



California Department of Fish and Wildlife Final Assessment of Marine Life Entanglement Risk and Management Recommendation

Date: March 15, 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 March 13, 2023, and finalized at the conclusion of the Working Group meeting which was held on March 15, 2023.

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

Entanglements:

As of March 13, 2023, no entanglements have been reported to CDFW by NOAA for the 2022-23 season. Therefore, the in-season Confirmed Entanglement Impact Score is currently zero. 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 which includes a recently identified humpback whale entanglement documented on February 13, 2022, off Cabo San Lucas Mexico. As a result, the current running 3-year average Impact Score is 2.39 for humpback whales for the years 2021-2023. Note: Entanglement data are subject to revision based on review and verification by NOAA.

Marine Life Concentrations:

USCG and CDFW aerial surveys for Fishing Zones 1, 2, and 3 did not observe humpback whales, blue whales, or leatherback sea turtles. Monterey Bay Whale Watch data documented one and three humpbacks whales during two trips over the most recent seven-day trip period in Fishing Zone 4. Cascadia Research small vessel surveys observed four humpback whales in Monterey Bay, Fishing Zone 4.

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 Fleet Advisory for Fishing Zones 1-6**

Commercial Fishery:

- **Continue Fleet Advisory for Fishing Zones 1-6**

Management Recommendation Summary Rationale:

No Marine Life Concentrations triggers were met for Actionable Species under RAMP. Humpback whale sightings are near seasonal lows, which is a strong indication that most humpback whales remain in their southern breeding grounds. Recent Whale Alert observations do indicate an aggregation of humpback whales approximately 25 miles offshore of Morro Bay, which falls outside of the typical Dungeness crab fishing grounds. Based on available data, known historic migration patterns, and supported by the totality of Management Considerations, entanglement risk remains low for Fishing Zones 1-6. However, given the current Entanglement Impact Score CDFW's staff recommendation is to continue the Fleet Advisory for both the recreational and commercial fishery in all Fishing Zones. Statewide, both the commercial and recreational fishing fleet should remain vigilant and move or avoid setting gear in areas where whales are transiting or foraging to further minimize risk of entanglement. This is especially important given the current entanglement Impact Score for the commercial fishery. It is also anticipated that humpback whales will begin to return to areas that overlap with the commercial and recreational Dungeness crab fishery over the coming weeks and months. CDFW will then consider additional Management Actions that minimize the risk of entanglement of returning humpback whales.

Alternatives Considered but Rejected

- Fishery Closure –CDFW considered implementing a fishery closure in Fishing Zone 5 given the proximity of humpback whale sightings west of Morro Bay and known migration patterns. However, given low fishing effort (fewer than three vessels actively fishing) and resulting low risk of entanglement, CDFW is not recommending a closure at this time.
- Gear Reduction – based on available data and historic migration patterns this management action is not required.
- Depth restriction – based on available data and historic migration patterns this management action is not required.
- Alternative Gear - can only be authorized after April 1st.

