ATTACHMENT 5

What are some of the things being done on the west coast ?

Included in this attachment:

- 5.1 Jim Anderson: CA working group fisherman
- 5.2 Dan Ayers: WDFW gear retrieval
- 5.3 Amanda Gladics OR Cetacean Entanglement Working Group
- 5.4 Justin Yeager, OR fisherman
- 5.5 Kortney Opshaugh, Blue Ocean Gear
- 5.6 Kyle Antonelis, NRC, line cutter

5.1 CA fisherman Jim Anderson, jimmydawn13@gmail.com CA Working Group

I have not seen what other presenters will talk about, and we haven't done this traveling road show before, so I have put together some thoughts about how I as a fisherman see this CA working group going.

With the increase of a derby style crab fisheries, we have noticed crab boats set up their gear with enough rope for fishing in the deepest depth they plan on fishing. When they take this gear and dump it into the shallows at the beginning of the season in our area, you can find the pot on one side of your string and the buoys on the other side of your string. We also have found some people that don't use leads when using floating rope, or maybe they have just lost some leads along the rope. This has entered the challenge of driving up or down a string, trying to find an opening so you can go through that string. Since we found this floating rope and have talked about it, We heard last year fishermen had bought every coil of neutral buoyancy up to the surface, has allowed me to say this year I didn't drive over anyone's floating rope. It also allows us to not have leads along the rope, which we have heard may be an issue that catches on a whale.

We also found people in the past that thought the best way to deal with a big current, especially if their buoys were going down, was to just add on another extension and another and keep adding until a buoy was up. When we found people using a 7X14 main buoy with the holes, and then like 5 fathoms and another 7X14 main buoy with the holes, then when the current increased they would just add like another 5 fathoms with another 7X14 main buoy with the holes. During the slack and tide changes, all this rope was on the surface. When we saw this wrapped around a whale, we tried to put into our best practices guide, some suggestions to reduce or stop this issue form growing.

We have decided to take this year and test the tools. We understand that when looking at the whole coast there will be different patterns or trends for different areas. If we can spend this year testing the tools to see what each tool can teach us, and what the limits are for each tool, we will better understand what other tools we may need to develop for the future.

One of the tools is this study that Peter Nelson is doing, trying to learn more about line profiles with equipment that will go down from the surface as much as 50 fathoms. This will help us understand what the line profile looks like in times of heavy currents, slack tides, and tide changes. Peter is also developing visual data to see visual contrast of the line against the background.

We have tried a couple of Aerial surveys to get a snap shot of where the crab gear is, and where the whales are. The first couple of Aerial surveys have taught us a bit about, Where we need to look, and How we should look for crab gear and whales. We require clear skies and winds less then 10 knots for a good survey. Questions like how many people do you need in the plane. Who is counting crab gear, who is counting whales, and where in the plane do we need to positioned people in order for them to be able to get the best results. How do we develop a grid pattern to best represent what we see on the ocean. Today we now have a better understanding about the cost to fly, and the difficulty that weather affects this project.

We are also looking into using a vessels-based survey. Some organizations have already been doing studies in the areas that we have chosen to look at. These vessels and organizations have been doing similar studies about whales and crab gear for years. We have been asked to help develop the study plan and review the results. This way we can best answer the questions about how accurate this data relates to what we see on the ocean.

We have been asked to collect data on the location of crab gear. For fishermen to have their own data set. This is for a comparison of the data that other agencies are now collecting and have in years past. We are testing a number of tools to collect the data, and we are trying to decide what data needs to be collected. We trying to come to an agreement with how many boats, in how many areas needs to be testing. This along with how do we track the whales. How do we collect and compile all this data, where do we store the data, and who has access to the data. How we will use this data to answer the questions we have, and will it give us a better understanding of the cooccurrence between whales and crab gear.

We have also put together a team to go back through the data that has already been collected. To research for a more thorough understanding of whale behavior and the Dungeness crab fishing effort in California. By developing a comprehensive dataset of existing ocean condition data, prey distribution pattern data, and whale sightings information. We hope this will inform future predictive models, to forecast whale distributions based on ocean conditions and prey distribution. If we have a better understanding of why the whales are in aisle 7, and when or if they may move to aisle 8 where the crab gear is, or if they may move to aisle 6 where there is no crab gear. This will help us to have a better understand of the cooccurrence between whales and crab gear.

This is just a quick review of some of the projects and teams of people, that are involved in working on how we can better address this issue of coexisting in this environment.

