

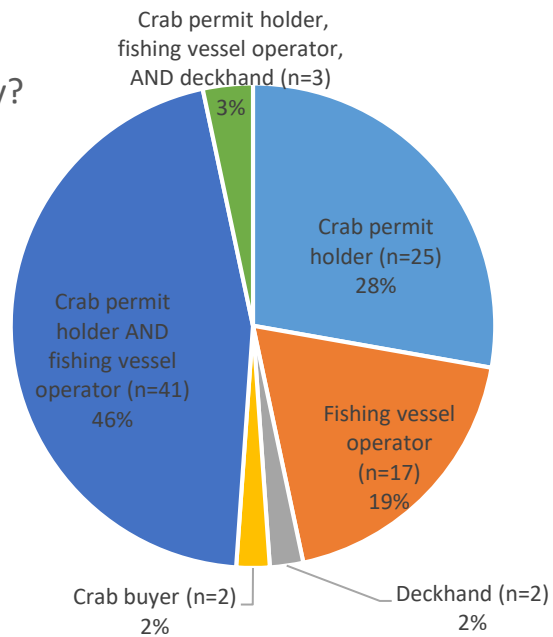
## Industry Input on Management Measures to Reduce Risk of Whale Entanglement

### October 2019 Public Meeting Surveys

#### SURVEY DEMOGRAPHICS

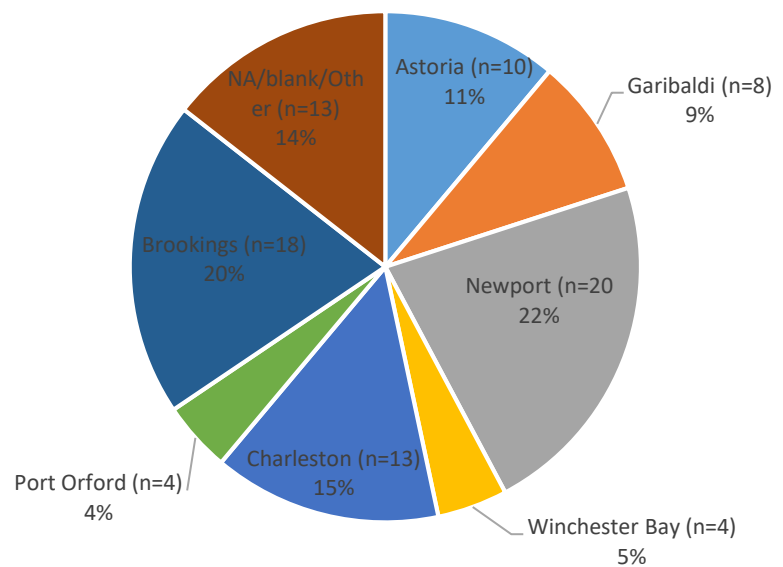
Q1. What category best describes your role in the Oregon crab industry?  
(circle all that apply)

Total surveys submitted = 90

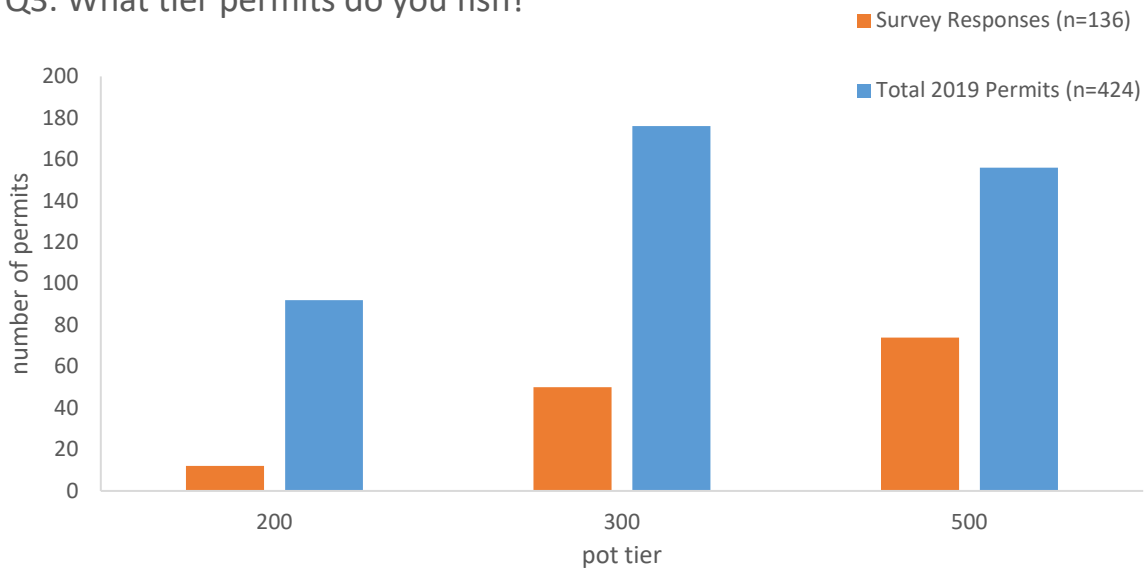


Q2. What is your home port?

