

Exhibit (C)

**Supplemental
Public Correspondence
received as of
September 16, 2021**

KINGSLEY Lisa M * ODFW

From: LobsterLift LLC <lobsterliftllc@gmail.com>
Sent: Tuesday, September 7, 2021 12:39 PM
To: COMMISSION ODFW * ODFW
Subject: Comments on the DRAFT Conservation plan for reducing the impact of the Oregon ocean commercial Dungeness crab fishery on ESA-listed species off Oregon (posted 8/18/21)

Good afternoon,

I am writing to comment on the Draft Conservation plan on behalf of a ropeless gear manufacturer - LobsterLift. After reviewing the plan, I noticed some oversights that I would like to bring to your attention. I understand that you are trying your best given the swaths of information out there, and the ropeless manufacturers are not large corporations with multi-million dollar marketing campaign budgets which would bring the information to the average person.

In order to most effectively transition a fishery towards using a more sustainable fishing method, I believe it would be best to offer an easy method for trying the gear in closure areas during profitable seasons. The plan as it stands in draft form reduces the risk to the marine mammals (which is paramount), yet does not offer an attractive transitional period, or incentive for fishers to use ropeless gear. During closures is the most ideal time, as there will be a reduction in overall fishing efforts, and it would give fishers the opportunities to give ropeless fishing their full attention.

Commercially available ropeless gear is currently available at different price points, and has been developed by manufacturers (not us, yet) who have been developing and testing the gear for over 10 years. See below for links to options:

<http://neptunemarineproducts.com>
<https://www.subseasonics.com/ropeless-fishing>
<https://www.desertstar.com/ropeless-fishing>

I ask that you reconsider the draft plan to incorporate a financially incentivised method for ropeless gear adoption, as it must start somewhere. If your team could allow for ropeless fishing to be legalized in these areas to open up funding opportunities to be leveraged prior to the start of the seasonal closure, this would make a large scale impact on the sustainable fishing transition period.

If you would like more detailed suggestions, please don't hesitate to contact me.

Thank you for your time,

Cormac Hondros-McCarthy
Co-Founder
LobsterLift LLC • lobsterlift.com

KINGSLEY Lisa M * ODFW

From: Bart Chadwick <bart.chadwick@subseasonics.com>
Sent: Wednesday, September 8, 2021 9:00 PM
To: COMMISSION ODFW * ODFW
Subject: Comments on the DRAFT Conservation plan for reducing the impact of the Oregon ocean commercial Dungeness crab fishery
Attachments: Sub Sea Sonics Comments on ODFW CP.pdf

Please see attached.

Thanks very much for your consideration.

Sincerely,

Bart Chadwick, PhD
Sub Sea Sonics
4741 Orchard Ave.
San Diego, CA 92107
Phone: 619-223-3921
Cell: 619-218-5882
Fax: 619-223-3921
Email: bart.chadwick@subseasonics.com
www.subseasonics.com



Sub Sea Sonics, LLC
4741 Orchard Ave.
San Diego, CA 92107
619-218-5882

8 Sept, 2021

Marine Resources Program
Oregon Department of Fish and Wildlife
2040 SE Marine Science Drive
Newport, OR 97365

Dear Commissioners

I am providing these comments as a developer and manufacturer of ropeless fishing gear. The purpose of these comments is to (1) clarify many of the common misconceptions regarding ropeless gear that are contained within the draft plan, (2) urge the specific requirement for fisher, enforcement and regulatory participation in refinement and rigorous testing of ropeless gear, and (3) request incorporation of an option for the use of ropeless fishing gear during periods that might otherwise be closed to fishing due to the presence of marine mammals.

The DRAFT CP as written contains many of the common misconceptions about the ropeless fishing gear. For example, the plan (Section 5.6.2.9) states that “Currently, pop-up gear is very expensive and would require fishery participants to invest in new gear, in addition to, the lost time and revenue associated with initially adapting to running different gear.” From a cost perspective, there is ropeless gear available that spans the cost spectrum from very low-cost galvanic time releases (e.g. <http://neptunemarineproducts.com>), to simple low-cost electronic timer releases (e.g. <https://www.subseasonics.com/ropeless-fishing>), to more costly and sophisticated release-on-demand acoustic systems (e.g. <https://www.desertstar.com/ropeless-fishing>). From an adoption standpoint, many of these systems are already commonly in use in a range of fisheries applications with standard operating procedures in place that can be adopted and refined by Dungeness crab fishers. In addition, because of the broad support in the public for protection of marine mammals, there is a correspondingly high potential for public and private funding to help support capitalization, testing, training and ongoing maintenance of ropeless gear. Thus, the plan is incorrect in this statement and should be revised to indicate that there is a range of ropeless systems available with a corresponding range of costs and sophistication.

