

Director's Report

Reducing risk of whale entanglements in Dungeness crab gear – building resiliency into the crab management framework

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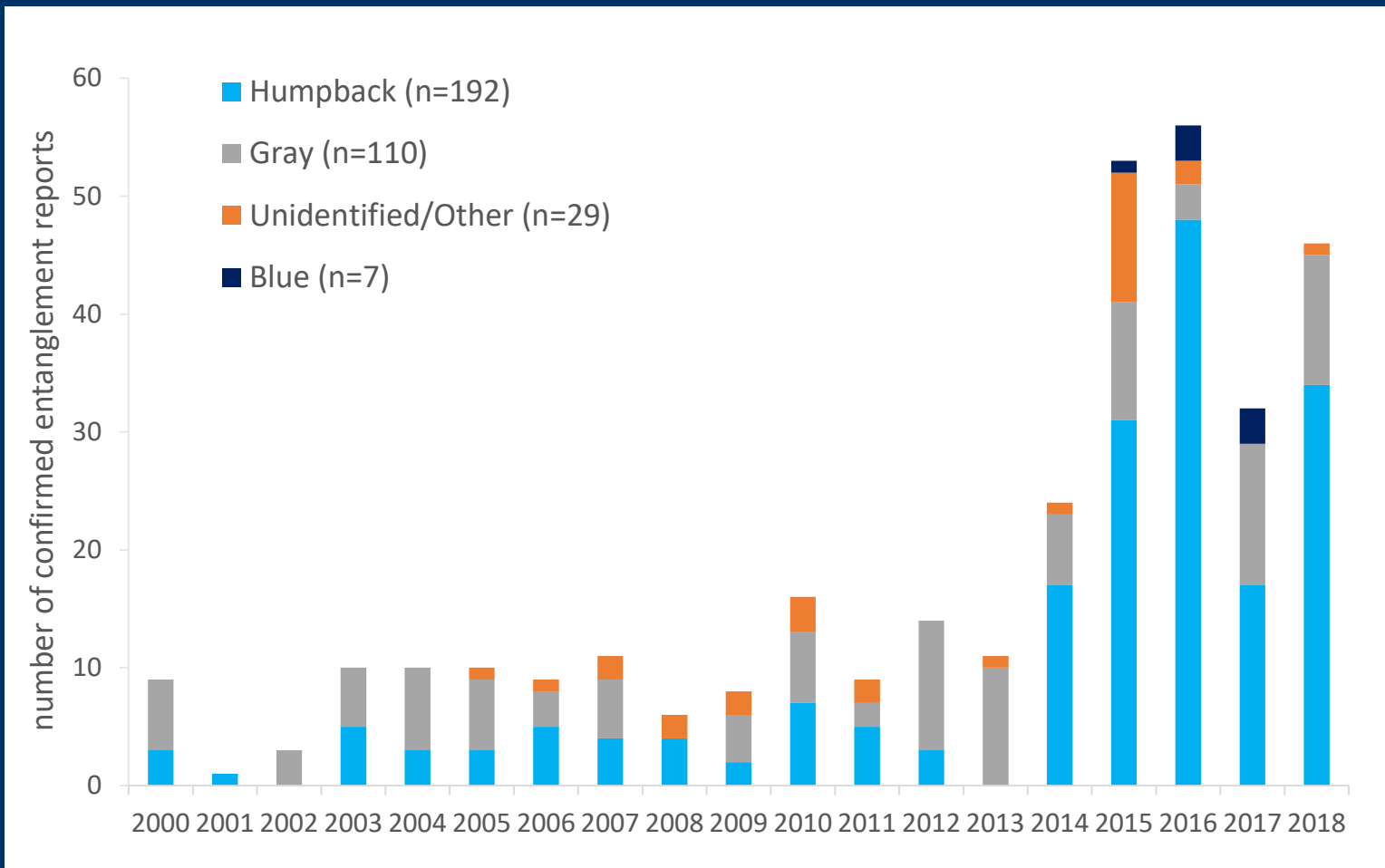
June 6, 2019



