



# California Department of Fish and Wildlife Final Assessment of Marine Life Entanglement Risk and Management Recommendation

Date: October 28, 2022

An initial assessment and preliminary recommendation were 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 Dungeness crab fishery as well as Section 29.80, Title 14, California Code of Regulations (Gear Restrictions for Recreational Take of Saltwater Crustaceans).

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

- In-season Confirmed Entanglement accounting is not available because the fishery is not currently open. The current Impact Score for calendar year 2022 is 4.15 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 2.01 for humpback whales at the start of 2023. This will exceed the three-year rolling average under RAMP and will require Management Action under RAMP.
  - o Confirmed Entanglements in California Commercial Dungeness Crab Gear during the current calendar year equal **three humpback whales**.
  - o Confirmed Entanglements in Unknown Fishing Gear reported from California during the current calendar year equal **eight humpback whales** (two additional entanglements are under review).
- Marine Life Concentrations Surveys across Fishing Zones 1, 2, 3, 4 and 5 documented numerous aggregations of humpback whales and some blue whales. Marine Life Concentration triggers for each Fishing Zone based on aerial and vessel-based surveys are as follows:
  - o Zone 1 = **3 blue whales**
  - o Zone 2 = **23 humpback whales**
  - o Zone 3 = **27, 43, 73, 128 humpback whales**
  - o Zone 4 = **50, 112 humpbacks whales**
  - o Zone 5 = **30 humpback whales**

See the Available Data document prepared for this Risk Assessment on the [Whale Safe Fisheries Webpage](#) under the Risk Assessment tab for additional detail.

## B. Recommended Management Actions pursuant to Sections 29.80 and 132.8

### Recreational Fishery:

- **Crab Trap Prohibition: Fishing Zone 1, 2, 3, 4, 5 and 6**

### Commercial Fishery:

- **Season Delay: Fishing Zones 3, 4, 5 and 6**

CDFW Marine Region staff's final recommendation is for the Director to delay the commercial fisheries in Fishing Zones 3 through 6 and prohibit the use of recreational crab traps in all Fishing Zones. This recommendation is based on exceedance of Marine Life Concentration data triggers for humpback and blue whales in Fishing Zones 1, 2, 3, 4 and 5, and insufficient data in Fishing Zone 6. In addition, given the current calendar year entanglement Impact Score, a precautionary management approach is warranted to minimize entanglement risk until a majority of the whales have migrated out of the area. Aerial and vessel surveys indicate a broad distribution of whales across depths and Fishing Zones with large aggregations of humpback whales in Zones 3 and 4. Foraging activity by both humpback whales and blue whales poses a risk of entanglement with vertical lines and surface gear in all Fishing Zones if the recreational season opens using crab traps on November 5, 2022, and the commercial season opens on November 15, 2022. A Fleet Advisory, Depth Constraint or Vertical Line/Gear Reduction (identified Management Actions under RAMP) would not minimize entanglement risk due to whale distribution and high historical fishing effort during the season opener for the commercial fishery. Additionally, greater than 37,000 trap validations have been sold to recreational fishers for the coming season. Management action in that fishery is limited to a trap restriction when numerical triggers (Marine Life Concentrations) are reached in RAMP. Combined fishing effort across both fisheries and the significant number of recent entanglements during and after the 2021-22 fishing season suggest that the most protective management actions are warranted (commercial season delay and recreational trap restriction).

In summary, this final recommendation is to delay the Fishing Season for the commercial fishery and prohibit the use of crab traps for the recreational fishery until the next risk assessment (expected to occur on or before November 23, 2022) to inform a potential commercial fishery for each Fishing Zone on December 1, 2022 and/or a lifting of the trap restriction for the recreational fishery in each Fishing Zone.

