

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

Discussion Date: March 9, 2020 Recommendation Finalized: March 11, 2020

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

A. Identified risk(s) and severity

Based on the information available during the March 9, 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 March 5, as well as additional real-time contributions during the March 9 discussion. Rationale and key information which informed the assessment are summarized below for each factor.

Entanglement (Humpback Whales, Blue Whales, Leatherback Sea Turtles) - Rationale

- While there have been no confirmed entanglements in California commercial Dungeness crab gear during the 2019-20 season, there was a confirmed Humpback Whale entanglement in unknown gear on 2/28/2020 (reported off Monterey).

¹ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=177681&inline>

- Commercial fishing representatives stated the commercial Dungeness crab fishery primarily uses blue, green, orange and yellow lines, making it highly unlikely the 2/28/2020 entanglement is from California commercial Dungeness crab gear. The dark colored line appears to be “trucker’s rope,” and could be from another fishery (including those in Mexico) or of non-fishery origin. No trap or buoys were observed, however photographs indicate the line is weighted in some way.
- Under both the Working Group’s Risk Assessment Framework criteria (5 or more confirmed Humpback Whale entanglements in California Dungeness crab gear) and the Center for Biological Diversity v Bonham settlement criteria (one or more confirmed entanglements in California Dungeness crab gear or two or more confirmed in unknown gear), the Working Group considers risk to be low.

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

- The CDFW aerial survey on March 4, 2020 used the same transect lines as aerial surveys conducted on November 18, 2019 and December 3, 2019², other than minor modifications due to weather. Only one Humpback Whale was sighted, compared to 49 whales on November 18, 2019 and four whales on December 3, 2019. No Blue Whales were sighted during the March 4, 2020 survey.
- Monterey Bay Whale Watch (MBWW) data indicates continued low presence of Humpback Whales in Monterey Bay, with a running 2-week average of 2.5 whales per trip. This is below the Working Group’s “low risk” threshold of 5 whales.
- Vessel-based observations from the Point Blue Conservation Science Data Portal within the Greater Farallones and Monterey Bay National Marine Sanctuaries are consistent with CDFW aerial surveys and MBWW; low presence of Humpback Whales and no Blue Whales over the past month. However, National Oceanic and Atmospheric Administration staff are reporting higher numbers (> 200) of Humpback Whale sightings within the Channel Islands National Marine Sanctuary over the past 30 days, indicating that whales are present within California waters and will likely migrate into Dungeness crab fishing grounds in the coming weeks.

² <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175404&inline>

- Leatherback Sea Turtles tagged during summer 2019 are still well outside California waters, and have not yet begun their migration to central California foraging areas.

Ocean and Forage Conditions – Rationale

- Multiple oceanographic indices suggest cold, productive upwelling conditions during the spring and summer months.
- Expansive cool water habitat suggests whales will be broadly distributed upon their return to California waters, rather than compressed into nearshore habitat.
- Plentiful krill along the outer shelf break will likely draw most whales away from nearshore areas and fishing grounds, however some Humpback Whales will likely feed on abundant anchovy in nearshore waters. Aerial surveys should continue monitoring bait balls.
- Commercial fishing representatives reported cold water within Dungeness crab fishing grounds, consistent with values from the winter Habitat Compression Index.
- Anecdotal reports from whale watch operators suggest whales off of Monterey are feeding on anchovies.

Fishing Dynamics - Rationale

- CDFW commercial landing receipts indicate declining Dungeness crab vessel activity, suggesting many participants are stacking out their gear for the season and reducing the prevalence of vertical lines. This trend is also reflected in a port-based survey conducted by the California Coastal Crab Association (CCCA) which indicates additional declines in the number of deployed traps are anticipated between now and April 1. The CCCA survey also suggests that after April 1, most gear between Oregon and Point Arena will be fished inside of 30 fathoms.
- While the fishery opener was delayed, the season opened in advance of the February 1 date identified within the Working Group's Risk Assessment Framework as representing elevated risk.
- The commercial salmon fishery is expected to open May 1st, although additional discussions and analysis at the Pacific Fishery Management Council's March and

April meetings are needed before details can be confirmed. Some portion of the Dungeness crab fleet is anticipated to pull gear and switch to salmon fishing at that time.

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. The risk is low for each RAMP factor; therefore, the Working Group recommends the CDFW Director not close the season on April 1 for Districts 10, 17 and south. The Working Group also recommends the CDFW Director keeps the season open north of the Sonoma/Mendocino county line on April 1.

The Working Group did not explicitly discuss any contingency plans for responding to updated information between now and their next scheduled risk assessment on March 25. The Working Group will review any updated information across all four factors during the next scheduled risk assessment.

Based on historical whale distribution and migration patterns, the Working Group anticipates whales will return to Dungeness crab fishing grounds in the coming weeks. The Working Group recommends that the fleet be on alert and ready to respond in a timely and efficient manner to any needed management measures. The Working Group requests that the CDFW Director provide at least 72 hours notice to the fleet prior to implementation of management measures.

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. Additionally, the Working Group recommends that the fleet and public track and report lost gear to CDFW so it can be targeted by gear retrieval efforts.

The Working Group requests the agencies and factor leads continue to collect and monitor information across all four risk factors. The Working Group expressed that it is critical to conduct an aerial survey before the March 25, 2020 risk assessment. The Working Group requests the CDFW Director continue encouraging participation in the solar logger pilot

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

project. Additionally, the Working Group requests the following data be made available prior to the March 25 assessment:

- Any available data from the solar logger pilot project
- Updated fishing dynamics data
- From 2003 to 2020, the average number of Humpback and Blue Whales seen by MBWW in 15-day increments (e.g. April 1, April 15, etc.). This will provide a benchmark for whale presence in Monterey Bay against which future data can be compared.

D. Alternatives

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