

Dungeness Crab Fishing Gear Working Group Conference Call
FINAL SUMMARY AND NEXT STEPS

Thursday, September 1, 2016

9:00am-11:00am

Call Participants

Working Group: Jim Anderson, Calder Deyerle, Tom Estes Jr., Gerry Hemmingsen, Doug Laughlin, Bob Maharry, Tom Mattusch, John Mellor, Kristen Monsell, Brian Nolte, Dick Ogg, Geoff Shester, Andrea Treece

CDFW: Christy Juhasz, Pete Kalvass, Sonke Mastrup, Lt. Andy Roberts, Cpt. Steve Riske

NMFS: Dan Lawson, Lauren Saez

OPC: Holly Wyer

Observer: Ryan Berger (for Kathi Koontz)

Strategic Earth Consulting: Rachele Fisher, Holly Rindge, Kelly Sayce

Absent: LCDR Jason Brand, Tom Dempsey, Kathi Koontz, Kevin Pinto

The following notes capture a high-level summary of what was discussed during the September 1, 2016 Working Group call. Highlights aim to capture the general sentiments expressed, and do not reflect the perspectives of all call participants. Once reviewed and deemed "final" by the Working Group, this meeting summary will be made publicly available on the [Ocean Protection Council \(OPC\) website](#).

Meeting Goal: To prepare for the Working Group's in-person meeting on September 21-22, 2016 and orient all participants with the progress of each Implementation Team as they have been developing ideas on strategies to reduce whale entanglements in Dungeness crab fishing gear during the 2016-17 fishing season.

Introductions and Review Meeting Objectives

- Introduce Working Group participants
- Walk through agenda and confirm meeting goals and objectives

- Working Group participants were introduced by the facilitation team. The facilitators highlighted the new participants on the Working Group and welcomed them to the call: Calder Deyerle, Monterey commercial fisherman, and Tom Estes, Jr., Fort Bragg commercial fisherman.
- Meeting ground rules were reviewed and goals/objectives were reconfirmed:
 - Introduce new Working Group participants.
 - Discuss updates, progress, and outcomes from the Gear Modification, Communications, and Enhanced Reporting Implementation Team discussions.
 - Discuss potential recommendations from Implementation Teams and Working Group participants to implement during the 2016-17 fishing season.
 - Identify priority agenda items and topics and discuss logistics for September 21-22, 2016 in-person meeting.

- Products and meeting summaries of the full Working Group will be publicly available on the OPC website (<http://www.opc.ca.gov/whale-entanglement-working-group/>).

Implementation Team Updates: Gear Modification

- Surface line options/recommendations
 - Updating and distributing Best Practices Guide
 - NMFS project updates
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- The Gear Modification Implementation Team held two conference calls (July 29 and Aug 26) since the Working Group last met and is continuing to make progress on developing voluntary recommendations to be implemented in the 2016-2017 fishing season. The group reviewed the draft recommendations on voluntary gear modifications, and discussed additional considerations:
 - General agreement that the recommended amount of line should be a total amount (i.e., from the main buoy to the end point/last trailer buoy).
 - General agreement that there will not be a recommendation specific to the number or size of buoys in a set up at this time (taken care of with max. line length between buoys)
 - Line length recommendation options were discussed:
 - Maximum total of 5 fathoms of line from the main buoy to the end point/last trailer buoy. OR
 - Maximum of 5 fathoms of line from the main buoy to the end point/last trailer buoy when fishing in 50 fathoms or deeper and 4 fathoms limit when fishing less than 50 fathoms.
 - General agreement for recreational and CPFV fishing to recommend a maximum of 2 fathoms of line for recreational traps.
 - Need to confirm how to address excess floating line as a result of fishermen not adjusting the amount of line they are using when they move from deeper to shallower water.
 - Suggested recommendation language: Rig gear so line length can easily be adjusted when gear is moved to a shallower area (e.g., use shots).
 - Other gear modification options were discussed and considered (e.g., weighted lines, line type) as a means to help reduce the risk of whale entanglements including:
 - Consideration of weighting the line between buoys to shorten the line profile (e.g., 2 ounce weight with lead core line). Using a 2 oz weight with lead core line helps lower the profile of the buoy setup across the surface and allows the use of a longer trailer buoy line with a minimal amount of gear on surface that may get snagged on other vessels. This method is common in the Monterey

Area to reduce navigational hazards. A similar practice is seen in the spot prawn fishery where a 4 oz weight is utilized between buoys.