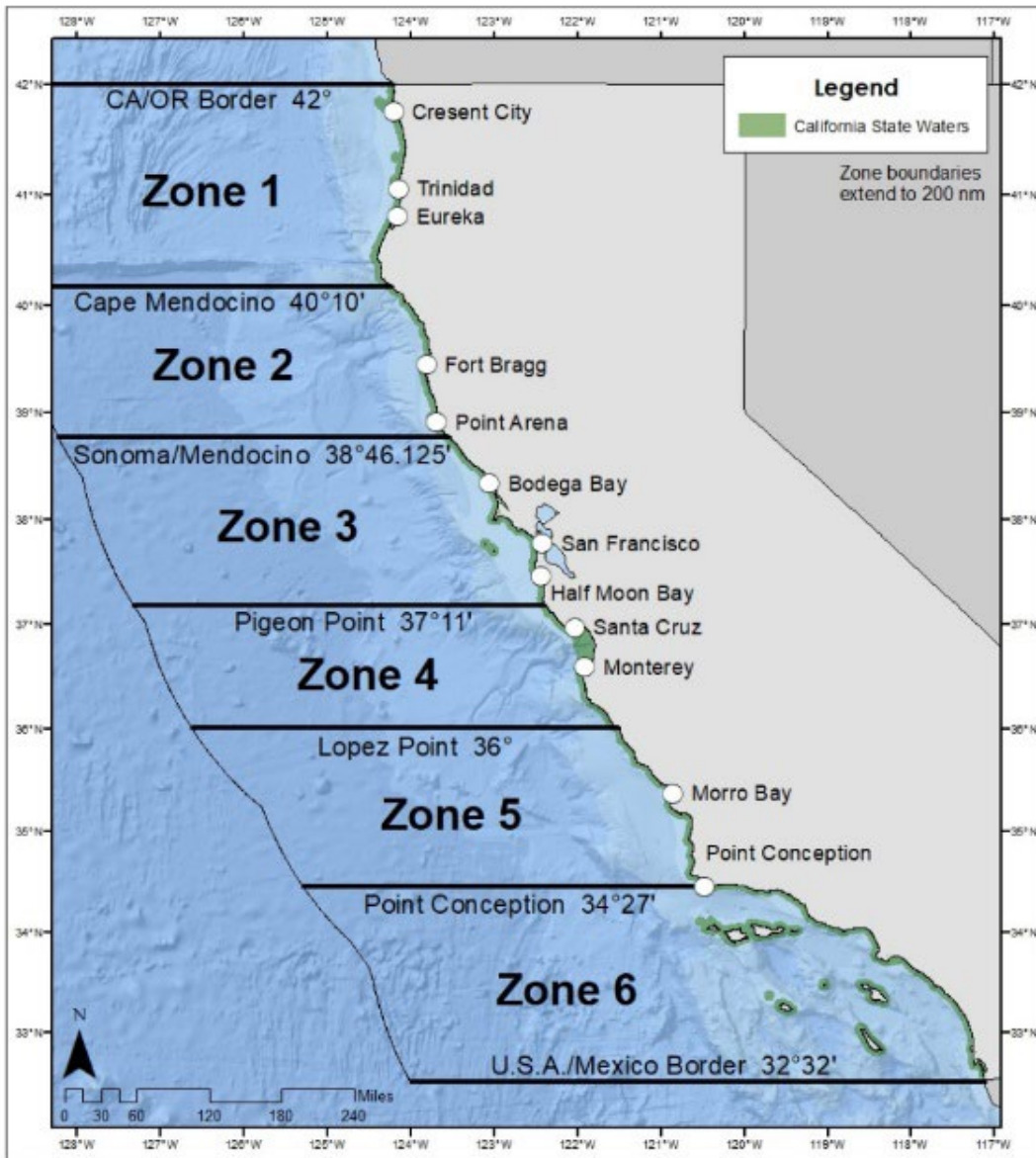


Figure 1. Map showing latitudinal boundaries of RAMP Fishing Zones 1-6. Fishing Zone 7 not pictured.