Outline

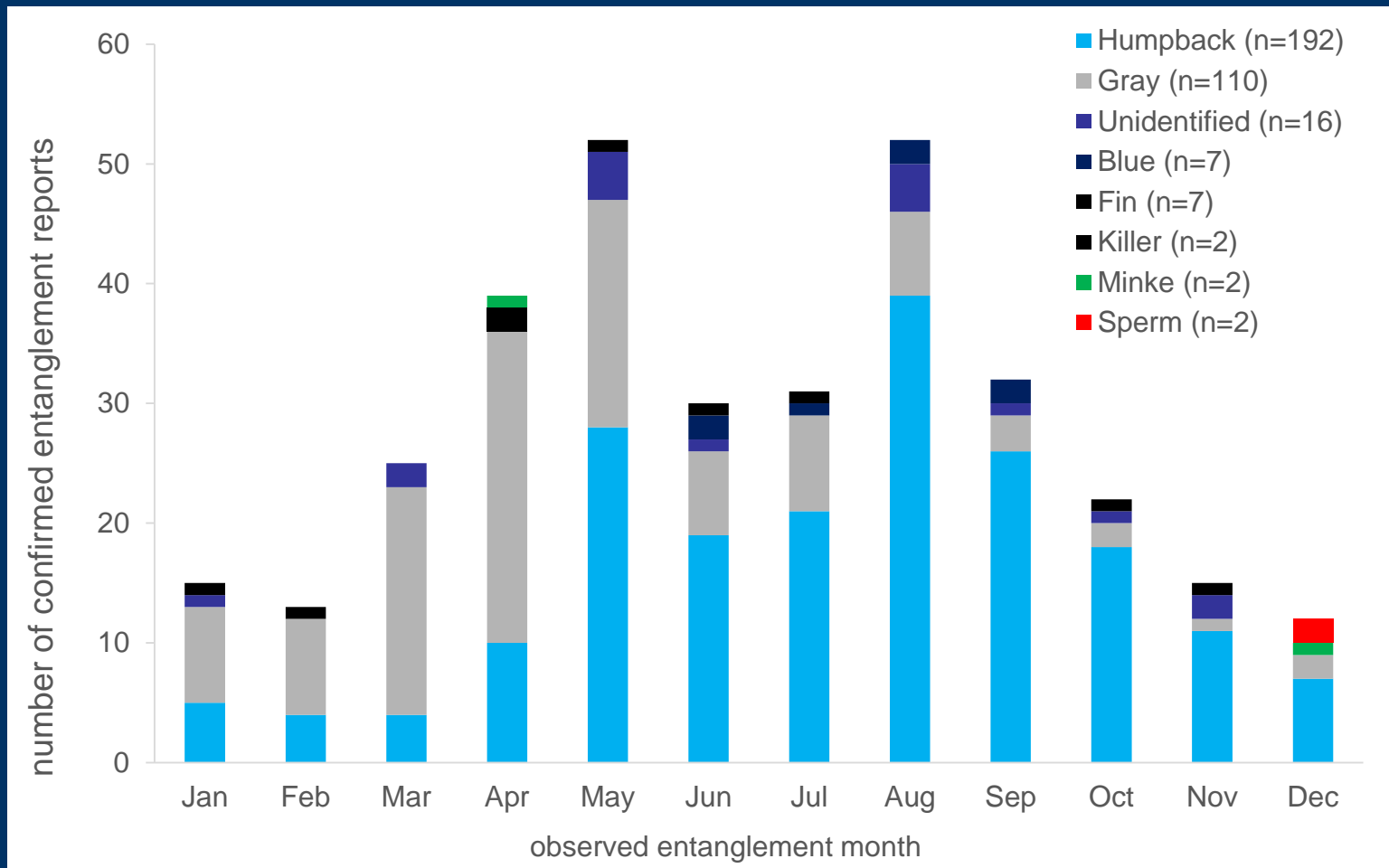
- Summary of large whale entanglements in fishing gear
- Whales and crab fishing effort off Oregon
- Existing regulations that have reduced risk
- Oregon's recent efforts to address increasing entanglements
- Summary of working group efforts
- Potential entanglement mitigation management measures
 - Reduce risk
 - Learn more from each event

