



Meeting Summary

Oregon Entanglement Advisory Committee

May 2, 2024, 1 – 4:30pm

Attendance

ODFW facilitators: Brittany Harrington, Kelly Corbett, Troy Buell, Justin Ainsworth

Present members: Crystal Adams, Aaron Ashdown, Cari Brandberg, John Calambokidis, Susan Chambers, Bob Eder, Sheila Garber, Mike Giles, Scott Hartzell, Ron Mason, Joy Primrose, Jim Rice, Leigh Torres, Heather VanMeter, Justin Yager

NMFS advisors: Dan Lawson, Lauren Saez

Non-members: Eric Anderson, Caren Braby, Cody Chase, Jon Gonzalez, Megan Hintz, Ryan Howell, Morgan Ivens-Duran, Francine Kershaw, Greg Krutzikowsky, Heather Nicholson, Natasha Novikova, Lori Steele

Introduction, Recent Entanglement Record, Conservation Plan (CP) and Incidental Take Permit (ITP) Status, and Management Updates

(slides 2-8 of the [meeting presentation](#))

The Oregon Department of Fish and Wildlife (ODFW) convened the third meeting of the Oregon Entanglement Advisory Committee (OEAC) on May 2, 2024.

ODFW reviewed the OEAC purpose which is to advise ODFW on efforts to reduce the risk of marine life entanglements in Oregon Dungeness crab gear and support ODFW commitments detailed in the Oregon CP. OEAC is designed to provide ODFW with information and broad perspectives on strategies to support the co-occurrence of economically viable fixed gear fisheries and thriving marine life populations off Oregon, with a primary focus on the crab fishery and CP covered species.

ODFW described the recruitment process that will be carried out in spring/summer 2024 to add representation from two conservation organizations, one North coast industry member, and one recreational crab fishery participant to OEAC. Existing OEAC members were asked to provide ODFW with any recommendations of organizations or individuals, and to advertise recruitment notices within their networks when available.

ODFW reviewed all entanglements that occurred on the West Coast in 2023 and in Oregon in 2023 and 2024 to date. The group briefly discussed the circumstances surrounding the juvenile humpback whale entangled in Oregon crab gear in April 2024 and the limited entanglement response capacity off Oregon. The reporting party and gear owner was present and shared their experience.

ODFW provided an update on the Oregon CP and ITP application status, including coordination efforts, regulatory actions, and CP development. In response to a question about the anticipated timeline following ITP application submission, NMFS advisors described that the evaluation and public comment process will kick off quickly, but that it will be at least one year after a complete application is received. The required National Environmental Policy Act (NEPA) assessment could take 1-2 years, depending on the level of analysis that is needed.

ODFW provided an update on key management and regulatory outcomes from the Oregon Fish and Wildlife Commission meeting in August 2023. These included the evaluation of late-season risk avoidance measures, removal of the attached sunset date, and request for additional review of effectiveness after two more years, and the adoption of a surface gear maximum and enhanced derelict gear recovery incentives. ODFW outlined regulatory next steps for CP implementation including line marking and electronic monitoring. ODFW also shared that the crab season opening protocol, line marking, incentivization of derelict gear recovery, and fishery overcapitalization will be discussed with managers and industry advisors from California, Oregon, and Washington at a Tri-State Dungeness Crab Committee Meeting on May 15-16, 2024.

Oregon State University (OSU) Research Updates

Dr. Leigh Torres provided an update on ongoing research to better understand year-round whale habitat use and entanglement risk off Oregon, as well as work to assess entanglement rates based on an analysis of scarring. The research team initiated work in 2019 to build whale distribution models, predict distribution patterns off Oregon, and analyze exposure to entanglement resulting from co-occurrence with crab fishery effort, through a project called Overlap Predictions About Large whales (OPAL 1). The results of this work have been described in two published papers ([Derville et al., 2022](#) and [Derville et al., 2023](#)). A key finding is that drivers of entanglement risk are different between California and Oregon.

In 2022, the researchers initiated 'OPAL 2' which is focused on improving predictions of spatiotemporal distribution and exposure to entanglement by integrating more observational data and adding prey as a factor (forage fish and krill). Next steps include testing the predictive performance of the improved models and conducting an overlap analysis including other fixed gear fishery effort, in addition to Dungeness crab. They will also be looking at whale occurrence as a function of krill energetics and swarm characteristics.

Dr. Torres then described another project, Scar-based Long-term Assessment of Trends in whale Entanglements (SLATE), that is estimating rates of scarring on humpback whales in Oregon waters based on fluke photographs to contribute to a better understanding of undetected entanglement rates. Preliminary results to date suggest that:

- Collection of perpendicular and forward tailstock photos is important;
- Estimated scarring rates on humpback whales observed in Oregon water between 2016 – 2023 range from 25.5% to 44%;
- No spatial trend was detected within Oregon, but the researchers will continue to investigate spatial fidelity; and
- Scarring rates were higher for male humpback whales compared to females.

Dr. Torres addressed a number of clarifying questions from the group and elaborated on the usefulness and caveats to the shared information. The scarring rates do not account for where entanglements may have originated (i.e., they do not imply Oregon gear was involved, just that the animal was photographed in Oregon waters). She and other marine mammal experts from the group answered several questions about population growth trends for humpback whales

that occupy waters off the West Coast. These distinct population segments (DPSs) are generally increasing, but rates and level of certainty vary among DPSs.

