



**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
DECLARATION OF FLEET ADVISORY  
IN THE COMMERCIAL DUNGENESS CRAB FISHERY  
DUE TO RISK OF MARINE LIFE ENTANGLEMENT**

Pursuant to Fish and Game Code Section 8276.1(b) and California Code of Regulations, Title 14, Section 132.8 ("Section 132.8"), I find and declare that:

I

On February 17, 2022, I evaluated entanglement risk for the commercial Dungeness crab fishery pursuant to Section 132.8(b). I provided the California Dungeness Crab Fishing Gear Working Group (Working Group) and the Whale Safe Fisheries email listserv with notice of the risk assessment and all non-confidential data under consideration on February 11, 2022. Prior to this risk assessment and management response, I considered relevant information provided to my staff. The Working Group met on February 15, 2022 to discuss the risk assessment but did not provide a written recommendation.

II

On January 27, 2022, a humpback whale was confirmed entangled in unidentified fishing gear off Cypress Point in Monterey. Pursuant to Section 132.8(c)(1)(B) I must implement a Fishing Zone closure or other protective management action.

III

Upon evaluation of the management considerations pursuant to Section 132.8(d), I have determined that the management action listed below protects [Actionable Species] based on the best available science. Additional information on the relevant management considerations is provided in the attachment to this declaration

IV

**THEREFORE**, under the authority granted by Fish and Game Code Section 8276.1(b) and Section 132.8 of Title 14 of the California Code of Regulations, I am implementing the following management action:

1. Fleet Advisory for the commercial Dungeness crab fishery in all Fishing Zones (Zones 1-6). The fishery is encouraged to report entangled whales to the United States Coast Guard or 1-877-SOS-WHALE and to review the Best Practices Guide during the season and when moving gear to a new Fishing Grounds.

This management action is in effect until lifted or modified. The next risk assessment is expected to occur on or around March 17, 2022.

Updates and material regarding future entanglement risk evaluations in the commercial Dungeness crab fishery will be made available on the [Department's Whale Safe Fisheries web page.](#)

[web page.](#)



Charlton H. Bonham, Director

2/17/22 7:55 PM

Date/Time

ATTACHMENT TO DIRECTOR FEBRUARY 17, 2022, DECLARATION OF FISHERY  
FLEET ADVISORY IN THE COMMERCIAL DUNGENESS CRAB FISHERY DUE TO RISK  
OF MARINE LIFE ENTANGLEMENT

Information referenced in this Attachment is further described in the Data Summary Compilation dated February 15, 2022, and located at the Department's Whale Safe Fisheries website (<https://wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries>), which to the Department's knowledge represents the best available science informing the management considerations in Section 132.8(d).

**Information Supporting Trigger for Management Action Under Section 132.8(c)**

**Confirmed Entanglements:**

- **Fishing Zone 4:** January 27, 2021 – confirmed entanglement of humpback whale in unknown fishing gear off Cypress Point in Monterey

**Relevant Management Considerations Under Section 132.8(d)**

**1. Working Group Management Action Recommendation and Best Available Science Made Available to the Department**

The Working Group did not provide an alternative management recommendation.

**2. Information from NOAA**

No additional information was made available for this risk assessment.

**3. Effectiveness of Management Measures to Minimize Entanglement Risk**

Given the low abundance of humpback whales in the Fishing Grounds, it is not possible to identify an appropriate depth-based closure to reduce what is an already low co-occurrence risk. Similarly, a fishery closure or vertical line reduction is unnecessary given the low abundance of humpback whales and over all low entanglement risk. A Fleet Advisory is sufficiently protective of Actionable Species within the Fishing Grounds.

**4. Total Economic Impact to the Fleet and Fishing Communities**

Total economic costs are considered when deciding between management measures that equivalently reduce entanglement risk. A Fleet Advisory will have the minimal to no impact on the fleet and fishing communities when compared to a Fishing Zone closure or a Depth Restriction.

