

California Dungeness Crab Fishing Gear Working Group (Working Group) Risk Assessment and Mitigation Program (RAMP) 2019-20 Management Recommendations Form

Discussion Date: January 8, 2020; Recommendation Finalized: January 10, 2020

The Working Group requests this recommendation and supporting information be considered by the California Department of Fish and Wildlife (CDFW) Director prior to the January 15 risk determination.

A. Identified risk(s) and severity

Based on the information available during the January 8, 2020 discussion, the Working Group's risk assessment associated with the four RAMP factors is as follows:

- **Entanglement – Risk is low**
- **Marine Life Concentrations – Risk is low**
- **Ocean and Forage Conditions – Risk is low**
- **Fishing Dynamics – Risk is low**

Rationale supporting this risk assessment is provided in Section B.

B. Available information

The Working Group's discussion was informed by the Data Compilation¹ provided by CDFW, in partnership with Working Group advisors, on January 3, 2020, as well as information shared via email prior to and additional real-time contributions during the January 8 discussion. Rationale and key information which informed the assessment are summarized below for each factor.

Entanglement - Rationale

- There have been no confirmed entanglements in California commercial Dungeness crab gear during the current fishing season; therefore, risk is low.

¹ Data Compilation (January 3, 2020): <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175687&inline>

- There was a confirmed entanglement in California recreational Dungeness crab gear in mid-December 2019. Due to the origin and timing (before the commercial season opened) of the entanglement, the Working Group did not consider it relevant to their assessment of entanglement risk for the 2019-20 commercial Dungeness crab fishery.

Marine Life Concentrations (Humpback Whales, Blue Whales, Leatherback Sea Turtles) - Rationale

- Satellite tagging data indicates Leatherback Sea Turtles have left California waters; the animals are not anticipated to return until spring.
- As of December 23, 2019, Humpback Whale observations (from Monterey Bay Whale Watch sightings) are below the “low risk” threshold of 5 animals/week (see Figure 1). Continued observations of whales within Monterey Bay suggest a small number of Humpback Whales may remain in California through the winter. NOAA scientists suggested the overwintering of the animals off the California coast may be a result of multiple factors, including increasing populations.
- Over the last month, very few Blue Whales have been observed in Monterey Bay (see Figures 1 and 2) and none have been detected within the Gulf of the Farallones (see Figure 2).
- The Working Group will continue to review all available marine life concentrations data, including information beyond the primary species of interest (i.e., Humpback Whales, Blue Whales, and Leatherback Turtles).

Ocean and Forage Conditions – Rationale

- Updated information from the NOAA Integrated Ecosystem Assessment program² shows that the large marine heatwave has moved farther offshore and cooler sea surface temperatures are present along the California coast.
- Fishermen have observed typical, cold water forage conditions within the Gulf of the Farallones.

² <https://www.integratedecosystemassessment.noaa.gov/regions/california-current/cc-projects-blobtracker>

- Updated habitat compression, regional upwelling, and other oceanographic indices which are anticipated to inform assessment of the ocean and forage conditions risk assessment factor during spring months are expected to become available in late January to early February 2020.

Fishing Dynamics - Rationale

- The current count of 339 active commercial Dungeness crab fishing vessels represents ~ 60% of the total permits issued for the 2019-20 season.
- The Working Group notes that, due to timing of the fishery opener north of the Sonoma/Mendocino county line (December 31) and when CDFW extracted preliminary landings data (January 3), these numbers likely underrepresent current Dungeness crab commercial fishing activity.
- Low crab availability (potentially due to offshore movement and/or reduced foraging activity) and low price have prompted some vessels south of the Sonoma/Mendocino county line to begin stacking out gear and winding down their operations for the season. Continued fishery participation in these market conditions is particularly challenging for smaller vessels.
- Declining fishing activity may reduce entanglement risk from decreased gear density.
- Lower-than-expected catch during the early part of the season may result in more crabs being available for harvest during the spring.
- While it is too soon to predict how fishery operations will unfold north of the Sonoma/Mendocino county line, continued monitoring of landings data will allow the Working Group to make a more informed assessment of risk for this factor as spring approaches.

C. Management recommendation(s)

Based on the above assessment of risk across all four factors, the Working Group does not recommend any management action by the CDFW Director at this time. This recommendation applies statewide. The Working Group continues to encourage

commercial and recreational Dungeness crab fishery participants to use best practices, as outlined in their current Best Practices Guide³.

Should an entanglement be confirmed in California commercial Dungeness crab gear prior to their next scheduled assessment, the Working Group intends to reconvene to discuss an updated assessment of risk and any need for management actions.

D. Alternatives

The Working Group arrived at the above risk assessment and recommendations by consensus. No minority recommendations were expressed.

³ http://www.opc.ca.gov/webmaster/_media_library/2019/11/2019-20_BPG_Final.pdf