The DRAFT CP also contains the misconception that “The absence of a reliable, affordable, and effective option and the need for substantial gear testing present the largest challenges for implementation at this time.” Testing of ropeless gear in a broad range of fisheries has shown it to be reliable when properly rigged and operated. While initial testing and refinement many be required to establish these methods and optimize them for a specific fishery, there is really no question that these systems can now be

operated reliably, affordably and effectively. Clearly lacking in the plan are any benchmarks for acceptability in terms of reliability, affordability, or effectiveness. This makes it impossible for gear manufacturers and testers to demonstrate compliance with benchmarks and establish clear pathway to gear acceptance which disincentives further innovation and investment. The plan is thus incorrect and should be revised to (1) indicate that ropeless gear, where embraced by fishers, has been demonstrated in both testing and application to be reliable, affordable, and effective, (2) incorporate specific benchmarks for acceptability and a pathway to gear acceptance, and (3) recognize that the largest challenge for implementation of ropeless gear withing the Dungeness crab fishery is the lack of collaboration among fishers, enforcement, regulatory personnel and ropeless gear manufacturers.

The DRAFT CP as written does little to advance the potential for implementation of ropeless gear. For example, the plan states “ODFW currently has the ability to authorize testing of otherwise illegal gear configurations, such pop-up gear, through an Experimental Gear Permit (EGP) authorized under OAR 635-006-0020.” However, simply allowing for testing is not sufficient to ensure that testing takes place and that there is a pathway for implementation of gear. The plan needs to establish a clear gear testing program that includes benchmarks for entry into testing, requirements for fishers enforcement and regulatory personnel to test gear that have met these benchmarks, and further establish benchmarks to measure the success of that testing and allow for future implementation. Without benchmarks and a pathway to implementation, simply allowing for testing is an insufficient strategy to move toward the dramatic reductions in entanglement risk that these technologies provide.

Finally, the DRAFT CP as written incorporates late season pot limits and considers a shortened season as methods to reduce entanglement risk. However, there is a high potential for ropeless gear to be used during the late season and allow for continued fishing without incurring any additional entanglement risk. This represents a significant opportunity for fishers, regulatory and enforcement personnel to gain experience with ropeless gear while potentially enhancing the economic advantage for implementation of this gear. The plan should incorporate an option to eliminate late season pot limits in the case where ropeless gear is implemented.

To summarize, I would strongly encourage the Commission to revise the plan to eliminate common misconceptions about ropeless gear, incorporate specific benchmarks and requirements for testing and acceptance, and allow for early implementation during late season fishing.

Sincerely,

A handwritten signature in black ink that reads "Bart Chadwick". The signature is written in a cursive, slightly slanted style.

Bart Chadwick, Owner
Sub Sea Sonics, LLC

From: [allison rice](#)
To: [COMMISSION ODFW * ODFW](#)
Subject: Comment on whale entanglement
Date: Monday, September 13, 2021 2:26:38 PM

Adaptive management measures need to begin with the first entanglement in order to prevent further entanglements instead of entangling the maximum allowed take. Sent from my iPhone

KINGSLEY Lisa M * ODFW

From: Nikki Dennis <nmden1@hotmail.com>
Sent: Tuesday, September 14, 2021 4:17 PM
To: COMMISSION ODFW * ODFW
Subject: Whale Entanglement Testimony

ODFW Commission,

I am writing to provide testimony on the draft Conservation Plan to "[reduce the risk of whale entanglement in Dungeness crab fishing gear.](#)" One entangled whale or sea turtle is too many. There should be no acceptable amount of whale deaths or entanglement injuries due to crabbing so that [sentient](#) crustaceans can be then boiled alive for human's insatiable palates. A reduction in whale deaths and injuries is not the path we should be taking. Our perspective needs to change. It is our twisted, self-serving relationship with nature and biodiversity that has resulted in the zoonotic, global pandemic and the sixth mass extinction we now find ourselves in.

