

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

Discussion Date: December 4, 2019; Recommendation Finalized: December 9, 2019

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 December 4, 2019, discussion, the Working Group's risk assessment associated with the four RAMP factors is as follows:

- **Entanglement - not applicable**
- **Marine Life Concentrations**
 - **Humpback Whales - risk is "low-moderate" and trending low**
 - **Blue Whales - risk is low**
 - **Leatherback Turtles - 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 December 3, 2019 as well as real-time contributions during the December 4 meeting. Rationale and key information which informed the assessment are summarized below for each factor.

Entanglement - Rationale

- The season has not yet opened; therefore, this risk factor is not applicable.
- Entanglements prior to the season opener should not impact a preseason assessment of risk. Further discussion is needed on how to consider entanglements from previous seasons.

Marine Life Concentrations - Rationale

- Recent aerial and vessel surveys indicate a downward trend in Humpback and Blue Whale concentrations, although some animals are still present.
 - Number of Humpback Whales (49 to 4 whales) and Blue Whales (4 to 1 whale(s)) decreased between CDFW's November 18 and December 3 aerial surveys.
 - Monterey Bay Whale Watch data (through November 29) shows a 7-day running average of 9.93 Humpback Whales, at the lower end of the Working Group's moderate range (5-20 whales).
 - A Cascadia Research survey on November 22 documented 3 Blue Whales along the shelf edge, and aggregations of Humpback Whales along the vessel track.
- The single tagged Leatherback Turtle foraging off California in late November has now moved off the continental shelf.
- When determining risk for this factor, risk ranges defined for the Monterey Bay Whale Watch dataset should be considered in conjunction with findings from other data sources.

¹Data Compilation compiled for December 4, 2019 Discussion: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175404>

- Real-time data is extremely important for accurately assessing this factor.

Ocean and Forage Conditions – Rationale

- A December 3 CDFW aerial survey observed fewer bait balls and molas than during the November 18 CDFW aerial survey.
- Krill is at its lowest level since 1998²; it is unclear how this may affect Blue Whale abundance and distribution.
- Advisors reiterated that anchovy is broadly distributed and at unprecedentedly high levels of abundance. As stated in the October 15 risk assessment, this decreases risk by providing broadly dispersed foraging opportunities for Humpback Whales.
- As of October 31, the large marine heatwave was diminishing off California’s coast.
- Tracking ocean and forage indices and information will be important in the coming months.

Fishing Dynamics - Rationale

- Usal is the only location north of the Sonoma/Mendocino county line with ongoing domoic acid concerns. All areas south of the Sonoma/Mendocino county line have now tested clean, increasing the area available to fish and thereby reducing entanglement risk.
- Quality testing is ongoing north of the Sonoma/Mendocino county line. A second round of samples were collected for Eureka, Trinidad and Crescent City on December 3.
- Bodega Bay, Half Moon Bay, and Monterey Bay representatives anticipate a normal level of fishing effort when the season opens. Additional out-of-area vessels are not expected between now and the opener.
- Recreational fishing activity in Monterey Bay has been productive, but not unusually high. It is difficult to extrapolate recreational catch to overall crab distribution.

C. Management recommendation(s)

Based on the above assessment of risk across all four factors, the Working Group recommends the CDFW Director open the fishery as soon as possible, while providing the fishery sufficient notice, between now and December 15. Notice should include a 72 hour period in addition to an 18-hour pre-soak period south of the Sonoma/Mendocino county line and 64 hour pre-soak north of the Sonoma/Mendocino county line. In addition, given the continued presence of Humpback and Blue Whales within Dungeness crab fishing areas, the Working Group encourages implementation of best fishing practices³ during the opener and throughout the season.

This recommendation applies statewide, acknowledging that domoic acid test results for Usal and low market quality may necessitate additional delays north of the Sonoma/Mendocino county line. The Working Group does not intend to provide additional recommendations to the CDFW Director prior to December 15.

The Working Group’s recommendation will remain in effect until their next risk assessment, which is currently scheduled for January 8, 2020. In the interim, the Working Group supports the agencies and factor leads continuing to monitor available data streams.

D. Alternatives

² Data Compilation compiled for October 15, 2019 Discussion: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=174766&inline>

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

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