Confirmed Whale Entanglements on the West Coast by Year



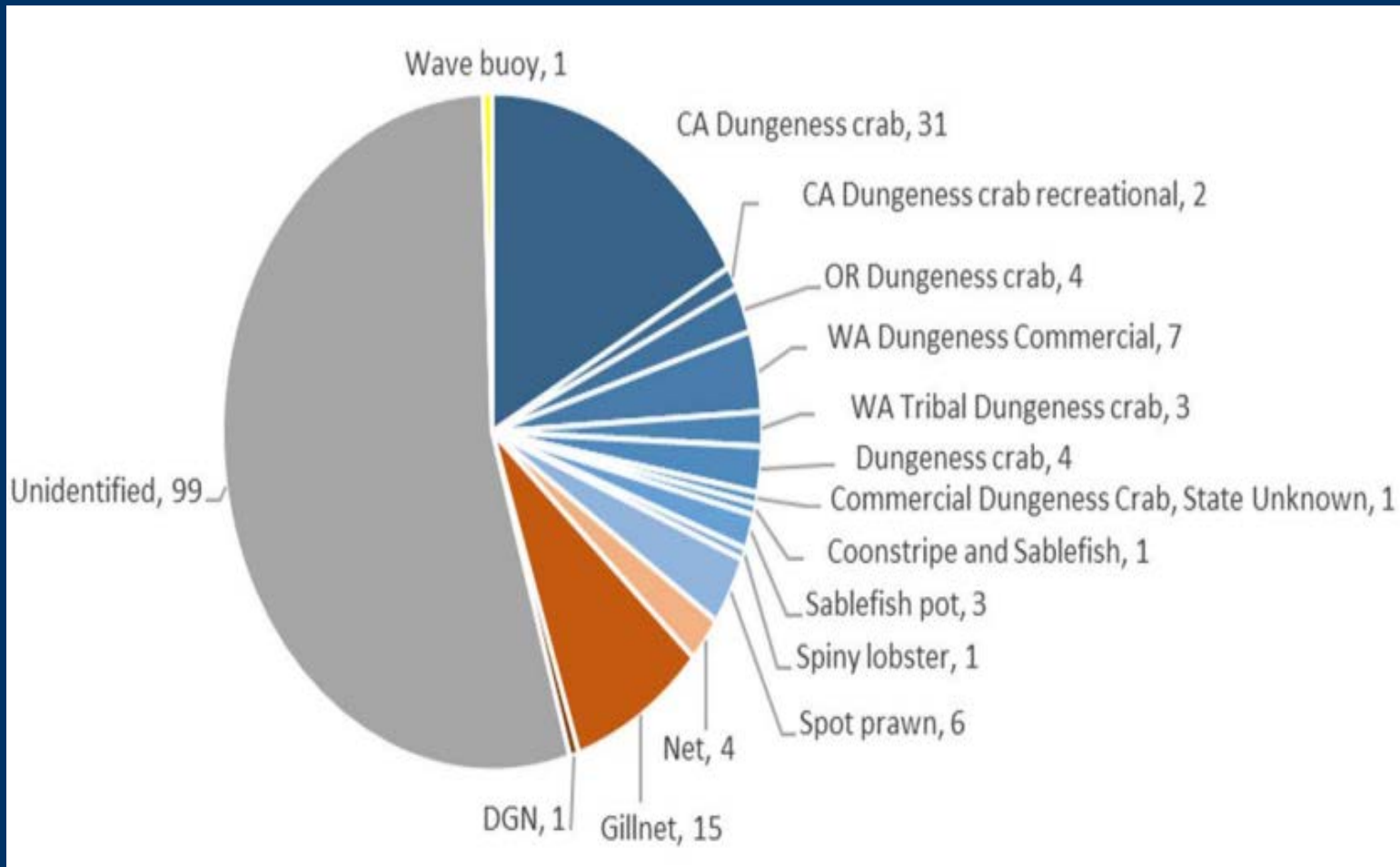
Source: NMFS

Confirmed Whale Entanglements on the West Coast by Month



Source: NMFS

