



**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
DECLARATION OF STATEWIDE FISHERY CLOSURE  
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 April 6, 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 April 4, 2022. Prior to this risk assessment and management response, I considered relevant information provided to my staff. The Working Group met on April 5, 2022 to discuss the risk assessment.

II

On March 25, 2022, in response to confirmed entanglements of Humpback whales in Fishing Zones 3 and 4, I implemented a fishery closure in Fishing Zones 3, 4, 5, and 6. Those Fishing Zones will close to commercial fishing activity starting at 12:00PM (noon) on April 8, 2022.

III

Two additional Humpback whale entanglements have since been confirmed by the National Marine Fisheries Service (NMFS). On March 30, 2022, a Humpback whale was confirmed entangled in California commercial Dungeness crab gear in Fishing Zone 3 (originally reported on March 28, 2022). On March 30, 2022, a Humpback whale was confirmed entangled in Unknown Fishing Gear in Fishing Zone 4 (originally reported on March 21, 2022). The National Marine Fisheries Service (NMFS) has confirmed that these entanglements represent distinct entanglements from those previously confirmed.

IV

The current Impact Score Calculation for the 2021-2022 commercial Dungeness crab Fishing Season is 3.01. Pursuant to Section 132.8(c)(1)(B)(1), I must close the remainder of the Fishing Season statewide.

V

Pursuant to Fish & Game Code Section 9002.5(b)(1)(A)(ii) and implementing regulations in Section 132.7 of Title 14 of the California Code of Regulations, I may authorize retrieval operations under the Lost or Abandoned Dungeness Crab Trap Gear Retrieval Program when take of crab is restricted pursuant to Section 132.8.

VI

Pursuant to Section 132.8(e)(5), I must allow use of any authorized Alternative Gear during a closure on April 1 or later.

VII

**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. Fishery Closure for commercial Dungeness crab for the remainder of the 2021-2022 season in Fishing Zones 1 and 2 starting at 12:00PM (noon) on April 20, 2022. All Dungeness crab traps must be removed from ocean waters in those Fishing Zones by then, and the take and possession of Dungeness crab is therefore prohibited after 12:00PM on April 20, 2022. This closure does not apply to fishing activity with authorized Alternative Gear types as stated below.
2. Retrieval operations under the Lost or Abandoned Dungeness Crab Trap Gear Retrieval Program may begin in Fishing Zones 1 and 2 on April 27, 2022, at 12:00PM.
3. Authorized Alternative Gear may be used in all closed Fishing Zones. Currently there are no authorized Alternative Gear types. If an Alternative Gear type is authorized before the statutory season closure dates, it may be used for take of commercial Dungeness crab.
4. The Fishery Closure and associated management actions for Fishing Zones 3, 4, 5, and 6 as implemented by my March 25, 2022, declaration remain in place.

Additional information on the Actionable Species entanglements are provided in the attachment to this declaration.

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](#).

  
Charlton H. Bonham, Director

4/6/22 7:48am PT  
Date/Time

ATTACHMENT TO DIRECTOR APRIL 6, 2022 DECLARATION OF FISHERY CLOSURE 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 April 4, 2022, and located at the Department's [Whale Safe Fisheries website](#), 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 For 2021-2022 Fishing Season by date reported, and associated Impact Score:**

- January 27, 2022 – Confirmed entanglement in Unknown Fishing Gear.
- March 11, 2022 – Confirmed entanglement in California commercial Dungeness crab gear.
- March 19, 2022 – Confirmed entanglement in California commercial Dungeness crab gear.
- March 21, 2022 – Confirmed entanglement in Unknown Fishing Gear.
- March 28, 2022 – Confirmed entanglement in California commercial Dungeness crab gear.

**Impact Score Calculation for 2021-2022 Fishing Season: 3.01**

**Chosen Management Action and Rationale**

Based on the management trigger outlined above, the Director will implement a Fishery Closure in Fishing Zones 1 and 2. Any Authorized Alternative Gear will be allowed to be used in the closed Fishing Zones.

