

CALIFORNIA DUNGENESS CRAB FISHING GEAR WORKING GROUP

RECOMMENDATIONS MEMO

TO: California Department of Fish and Wildlife, Charlton Bonham, Director
California Ocean Protection Council, Deborah Halberstadt, Executive Director
Joint Committee on Fisheries and Aquaculture, Mike McGuire, Chair
California Fish and Game Commission, Eric Sklar, President
Pacific States Marine Fisheries Commission, Randy Fisher, Executive Director

CC: California Ocean Protection Council, Jenn Eckerle, Deputy Director
California Department of Fish and Wildlife, Craig Shuman, Marine Region Manager
California Fish and Game Commission, Melissa Miller-Henson, Deputy Director
California Fish and Game Commission, Susan Ashcraft, Marine Advisor
National Marine Fisheries, Protected Resources Division, Penny Ruvelas, Long Beach Branch Chief
National Marine Sanctuaries, West Coast Regional Office, Lisa Wooninck, Policy Coordinator
Pacific States Marine Fisheries Commission, Dave Colpo, Senior Program Manager
California Dungeness Crab Task Force (DCTF), DCTF Administrative Team
Marine Mammal Commission, Dennis Heinemann, Senior Advisor, Fisheries and Ecosystems
Oregon Whale Entanglement Working Group, Amanda Gladics, Facilitator
Washington Whale Entanglement Working Group, Fran Recht, Facilitator

FROM: California Dungeness Crab Fishing Gear Working Group

DATE: November 12, 2019

RE: Updates and 2010-20 recommendations to advance the Risk Assessment and Mitigation Program (RAMP) and reduce whale entanglements

Since September 2015, the California Dungeness Crab Fishing Gear Working Group (Working Group) has been taking steps to actively identify and be responsive to elevated risk of entanglements. The Working Group met on September 4-5, 2019 ([meeting summary](#)) to provide input to the California Department of Fish and Wildlife (CDFW) regarding the Risk Assessment and Mitigation Program (RAMP) rulemaking and Incidental Take Permitting (ITP) process, and to discuss the 2019-20 RAMP in consideration of the recent settlement agreement. This was followed by October 15, 2019 and October 31, 2019 Preseason Risk Assessment meetings to develop recommendations for the CDFW Director in advance of the 2019-20 season. Key highlights of the Working Group's discussions, as well as next steps and recommendations from the meetings are provided below.

Preseason Risk Assessment

Based on the information available during the October 15, 2019 discussion and with consideration of each of the four RAMP factors, the Working Group developed and agreed upon the following levels of risk to be shared with the CDFW Director prior to the November 1, 2019 risk determination date as outlined in the settlement.

- Entanglement risk: low
- Marine life concentrations risk: moderate and decreasing
- Ocean conditions and forage risk: moderate/low and decreasing
- Fishing dynamics risk: low

The Working Group made the following preseason risk assessment recommendations on October 15, 2019:

- **Open 2019-20 Season:** The Working Group recommended that the Central and Northern Management Area open as scheduled without management measures (November 15 and December 1, respectively), presuming that delays are not warranted due to human health risks or low quality.
- **Voluntary Actions:** The Working Group recommended that the fleet implement voluntary actions to prevent entanglements, including implementation of the Best Fishing Practices Guide, which includes best practices for surface-gear set-up, as well as slackline reduction, and using neutral buoyancy line. The 2019-20 Best Practices Guide is available on the [Working Group's website](#).

During the follow up October 31, 2019 discussion, the Working Group evaluated new data that was available through recent aerial surveys and on the water observations. Taking into consideration this new information, a majority of Working Group participants continued to support the October 15, 2019 recommendation.

A minority (7 of 22 members) of the Working Group concurred with the risk levels specified in the October 15, 2019 recommendation. However, based on the new whale concentration data available showing that Humpback whales have not yet begun their traditional migration out of the Central Management area, they recommended a more precautionary approach of delaying the Central Management Area season opening until December 1, 2019. The concern is that opening the season on November 15 when a significant number of whales are still present, could result in an entanglement and jeopardize the rest of the 2019-20 commercial fishing season in the early months of the fishery causing broader economic impacts to the fishery than a 2-week delay.