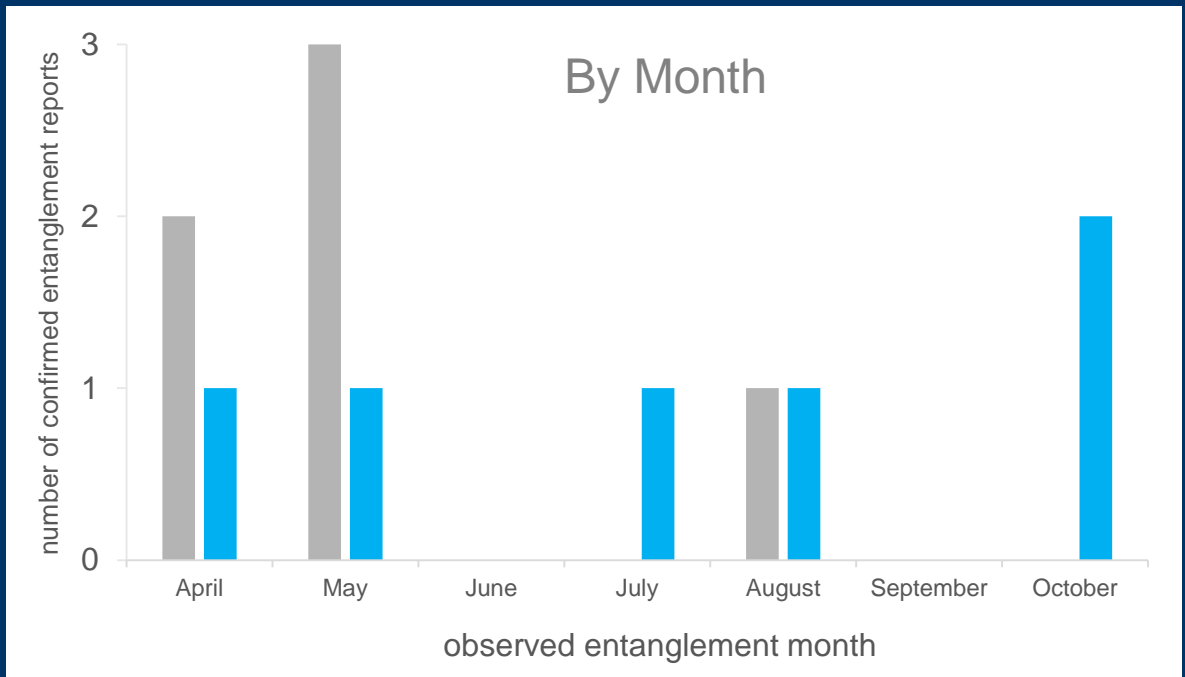
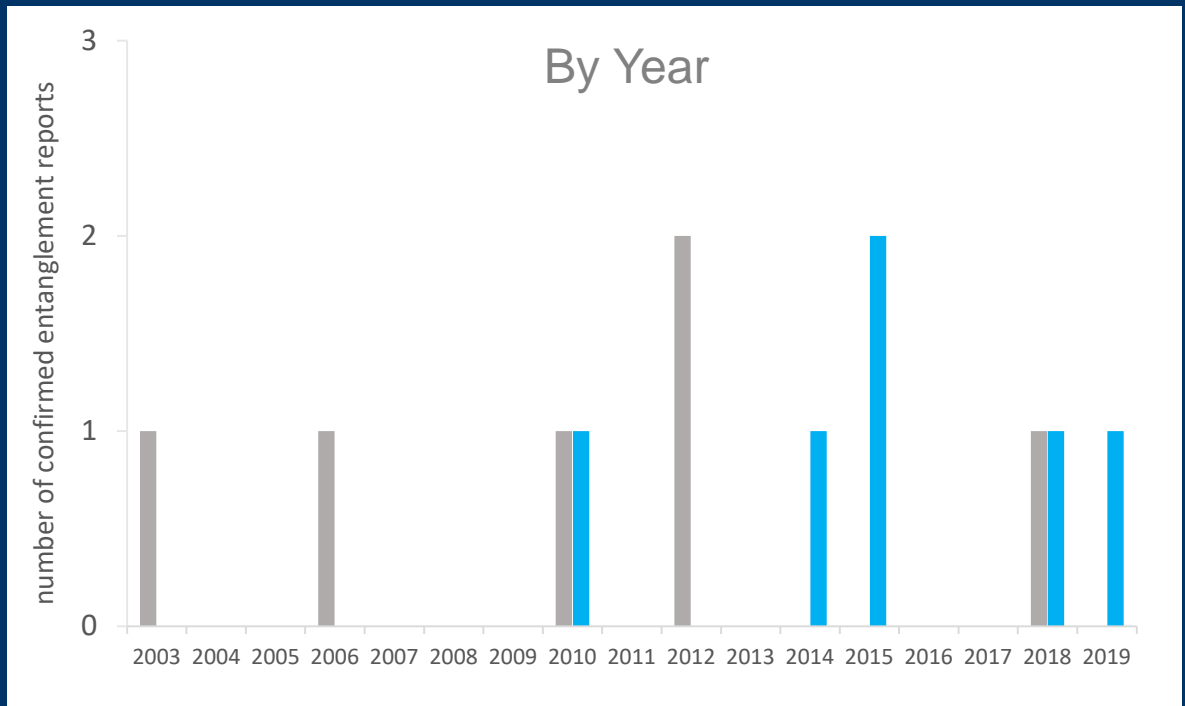
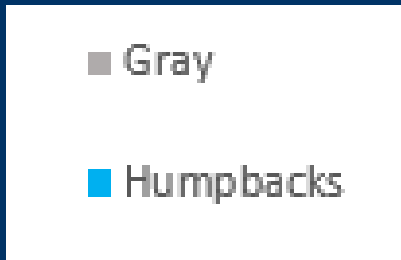
Sources of entanglements on the West Coast 2013-2018*