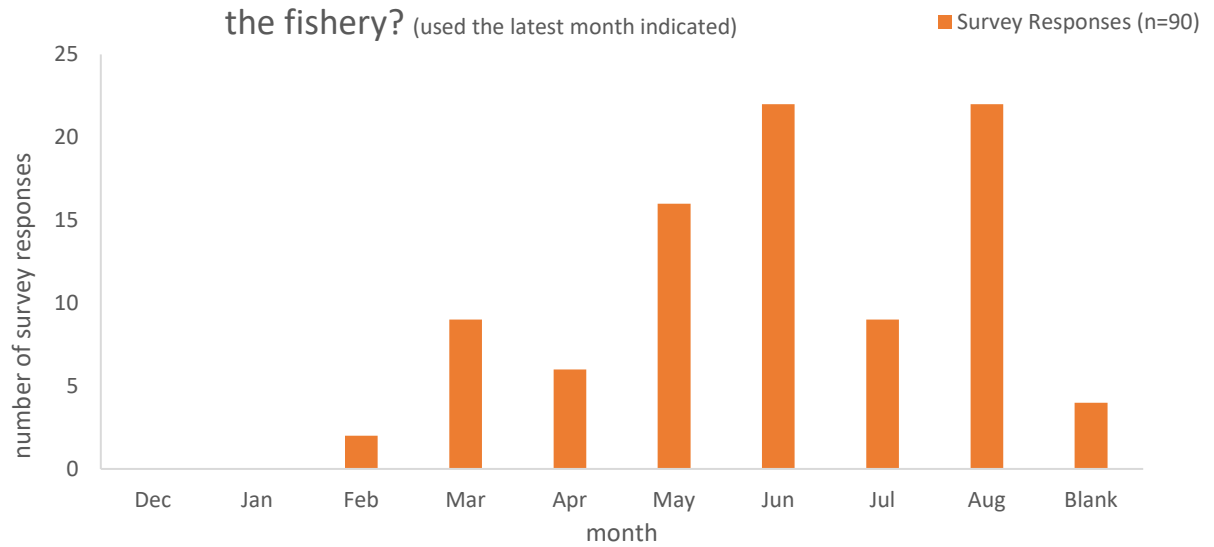
Total survey responses = 90



### Q3. What tier permits do you fish?

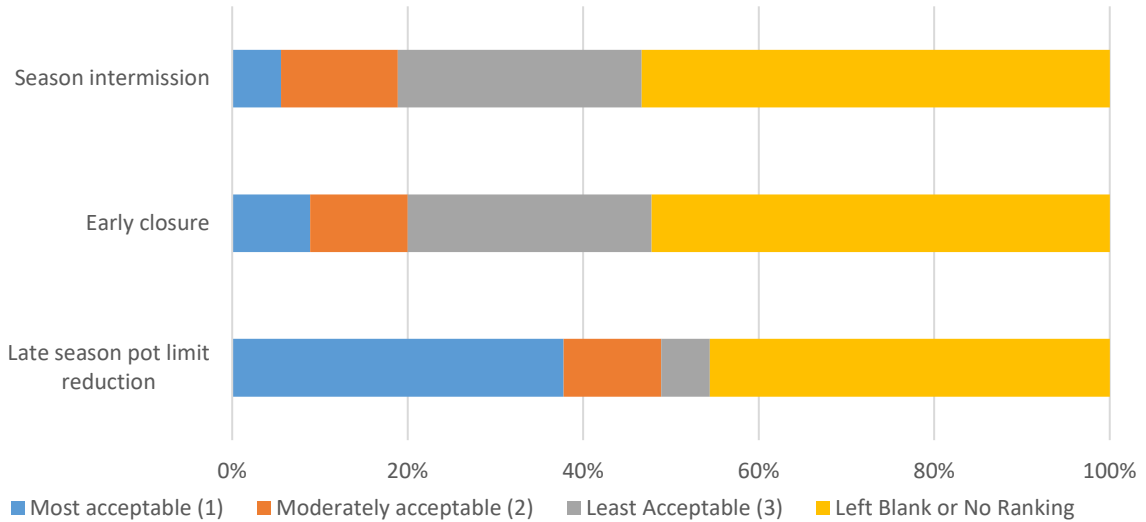


### Q4. In the last 5 years, what months have you most often exited the fishery? (used the latest month indicated)



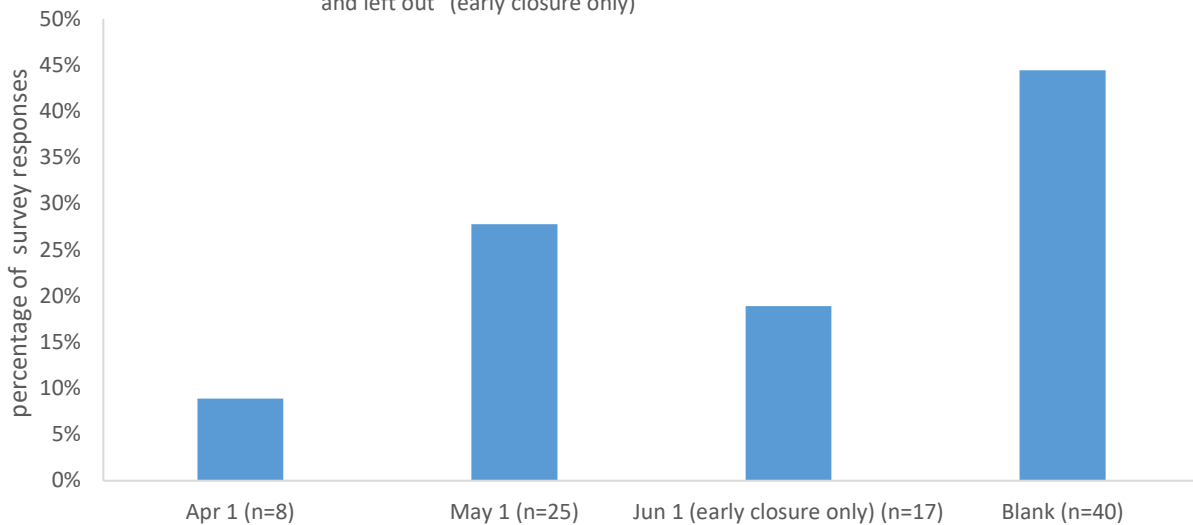