Details of the preseason risk assessment and supporting rationale are available in the [Risk Assessment and Mitigation Program \(RAMP\) 2019-20 Management Recommendations Form](#), which was collaboratively prepared by Working Group participants and can be reviewed, along with the CDFW staff recommendation memo.

Connections: RAMP, Incidental Take Permit (ITP) Process, and Settlement Requirements

The Working Group learned about and discussed the connections across the three 'phases' of RAMP development including **Interim Management** (2019-2020), **RAMP 1** (RAMP regulation starting 2020-21 through to when RAMP 2 is available), and **RAMP 2** (starting date TBC - reflective of the National Oceanic and Atmospheric Administration (NOAA) approved Conservation Plan (CP) and ITP) ([see CDFW presentation](#)). Settlement definitions and terms were reviewed, management options were discussed, and the Working Group provided guidance where additional clarity was needed. The focus of the meeting was on the draft RAMP rulemaking and planning for the 2019-20 fishing season (interim management), which are summarized in the sections below.

Refining the RAMP

In March 2019, a settlement agreement was reached between CDFW, the Center for Biological Diversity (CBD), and the Pacific Coast Federation of Fishermen's Associations (PCFFA) as a result of a lawsuit filed by CBD in 2017. Since then, CDFW has been working to implement the terms of the agreement, by outlining the process for the 2019-20 season and continuing to refine the RAMP and integrated into regulation as mandated by Senate Bill 1309.

Interim Management (2019-20 RAMP)

Interim management of the fishery during the 2019-2020 season will be dictated by the settlement. CDFW will lead the risk assessment process per the timeline outlined in the settlement, and will work with experts to gather available data in advance of each assessment for the Working Group's review. The Working Group would be expected to develop a recommendation on options of management measures to reduce the risk of whale entanglements for the CDFW Director for consideration as he evaluates actions to reduce entanglement risk. The CDFW Director will consult with the Working Group and settlement parties and has sole authority to make decisions and implement management measures.

The Working Group developed a number of recommendations specific to the design and implementation of the 2019-20 RAMP, including:

- **Available Data:** To inform the RAMP risk assessments, timely data will be extremely important. The Working Group highlighted the importance of being able to review information in advance of making decisions and expressed concern about making recommendations with limited data. To ensure the availability of data for scheduled risk assessments, the Working Group recommends that a systematic aerial survey be conducted in mid to late-October to inform the pre-season assessment and in March to inform the mid-season assessment. Additionally, timely aerial survey and tagging information about leatherback turtle concentrations is requested. To ensure continual, proactive tracking throughout the season while being mindful of available resources and weather opportunities, the Working Group recommends the use of reconnaissance flights in addition to systematic surveys. Additionally, the Working Group recommends continuing to test electronic monitoring tools (e.g., solar loggers, etc.) to develop more robust data streams to inform risk assessments.
- **Gear Innovations:** To support the state's efforts to reduce the risk of whale entanglements in the Dungeness crab fishery, the Working Group recommends continued dialogue on exploring new gear innovations for the 2019-20 season and beyond to allow for continued fishing while whales are present. The Working Group's Gear Innovations Project Team is working to develop a comprehensive, systematic gear innovations testing project to begin in Spring 2020. The project is anticipated to include testing of Yale grip sleeves, Blue Ocean Gear technologies, Longsoaker Fishing systems, Desert Star systems, Fiomarine Buoys, SMELTs line-less rafts, and long-lining fishing gear. Additional gear innovations and set-ups may be added to the project testing design. The Project Team, in close coordination with the Working Group, will work collaboratively with others to seek funding to purchase gear innovations for testing, to pay fishermen for their participation in the project, and to fund a project coordinator to oversee and consistently implement the testing.
- **Communications:** To better prepare the fleet for the 2019-20 fishing season, the Working Group recommends the development of a newsletter to all permit holders with information about

triggers, potential management measures, and gear innovations ready for testing (e.g., the Novabraid). The Working Group also recommends the development of external communications to tell the broader public that the issue is being addressed through a collaborative process that includes fishermen, conservation organizations, researchers, and managers. The Working Group also recommends the development of a 2019-20 Best Fishing Practices Guide.