Therefore, I am requesting this commission ban summer crabbing altogether at this time to prevent further harm. While Caren Braby, ODFW's Marine Resources Program Manager, labels this an "[extreme option](#)," Braby goes on to state how it could still be an option depending on "[how successful the new rules are.](#)" Although I am pleased that option was listed, I would counter that the failure of any new rules that did not implement a summer ban would only be determined after more whales and turtles are again unnecessarily injured or killed. Furthermore, since so many species of whales and also leatherhead turtles are endangered, economic and financial industry considerations should not play its usual starring role.

Whales, including the highly-endangered Southern Resident Orcas (now with another [sick calf](#)), and turtles (crab eaters), are in extreme danger due to increased ocean temperatures and acidification, dams and overfishing/crabbing that rob them of salmon/crab, noise pollution, underwater testing, decreased habitat spaces, less-diverse ecosystems due to bycatch, collisions with ships, and often-fatal entanglements with fishing lines and crab traps. All of these insurmountable attacks against them, whether intended or not, mean they need to fight daily for survival against their most-formidable threat (man) and change their migration patterns, causing them to be in areas not previously found. If possible, try to put yourself in their place for a moment and see if you believe that you could survive in those conditions and whether or not you feel that a mere reduction in just one of those dangerous conditions is adequate.

We are losing these magnificent creatures in staggering numbers. Furthermore, we are taking over their home, intruding upon their ecosystem, putting lethal obstacles in their way, and, in many cases, taking food right out of their mouths in a manner as far-removed from the circle of life as possible. Whales, turtles, etc. are deserving of life and are deserving of our awe and respect - something they are yet to experience.

The time to stop prioritizing industry over all wildlife is now. We are all creatures on what is supposed to be a shared planet and we are in as much need of them as they are of us. I hope that isn't realized by this commission, by this state, and by the country as a whole when it is too late - too late for them and too late for the next generation (our children) to have the opportunity to be in awe of them as well.

Thank you for allowing me the opportunity to provide my written testimony on this important topic.

Nikki Dennis
255 SSW Harrison St., #TH2
Portland, OR 97201
(971) 645-9423

From: [Christine OceanHaven](#)
To: [COMMISSION ODFW * ODFW](#)
Subject: Oregon Shores Conservation Coalition comments on ESA species Entanglements
Date: Tuesday, September 14, 2021 5:14:08 PM

Thank you for this opportunity to comment on ODFW's Draft Conservation Plan (CP) for reducing the impact of the Oregon ocean commercial Dungeness crab fishery on ESA-listed species.

Oregon Shores Conservation Coalition (OSCC) supports the enforcement of the ESA and the MMPA and Oregon's ESA. OSCC applauds ODFW's efforts to protect Oregon's non-listed species, as well as the Federal ESA listed species. We respectfully request ODFW make amendments to the Draft CP. The Draft CP fails to adhere to basic protections of marine mammals afforded in the ESA. The ESA allows for criminal punishment and fines in instances of harm, harassment and killing of ESA listed species. ODFW and the Oregon Dungeness crab fishery is aware of the harm caused by their gear to ESA listed species and other marine mammals in Oregon's ocean. The CP needs to specify the fines and criminal punishments for violation of the ESA.

ODFW needs to provide further proof of the crab fishery's need for an IT permit. The CP needs to prioritize the protection of the ESA listed and non-listed species over the protection of the Dungeness crab fishery. The CP needs to acknowledge there are unknown/unobserved entanglements of ESA listed and non-listed species, therefore, the proposed adaptive management measures must be implemented at the start of the season, not at the first known/observed entanglement.

The CP fails to detail specific consideration for gray whales which migrate and seasonally reside nearshore in Oregon's oceans during the Dungeness crab fishery season. ODFW's premise is that the gray whale is not present in Oregon's ocean in the winter. Gray whales are known to migrate south passing through Oregon's ocean in December and January. They return on northern migration beginning in March, with up to 200 individuals remaining along the Oregon's ocean in the months of April through September. The CP does not specify guidelines on protections of non-listed species that are inhabitants or transients of Oregon's ocean where there are no recorded or known entanglements. The CP does not call for reliable, scientific methods of collecting data on entanglements. The CP should not assume there have not been

entanglements, because no entanglements have been observed or recorded.