Pursuant to Section 132.8(c)(1)(B)(1), an Impact Score of three or more in a single Fishing Season requires the Director to close the remainder of the Fishing Season statewide. The Director's March 25, 2022 declaration implemented a closure for Fishing Zones 3-6; a closure of Fishing Zones 1 and 2 is necessary to complete the statewide fishery closure required by Section 132.8.



# California Department of Fish and Wildlife Assessment of Marine Life Entanglement Risk and Required Management Recommendation under RAMP

Date: April 4, 2022

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

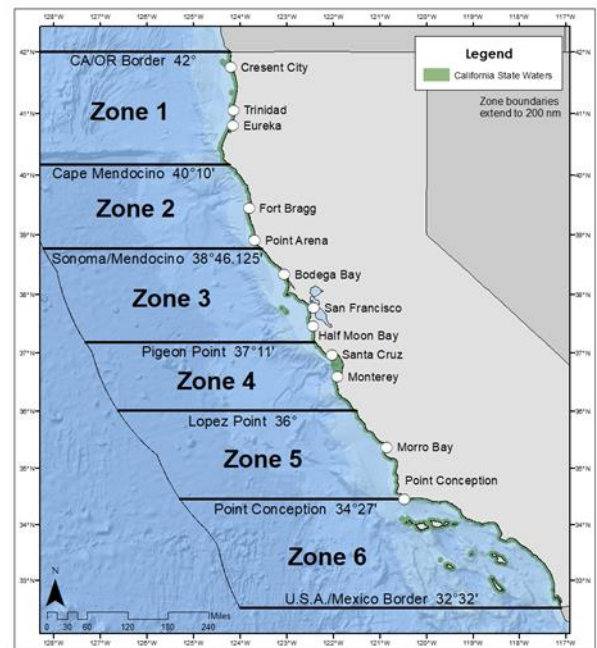
### Commercial Fishery:

- **Fishery Closure: Fishing Zones 1 and 2 – effective April 20, 2022 at 12:00pm (noon)**

### Recreational Fishery:

- **No Management Action**

CDFW Marine Region staff's recommendation is to implement a Fishery Closure for Fishing Zones 1 and 2 triggered by an Impact Score of 3.01 caused by three confirmed humpback entanglements in commercial Dungeness crab gear and two confirmed entanglements in Unknown Fishing Gear that could be California commercial Dungeness crab fishing gear during the 2021-22 fishing season. RAMP regulations require a non-discretionary Fishery Closure when an Impact Score of three or more is reached within any Fishing Season. Staff's recommendation is to implement the Fishery Closure for Fishing Zones 1 and 2 beginning April 20, 2022, at 12:00pm (noon). In addition to the Fishery Closure, staff recommend the Director authorize the Lost or Abandoned Commercial Dungeness Crab Trap Gear Retrieval Program to begin on April 27, 2022, at 12:00pm (noon) for Fishing Zones 1 and 2. Authorization of this program will further reduce entanglement risk by removing lost or abandoned gear.



CDFW will continue to monitor marine life concentrations to inform management actions for the recreational crab fishery. The recreational crab fishery is not currently subject to a restriction at this time because Marine Life Concentration triggers have not been reached. The recreational fleet should however implement best fishing practices and remove all gear promptly once they no longer intend to fish for crab to further minimize risk of entanglement. If Marine Life Concentration triggers are reached during a future risk assessment, the Director may implement a trap restriction for the recreational fishery either

by Zone or statewide.

CDFW will continue to monitor all available data to inform the next risk assessment for the recreational fishery (expected to occur no later than May 3, 2022 as data becomes available).