- Consideration of lighter line (e.g., 5/16) between the main and trailer buoys may increase a whale's ability to break free from the line. Recommended breaking strength would need to consider the appropriate strength to allow whales to break free while also reduce gear loss. A 5/16 line may not have a low enough breaking strength to help whales break free, but the overall idea is on the right track. Instead of line strength between the main and trailer buoys, other options may be considered (e.g. breakaways).
- Some Working Group participants continued to ask whether surface gear (especially between the main buoy and trailer buoy) is the root cause of entanglements.
 - Based on observed entanglements, NOAA whale experts and members of the disentanglement network see a potential correlation between slack surface line and the number of trailer buoys contribute. However, further analysis is needed to definitively point to surface slack.
 - NMFS is continuing to think through how to analyze available entanglement information and future information that comes in to help understand if surface gear is the root cause of entanglements and if the recommended adjustments are having an impact in reducing entanglements.
- The Best Practices Guide and other Working Group products will include messaging explaining why these gear modifications are being recommended to provide context to the Working Group's recommendations.
- **Strategic Earth will update the draft document outlining the Working Group's considerations with the intent that Working Group participants will share it with peers and gather feedback to be discussed at the in-person Working Group meeting September 21-22, 2016.**
 - Following the September 21-22 meeting, the Best Practices Guide will be updated to reflect final recommendations from the Working Group. NMFS will update the Best Practices Guide based on the Working Group's final recommendations and will share a draft for the group's feedback before finalizing. NMFS plans to add photos to the back side of the Guide, a gear set-up diagram, and use language from the communications outline to provide context of why these voluntary changes are being recommended.
 - NMFS is also developing a PowerPoint presentation that complements the Best Practices Guide and can be used by anyone to help convey the new voluntary gear modifications.
 - Some Working Group participants will bring gear (e.g. buoy set up, 2oz leads, lead core line, etc.) to discuss during the September 21-22 meeting to demonstrate gear set up and help finalize recommendations.
- NMFS followed up on projects that are beginning to come online in the coming months. These projects will be further discussed at the September 21-22 meeting.

- Two projects are funded by the Bycatch Reduction Engineering Program. One of the projects includes a survey of crab fishermen, including questions on gear setup, to better understand line profiles.
- NMFS is also designing a project to analyze images of whale entanglements based on the Working Group's recommendations.

Implementation Team Updates: Enhanced Reporting

- Evaluation criteria
- Process for identifying priority projects
- General support was reconfirmed for collecting data investigating the overlap between Dungeness crab fishing effort and whale presence, migration, and/or prey.
- Updates were shared from the Enhanced Reporting Implementation Team's recent conference call on August 18. There continued to be general agreement by the Working Group on the following components of the group's efforts in this topic:
 - Goal: To obtain data on fishing effort and whale patterns to better understand the co-occurrence of fishing gear and whales and potentially explain the entanglements that have been observed (i.e. Does more gear and whales in an area result in more entanglements? How does fishing effort (location and density) affect the likelihood of entanglements?)
 - Prioritized needs: To develop a co-occurrence model that overlaps whale locations and fishing locations and density
 - Understanding this co-occurrence continues to be difficult since there is no fishing effort data available. Additionally, whale data is only available during spring and summer, not in the fall and winter when a bulk of Dungeness crab fishing occurs.
- An Evaluation Criteria document developed by Implementation Team participants was reviewed and discussed as a first step in identifying the scientific tool(s) needed to investigate and measure co-occurrence.
 - There was general agreement by the Working Group on the listed criteria to evaluate tools: coverage range scale; frequency of data collections; skew of results/bias of tool; costs; feasibility of scaling; back end analysis required; who will own the data and have access to the data; and adequate participation in a pilot program.
 - Tools should effectively capture and measure fishing effort while also being the least disruptive to fishermen. Tools can be piloted in the 2016-2017 fishing season. Tools under consideration include:
 - Aerial surveys: A Working Group participant is working with the Working Group's data analyst to develop a sample design and outline of costs/budgets that will be shared at September 21-22 meeting.
 - Data plotters: Discussions should be had during the September 21-22 meeting about how data collected through the use of this tool will be shared.

