Marine Life Entanglements: Interim Dungeness Crab Fishery Management



OVERVIEW

- Entanglement Issue Summary
- Working Group History
- Interim Management
- Habitat Conservation Plan Overview
- CDFW and Working Group Next Steps

WHALE ENTANGLEMENTS

- Occurring coastwide WA, OR & CA
 - Since 2015 = 156 confirmed in CA
 - 45 confirmed D crab fishing gear (*2 recreational)
 - CA gear set locations include: Del Norte, Sonoma, Marin, Monterey, San Francisco, San Mateo, San Luis Obispo counties

	Confirmed Entanglements (CA/OR/WA; n=187)	Confirmed Entanglements	•	% of CA Entanglements
2015	53	48	10	21%
2016	56	52	22	42%
2017	32	26	6	23%
2018	46	30	7	23%
Totals	187	156	45	29%

Source: NMFS

FISHING GEAR WORKING GROUP

- Established 2015 by the California Department of Fish and Wildlife in partnership with the California Ocean Protection Council and National Marine Fisheries Service
- Purpose address an increase in large whale entanglements in Dungeness crab fishing gear, while supporting the fishery
- Comprised of commercial and recreational fishermen, environmental organization representatives, members of the disentanglement network, and state and federal agencies

WORKING GROUP PURPOSE

- Collaboratively inform CDFW, OPC, FGC, and Legislature to reduce the risks of entanglements in Dungeness crab fishing gear
- Provide guidance to fishing industry to avoid or minimize whale entanglements
- Identify measures or experiments that can be developed to reduce risk
- Establish priorities for the Working Group to address the issue of whale entanglements in CA

WORKING GROUP COLLABORATIVE PRODUCTS

- Developed Risk Assessment and Mitigation Program (RAMP) and Management Measures Toolbox
- Projects to inform the RAMP
 - Electronic monitoring fishing effort in space and time
 - Gear innovation (ropeless gear, manila line, line profile studies, Yale grip sleeve etc.)
 - On-the-water surveillance (aerial surveys, fishermen text threads)
 - Whale forage distribution research
- Disentanglement trainings
- Best Practices Guide

LITIGATION TIMELINE CENTER FOR BIOLOGICAL DIVERSITY v. CHARLTON H. BONHAM

- October 2017 CBD filed complaint based on alleged illegal take under Section 9 Endangered Species Act
- Pacific Coast Federation of Fishermen's Associations later intervened on behalf of the Dungeness crab industry
- November 2018 CDFW announced it would seek a federal permit under the Endangered Species Act to address protected species interactions with the crab fishery
- March 2019 Parties arrived at Settlement agreement

2018/2019 Season

- The season closed statewide on April 15
- Terms and conditions that were specified:
 - Last day to land crab was 11:59pm on April 15
 - All gear needed to be out of the water by 11:59pm on April 15
 - Waivers to the 6 pot limit issued promptly to facilitate removal
- Challenges?

2019/2020 Season

- The season will close April 1 south of the Sonoma/Mendocino county line unless risk is determined to be low
- The closure can be avoided if the Director after consultation with the Working Group and the settlement parties determines the risk is low as defined in the March 15, 2020 Working Group RAMP risk assessment and management recommendation and remains low for each successive reporting date during the remainder of the 19/20 season
- The season will remain open north of the Sonoma/Mendocino county line unless risk is determined to be high

2019/2020 Season

- Either of the following prompts a district-wide closure or other management action that the Director demonstrates protects listed species based on best available science after consultation with the Working Group and settlement parties
 - One or more confirmed entangled ESA-listed species in CA Dungeness gear or two or more ESA-listed species confirmed in unknown gear
 - Presence of 20 or more ESA-listed whales in a NOAA survey or a running average of 5 or more ESA-listed whales over a one-week period

2020/2021 Season +

- The seasons will be conducted much the same as 2019/20 until the ITP is issued.
- Provision to fish with ropeless gear in otherwise closed areas
- RAMP rulemaking can increase flexibility

DEPARTMENT COMMITTMENTS

- In consultation with the Working Group, the Director determines risk and management action on these dates: November 1, December 15, January 15, February 15, March 15, April 1, April 15, May 1, May 15, June 1, June 15, July 1
- Prior to those dates, the Working Group will provide any RAMP risk assessment and management recommendation to the Director and settlement parties

DEPARTMENT COMMITTMENTS

- Submit a comprehensive draft HCP to NOAA consistent with Section 10 of the ESA, 16 USC § 1539, for commercial Dungeness crab by May 15, 2020
- Prohibit crab gear spatially and temporally or take other measures as recommended by NOAA until ITP is issued
- Complete the following rulemakings:
 - Gear retrieval, to be effective by November 15, 2019.
 - Marking for fixed gear fisheries, to be effective by November 15, 2019.
 - RAMP rulemaking this shall incorporate the elements discussed below to be effective by November 1, 2020.