## B. Marine life entanglement risk, relative to the triggers in subsection (c)

### Confirmed Entanglements in California Commercial Dungeness Crab Gear

#### Confirmed Entanglements in California Commercial Dungeness Crab Gear

- During the current Fishing Season: 3 humpback whales
- During the current calendar year: 3 humpback whales
- During the 2021 calendar year: 1 humpback whale

#### Confirmed Entanglements in Unknown Fishing Gear reported from California:

- During the current Fishing Season: 2 humpback whales
- During the current calendar year: 2 humpback whales
- During the 2021 calendar year: 3 humpback whales

## 2021-22 Risk Assessment: Available Data

Last updated: April 4, 2022

Given the short amount of time elapsed since the March 25, 2022 Risk Assessment, CDFW has prepared an abbreviated version of the typical Available Data document which only includes updated information regarding Confirmed Entanglements. For relevant context regarding Marine Life Concentrations and the various management considerations, please see the [March 22, 2022 Available Data document](#).

### TRIGGERS REQUIRING MANAGEMENT ACTION

#### Confirmed Entanglements: §132.8(c)(1)\*

*Data provided by: Lauren Saez and Dan Lawson, National Marine Fisheries Service*

As of April 4, 2022 there have been a total of five confirmed humpback whale entanglements, 0 confirmed blue whale entanglements, and 0 confirmed leatherback sea turtle entanglements reported to the West Coast Region during 2022. Humpback whale entanglements confirmed since the last risk assessment are discussed in more detail below.

On March 28, 2022 NMFS received a report of a humpback whale entanglement (20220328Mn) four miles off Moss Landing (Fishing Zone 4) which was confirmed in California commercial Dungeness crab gear. Based on fluke ID photos, NMFS has confirmed this is a distinct entanglement from those reported on March 11, March 19, and March 21, 2022 (see the [March 22, 2022 Available Data document](#) for additional details regarding these entanglements).

The humpback whale entanglement reported off Santa Cruz (Fishing Zone 4) on March 21, 2022 (20220321Mn) has now been confirmed by NMFS as an entanglement in unidentified fishing gear.

**Table 1. Actionable Species Entanglements in 2022, prepared with information shared by West Coast Region.**

Actionable Species	Number Confirmed Entanglements in California Commercial Dungeness Crab Gear	Number Confirmed Entanglements in Unknown Fishing Gear Reported off California
Humpback whales	3	2
Blue whales	0	0
Leatherback sea turtles	0	0

CDFW has assigned the following Impact Scores to humpback whale entanglements confirmed during the 2021-22 season, all of which occurred during the 2022 calendar year:

- 20220127Mn: 0.38
- 20220311Mn: 0.75
- 20220319Mn: 0.75
- 20220321Mn: 0.38
- 20220328Mn: 0.75

CDFW currently considers 20220321Mn to be a confirmed entanglement in Unknown Fishing Gear and has assigned an Impact Score of 0.38. CDFW will consider revising this Impact Score if additional information becomes available.

During 2021 and 2022, there were no confirmed entanglements of either blue whales or leatherback sea turtles in California commercial Dungeness crab gear (reported from any location) or Unknown Fishing Gear (reported from California). Therefore, the cumulative Impact Score for 2022 and the current fishing season is 0 for these two species.

**Table 2. Impact Score Calculations based on Confirmed Entanglements in California commercial Dungeness crab gear and confirmed entanglements in Unknown Fishing Gear reported off California.**

Actionable Species	Current Fishing Season Impact Score (2021-22)	Current Calendar Year Impact Score (2022)
Humpback whales	3.01	3.01
Blue whales	0	0
Leatherback sea turtles	0	0

The total calendar year impact score for 2021, and current total calendar year impact score for 2022, is provided in Table 3. CDFW will also evaluate risk based on a 3-year rolling average impact score starting with the 2023 season.

**Table 3. Impact Score Calculations based on Confirmed Entanglements in California commercial Dungeness crab gear and confirmed entanglements in Unknown Fishing Gear reported off California underlying calculation of a 3-year rolling average.**

Actionable Species	2021 Calendar Year Impact Score	2022 Calendar Year Impact Score	2023 Calendar Year Impact Score	3-Year Rolling Average
Humpback whales	1.89	3.01	NA	NA
Blue whales	0	0	NA	NA
Leatherback sea turtles	0	0	NA	NA