The CP recommends empirical observation surveys of whale distributions every 5 to 10 years. The ESA's IT requires an adequate monitoring program in the CP. A 5 to 10 year survey is ridiculously inadequate, especially with the significant negative impacts of climate change on marine mammals viability increasing each and every year. Science based surveys and accurate timely data needs to be ongoing, allowing for immediate management responses to entanglements.

The CP proposes to utilize volunteers for visual shore sighting and opportunistic whale sightings out of Newport, Oregon only. This is an inadequate and limited method of survey and counting of whale distributions which will not provide accurate data. Trained professionals and trained volunteers along the entire Oregon coast are needed. Along with visual shore sightings and distribution counts, we recommend the use of on board Electronic Monitoring Systems, on shore infrared cameras for night counts/observations and the use of drones and planes for aerial counts and monitoring of entanglements.

The CP does not provide the number of entanglements that would trigger closure of the fishery. We recommend closure of the fishery upon the first reported entanglement to enforce the CP and monitor the entanglement recovery efforts.

The CP IT permit request is calculated on current levels of take for the years 2013 through 2020. In 2019 there was a reported Unusual Mortality Event for gray whales which is continuing. (Stewart, J.D., Weller, D.W., January 2021). We recommend no IT permits be requested or issued and no take of ESA listed species allowed. As ESA listed and non-listed species populations have decreased, the take needs to be decreased to none, not "maintained" at the current level.

KINGSLEY Lisa M * ODFW

From: Gway Kirchner <gway.kirchner@tnc.org>
Sent: Wednesday, September 15, 2021 1:23 PM
To: COMMISSION ODFW * ODFW
Cc: BRABY Caren E * ODFW; CORBETT Kelly C * ODFW; troy.v.buell@state.or.us; CARTER Jena
Subject: Comments on Exhibit C_Whale Entanglement Conservation Plan.
Attachments: Exhibit C_Whale Entanglement Conservation Plan_TNC Public Comment_9-17-21.pdf

Dear Chair Wahl and Commission Members,

Please see the attached comments from The Nature Conservancy on the Conservation Plan for the Oregon Ocean Commercial Dungeness Crab Fishery, Exhibit C at your September 17, 2021 meeting. Thank you for the opportunity to weigh in on this important issue.

Sincerely,
Gway Kirchner

Please consider the environment before printing this email

Gway Kirchner
Marine Fisheries Project Director
gway.kirchner@tnc.org
(541) 336-7215 (Phone)
(541) 272-0406 (Mobile)

The Nature Conservancy
821 SE 14th Avenue
Portland, OR 97214



nature.org

September 14, 2021

Ms. Mary Wahl, Chair
Oregon Fish and Wildlife Commission
4034 Fairview Industrial Drive SE
Salem, OR 97302

RE: Exhibit C: Conservation Plan to Reduce Risk of Whale Entanglement in Dungeness Crab Gear

Dear Chair Wahl and Commission Members:

My name is Gway Kirchner, and I am the Marine Fisheries Project Director for The Nature Conservancy (TNC). Thank you for the opportunity to provide testimony in support of Exhibit C: Conservation Plan to Reduce Risk of Whale Entanglement in Dungeness Crab Gear.

Conservation of marine mammals is a critical challenge on the West Coast. TNC has participated on the Oregon Whale Entanglement Working Group since its inception. We believe this is important work and see the application for a federal Incidental Take Permit for Oregon's Dungeness crab fishery and the completion of the Conservation Plan as a positive step forward in reducing the risk of whale entanglement in Oregon.

We have reviewed the Conservation Plan and offer the following comments:

- We understand the rationale for limiting the plan to humpback and blue whales and leatherback sea turtles; however, we recommend ODFW take a broader view of whale entanglement and include other important species, such as gray whales and southern resident killer whales. This may be especially important as all whale species will be affected by climate change in the coming decades.
- While there is a brief discussion of climate change, overall, the topic and its impacts are lacking in the document. There are many scholarly articles available¹ on the impacts of climate change on whales and important prey species, such as krill and anchovy. Additionally, whales play a key role in capturing carbon in the ocean system^{2,3}. A fuller

¹ Van Weelden, C., Towers, J. R., Bosker, T. Impacts of climate change on cetacean distribution, habitat and migration. *Climate Change Ecology*, Volume 1, 2021, 100009, ISSN 2666-9005, <https://doi.org/10.1016/j.ecochg.2021.100009>.

