



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

Date: November 21, 2022

A preliminary 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 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).

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

In-season Confirmed Entanglement accounting is not available because the fishery is not currently open. The current Impact Score for calendar year 2022 is 4.15 for humpback whales. The Impact Score for calendar year 2021 was 1.89 for humpback whales, as a result CDFW anticipates a running 3-year average Impact Score of at least 2.01 for humpback whales at the start of 2023.

- Confirmed Entanglements in California Commercial Dungeness Crab Gear during the current calendar year equal three humpback whales.
- Confirmed Entanglements in Unknown Fishing Gear reported from California during the current calendar year equal eight humpback whales (two additional entanglements are under review).

Marine Life Concentrations Surveys for Fishing Zones 3 and 4 documented aggregations of humpback whales. Marine Life Concentration triggers for each Fishing Zone based on an aerial survey and whale watch data are as follows:

- Fishing Zone 3 = 39 humpback whales
- Fishing Zone 4 = 22 humpback whales and weekly average was 11.9 humpback whales

No triggers were reached for Fishing Zones 1 and 2. Fishing Zones 5 and 6 had insufficient data to inform this risk assessment. Only a partial survey of Zone 5 was conducted prior to this assessment and humpback whales remain in areas north of Zone 5 and 6.

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

Recreational Fishery:

- **Crab Trap Prohibition (continued): Fishing Zones 3, 4, 5 and 6**
- **Lift crab trap prohibition for Zones 1 and 2 on November 28, 2022, at 9:00am**

Commercial Fishery:

- **Season Delay (continued): Fishing Zones 3, 4, 5 and 6 (no delay Fishing Zones 1-2)**

Fishing Zones 1 and 2

CDFW Marine Region staff's final recommendation for Fishing Zones 1 and 2 is to lift the recreational trap prohibition on November 28, 2022, at 9:00 am. CDFW acknowledges that the Working Group recommends a continued trap prohibition for the recreational fishery. Staff understand concerns regarding unidentified entanglements impacting the commercial fishery, however, pursuant to subsection 29.80(c)(7), the Director shall evaluate entanglement risk based on marine life concentrations as defined in subsection 132.8(a)(10) consistent with the acceptable data and numerical triggers specified in subsection 132.8(c)(2). Available data indicate abundance of humpback whales is now below the specified triggers in Zone 1 and 2, and further actions to restrict use of recreational crab traps is no longer warranted. Therefore, staff recommend lifting the trap prohibition. CDFW is committed to working with NOAA, Oregon, Washington and the fleet to reduce the occurrence of unidentified entanglements by improving gear marking for all fisheries, including the commercial Dungeness crab fishery.

CDFW Marine Region staff's final recommendation for the commercial fishery would be to allow the season to open in these Zones due to reduced entanglement risk. However, the commercial fishery opener in Fishing Zones 1 and 2 will be delayed pursuant to Fish and Game Code Section 8672.2 due to quality testing results until at least Dec 16, 2022.

Fishing Zones 3, 4, 5, and 6

CDFW Marine Region staff's final recommendation for Fishing Zones 3 through 6 is continuation of the delay for the commercial fishery and recreational crab trap prohibition until the next risk assessment (expected to occur on or before Dec. 7). This recommendation is based on exceedance of Marine Life Concentration data triggers for humpback whales in Fishing Zones 3 and 4, and insufficient available data in Fishing Zones 5 and 6. Aerial surveys indicated large aggregations of humpback

whales in Fishing Zone 3 which is further supported by sightings data from Point Blue around the Farallon Islands. Monterey Bay Whale Watch data (standardized by NOAA) indicate above average sightings in Fishing Zone 4. Foraging activity by humpback whales poses a risk of entanglement with vertical lines and surface gear from recreational and commercial crab traps. In addition, given the current calendar year entanglement Impact Score, a precautionary management approach is warranted to further minimize entanglement risk until a majority of the whales have migrated out of or across these remaining Fishing Zones.