**SURVEY QUESTIONS**

Q5. Please rank the following whale entanglement risk reduction measures from 1=most acceptable to 3=least acceptable. (n=90 survey responses)

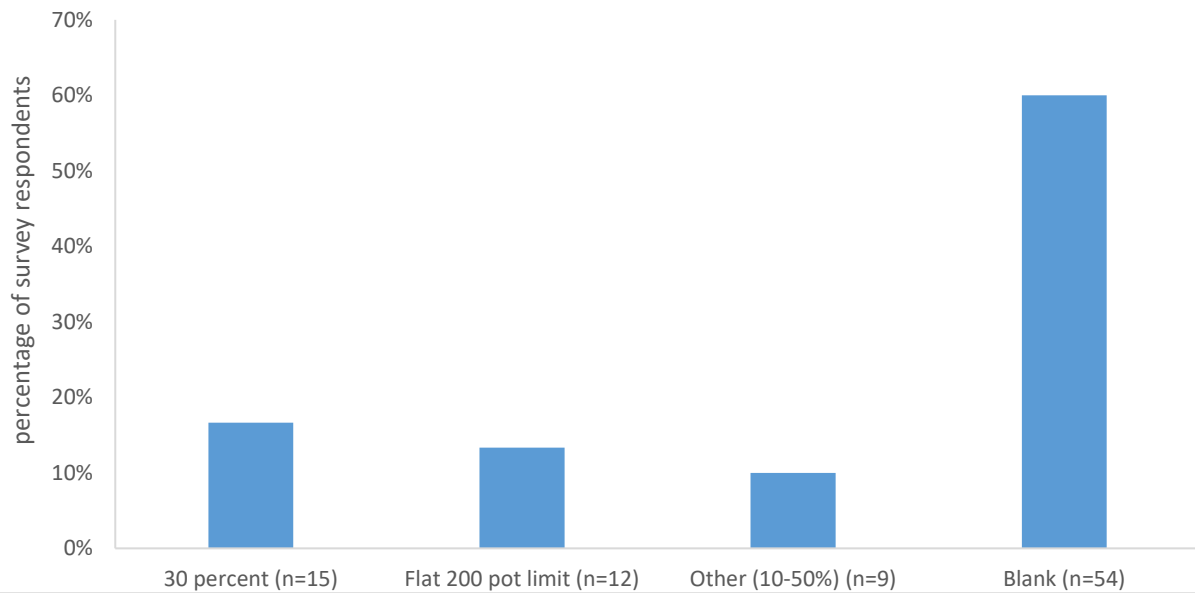


Q6. What month do you support implementing risk reduction measures? (circle one) (n= 90 surveys)