² Chami, R., Cosimano, T., Fullenkamp, C., Oztosun, S. Nature's Solution to Climate Change: A strategy to protect whales can limit greenhouse gases and global warming. *Finance & Development*, Volume 56, Number 4 (2019). <https://www.imf.org/external/pubs/ft/fandd/2019/12/natures-solution-to-climate-change-chami.htm>

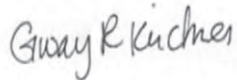
³ Pershing, A.J., Christensen, L.B., Record, N.R., Sherwood, G.D., Stetson, P.B. The Impact of Whaling on the Ocean Carbon Cycle: Why Bigger Was Better. *PLoS ONE* 5(8): e12444 (2010). <https://doi.org/10.1371/journal.pone.0012444>

analysis of climate change and whale response would provide a better understanding of how the current risk of entanglement may change over time.

- There is little discussion of how ocean temperature can impact blue⁴ and humpback^{5,6} whale migration and feeding choices. This is a critical component of understanding the future risk of whale entanglement, as it drives where whales are in the ocean in terms of time and space.
- We request more details be added to the plan regarding future federal, state, or private activities such as marine renewable energy or offshore aquaculture. While the actuality of these types of activities is uncertain and it is not possible to determine cumulative impacts at this time, these ocean uses have the potential to be impactful to marine mammals in the near future and should be considered within the 20-year timeframe of the requested permit.
- We note that hot spot closures and the implementation of new or modified gear technology are identified in Figure 5-1, though there is no discussion provided in Section 5.3.3 *Planned Future Measures*. These are important measures and should be included.

In closing, we appreciate the time and consideration of staff in preparing the Conservation Plan and see its value in helping to reduce the risk of whale entanglement. Thank you for the opportunity to provide comments.

Sincerely,



Gway Kirchner
Marine Fisheries Project Director
The Nature Conservancy

⁴ Szesciorka, A.R., Ballance, L.T., Širović, A. et al. Timing is everything: Drivers of interannual variability in blue whale migration. *Sci Rep* 10, 7710 (2020). <https://doi.org/10.1038/s41598-020-64855-y>

⁵ Climate Change Impacts: Hawaiian Islands Humpback Whale National Marine Sanctuary. Office of National Marine Sanctuaries, National Oceanic and Atmospheric Administration. <https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/docs/20200820-climate-change-impacts-hawaiian-islands-humpback-whale-national-marine-sanctuary.pdf>

⁶ Ramp, C., Delarue, J., Palsbøll, P.J., Sears, R., Hammond, P.S. Adapting to a Warmer Ocean—Seasonal Shift of Baleen Whale Movements over Three Decades. *PLoS ONE* 10(3): e0121374 (2015). <https://doi.org/10.1371/journal.pone.0121374>

KINGSLEY Lisa M * ODFW

From: Kristin Bayans <kbayans@gmail.com>
Sent: Wednesday, September 15, 2021 5:23 PM
To: COMMISSION ODFW * ODFW
Subject: Public Comments: Conservation Plan to Reduce Whale Entanglement

To Whom It May Concern,

I can't entirely agree with the plan in its current form.

- Adaptive management must start with the first entanglement to prevent further entanglements. Maximum take allowed is a bad move.
- The plan does not define special considerations for gray whales, which populations of these whales, or how those considerations will be used.
- A survey every 5-10 years is insufficient, and ODFW needs to be required to have adequate funding and resources to implement a monitoring program as well as the rest of the plan.
- While opportunistic whale sightings and volunteer surveys are useful tools, they cannot be relied upon as the basis of an adequate monitoring program. I know this first hand as an active volunteer.
- The augmentation of existing surveys, again relying on voluntary participation, needs to monitor the entire coast, not just off of Newport, to understand the whole picture.
- The plan does not specify a cap on the number of entanglements that would trigger the closure of areas or fisheries. A cap limit needs to be designated for a maximum number of entanglements, after which closure would be required.
- Lastly, the anticipated/requested take is calculated on maintaining current take levels from 2013 to 2020. **Therefore, the goal needs to be to decrease the take**, not to maintain current take levels.