- The Working Group continued discussions about data plotters.
 - The utility of data collected through VMS and AIS systems was discussed. Vessels that already have NMS or AIS could voluntarily share data during the 2016-17 fishing season.
 - There are issues with NMFS's (i.e. those involved in Working Group efforts) and CDFW's ability to access the VMS data that would need to be further investigated. Additionally, since fishermen pay directly for VMS, the use of the tool can be expensive.
 - VMS gives a vessel track line, but does not clearly indicate where traps are set. However, a participant noted there are methods available in which a computer algorithm could be used to determine where traps are set based on where the vessel was located. VMS would not require fishermen to collect any additional data.
 - Concerns were expressed that the use of VMS (and other data loggers) only collect data related to fishing effort and do not address data gaps for whales.
 - There is general support for utilizing tools that may already be in place to understand and document fishing effort.
 - Fishermen were asked to check in with their peers to understand if there are individuals who would be willing to voluntarily share their vessel tracking data to inform discussions during the September 21-22 meeting.
- Since every Dungeness crab fisherman knows where they set their gear, a project could be developed in which fishermen voluntarily share the log of their trap locations.
- The use of logbooks to track trap location were not recommended due to the burden placed on fishermen.
- There was general agreement that there was a need to better understand the willingness from the commercial and recreational fleet to voluntarily share trap locations and/or test fishing effort reporting tools through the use of private data loggers, AIS, VMS, logbooks, and/or sharing GPS coordinates of trap set locations.
- CDFW is not planning to implement electronic monitoring on any trap fishery due to the cost, but is moving towards electronic logbooks that records catch.
 - Participants expressed that the Working Group should not recommend a data collection tool or system that will need to be changed in a few years if California implements an electronic system, like logbooks, that may ultimately inform this effort.
- The scale of data needed needs to be addressed to better understand the utility of enhanced reporting tools.
 - NMFS will look at the data currently available and what the scale of analyses can produce. NMFS will bring a better understanding of what whale data is attainable with current resources to the September 21-22 meeting.

- Several key questions and considerations were identified during the call that will be further discussed at the September 21-22 meeting:
 - The Enhanced Reporting Implementation Team should lay out a plan for data collection for the upcoming fishing season. The plan should explore the scale, data, and costs.
 - Can the Dungeness Crab Task Force play a role in moving the data collection efforts forward?
 - Can funding be found to support the purchase of data collection tools, project implementation, data analysis, etc.?
- To better understand entanglements using the data currently available, NMFS will re-evaluate images of whale entanglements to identify common themes and alignment with the updated Best Practices Guide over the coming months. Working Group participants generally supported this effort.

10:30am Implementation Team Updates: Communications

- Overview of Best Practices Guide Communications Outline
- Update on NOAA Disentanglement trainings
- The Working Group briefly reviewed the communications outline which provides guidance and a process for reaching out to the fleet (the primary audience) to communicate the concern around whale entanglements in Dungeness crab fishing gear in an attempt to garner support for considering and adopting the recommendations in the Best Practices Guide.
- Working Group participants will review the communications outline and consider how they would like to support communications moving forward, as well as add any ideas on resources, products, or materials to the outline.

10:40am Planning for September 21-22, 2016 Meeting

- Identify Working Group meeting goals, priorities, issues
- Follow up with peers in advance of in-person meeting
- Discuss logistics
- An agenda and meeting logistics will be circulated to the Working Group in advance of the September 21-22 meeting.

10:55am Confirm Next Steps

- The following next steps were identified during the call. Strategic Earth will check back in with the Working Group on the status of these items over the coming weeks.
 - **Working Group Participants**
 - Review updated "options document" (will be ready September 7, see below) with peers to gain feedback to inform discussions and finalizing recommendations on September 22-21

- Review the draft Communications Outline and identify areas you would like to contribute/develop - by September 7
- Email Strategic Earth with any requests for travel support for the September 21-22 meeting - by September 14
- Jim Anderson, Calder Deyerle, and other Working Group participants should bring examples of gear set-ups to the September 21-22 meeting
- **NMFS**
 - Discuss the appropriate scale of the whale data, and what the data analysis can look like and/or produce
 - Share a draft updated Best Practices Guide
- **Strategic Earth**
 - Update "options document" for Working Group's use/circulation - by September 7
 - Draft September 21-22 agenda and share logistics details - by September 12
 - Coordinate Enhanced Reporting Implementation Team call - before September 19
 - Work with NMFS and Communications Team to finalize draft PowerPoint slides and draft BPG content - in advance of September 21-22 meeting
 - Add background context/rationale for Working Group's ideas/recommendations in meeting summaries, recommendations materials, and other communications - ongoing

11:00am

Adjourn