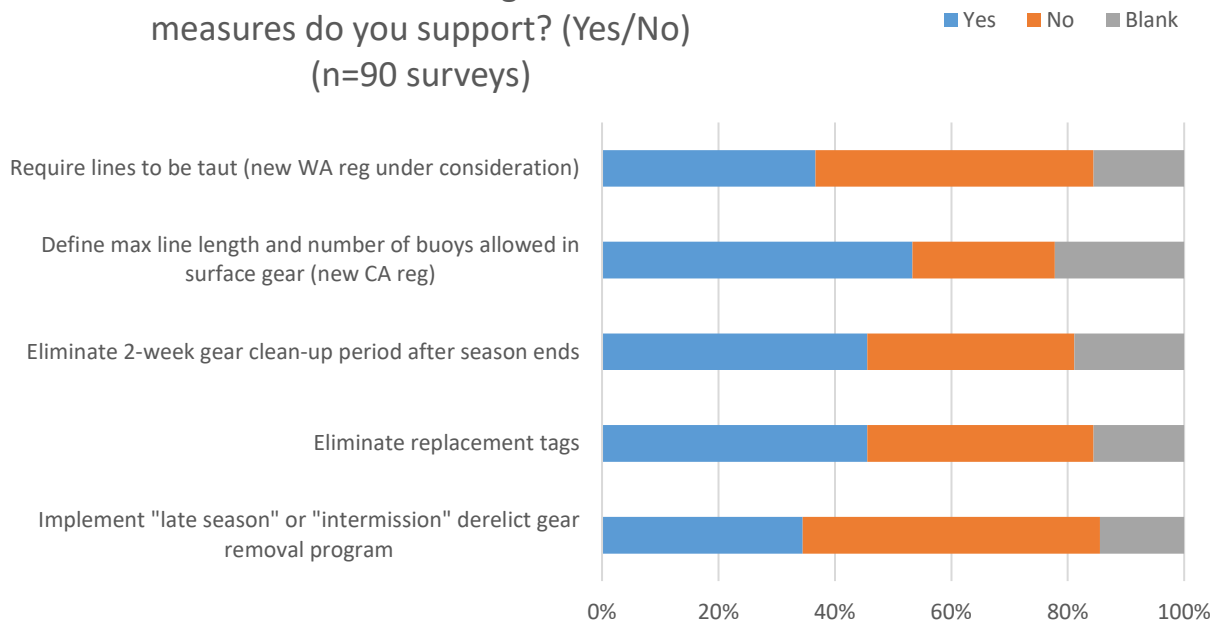
\* Note 8 respondents who appeared to intentionally circle only "June 1" and left out "(early closure only)"



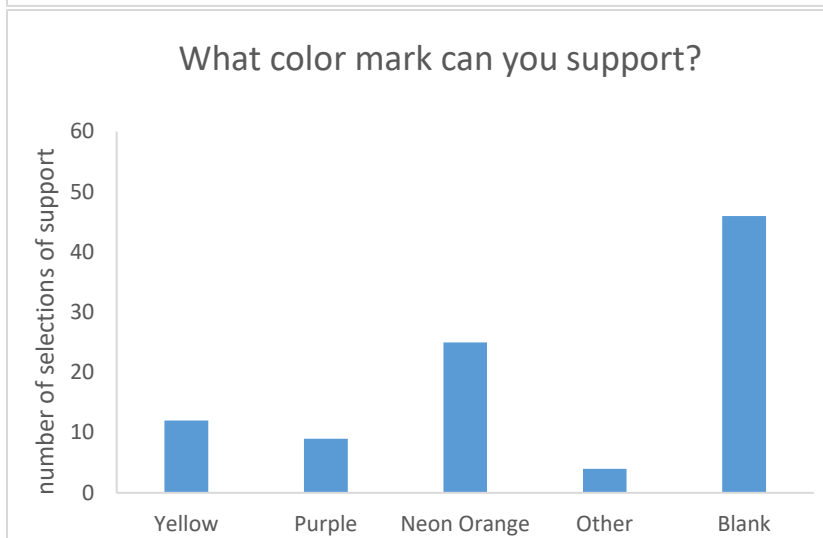
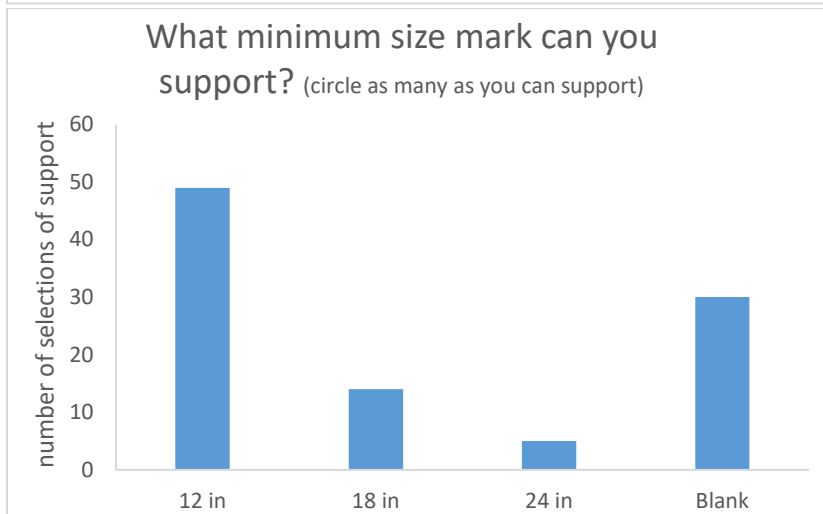
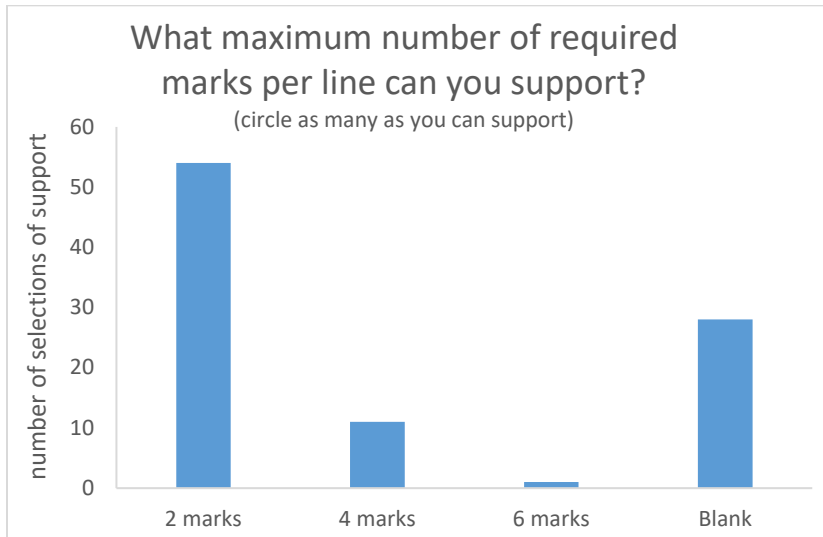
**Q7. What % reduction of pots do you support? (circle one)**  
(n= 90 surveys)



