



## California Department of Fish and Wildlife Final Assessment of Marine Life

### Entanglement Risk and Management Recommendation

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Date: January 14, 2021

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 (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. The initial assessment was shared with the Working Group on January 12, 2021 and finalized at the conclusion of the Working Group meeting on January 14, 2021 based on discussions with the group.

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

Confirmed Entanglements in California Commercial Dungeness Crab Gear

- During the current Fishing Season: 0
- During the current calendar year: 0

Confirmed Entanglements in Unknown Fishing Gear reported from California:

- During the current Fishing Season: 0
- During the current calendar year: 0

Marine Life Concentrations Surveys and/or Satellite Telemetry Observations:

- Fishing Zones 1-7: No Triggers reached

#### **B. Scope of elevated risk based on Management Considerations in subsection (d)**

Section 132.8(d)(2): Information from NOAA

- No additional information was made available for this risk assessment

Section 132.8(d)(3): Effectiveness of management measures to reduce entanglement risk

- No management measure(s) recommended under this initial assessment

Section 132.8(d)(4): Total economic impact to the fleet and fishing communities

- No additional information was made available for this risk assessment and no management measure(s) were recommended for this initial assessment

Section 132.8(d)(5): Data availability within and across Fishing Zones

- Aerial surveys were conducted across Fishing Zones 3 and 4. Monterey Bay Whale Watch (MBWW) data was available for Fishing Zone 4. Additional observational data were contributed for Fishing Zones 3, 4 and 6 and Blue whale habitat predictions are available for all Fishing Zones

Section 132.8(d)(6): Known historic marine life migration patterns

- Seasonal migration of Blue and Humpback whales out of California waters to Mexico and Central America typically occurs in November and early December. Based on MBWW reports and CDFW aerial surveys the bulk of the migration out of the Fishing Grounds appears to have occurred.

Section 132.8(d)(7): Fishing Season dynamics

- Season price negotiations delayed actual start of fishing following the December 23, 2020 statewide opener. Gear setting for a majority of the fleet began on January 11, 2021, which will likely result in high gear concentrations in many areas of the Fishing Grounds.

Section 132.8(d)(8): Known distribution and abundance of key forage

- No additional data was made available for this risk assessment.

Section 132.8(d)(9): Ocean conditions

- La Niña is expected to continue through the Northern Hemisphere winter 2020-21 (~95% chance during January-March), with a potential transition to ENSO-neutral during the spring 2021 (55% chance during April-June).

#### Section 132.8(d)(10): Current Impact Score Calculation

- Impact score calculation under RAMP began on January 1, 2021. Current impact score is 0 for all three species.

#### Section 132.8(d)(11): Actionable Species migration into or out of Fishing Grounds and across Fishing Zones

- Based on aerial survey data and MBWW data, the bulk of the migration appears to have occurred out of the Fishing Grounds.

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

- **Fishing Zones 1-6:** CDFW Marine Region staff's final recommendation is for the Director to lift the Fleet Advisory in all Fishing Zones. Based on CDFW aerial survey data and as indicated by Monterey Bay Whale Watch data, Actionable Species appear to have migrated out of the Fishing Grounds. As a result, co-occurrence of commercial Dungeness crab trap gear and Humpback whales, Blue whales and Leatherback sea turtles is expected to be very low, which results in lowered entanglement risk. CDFW continues to encourage the fleet to implement fishing best practices (e.g. by minimizing knots and line scope) and to review the [Best Practices Guide](#) during the season and when moving gear to new Fishing Grounds.

CDFW Marine Region shared the Initial assessment with Working Group representatives and advisors on January 14, 2021. There was no opposition to the recommendation by Marine Region staff.

CDFW will continue to monitor all available data to inform the next risk assessment (expected to occur on or around February 16, 2021).

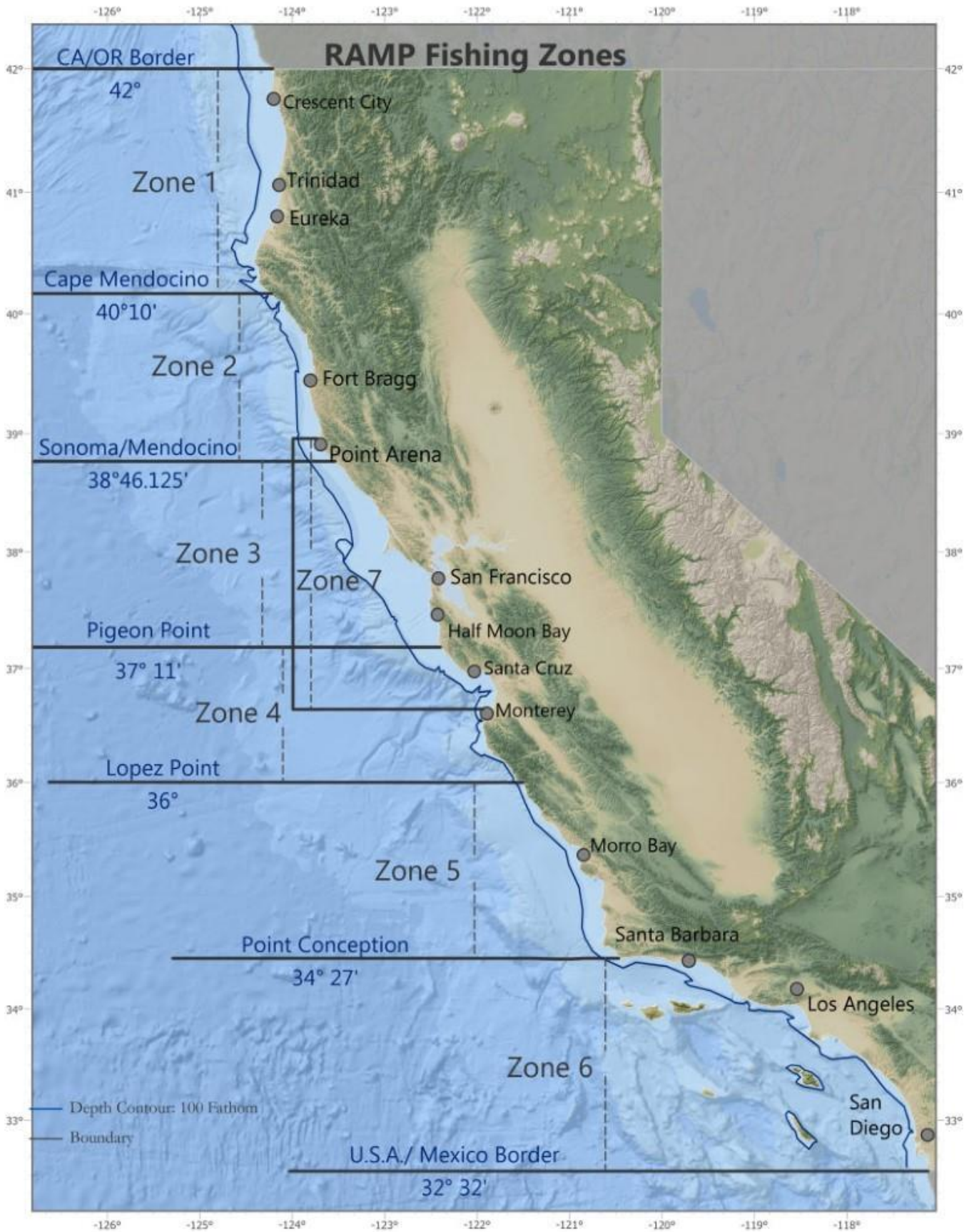


Figure 1. RAMP Fishing Zone boundaries.