Regards,

Kristin Bayans
American Cetacean Society Member - Oregon Chapter

KINGSLEY Lisa M * ODFW

From: Shane Grant <smgrant37@gmail.com>
Sent: Wednesday, September 15, 2021 5:32 PM
To: COMMISSION ODFW * ODFW
Subject: My Public Comments on Whale Entanglement

Dear Committee Members,

I do not in good conscience agree with this plan.

- Adaptive management must start with the first entanglement to prevent further entanglements.
- The plan does not define special considerations for gray whales.
- A survey every 5-10 years is insufficient. ODFW needs to be required to have the internal resources to manage the program and plan.
- Relying on volunteers is helpful, but should not be considered "ok"/adequate for a monitoring program of this degree.
- Surveys need to monitor the entire coast.
- A cap limit must be designated for a maximum number of entanglements, after which closure area is defined and required.
- **The goal should be to decrease the take**, not to maintain current take levels.

Regards,

Shane Grant

KINGSLEY Lisa M * ODFW

From: William Lackner <crabbinginfo@yahoo.com>
Sent: Wednesday, September 15, 2021 7:19 PM
To: Chuck Erickson; REP Gomberg; SEN Thatcher; COMMISSION ODFW * ODFW; Caren Braby; John Schaefer
Subject: cdao recommendations for crab management plan

Dear Steven Rumrill and others, please consider adopting the following recommendations for inclusion into ODFW's Crab Management regulations: My friend Chuck Erickson comment # 7 reflects the opinion of many of numerous businessmen connected with this crabbing industry

1. Elimination of Commercial crabbing in Oregon's bays.
2. Increase the harvest size size for retention of Dungeness crabs from 5 3/4 inches to 6 1/4 inches.
3. Prohibit the retention of softshell crabs.
- 4 Prohibit the use of crab snares to eliminate the continued loss of crabs to lost or abandoned crab snares.
- 5.Require cabbbers to return unwanted crbw to the waters of the bay or ocean unharmed.
6. Replace the limit on the take of green crab yo no limit.
7. Tourism should matter. People from all over the Western United States come to Pacific Coast to enjoy what we have to offer. We need a plentiful supply of big crabs for the tourist to catch. Move the commercial crab harvest into marine zone and leave the bays for sport harvest. "Three great forces rule the world: Stupidity, Fear and Greed" - Albert Einstein

Thank you for your consideration,
Bill Lackner and Chuck Erickson for the members of The Clam Digger Association.

KINGSLEY Lisa M * ODFW

From: Joy Primrose <marine_lover4ever@yahoo.com>
Sent: Wednesday, September 15, 2021 9:18 PM
To: COMMISSION ODFW * ODFW; BRABY Caren E * ODFW
Cc: Dan Lawson
Subject: Comments on draft Conservation Plan prior to September 17 OFWC Meeting
Attachments: Letter to OFWC Sept 2021.pdf

Attached is a letter containing comments to Chair Wahl and Oregon Fish and Wildlife Commissioners, Dr. Braby at ODFW, with a copy to Dan Lawson, NMFS Protected Resources, regarding the draft Conservation Plan (CP) for an Incidental Take Permit (ITP) for the Oregon commercial Dungeness crab fishery. I am submitting these comments in advance of the OFWC meeting on September 17, 2021.

Joy Primrose
American Cetacean Society-Oregon Chapter President
(541) 517-8754
www.acsonline.org

September 10, 2021

Dear Dr. Braby, Oregon Fish and Wildlife Commissioners,

I am providing comments on the draft Habitat Conservation Plan (HCP/CP) for the Incidental Take Permit (ITP) application by the Oregon Department of Fish and Wildlife (ODFW) for the take of ESA listed species in the Oregon ocean commercial Dungeness crab fishery.

I commend ODFW and the Oregon Fish and Wildlife Commission (OFWC) for the steps they have already taken to decrease whale entanglement. I appreciate the effort ODFW has put into developing the HCP/CP but the plan is insufficient. It lacks clarity and specificity, provides insufficient protection and has a severely inadequate monitoring program. It appears ODFW in the interest of being expedient failed to take the time to develop a solid plan.