**Q8. What additional whale entanglement risk reduction measures do you support? (Yes/No)**  
(n=90 surveys)



Q9. If ODFW develops a line marking requirement for the Oregon crab fishery:



**WRITTEN COMMENTS**

**Question 5. Please rank the following whale entanglement risk reduction measures from 1=most acceptable to 3=least acceptable [Late season pot limit reduction, Early closure, Season intermission].**

**Why?**

*Respondents who chose to rank the measures and provided additional comments:*

2, 3 (unless June), 3	I run smaller boats and I am able to make a living with what I have. I think any permit on a 26' vessel should be exempt.
✓, ,	Least impact for small boats (200 pots); None of these options are acceptable and have a viable business
1, ,	0
1, ,	I am a late season crabber
2, 3, 3	With domoic acid and price negotiations, the season is starting late and makes for a real short season
1, 3, 3	I fish and depend on the whole season. The end of the season is as important as the beginning to my operation.
1, 3, 3	Closing the season would harm the small boats [who] rely on income from fishing the whole season
1, no, no	Not fair to small boats
1, no, no	Smaller boats rely on spring/summer crabbing
1, 3, 3	Pot limit would still give big boats a chance to not have to end their season
1, 2, 3	Stacking out on a small boat is dangerous and resetting is also dangerous
1, 2, 3	Pot reduction works best
1, 2, 3	I'm concerned for the smaller boats getting opportunity when conditions are more relaxed, but also think we should make adjustments when the whales are actually here.
1, 3, 1	Late season fishing is good for smaller vessels
1, 3, 2	I don't think any of these options will fix this - a depth limit will work better
1, 3, 2	I think we don't have a summer fishery problem. We need more flexibility in our management. Maybe pingers work.
1, 3, 2	Safety reasons
1, 3, 2	Season intermission is dangerous for my boat. I'm a one-man boat during that time and can only haul 20 pots

1, 3, 2	I don't normally fish in the later season but I know how important it is to many and the local communities
1, 3, 2	I want crab available for the fresh market as long as possible every summer without interruption
1, 3, 2	Bringing pots home in the middle of season is a safety issue and more possible violations. Pot reduction is easier. Early closure effects financially.
, X,	Create less risk of whale entanglement
3, 1, 3	Early closure best of these severe measures. This season not even 1% of catch came in June 1 - Aug 14. This choice delivers most effect for least economic impact, industry wide. Also, it is clean and simple. Additionally, there are other reasons to consider early closure, namely hypoxia and our intention to avoid the molt.
3, 1, 3	Simple and effective
2, 1, 3	Have permit holders declare what state in the tri-state in which they plan to fish that winter
2, 1, 3	Season intermission <u>will kill people</u> if combined with elimination of 2 week grace period for gear removal
3, 1, 2	Early closure best keeps CBD off our back. Not willing to risk \$40m for \$5m
2, 3, 1	Summer tags would be a good idea
2, 3, 1	Season intermission will eliminate more stray gear
2, 3, 1	[Circled season intermission]; To let the whales migrate

*Respondents who wrote all 3's, No's, zeros, etc., but provided comments:*

Pinger, Pinger, Pinger, Pinger! [separate note] I do not support it, but if start in June, only way. I think it will devastate small boat fleet
Disagree with all. Dangerous to the fleet and not convinced its going to solve problem.
We're cutting back fishing with incomplete data to support the theory that cutting back will solve a problem we don't even know we have
None of these options are proven as effective mitigation measures, they are too blunt. Need to start slow.
Gonna kill little boat guys not me.
6 whales in 16 years
Taking gear away leads to more risk take
Risk to small boat operators
None
[% reduction] Burden falls on summer fishery only; [closure] Only hurts summer fishery; [intermission] Too dangerous and costly to bring gear in and out
Because this is not legal to do. This is ludicrous! This needs to go to court.
Lack of real science

None
Do not agree
Permit buyback program 1
Taking away more from fishermen isn't the answer. You need to bring more info to back your thinking/facts.
Don't want to reduce pots or season to fish them
[Wrote 3 for pot reduction, and "3-4" for early closure and season intermission]; No [evidence] to support
Buyback
Work on a better recovery for lost pots. Instead of a pot reduction propose line reduction.
Fisheries are susceptible to weather and volume of biomass - constant changes. You can't schedule the unpredictable.
We need more research on this. This is too soon to apply any of these.
We need more research on this. This is too soon to apply any of these.

