the recreational crab fishery is not subject to any additional management actions in Fishing Zones 1 and 2 as recreational effort is low, as reported by CDFW enforcement. However, staff will continue to monitor whale presence and entanglement risk, and it should be noted that the Director may implement a trap prohibition for the recreational fishery at a future date to further reduce the risk of entanglement.

While not subject to RAMP regulations, there was a recent grey whale entanglement in unidentified trap gear (likely commercial Dungeness crab trap) near Shelter Cove and a spot prawn trap gear entanglement involving a humpback whale near Moss Landing. As a result, CDFW reminds all fisherman to use best fishing practices to minimize risk of entanglement as whales begin to arrive in Fishing Zones that remain open to fishing, regardless of fishery or gear type.

Alternatives Considered but Rejected

- Gear Reduction – CDFW recommended a 50% trap reduction in its preliminary recommendation to provide additional risk reduction; the trap gear recommendation was modified after receiving input from the Working Group.

- Fishery Closure – based on available data this is not currently the recommended Management Action but based on historical migration patterns CDFW anticipates this action will likely be required in the coming weeks.
- Alternative Gear - can be authorized after April 1st, but no gear currently is authorized for the commercial Dungeness crab fishery.