The foundation of the plan are the two regulatory packages currently in place. These measures are a good start. According to the CP, these management measures have a 3-year sunset date of 2023, and “will be vacated unless the OFWC elects to extend or modify them. It is the *intent* of OFWC that ODFW evaluate the effectiveness of these measures and provide recommendations to them that will provide equal and/or more conservation benefit as the original measures prior to the expiration date of the rules”. (Pg. 83-84) Since these measures are the foundation the plan builds on, ODFW needs to spell out in the CP the exact date of expiration and a deadline by which ODFW will have regulations ready for sufficient review and comment prior to submission for OFWC approval.

In the CP anticipated/requested take for humpback whales is calculated based on maintaining current levels of take from 2013-2020. (Pg. 59-61) The goal is to decrease take, not maintain current levels.

The plan expands to adaptive management measures. The plan states that adaptive management discussion will begin **after** they have “taken” the allotted animals. (Pg.114) Adaptive management measures need to begin after the first entanglement to prevent further entanglements. Requirements for the Incidental Take Permit are that take must be minimized and mitigated to the **maximum extent practicable.**

The plan does not have a cap on the number of entanglements that will cause an area closure or an entire fishery closure. There must be set caps on numbers of entanglements that will cause closure. There also needs to be a clear set of triggers that will close areas or the entire fishery when met in order to prevent reaching the cap number of entanglements.

The CP states that “prioritized potential measures will be based on two criteria: readiness for development and crab industry support of the measures”. (Pg. 119) There is no mention of conservation benefit being a factor or considered in the discussion. Conservation benefit must also be one of the key considerations.

The CP specifically states “ODFW has implemented a management approach which is focused on reducing the number of vertical lines which are present when entanglement risk is expected to be elevated”. (Pg. 147) Humpback whale critical habitat begins at 27 fathoms. The initial plan was to request a 30-fathom depth restriction after May 1st, however at the OFWC meeting September 2020 it was changed to a 40-fathom depth restriction. It would be best practice to avoid fishing in the humpback

whale critical habitat area during the whales feeding season. There should be a 30-fathom depth restriction.

The CP is inadequate in the reduction of line-days, an 8.3% reduction is not significant. (Pg. 108) According to the 2012-2019 crab fishery effort data the 40-fathom depth closure will not make a significant impact as there was already a substantial decrease in effort outside of 40 fathoms beginning in May. Since the management approach is to reduce the number of vertical lines there must be a significant reduction of line-days, either by an increased pot limit reduction and/or an earlier season closure. The alternative would be use of pop-up gear.

The plan does not provide a commitment to pop-up or on-demand gear testing or implementation. ODFW determined that a reliable, affordable and effective option does not exist. To my knowledge no Oregon commercial Dungeness crab fisherman has tested any pop-up gear even though it has been offered on multiple occasions. ODFW currently has the ability to authorize testing through an Experimental Gear Permit and/or a Scientific Take Permit. (Pg. 125) Unless the fishermen test gear and provide feedback the gear will not improve. At some point they may have to use this technology so it would be to their benefit to begin testing now. Perhaps time and money should be spent developing and testing pop-up gear instead of on some of these other options if the goal is to eliminate vertical lines and entanglements.

Appropriate monitoring is essential to the CP, especially since the plan is dependent on adaptive management. Ecosystem changes may increase the likelihood of entanglements. The monitoring plan (Pg.99-101) begins with opportunistic entanglement reporting and a current collaborative research project to develop predictive models with data collection ending in June 2022. The CP relies on an intent to update models every 5-10 years. This is too long a time frame when your plan is based on predictive modeling and adaptive management! It then goes on to augmentation of existing surveys which is problematic as surveys need to look at the entire fishing area and “implementation is dependent on the willingness of potential collaborators to participate, frequency and design of existing projects, and the size of vessels and space for on-board observers among other factors”. This is very uncertain and unreliable, and may result in variable effort among locations. The monitoring plan strongly relies on volunteer effort and self-monitoring by the fishery and other fisheries. The voluntary request to the Dungeness crab fishery, other fisheries and other ocean users to collect and report data using the simple Whale Alert app has not made much progress to date despite the outreach effort. The at-sea sampling program “is dependent upon voluntary industry participation and in-season sample sizes remain low to date”. While volunteer data collection will provide useful information it is unacceptable to be the ITP and CP monitoring program. Asking fishermen to voluntarily complete an observation protocol, while actually working on the job, seems to be a difficult ask. Self-reporting of bycatch and entanglements has a strong incentive to under-report. If this method is included there must be independent validation such as by an on-board observer. Funding for the CP monitoring program will need to include funding the independent observers using an appropriate protocol.

