



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

Date: December 16, 2022

This preliminary assessment and management recommendation has been 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 and recreational Dungeness crab fishery. CDFW will prepare a Final Assessment and Management Recommendation after review of the Working Group Recommendation and other relevant data.

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

Entanglements:

In-season Confirmed Entanglement accounting is not available because the fishery is not currently open. The current Impact Score for calendar year 2022 is 4.53 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 2.14 for humpback whales at the start of 2023.

All Fishing Zones

- 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 that could be commercial Dungeness crab gear equal six humpback whales.

Marine Life Concentrations:

Fishing Zone 3

- NMFS Aerial Survey = 29 humpback whales (21 unidentified whales were also observed with an unknown proportion that could be humpback whales)
- Cascadia Research Small Vessel Survey of Fishing Zone 3 = 24 humpback whales

Fishing Zone 4

- Surveys did not exceed triggers

#### Fishing Zone 5

- Previous surveys did not exceed triggers

#### Fishing Zone 6

- Data availability triggers no longer applicable

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

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

#### Recreational Fishery:

- **Lift Crab Trap Prohibition and Issue a Fleet Advisory for Fishing Zones 3, 4, 5 and 6**
- ***Alternative Management Action for consideration by the Working Group is to continue the trap restriction until the next risk assessment (see Section C)***

The recreational Dungeness crab fishery is currently open statewide in all Fishing Zones (see CCR Title 14, section 29.80(e)), although use of traps is temporarily restricted in Fishing Zones 3-6. CDFW Marine Region's preliminary recommendation is for the Director to lift the trap restriction in Fishing Zones 3-6 and issue a Fleet Advisory, with specific information on recent humpback whale sighting locations. The recommendation is that the recreational trap restriction be lifted on December 28, 2022, at 8:01am in Fishing Zones 3-6 and a Fleet Advisory issued.

#### Commercial Fishery:

- **Season opener with Gear 50% Gear Reduction (trap reduction) and Fleet Advisory for Fishing Zones 3, 4, 5 and 6**
- ***Alternative Management Action for consideration by the Working Group is to continue the season delay until the next risk assessment (see Section C)***

The commercial Dungeness crab fishery is currently delayed in all Fishing Zones due to crab meat quality or elevated entanglement risk. Fishing Zones 1 and 2 were evaluated during the November 21, 2022 risk assessment under RAMP and CDFW [Marine Region staff's final recommendation](#) for the commercial fishery was to allow the season to open in these Fishing Zones due to reduced entanglement risk. However, the commercial fishery opener in Fishing Zones 1 and 2 was further delayed pursuant to Fish

and Game Code Section 8672.2 (due to quality testing results) until at least December 31, 2022.

CDFW Marine Region's preliminary recommendation is for the Director to open Fishing Zones 3-6 under a Gear Reduction of 50% of allotted traps by permit tier for each permitted vessel and issue a Fleet Advisory on December 31, 2022. Buoy tags issued pursuant to Fish and Game Code 8276.5 shall be reduced consistent with the Director's declaration and all unused buoy tags shall be onboard the permitted vessel and made available for inspection by the department upon request, pursuant to Section 132.8 (e)(3) Title 14, CCR. Specific information on recent humpback whale sighting locations will be included in the Fleet Advisory. The 64-hour pre-soak would begin for the commercial fishery at 8:01am on December 28, 2022.

#### Management Recommendation Summary Rationale:

Survey data for Fishing Zones 1, 2, 3, 4 and 5 were available prior to this risk assessment. For Fishing Zone 6, RAMP regulations require a season delay until December 31 when data are unavailable. Therefore, the no data scenarios under RAMP are no longer applicable, and Fishing Zones can be evaluated based on the totality of the management considerations and previous survey data. Based on available data, and in consideration of the current entanglement Impact Score additional precaution is warranted when choosing between Management Actions under RAMP.

Aggregations of humpback whales remain in Fishing Zones 3 and 4, particularly in waters west and south of Point Reyes (Gulf of the Farallones). However, aerial and vessel-based surveys have shown a steady decline in humpback whale observations since the first risk assessment in October. NOAA aerial surveys documented a decline from 78 humpback whales to 29 humpback whales over a two-week period in Fishing Zone 3 (early December to mid-December). Cascadia vessel surveys in Fishing Zone 3 documented a decline from 64 humpback whales to 24 humpback whales along the Bodega Bay/Point Reyes transect and 28 to zero along the Gulf of the Farallones transect over one-week period based on the latest data contribution (early December to mid-December). Monterey Bay Whale Watch weekly average observations have also declined from 8.9 humpback whales in early December to 4.5 humpback whales as of this risk assessment. All available data show a continued decline and based on this trend, CDFW anticipates risk of entanglement has abated sufficiently to allow the opening of all Fishing Grounds including Fishing Zones 3-6 to the recreational and commercial trap fisheries.

In addition, based on previous data indicating arrivals of humpback whales to the winter breeding grounds, entanglement risk is significantly reduced compared to previous risk assessments, as observations on the winter breeding grounds confirm

humpback whales from California continue to arrive. However, to further minimize risk of entanglement, a 50% Gear Reduction for the commercial fishery and a Fleet Advisory for all fisheries operating in Fishing Zones 3-6 is prudent as whales continue their migration out of California waters. Therefore, the recreational and commercial crab fleets should use precaution when setting trap gear because humpback whales may still be present. 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. Ocean waters off Point Reyes have shown persistent aggregations of humpbacks during most surveys. Staff's recommendation is for the 50% Gear Reduction and Fleet Advisory to remain in place until it can be reevaluated at the next risk assessment (expected to occur in mid-January 2023) by the CDFW Director.

### C. Alternative Management Actions considered from options identified in subsection (e)

#### Alternative Recommendation

- Fishery Closure/Trap Restriction – most protective but in consideration of lowered risk, continued migration departures and economic impacts to the fleet it was not the recommended management option. However, CDFW will bring this option to the Working Group as an alternate recommendation for consideration to inform the CDFW Director's assessment of entanglement risk.

#### Alternatives Considered but Rejected

- 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.