RAMP 1 (starting 2020-21): CDFW Straw Proposals, Draft RAMP Straw Proposals

As mandated by Fish and Game Code section 8276.1, CDFW, in consultation with the Working Group, is required to adopt regulations on or before November 1, 2020 to establish criteria and protocols to evaluate and respond to elevated entanglement risk (i.e., the RAMP). These regulations are expected to be in place for the 2020-21 fishing season and until NOAA issues an ITP to the state for the Dungeness crab fishery (timing TBC). During the September 4-5, 2019 meeting, CDFW presented [draft straw proposals](#) for humpback whales, blue whales, and leatherback turtles for the Working Group's review and consideration.

Some Working Group participants are concerned about the low number of marine entanglements and concentrations that would trigger management measures that could severely impact the California commercial Dungeness crab fleet. The Working Group would like managers to consider a finer-scale approach to management rather than the broad scale temporal and spatial management measures outlined in CDFW's draft straw proposals.

- **Considerations to Improve CDFW's Rulemaking Straw Proposal:** The Working Group emphasized the need to include the forage/ocean factor in the rulemaking and highlighted the importance of expeditiously identifying data and expertise to inform the factor. Improved data collection and availability as well as investigation of new data gathering tools (e.g., loggers, etc.) across all factors was also identified as a top priority to ensuring the RAMP is effective and useful. The Working Group had concerns about the quality and reliability of data being used to track whale concentrations and suggested managers look to more thorough, robust, and impartial data sources. Working Group participants requested that CDFW consider more refined spatial and temporal closures and other management measures under consideration. In parallel, the Working Group will continue engaging in exploring new gear innovations to allow for continued fishing while whales are present.

The Working Group developed a number of recommendations specific to the development of RAMP regulations, including:

- **Models:** The Southwest Fisheries Science Center and other agencies and organizations are in the processes of developing whale and forage distribution models that could have utility in the RAMP. The Working Group would like these models to be made available for consideration and testing. Once fully vetted, models should be built into the RAMP regulations to support access to real-world data availability.
- **Single-Year Buoy Tags:** Forensic analysis of marine life entanglements show that it is often difficult to know when an entanglement is the result of derelict or actively fished gear or how long the animal has been carrying the gear. Switching to single-year buoy tags for Dungeness crab gear may help inform this information gap. The Working Group recommends the state and Dungeness Crab Task Force (DCTF) explore the viability of a single-year buoy tag.

- **Funding:** To help further develop the RAMP, and specifically improved whale and sea turtle concentration data streams, the Working Group supports CDFW, in collaboration with the Ocean Protection Council (OPC) and NMFS, exploring a Section 6 funding opportunity. Although not a solution for reducing the risk of whale entanglements, the Working Group also recommends the OPC allocate \$110,000 per year for five years to provide support to the Large Whale Entanglement Response Network in support for entanglement responses, documentation, and analysis.
- **RAMP 1 Considerations:** During the course of the September 4-5, 2019 Working Group meeting, a number of details relative to the next phase of the RAMP were brainstormed (see meeting summary, link available below). The Working Group recommends memorializing and tracking these details so they may be considered for future iterations of the RAMP (i.e., RAMP 2).
- **Adaptive approach to RAMP regulations:** Members of the Working Group have expressed concern that an overly prescriptive RAMP rulemaking may bind the fishery into suboptimal decision making that is detrimental to marine life and the fishery, and would result in higher agency cost burdens to revise regulations as available information evolves and fishery and environmental dynamics continue to shift. The Working Group recommends that CDFW consider opportunities for the RAMP rulemaking to incorporate an adaptive management approach, and will provide additional guidance to support this effort.
- **Slackline Best Practices:** To help inform fishing best practices and reduce whale entanglements, the Working Group recommends the California Dungeness Crab Task Force (DCTF) help inform slackline/scope best practices when considering such variables as fishing depths, fishing at different times throughout the fishing season and along different parts of the coast, etc. Ideas generated by the DCTF will help to inform a slackline best practices guide that would be developed by the Working Group and shared with the fleet.

A more detailed summary of key themes discussed during the September meeting is also publicly available on the Working Group webpage: <http://www.opc.ca.gov/whale-entanglement-working-group/>. For more information about the Dungeness Crab Fishing Gear Working Group, please contact info@cawhalegroup.com or visit <http://www.opc.ca.gov/whale-entanglement-working-group/>.