\*5 additional respondents wrote 3's, No's, zeros across all options, but did not provide additional comments

*Respondents who chose not to rank the measures but provided comments:*

None; I am strongly opposed to pot reduction or stealing our season
Don't agree with any of them. I oppose reduction in gear or season time. I think we should try the pingers, more than 1 pot per buoy, depth restrictions.
[Wrote "June 1" under late season pot limit reduction]; <u>Pingers</u> for the whole season
[There might be a "1" outside of the box near "Late season pot limit reduction"]
These are all bad options
None of the above
Not acceptable choices. You are forcing these regs on us, need more options
None; Caren said all day we need to come up with ideas. There were lots of ideas. Try pingers, depth restrictions, long line pots, make it mandatory that a person that can unentangle a whale has to be on boat every boat.

**Question 6. What month [April 1, May 1, June 1 (early closure only)] do you support implementing risk reduction measures (circle one)?**

**Why?**

*Respondents who chose April 1:*

Summer time tag requirement
Would be the best for getting gear out of water and would reduce the most entanglements
Most of the crab is already caught by then
More whales/less production
Lots of whale migration then
[June 1 option crossed out]



*Respondents who chose May 1:*

Least impact to fishery
Better weather to get gear in
15% in April, 15% in May
Get crab gear out of way of pink shrimp and salmon trollers
Less danger bringing gear
Gives a chance
Less whale interaction; Less interaction with other fisheries
Torn between April, May, or June so it's in the middle
Don't want a (June 1) early closure at all. April seems like it might cut more people out earlier than necessary. I would support an April 1 reduction date as plan B.
Gives time to get gear out still possibly make a profit
Effective
They are migrating
[Added 5 to May 1 to make it the 15th]; Most \$ made before that, most whales here after that
Later the better if we have a late starting date.
Usually before they molt and strong market

*Respondents who chose June 1 (early closure only):*

Temporary measure until better [safer] practice can be found.
[Appeared to intentionally circle only "June 1" and not "(early closure only)"]
[Appeared to intentionally circle only "June 1" and not "(early closure only)"]; Better weather. Safer, less impact to fleet.
June would hurt the least amount of people
Better weather to stack out, less financial impact
[Underlined only "June 1" and not "(early closure only)"; crossed out "early closure only" and wrote in "reduction"]
[Appeared to intentionally circle only "June 1" and not "(early closure only)"]
[Appeared to intentionally circle only "June 1" and not "(early closure only)"]; I would rather crab as long as possible
[Appeared to intentionally underline only "June 1" and not "(early closure only)"]; Crabs have been caught already
Weather
[Appeared to intentionally circle only "June 1" and not "(early closure only)"]
Economics should be a primary consideration. Also crab biology. Softshell crab should also be protected to some degree.
[circled June but then put a slash and wrote] None at this time; not enough research
As season is delayed we may reach into these months

*Respondents who left it blank but provided comments:*

No; No; Lost of income
I do not support these dates. August 1st traditional close
I do not believe these are risk reduction measures, it is speculative and not proven
[Crossed out options]; None of these are acceptable; None. If anything close or reduce the pot limits in half.
Crossed out "(early closure only)" by "June 1" and wrote "200 in June?"
No action required
None; Reduction will cause more risk taking
None; economic issues
None of the above because the hardship only applies to the summer fishery
Not fair. 6 whales do not equal 1 human life. We will sue ODFW for increased danger - loss of life.
I support risk reduction always without making more risk for fishermen
No support to make an effect
[circled "(circle one)"] Basically because this is not the solution either
None at this time; not enough research

\*13 additional respondents just wrote "None", "N/A", "0", or "Don't support it".

**Question 7.** What % reduction of pots [30%, Flat 200 pot limit, Other \_\_\_\_] do you support (circle one)?

*Respondents who chose 30%:*

Only works for bigger permits
Late season

*Respondents who chose Flat 200 pot limit:*

Just like Alaska has 250 across the board
---

*Respondents who chose Other \_\_\_\_ and proposed some sort of reduction:*

50% flat reduction throughout whole season
Start w/ 10-20%
20%
20% [Circled 30%, but wrote in 20%]
50%
10%
200 pot permits stay 200 pots; 25% on 500 and 300 pot permits.
50%
15%

*Respondents who left it blank (or wrote 0) but provided comments:*

Zero/ late season only
------------------------

[Didn't select any but put notes underneath options] 30% - if the 200 tier permit stays at 200; flat 200 pot limit - maybe; other - none
None; go to a 2 pot on one line - 50% line reduction
No; No; Deep longline
Do not support pot reduction, but 30% is more fair than 200 flat
Zero reduction at this time
None, but flat limit is total non-starter due to inordinate effect on 500 holders (% better)
Small but equal % for all vessel for entire season
Permit buyback program to get pots off water forever. Send out survey to permit holders see how many are interested
Move gear inside 45F April 1st
Depends on implementation date but should be a percentage <u>Not A Flat Limit</u>
Replacement tags
Neither. Do a % line reduction by certain date.
Only reduces the bigger non local boats that are not owned by local fishermen

\*37 additional respondents just wrote "None", "N/A", "No", "0", "0%", "No reduction", or "Don't support".

