CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
DECLARATION OF CRAB TRAP PROHIBITION
IN THE RECREATIONAL DUNGENESS CRAB FISHERY
DUE TO RISK OF MARINE LIFE ENTANGLEMENT

Pursuant to California Code of Regulations, Title 14, Section 29.80, subsection (c)(7)
(“Section 29.80(c)(7)”), I find and declare that:

I

On April 13, 2022, I evaluated entanglement risk for the recreational Dungeness crab fishery pursuant to Section 29.80(c). I provided the Whale Safe Fisheries email listserv with notice of the risk assessment and all non-confidential data under consideration on April 11, 2022. Prior to this risk assessment and management response, I considered all relevant information provided to my staff and consulted with the designee of the President of the Fish and Game Commission.

II

NOAA-standardized data from commercial whale-watching trips in Fishing Zone 4 show increasing presence of Humpback whales, with the most recent weekly running average of 22.1 Humpback whales in Monterey Bay. Pursuant to Section 29.80(c)(7)(A)(1), I must implement a protective management action in the recreational crab fishery.

III

Aerial surveys undertaken by NOAA researchers on April 6 and 7, 2022 observed 40 and 41 whales in Fishing Zones 3 and 4, respectively. Vessel surveys by Cascadia researchers on April 6, 2022, sighted approximately 39 whales in Fishing Zone 4. Pursuant to Section 29.80(c)(7)(A)(1), I must implement a protective management action in the recreational crab fishery.

IV

Section 29.80(c)(7) requires evaluation of the information outlined in California Code of Regulations, Title 14, Sections 132.8 (“Section 132.8”). Upon evaluation of the management considerations pursuant to Section 132.8(d), I have determined that the management action listed below protects Humpback whales based on the best available science. Additional information on the relevant management considerations is provided in the attachment to this declaration.

Conserving California’s Wildlife Since 1870
THEREFORE, under the authority granted by Section 29.80(c) of Title 14 of the California Code of Regulations, I am implementing the following management action:

1. The deployment and use of crab traps is prohibited statewide beginning April 24, 2022, at 7 p.m.

This management action is in effect until the normal end of the Dungeness crab season as specified in California Code of Regulations, Title 14, Section 29.85(b)(2).

Updates and material regarding future entanglement risk evaluations in the commercial and recreational Dungeness crab fisheries will be made available on the Department's Whale Safe Fisheries web page.

Charlton H. Bonham, Director

Date/Time
ATTACHMENT TO DIRECTOR April 13, 2022 DECLARATION OF CRAB TRAP PROHIBITION IN THE RECREATIONAL 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 11, 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)

Marine Life Concentrations:

- **Fishing Zone 3**: 40 humpback whales observed by NOAA aerial survey.

- **Fishing Zone 4**: 41 humpback whales observed by NOAA aerial surveys and 39 humpback whales observed by Cascadia Research vessel surveys. Weekly average of 22.1 humpback whales in Monterey Bay based on data from Monterey Bay Whale Watch (MBWW).

Relevant Management Considerations Under Section 132.8(d)

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

   There was not a Working Group Management Recommendation made related to this action, and no other information was made available to the Department.

2. **Information from NOAA**

   No additional information was provided for this risk assessment.

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

   The only alternative management response in the recreational crab fishery is an advisory notice. Given increasing presence of whales, entanglements in the season to date, and known locations of humpback whales based on survey data, an advisory will not effectively protect humpback whales. Therefore, a recreational trap prohibition is the most effective management option.

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. At this time, only a trap prohibition will effectively reduce entanglement risk. Economic impacts from a recreational trap prohibition are unknown at this time given the lack of data on the fishery, however
businesses dependent on recreational fishing activity may be impacted. Potential access to other recreational fisheries such as salmon and groundfish may provide alternative forms of income to certain businesses.

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

CDFW and NOAA aerial survey data are available for Fishing Zones 1 through 4, and Cascadia vessel survey data and Monterey Bay Whale Watch data are available for Fishing Zone 4. Point Blue Conservation Science observation data are available for Zones 3, 4, and 6.

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

Aerial survey data and data from Monterey Bay Whale Watch (MBWW) indicate increasing Humpback whale presence in Fishing Zones 3 and 4. Based on MBWW data, the average number of whales is higher than average for this time of year, and has increased substantially in the past few weeks. Cascadia surveys observed a mix of age classes, indicating migration from winter breeding areas to summer foraging areas has begun. Furthermore, there has been an increase in sightings by trained naturalists in the Channel Islands. Based on historic migration patterns, CDFW expects a continued increase in Humpback presence statewide.

7. **Fishing Season Dynamics**

CDFW expects overall little recreational crab effort given the time of year and access to other fisheries, including salmon and groundfish.

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

Humpback whales were observed feeding on krill in deeper waters and anchovies in shallower waters. Bait balls were observed off the coast of Fishing Zone 2.

9. **Ocean Conditions**

Given typical spring upwelling patterns caused by high winds, CDFW anticipates the recreational fleet will need to closely monitor weather to successfully retrieve fishing gear.

10. **Current Impact Score Calculations**

    a. Fishing Season – 3.01 for Humpback whales; 0 for blue whales and leatherback sea turtles

    b. Calendar Year – 2022 Calendar Year – 3.01 for Humpback whales; 0 for blue whales and leatherback sea turtles.
c. 2021 Calendar Year – 1.89 for Humpback whales; 0 for blue whales and leatherback sea turtles.

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

Substantial increases in the numbers of Humpback whales in Fishing Zones 3 and 4 indicate migration is well underway. Point Blue Conservation Science observation data also indicates an increase in humpback whale presence in the Channel Islands. Whales were sighted both inshore and offshore.

Chosen Management Action and Rationale

Based on the management considerations outlined above, the Director will implement a statewide crab trap prohibition in the recreational Dungeness crab fishery through the normal end of the Dungeness crab season as specified in California Code of Regulations, Title 14, Section 29.85(b)(2).

Aerial survey, vessel survey, and MBWW data, supported by observations from Point Blue Conservation Science, indicates significant increases in Humpback whale presence over the past two weeks, posing a risk of entanglement with recreational crab traps. This is consistent with known migration patterns for humpback whales. Humpback whales have been observed foraging on krill and anchovies, both offshore and inshore. Whale presence is anticipated to increase over the coming weeks, which will increase the risk of co-occurrence of whales and recreational crab traps.

Two of the five recent humpback whale entanglements have not been identified to a fishery of origin. Additionally, entanglements occurred during timeframes when data indicated seemingly low humpback presence, which raises concerns over the level of entanglement risk from any remaining crab traps as whale presence increases over the coming weeks.

Section 29.80(c) anticipates a statewide management response to entanglement risk if best available science demonstrates a statewide action is appropriate to protect humpback whales. Given the current rise in overall humpback whale presence in the state, the anticipated continued migration of humpback whales into California waters, and the presence of suitable forage statewide, it is reasonable to anticipate humpback presence will increase statewide over the coming weeks. Therefore, a statewide trap prohibition is appropriate to further minimize entanglement risk.