DEPARTMENT COMMITTMENTS

- Improve collaboration, support, and participation in the Working Group
- Work with Working Group to evaluate Appendix A for incorporation into RAMP rule unless the Working Group demonstrates a different approach protects listed species based on the best available science
- Seek support for model development and research useful to the efforts of the RAMP
- Support development of whale safe fishing gear

RAMP RULEMAKING

- ISOR must be noticed by February 1, 2020 to be effective by Nov. 15, 2020
- To complete ISOR the following must be addressed:
 - Incorporate Appendix A
 - Refine forage model(s)
 - Conduct public outreach

INCORPORATING APPENDIX A

- Humpback, Blue, and Leatherback
- Forage Factor
- Fleet Dynamics Factor
- Whale Concentration Factor
- Entanglement Factor
- Decision Tool (rubric)
- Management Tools

FORAGE FACTOR

 Ocean Conditions, meaning prediction or other indication of ocean or forage conditions for whales, including but not limited to low krill abundance and high nearshore anchovy abundance. Until models currently under development are finalized in consultation with the Center for Biological Diversity, *Trigger for elevated risk is poor forage*.

FLEET DYNAMICS FACTOR

• <u>Fleet Dynamics</u>, meaning behavior or potential behavior of the fleet due to changes in the fishery. Until satisfactory data is otherwise available (for example solar loggers or other electronic monitoring of the fleet), *Trigger for elevated risk shall be* (1) the first two weeks of any season opener; (2) any season that opens after Feb. 1.

WHALE CONCENTRATION FACTOR

- Presence of species of concern. *Trigger for elevated risk* shall be 20 or more whales detected on any one NOAA survey in California waters, or a running average of 5 or more whales over a one-week period.
 - Once elevated risk is triggered, elevated risk shall last as follows:
 - If based on fall aerial survey data, risk shall be elevated through December 15;
 - If based on spring rock-fish data, risk shall be elevated through the remainder of the season.
 - <u>Leatherback</u> *Trigger for elevated risk* shall be NOAA tagging data that indicates a leatherback sea turtle is present in a fishing district

ENTANGLEMENT FACTOR

- <u>Number of confirmed ESA-listed entanglements</u>. *Trigger for elevated risk* shall be 1 or more entanglements of ESA-listed species in the current fishing season
 - A confirmed entanglement attributable to the CA commercial Dungeness crab fishery shall count as 1 entanglement.
 - A confirmed entanglement of a whale in an unknown gear type or a whale of unknown species shall count as 0.5 entanglement.
- <u>Leatherback</u>. *Trigger for elevated risk* shall be one or more-ESA listed turtles are confirmed entangled in CA commercial Dungeness crab gear or two or more confirmed in unknown crab gear.

DECISION TOOL (RUBRIC)

- A rubric adopted in the RAMP rule should outline a scoring system for each risk factor, and associated categories of management actions depending on overall risk score.
 - The rubric will allow for Working Group input on practical implementation of the management action.

MANAGEMENT TOOLS

- Categories of management actions will include at least one the below:
 - Modification of fishing seasons and allowable fishing areas;
 - Specifying total or per-vessel numbers of traps allowed in any given fishing area;
 - Requiring use of specialized gear designed to reduce risk of entanglement in specified areas or periods, for example no fishing unless with ropeless gear, or;
 - No action.

UNWINDING RESTRICTIONS

• Once risk factors no longer indicate to the Director an elevated entanglement risk, or if the Director determines that the management actions are not appropriate or protective of marine life, the Director, with consultation with the Working Group, shall remove any management restriction.

HABITAT CONSERVATION PLAN

- Key elements of the HCP:
 - Species and fisheries to be included
 - Humpback whale, blue whale, leatherback sea turtle
 - Commercial (and recreational?) Dungeness crab
 - Impacts of the Dungeness crab fishery on ESA-listed species
 - Biological goals and objectives for ESA-listed species
 - Avoidance, minimization and mitigation measures
 - RAMP, gear innovation, time and/or area closures, gear restrictions
 - Monitoring approach and performance metrics
 - Implementation plan, including funding and enforcement
 - Reasonable alternatives to the proposed activity

DRAFTING THE HCP

- Department will work closely with NOAA and the Working Group to develop sections of the HCP
- Public process
 - Updates posted to <u>www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-</u> Fisheries
 - Includes form to sign up for email updates
 - Public meetings, tentatively planned for:
 - September 2019: overview of HCP process
 - December 2019: discussion of avoidance, minimization, and mitigation measures
 - March 2020: comments on draft HCP

CDFW NEXT STEPS

- Settlement implementation, rulemaking and Habitat Conservation Plan (HCP) development:
- Gear retrieval program by November 15, 2019
- Fixed gear marking by November 15, 2019
- RAMP rulemaking by November 1, 2020
- Department will work with the Working Group/stakeholders to develop a draft HCP to NOAA by May 15, 2020

WORKING GROUP NEXT STEPS

- Update RAMP process, objectives, tasks for 2019-20 & 2020-21 seasons
- Develop RAMP scoring and support RAMP rulemaking
- Support HCP drafting
- Finalize Blue whale and Leatherback sea turtle risk assessment factors
- Aerial survey training
- Gear innovation support (continued testing and design)

THANK YOU

More information:

www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries

www.opc.ca.gov/whale-entanglement-working-group

