



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

Date: March 29, 2023

A preliminary assessment and 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 27, 2023 and finalized at the conclusion of the Working Group meeting which was held on March 29, 2023.

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

Entanglements:

As of March 24, 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 reported entanglement from 2022 off Mexico that was attributed to the California commercial Dungeness crab fishery. The current running 3-year average Impact Score is 2.39 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 aerial surveys for Fishing Zones 3, 4 and 5 did not observe humpback whales, blue whales, or leatherback sea turtles. Monterey Bay Whale Watch data documented one humpback whale during the most recent seven-day trip period in 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**
- **Fishery Closure for Fishing Zones 3, 4, 5 & 6 effective April 15, 2023 at 12:00pm (noon)**

Management Recommendation Summary Rationale:

Repeated storm events over the last few weeks have impacted CDFW's ability to collect and consider real-time survey data regarding presence of Actionable Species on the Fishing Grounds. In such instances, it is necessary to consider historical migration patterns and as a result CDFW anticipates the return of large aggregations of humpback whales to California waters in the coming weeks. Specifically, migrating humpbacks may return to key foraging areas in Monterey Bay (Fishing Zone 4) and the Gulf of the Farallones (Fishing Zone 3) in early to mid-April. Historical data indicate that once humpback whales begin returning to the Fishing Grounds their numbers can increase rapidly over a short time period. Allowing the commercial Dungeness crab fishery to remain open with no restrictions in Fishing Zones 3-6 creates entanglement risk as humpback whales transit and forage across those Fishing Zones.

CDFW Marine Region has revised its preliminary recommendation of a Gear Reduction to a final recommendation of a Fishery Closure in Fishing Zones 3-6, effective April 15, 2023 at 12:00pm (noon). This recommendation is informed by historical migration patterns, the documented three humpback whale entanglements in commercial Dungeness crab gear that occurred in March of 2022 in Zones 3-6, input from the Working group, 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. Effective April 15, 2023 at 12:00pm (noon), pursuant to Section 132.8 (e)(4) Title 14, CCR, take and possession of Dungeness crab is prohibited in Fishing Zones 3, 4, 5 and 6. Staff also recommend the Director authorize the Lost and Abandoned Gear Retrieval Program to begin removing commercial Dungeness crab traps left in the water beginning April 21, 2022, at 6:00am in Zones 3, 4, 5 and 6.

The final recommendation is to also continue the Fleet Advisory for both the recreational and commercial fishery in all Fishing Zones until Fishing Zone closures or a trap prohibition are in effect. Both the 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 because Marine Life Concentration triggers have not been reached. If Marine Life Concentration triggers are reached during a future risk assessment, the Director may implement a trap prohibition for the recreational fishery either by Fishing Zone or statewide. CDFW also 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. Staff have received anecdotal reports that strong winter storms may have increased the likelihood of silted in pots and the potential for lost gear which makes it essential that both fleets work proactively to help reduce risk of entanglement by removing gear from the Fishing Grounds.

Alternatives Considered but Rejected

- Depth Restriction – based on available data and historic migration patterns this management action will not sufficiently minimize risk of entanglement because humpback whales forage across all depth ranges and could concentrate trap gear thereby increasing risk.
- Gear Reduction – in consideration of the current three-year average impact score, historical migration patterns, and input from the Working Group this alternative may not provide adequate risk reduction.
- Alternative Gear - can be authorized after April 1st, but no gear currently is authorized for the commercial Dungeness crab fishery.