Thank You,

5.2 Dan Ayers: WDFW Permitted Stray and Abandoned Gear Recovery Program.

In 2009 WDFW implemented a state supported Permitted Stray and Abandoned Gear Recovery Program. This program provides fishers who hold a Washington State commercial crab fishing license the opportunity to request a permit from WDFW that allows them to recover and retain any pots remaining in the ocean following the close of the commercial fishing season. This permitted program required action by the state legislature to modify long-standing lost property statutes in Washington State law and provides some incentive for fishers to recover abandoned pots by allowing them to keep the gear recovered.

This permit, when issued by the WDFW to a coastal commercial Dungeness crab license owner, allows for the recovery and retention of commercial Dungeness crab gear owned by Washington state licensed fishers in the specified areas and at times outlined below. Failure of the license owner or alternate operator to abide by the terms of this permit will result in termination of the provisions authorized.

Permit Conditions:

- Recovery operations are restricted to the waters between 46° 15 North Latitude and the Washington-Canada border (the borders of WA state).
- This permit must be on board the vessel at any time crab pot recovery work is being conducted or anytime crab pots that do not belong to the license owner are on board.
- WDFW staff must be notified 24-hours prior to the vessel leaving the dock and at least 2-hours prior to returning to the dock following a gear recovery operation even if no gear was recovered during the trip. Notification can be made by calling a WDFW Enforcement Sergeant.
- All pots recovered during permitted gear recovery must remain on the vessel and remain in the condition it was recovered until the gear is registered and tagged by WDFW. Tampering with recovered gear, including removing pot tags, buoys or other markings prior to registering the gear will result in termination of this permit.
- No fishing gear belonging to tribal fishers can be recovered.
- Accurate and complete data records must be collected and provided to the Department upon returning with recovered gear. A gear recovery log book is provided with the recovery permit.
- It is unlawful to retain crab during the closed season, WAC 220-52-040, all crab caught must be immediately returned to the ocean.

Between 2009 and 2015 between 8 and 19 permits have been issued each year, with total pots recovered totaling 3475 (with an average pot recovery per year being 434, ranging from 70-914).

(for more information See Appendix 2)

5.3 Amanda Gladics Presentation re: formation of Oregon Dungeness Crab and Whale Entanglement Group (name to be decided):

OR Sea Grant is working to develop an OR working group on whale entanglement. Went to some meetings with Dan Lawson and OR fishermen. OR fishermen want to get ahead of the entanglement issue.

OR Sea Grant is going to support a working group.

Going to continue focusing on this issue using:

Small group of representatives from fixed gear fisheries, recreational and commercial crab fisheries, state/federal managers, public representatives, gear representatives, etc. The goal is to take non-regulatory steps to help prevent entanglement.

Building on work of CA best practice manuals. They want to apply them to conditions in OR waters.

What this looks like will depend on what direction the group want to take it. There is the potential to collaborate with CA working group.

Funding/Logistical Support

Support travel to series of meetings (not too many, want to avoid meeting fatigue).

Funding goes through the end of calendar year, and so this will be a focused effort. Rotate meeting locations.

Want to do an exchange perhaps with CA working group meetings, training exchange, etc.

AG invited people in the room to join the working group, or to nominate someone who would be a good member.

Section 5.4. Justin Yeager, OR fisherman

Thinking about this issue and looking forward as to what we can do.

We have been assigned the task of brainstorming ways to lower entanglement of whales. I think our greatest success will come from changes in our behavior and timing of our fishery. Our fishery is more efficient now than in the past and will be more efficient in the future. We can do better. We need to realize the responsibility that comes with being a crab fisherman and make the changes that make a difference.

I have put a lot of thought into the issue of whale entanglement with crab gear. I support continued research on better gear types, but I believe the greatest improvement will come from more responsibility and better timing of the fishery.

I believe we can reduce the entanglements of whales.

We can have less lost gear in the fishery.

We can have a better, longer lost gear retrieval program.

We can have an even more sustainable fishery than we now have. The crab fishery can have less exposure time with whales.

The crab fishery is far more efficient now than in the past and will continue to be more efficient in the future.

This is a fishery that by the latest estimates captures 88% in the first two months on an 8.5 month season.

I'm hopeful we can do better in many aspects of the fishery and show that change can be positive for the fishery and the animals it interacts with.

Section 5.5. Kortney Opshaugh, Blue Ocean Gear, gear tracker (see notes)

Section 5.6 Kyle Antonelis, NRC, line cutter (see notes)