ODFW will give special consideration to the potential impacts of any management action taken under this CP on PCFG gray whales.(Pg. 7-8) Gray whales are currently experiencing an Unusual Mortality Event (UME) that began in 2019 and is still continuing at the present time. Nowhere in the CP does it spell out what the special considerations for PCFG gray whales are or how they will be used.

Throughout the CP it appears ODFW lacks the appropriate funding for their plan as noted by frequent statements “as funding allows”, “limited or lacking funding is a primary barrier” etc. Regulations for issuing an ITP with an approved CP include **adequate funding for the plan must be ensured**. What steps has ODFW taken to ensure it has the funding to carry out the plan? Have they submitted proposals for funding? Dungeness crab is the most valuable single species commercial fishery in Oregon. Perhaps the entire Dungeness crab industry should participate in providing funding and not financially burden only the fishermen. Others in the supply chain should have resources they could contribute, for example Publix is funding testing of ropeless gear in the Canada snow crab fishery.

The ocean and the life within it belong to the public. All stakeholders need to be adequately represented, including ENGO's, tribal representation, and others, as this is a public resource. The CP is very vague on who the CP advisory committee is, the partners and the advisory groups. ODCAC is mentioned as being a key partner and a subset of ODCAC will be in the four advisory committees, “with a strong overlap of participants in each committee”. ODCAC is an industry group with no other stakeholders. All stakeholder groups need to be included in any advisory committees or groups and decision making.

With all three states, Washington, Oregon and California, submitting an Incidental Take Permit application and Habitat Conservation Plan, **there is a hodge podge of plans**. NMFS should ensure consistency and equity in terms of what is required. Coordination among the states for monitoring and funding may be helpful. NMFS should look at requested take at a coastwide level. It would be very easy for the amount of take to quickly add up with each state requesting variable amounts. A request for a 20-year take authorization is too long. NMFS should standardize the authorization period for all three states along with the reporting requirements. I would encourage the Tri-State Committee to continue sharing data and working together on reducing whale entanglements.

I appreciate the steps taken and the effort to reduce entanglements of ESA listed species in the Oregon commercial Dungeness crab fishery. I request ODFW to revise the CP to add clarity and specificity, develop a strong monitoring program, provide significant species protection and ensure adequate funding. I look forward to reviewing the improved conservation plan.

Sincerely,

Joy Primrose

Oregon Whale Entanglement Working Group Member
American Cetacean Society-Oregon Chapter President

KINGSLEY Lisa M * ODFW

From: Carrie Ekeroth <carrie.ekeroth@gmail.com>
Sent: Wednesday, September 15, 2021 9:28 PM
To: COMMISSION ODFW * ODFW
Subject: Whale entanglement proposal

I am very concerned with the draft of the whale entanglement proposal. As an Oregonian advocating for protection of our endangered and endearing whales, I wish to share this feedback.

1. The thresholds set do not require any change from the current practices. They are at or above current averages. The number of entanglements has gone up drastically in the last ten years making the numbers already higher than they should be. If the goal is to reduce impacts and entanglements, the threshold should be set at lower than current averages.
2. These species are registered as endangered for good reason. Any loss or damage to these populations can be devastating. While I understand that a "no tolerance" policy is likely not realistic in the case of accidental entanglements, I do feel that EVERY entanglement should be investigated, or at least those involving protected species. A consultation could help ODFW and the fisheries to work together to identify root cause of an entanglement and opportunities to implement prevention plans for the future.
3. There should be an advantage, recognition, or reward of some sort to fisheries that actively invest in better practices and/or equipment that reduce entanglement. As this plan stands currently, there is little motivation for fisheries to implement any sort of changes from current behavior.

A minimum suggestion for #3 would be better visibility and awareness for consumers in where their crab supply came from and whether they are this supporting a fishery that has put a higher priority on whale safety. An example would be a letter-grade rating system for each fishery that indicates efforts they are taking to prevent entanglements. This would be a quick and simple way to inform consumers and provide incentive to fisheries to participate more fully.

It is heartbreaking to think we are willing to sacrifice the lives of multiple endangered species every year for the sake of one industry that has inexpensive and readily available options that could reduce these impacts immediately. Please reconsider this proposal and prioritize our endangered marine wildlife.

Thank you,
Carrie Ekeroth