**5. Data Availability Within and Across Fishing Zones**

Department aerial survey data are available for Fishing Zones 3 and 4, and Monterey Bay Whale Watch (MBWW) data are available for Fishing Zone 4.

## **6. Known Historic Marine Life Migration Patterns**

Based on historic migration patterns, the Department expects a majority of humpback whales to still be located on breeding grounds off the coast of Mexico and Central America. This aligns with the available data from aerial surveys and MBWW.

## **7. Fishing Season Dynamics**

Weekly total landing volume has decreased since the beginning of January, with the highest harvest coming from Fishing Zone 3, followed by Fishing Zone 1. So far, 67% of the total volume harvested for this season has been from Fishing Zone 1, with 29% from Fishing Zone 3 and less than five percent coming from each of the other Fishing Zones. Weekly vessel activity and number of landings has also declined since the beginning of January, with the highest activity in Bodega Bay, San Francisco, Crescent City, and Trinidad (Figure 4). Overall, 42% of the total volume harvested for this season has been landed into Crescent City, with 20% landed into Eureka, 11% each landed into San Francisco and Half Moon Bay, seven percent landed into Bodega Bay, six percent landed into Trinidad, and less than five percent landed into Fort Bragg, Monterey, and Morro Bay. Looking at vessel activity by port over the course of the season, the highest activity has been in Crescent City (82 vessels) and Eureka (67 vessels), followed by San Francisco (53 vessels), Half Moon Bay (53 vessels), and Bodega Bay (51 vessels; Figure 5). Vessels have also made landings into Fort Bragg (30), Trinidad (22), Monterey (14), and Morro Bay (3).

## **8. Known Distribution and Abundance of Key Forage**

Numerous bait balls presumed to be schooling fish were observed during the Department's aerial survey.

## **9. Ocean Conditions**

As of February 10, 2022 La Niña conditions are expected to continue into the Northern Hemisphere spring (77% change during March-May) and then transition to ENSO neutral (56% change during May-July). Due to cool SST conditions, the HCI is above average in the north and average in the central region (increasing thermal habitat area and low impact of compression nearshore). This trend is anticipated to continue through February and early March.

## **10. Current Impact Score Calculations**

- a. Fishing Season – 0.38

b. Calendar Year – 0.38

## **11. Marine Life Concentrations and Distribution During the Current Fishing Season**

Based on Department aerial surveys and MBWW data, few whales are observed on the Fishing Grounds.

### **Chosen Management Action and Rationale**

Based on the management considerations outlined above, the Director will implement a Fleet Advisory statewide (Fishing Zones 1-6).

The confirmed entanglement in unidentified fishing gear requires the Department to evaluate entanglement risk and take an appropriate management response. Based on the available information, a Fleet Advisory is protective of Humpback whales. Both aerial surveys and MBWW data show low numbers of humpback whales in the Fishing Grounds, which is consistent with historic migration patterns. Furthermore, fishery participation is decreasing, and it is anticipated that fishing effort will continue to decline into the spring months, reducing the likelihood of co-occurrence between commercial crab traps and Actionable Species. A Fleet Advisory will also alert fishery participants and other mariners to increase entanglement detection and the potential for an entanglement response team to disentangle the animal

Fishing Zone 4 reached a confirmed entanglement trigger, leading to analysis of the management considerations under Section 132.8(d) and appropriate management response under Section 132.8(c). Those sections anticipate a broader analysis of the factors impacting entanglement risk statewide. Although no triggers for management action were met in Fishing Zones 1, 2, 3, 5, and 6, commercial fleets should still use caution when setting gear in those areas. A Fleet Advisory under Section 132.8(e) is not necessarily limited to a single Fishing Zone, and compliance with best management practices throughout the state will ensure that entanglement risk continues to remain low for any remaining Humpback whales in those Fishing Zones. The Department will also issue a press release to alert all fisheries and mariners to be on the look out for entangles whales and report them as quickly as possible.