**Question 8. Which additional whale entanglement risk reduction measures do you support (Yes/No)?**

**Why?**

Implement "late season" or "intermission" derelict gear removal program, incentivized by allowing ownership of retrieved pots (will require legislative changes)

*Respondents who chose Yes and provided additional comments:*

Get gear out of the water
Get derelict gear out
Derelict gear should be cleaned up to avoid whale take
You should be able to retrieve your [own] gear
Mandatory owner buyback required
[Specified "Yes, intermission"]; Good to get derelict gear out of the water during intermission only, not while fishing
Any removal of derelict pots is good
Gets gear out of water as long as late season fisherman can fish and can grab gear that isn't fishing!
The owner should get the gear (pot) back regardless who brings the pot back
Because anytime derelict pots come out of the water is good
Less trouble
I just think all boats should have to remove any of their derelict gear prior to June 1st.

*Respondents who chose No and provided additional comments:*

Not a fan of intermission
Not enough info
Encourages pot theft. We bring back in old gear free
Give back to owner
My gear is my property
Too hard to enforce; Too much theft
Not effective
Too costly and dangerous to bring gear in or out unnecessarily
Already allowed 20+ pots per trip!
Not needed. We need to work on gear.
[written in reverse order but seems like this was the intent] Help keep gear out of the whales way - but don't want my gear stolen
Legal pot theft
[Intermission] will kill people; [ownership of retrieved pots is] legalized gear theft, junk pots will be left at sea
Pot ownership is a lousy incentive because not all gear is worth owning
Not enough research at this time.
Not enough research to apply this year!
Legalized pot theft

*Respondents who chose not to answer or were undecided, but provided comments:*

[Wrote "Yes/No"]; Because it won't hurt the fleet economically but there are safety concerns
?
Consider copying CA's program. Rather than ownership give original owner chance to buy back. Is (s)he refuses, he still pays a few, so finder is truly incentivized and pots don't change hands.

Eliminate replacement tags

*Respondents who chose Yes and provided additional comments:*

People cheat on this
Its an easy way to eliminate some gear
Abuse
Keep more gear off the water
Many people currently feel its automatic 10% more pots
Not needed
In lieu of pot reduction
Lots of cheating (lying) & reduce # of lines
We need all we can to make life go on
Reduce line
Eliminate pots

Make fishermen more responsible. Maybe half the replacement tags.
---

*Respondents who chose No and provided additional comments:*

We are cut back far enough. We need those on years with bad weather and high pot loss
Allow guys to replace gear in beginning - weather events wipe out
Too small of a problem to pick at
Might have gear loss from storms that need replaced
Doesn't solve problem
No fair. Pots are lost for many reasons.
Maybe reduce. Pot #'s should not be reduced when humpbacks are not present.
Not enough research at this time.
Not enough research to apply this year!
Small pot tiers need more pots

*Respondents who chose not to answer or were undecided, but provided comments:*

Yes, possibly
Not sure. I try not to lose gear.
?
0

Permanently eliminate the 2-week gear clean-up period after the season ends

*Respondents who chose Yes and provided additional comments:*

Its how I fish already
As long as the season ends after May 1
Gear should be out by end date
No to little impact
All gear should be out of water at end of season
Gear should be in by last day of the season
Everyone should be able to get their gear in on time
No brainer, lowest fruit
Eliminate line in water
When done its done
People would be more inclined to retrieve others gear

*Respondents who chose No and provided additional comments:*

Essentially ending the season early. Can't stack out in one day
Safety at sea concerns
Let guys have time to choose better weather
This works
Why?
Collecting strays is important

The small boats should be allowed time to get their gear
Might need time to retrieve gear because of weather
I think it has worked well. Lots of gear removed
Hard on small boats
Puts lives in danger forcing fishermen to possible fish inclement weather
Hardship to get gear in a shorter time
Should be able to clean up all year
Not safe for small boats
Little boats need all the time. You're squeezing them out!
[Wrote "See answer one"] Because anytime derelict pots come out of the water is good
Not enough research at this time.
Not enough research to apply this year!
Gives time to get all gear off water

*Respondents who chose not to answer or were undecided, but provided comments:*

0; Makes harder for small boats fishing late because weather and missing a potential limit
Late season yes. Early season <u>absolutely not</u> , people will die!
Undecided
[Wrote "Yes/No"]; Yes if the season goes through August. Safety concern with early closure.

Define maximum line length and number of buoys allowed for use in surface gear (new CA reg)

*Respondents who chose Yes and provided additional comments:*

As far as I know this is how it works already.
As long as reasonable
Pragmatic
Promote better practices
It might help
Keep from having line floating for long distances
2 buoys, 2 ftms
It would help with the problem
Good idea
Eliminate excess rope
2
Lots of guys use too much line. Too much floatin line get cut off by other boats
Limit surface gear length
200% of depth; 2-3 buoys
If use <u>WA language</u>
Only line length, not number of buoys
May work or help
Will do gear experiments
We could do that

Definitions give clarity for rule enforcement.

