

Marine Life Entanglements: Interim Dungeness Crab Fishery Management



CA DEPARTMENT OF FISH AND WILDLIFE
WHALE SAFE FISHERIES PROGRAM

WHALE ENTANGLEMENTS

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

FISHING GEAR WORKING GROUP

- Established 2015 by the Department 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
- Establish priorities to address the issue of whale entanglements in CA
- Members represent fishing ports/communities and facilitate outreach to the fleet

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 industry
- November 2018 - CDFW announced it would seek a federal permit under the ESA to address protected species interactions with the crab fishery
- March 2019 - Parties arrived at Settlement agreement

2018/2019 Season

What the ?

- 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 Pre-emptive Elements

- 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 RAMP determines risk is low and remains low for 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 Responsive Elements

- Any of the following prompts a district-wide closure or other management action that protects listed species
 - **One** or more **confirmed** entangled ESA-listed species in **CA Dungeness gear**
 - **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**

RAMP SCHEDULE

Risk Assessment/Response

Data Evaluation	WG Recommendation Date	CDFW Determination Date	Announcement Date	Implementation Date
Concentrations, Domoic	October 31	November 1	November 4	TBD
Concentrations, Entanglement, Domoic, Quality	December 12	December 13	December 16	TBD
Concentrations, Entanglement, Domoic	January 14	January 15	January 17	TBD
Concentrations, Entanglement, Domoic, Dynamics	February 13	February 14	February 17	TBD
Concentrations, Entanglement, Dynamics	March 12	March 13	March 16	TBD
Concentrations, Entanglement, Dynamics	March 31	April 1	April 3	TBD
Concentrations, Entanglement, Dynamics	April 14	April 15	April 17	TBD
Concentrations, Entanglement, Dynamics	April 30	May 1	May 4	TBD
Concentrations, Entanglement, Dynamics	May 14	May 15	May 18	TBD
Concentrations, Entanglement, Dynamics	May 29	June 1	June 3	TBD
Concentrations, Entanglement, Dynamics	June 12	June 15	June 17	TBD
Concentrations, Entanglement, Dynamics	June 30	July 1	July 3	TBD

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

- Fleet Dynamics, 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.
 - Leatherback ***Trigger for elevated risk*** shall be NOAA tagging data that indicates a leatherback sea turtle is present in a fishing district

ENTANGLEMENT FACTOR

- Number of confirmed ESA-listed entanglements. ***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.
- Leatherback. ***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.

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.

DEPARTMENT COMMITMENTS

- Submit a comprehensive draft CP 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.

KEY ELEMENTS OF CONSERVATION PLAN

- Species and covered activities
- Impacts of fishery on ESA-listed species
- Biological goals and objectives for ESA-listed species
- Avoidance and minimization measures (RAMP)
- Monitoring approach and adaptive management
- Implementation plan, funding and enforcement
- Project alternatives (extent practicable)

IMPORTANT CP DEVELOPMENT FACTORS

- Applicant driven process
- Stakeholder involvement
- Take levels – Marine Mammal Protection Act
- Adaptive management
- Climate change
- Minimization measures (proof)
- Jeopardy standard (survival and recovery)
- NEPA and CEQA
- Alignment with OR and WA?

WORKING GROUP NEXT STEPS

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

Dungeness Crab Management Timeline

	September 2019	May 2020		November 2020		2021	2023
Working Group	Consultation and Risk Assessment						
Interim Management	Settlement						
RAMP 1	-----in development-----			RAMP 1 Management			
Conservation Plan	-----drafting-----		NMFS consultation, Jeopardy determination, NEPA and CEQA				
RAMP 2					RAMP 2 Management?		
Incidental Take Permit						Permit Issuance (TBD)	
Adaptive Mgmt./ RAMP 3?						Adaptation	
Public Involvement	Communication						

THANK YOU

More information:

- www.wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries
- www.opc.ca.gov/whale-entanglement-working-group

