

## 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                     |