*Respondents who chose No and provided additional comments:*

I don't feel you can regulate that. Different areas need different gear set ups
Enforcement reasons
While that may work in CA, we have more current in OR & WA
Cause that forces everyone to fish one spot and hurt the [sentence trails off]
Strong current!
Not enough research at this time.
Not enough research to apply this year!
Different areas have different currents
2 buoys

*Respondents who chose not to answer or were undecided, but provided comments:*

3 2.5 fat[hom] trailers
Don't know
[Wrote "Yes/No"]; Got to figure out what works with current drags
[Wrote "?"]; Different current conditions in different areas and times
No more than 3 buoys, trailers 2 fathoms, & top sinking line so rope is always tight
10% depth, 2 buoy
?
N/A
N/A

Require lines to be taut (new WA reg under consideration)

*Respondents who chose Yes and provided additional comments:*

Floating line is a hazard to other vessels anyway
Pragmatic
Promote better practices
It might help
It would help
Helps keep the lines from getting caught on other things. Keeps out of way of other vessels.
Taut needs definition
Except inside of 8 fathoms
If using WA language
Eliminates floating or loose lines
Willing to do what we can to keep fishery viable
Would be a step in the right direction
Helps entanglements with the whales
Your crab line shouldn't be more than 15-20 fathom scope with top <u>sinking line</u>
Do not allow floating line in front of the main buoy

Less possible entanglement
I support taut lines because I heard it reduces entanglement.

*Respondents who chose No and provided additional comments:*

Likely cause buoys to dive out, creating more derelict gear
In strong current conditions, buoys will dive below surface
Once again different areas require different set ups
Enforcement reasons
Current runs too hard, buoys will shrivel up
Current and tides diving gear
I don't see how it can be enforced
Current is an issue and we will be creating a derelict gear problem
Describe taut line; need to be able to accommodate swells and current
How do you enforce
Too hard to enforce
While I agree that lines should be taut, I don't know how you enforce such a vague rule
Can cause more lost or derelict gear
Not enforceable
No proof of that being a reason whales get entangled. We fish lots of current most time line is tight.
Lines still in water
Means larger buoys
Not enough research at this time.
Not enough research to apply this year!
Need slack for weather and current
The newer sinking line hangs straight up and down

*Respondents who chose not to answer or were undecided, but provided comments:*

May cause gear to go down more
Don't know
[Wrote "Yes/No"]; Got to figure out proper scope due to buoys dive on current
[Wrote a "?"]; Sinking topshot would be good

**Question 9. If ODFW develops a line marking requirement for the Oregon crab fishery: What maximum number of required marks per line [2 marks, 4 marks, 6 marks] can you support (circle as many as you can support)? What minimum size mark [12 in, 18 in, 24 in] can you support (circle as many as you can support)? What color mark [Yellow, Purple, Neon Orange, Other \_\_] can you support?**

*General comments about line marking:*

? Don't get this
Doesn't help the problem



Not help the problem; No
Lines need to be defined - each shot or line in total (length)
[Selected all options for each part of the question]; All are easy, none are a solution
[Selected answers for each part of the question] ???
???; Not enough info or studies. Let Washington go down that road. If it work, I can see implement it.
Not understood #9
Please don't
None at all, this is a stupid idea.
Dumb & Dumber; None

\*10 respondents wrote "No marking", "None", "No thanks", "0", "0 in", etc. throughout question

*Comments about the maximum number of required marks per line that they can support:*

One mark
1 mark

*Comments about the minimum size mark that they can support:*

What's effective?
[wrote "4 in" under the size mark question and drew an arrow to] use tags, rather than paint or tape or spliced twine. Each state a different shape (square, triangle, circle). Shapes will be unaffected by marine growth on line.
6 in?

*Respondents who chose Other or provided comments about the color mark that they can support:*

What works?
[crossed out "Neon orange" and wrote "Oregon color"]
There are multiple colors of line that might conflict. Maybe an alternating dark and light color. "Barberpole"
Any color that isn't a regular crab rope color
Who cares? With all the issues at stake why would you ask if I can support a color?
Whatever is cheapest or readily available at the supply house. Also need to coordinate with WA as they are looking at red OR orange
Red
Same as other states
I already have orange mark for just before the trap breaks the surface
Green
Whatever is most visible
Any except pink
White

\*10 respondents wrote "Any", "Doesn't matter" or "Whatever"

### Additional comments throughout survey

[Wrote next to question #3] Implement buy back to reduce pots in water
[Added "Pingers" to question #8 and put "Yes"]
[Wrote across question #8] I'm in favor of working with gear to avoid conflict
[Additional note on #8] We need to look at gear modification
[Wrote across question #8] None. I'm selling out. Done.
[Wrote at bottom of page 2] 30/35 Fathom and in line late season
[Wrote at bottom of page 2] Need scientific #s and knowledge