Line Marking Update (slides 9-12 of the [meeting presentation](#))

ODFW provided an overview of the Department's current draft line marking proposal and updates that have been made. ODFW plans to recommend a line marking requirement for the crab fishery to the Oregon Fish and Wildlife Commission at their September 2024 meeting. ODFW requested input from this group to shape what is shared at the Tri-State Crab Committee Meeting (May 15-16, 2024).

ODFW's revised draft proposal would require manufactured bi-colored (yellow and black) line on all surface line (excluding buoy gangions) by the 2025-26 crab season, and on the upper 15 fathoms of the main line by the 2028-29 season. ODFW has heard substantial feedback requesting a solid marking option (e.g., paint or tape) as an alternative to manufactured line. ODFW asked the group to provide their thoughts on two options:

1. A **temporary** solid marking option that would allow for one set of solid marks (2' black within 6" of 2' yellow) between any two buoys and *three* sets in the upper 15 fathoms of the main line to satisfy marking requirements until the 2033-34 season when all marks would be transitioned to manufactured line; or
2. A **permanent** solid marking option that would allow for one set of solid marks between any two buoys and *five* sets in the upper 15 fathoms of the main line to satisfy marking requirements indefinitely.

The group discussed the potential difficulty of maintaining visibility of solid marks over time. Several members expressed support for transitioning to manufactured line over time, and enforcement personnel agreed that manufactured line would be easier to enforce although they recognize the cost involved. One member emphasized the importance of coordinating with the other West Coast states, which is the intent of including line marking on the agenda for the Tri-State Committee meeting. A couple of members recommended focusing on the surface and top five fathoms for marking. A NMFS advisor pointed out that the line marking proposal that was presented is based on actual entanglement data that were analyzed by NMFS to assess the probability of detecting a line mark based on the line documented to be present in recent entanglements. One member recommended requiring line marking for surface line by the start of the 2024-25 season through emergency rule. Members briefly discussed the amount of line that will need to be transitioned over and stressed the importance of considering how it will be disposed of and funded. A couple members expressed interest in buying compliant line as soon as possible since they replace some line before every season due to normal wear and tear.

The group discussed the rationale and logistics related to marking gear fished in shallow water (<5 fathom depth). Based on prior industry feedback, ODFW is interested in allowing for the bottom five fathoms of line to be any color to help crews detect when the pot is close; however, ODFW also wants to ensure that there is marked line on every pot, even in very shallow water, and wants to avoid incentivizing the use of excess scope.

Take Reduction Team Update (slides 13-19 of the [meeting presentation](#))

NMFS provided an update on the West Coast Take Reduction Team (TRT) that they will be convening in 2025. The TRT will address impacts to 3 strategic marine mammal stocks (Central America/Southern Mexico humpback whales, Mainland Mexico humpback whales, and Eastern North Pacific blue whales) from interactions with five commercial fisheries (federal sablefish pot fishery, California Dungeness crab, Oregon Dungeness crab, Washington Dungeness crab, and California spot prawn). NMFS is currently planning for the recruitment, vetting, and selection of members. By court mandate, the team will be established by October 31, 2025 and the first meeting will be convened by November 30, 2025, although NMFS is also considering options to begin earlier or request an extension to avoid coinciding with the start of the commercial crab season in all three states.

NMFS outlined the TRT goals, as specified in Section 118 of the Marine Mammal Protection Act (MMPA). The short-term goal is to reduce mortality and serious injury (M/SI) below each stock's Potential Biological Removal (PBR) within 6 months. The long-term goal is to reduce M/SI below 10% of PBR within 5 years.

The TRT timeline will be rigorous. The team will be responsible for reviewing all available information and developing consensus recommendations to submit to NMFS. NMFS will then develop and implement a Take Reduction Plan (TRP) following public comment. If no consensus is reached, NMFS will still be required to develop a TRP. Ongoing monitoring and evaluation of the plan will inform whether short- and long-term MMPA goals are being met and whether the process will be re-initiated to develop additional recommendations.

NMFS addressed clarifying questions about the MMPA-specified goals, the current status of the relevant marine mammal stocks, and the TRT membership composition. NMFS emphasized that they will be relying on the states' well-developed strategies for reducing entanglement risk that are already being developed or in place. They do not want to reinvent the wheel but hope to incorporate and possibly fine tune existing strategies.

Public Comment and Additional Discussion

ODFW staff provided time for public comments. Several group members discussed the advantages and disadvantages of weak links. For a weak link to be effective, it needs to break when an animal becomes entangled (reducing the severity of the entanglement), but not during normal fishing operations. Some members believed weak links could work but others were skeptical that a sweet spot could be reached. One attendee asked for clarification on whether data was available demonstrating that surface line is most commonly involved in entanglements. NMFS has analyzed the type and amount of gear documented in recent entanglements and found that surface gear is present in the majority of entanglement events. One member asked if the OEAC scope will be broadened to include additional fisheries and, if so, additional members. ODFW explained that they heard a range of opinions when OEAC was formed about the benefits of keeping it focused on the CP or broadening the group to cover other entanglement-related

issues. The OEAC purpose was drafted to include the potential for broadening the group's scope down the line, and ODFW agreed that another conversation about this topic is warranted.

ODFW staff wrapped up the meeting by thanking everyone for their participation and relaying that a meeting summary will be provided to the group soon. Follow-up questions and input can be provided via email or phone.