Source: NMFS

* 2018 through 6/6

Entanglements Confirmed in Oregon Dungeness Crab Gear



Entangled whales off Oregon



	Gray Whale Eastern North Pacific Stock	Gray Whale Pacific Coast Feeding Group	Humpback WA/OR/CA Stock
Population trend	increasing*	increasing*	leveling off*
Population status	delisted 1994	No formal status	Endangered/ Threatened
Primary activity	migrating	feeding	feeding
Known hotspots	migratory corridors by distance from shore coastwide	coastal reef habitats off central and southern regions	Stonewall and Heceta Banks
Peak timing	Northbound - late Jan-Jul, peak Apr-Jul Southbound - Oct-Dec, peak in Dec-Mar	Jun-Nov	May-Nov
Area utilized	frequently within 2.5-5 nm from shore	frequently within 2 nm of shore	most commonly inside 100 fa
Prey	na	epibenthic zooplankton, benthic crustaceans	krill and anchovy

Center for Biological Diversity v CDFW lawsuit

- **October 2017** – CBD filed complaint based on alleged illegal take under Endangered Species Act
 - Humpbacks, Blue whales and sea turtle interactions
- **November 2018** – CDFW announced it would apply for Incidental Take Permit
- **March 2019** – Settlement agreement was reached and resulted in April 15 closure for current season and many provisions for future seasons

Incidental Take Permit

- ITP required by ESA for incidental take of ESA-listed species
- April 2019 formalized ODFW intent to apply
- Identifies management actions to minimize risk
- Extensive multi-year process – need to increase staff capacity and expertise to assist with process
 - **ODCC has moved to fund up to 100K to help with staffing**
- Proceed with state management measure development and implementation, while ITP is being developed and evaluated

Existing regulations that reduce entanglement risk

1984-85 – Season end date Aug 14

1992-93 – 10% cap on summer fishery

1998-99 – 1200 lb trip limits on summer fishery

1995-96 – Limited entry

2004-05 – Groundfish vessel buyback

2006-07 – Pot Limits and buoy tags
Derelict gear allowances

2007-08 – Required logbooks
14-day landing requirement

2010-11 – Increased derelict gear retrieval allowances

2011-12 – Incentivized derelict gear retrieval by
allowing crab retention

2013-14 – Post-season derelict gear program



Oregon's Recent Efforts to Mitigate Risk

Timeframe	Actions
2010 - 2012	Collaborated with NOAA on co-occurrence modeling efforts and fixed gear guide
2015 - in progress	Targeted fleet outreach on issue
2017 - 2018	Participated in PSFMC whale entanglement mitigation workshops
2017 - in progress	Oregon Whale Entanglement Working Group
2018 - in progress	Developing phased approach of potential management measures <ul style="list-style-type: none"><li data-bbox="664 976 987 1015">▪ Reduce risk<li data-bbox="664 1033 1340 1072">▪ Learn more from each event

Oregon Whale Entanglement Working Group

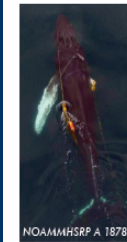
- Gained a better understanding of the issue and identified information gaps
- Developed an Oregon Dungeness Crab Best Practices Directive
- Helped distribute information on who to call to report entangled whales (1-877-SOS-WHALE)
- Developed and surveyed fleet on range of management options to reduce risk of whale and gear interactions
- Developed preliminary recommendations of management options to reduce risk and learn more from future entanglement events

Oregon Commercial Dungeness Crab Fishing

2017 - 2018 Directive to Minimize Whale Entanglement Risk



Recommended by the Oregon Whale Entanglement Working Group



NOAAMHSRPA 18786

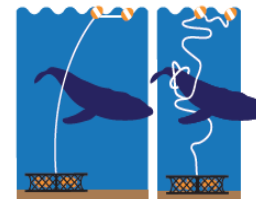
Reasons for Directives

National Marine Fisheries Service (NMFS) has confirmed significant increases in large whale entanglements over the last few years, and specifically in Dungeness crab fishing gear. This situation threatens the stability of the fishery and coastal fishing communities. By using these voluntary best practices, the Oregon Dungeness crab fleet can take an important step towards reducing the risk of whale entanglements.

The best known way to reduce risk of whale entanglement is to reduce the amount of gear and line in the water during the spring and summer months, when whales are in the area.

Best Practices During Crab Season

- Use the minimum amount of scope required to compensate for tides, currents and weather. Whales are more likely to become entangled with slack lines, which can potentially create a "floating snare".
- When changing set location across depths, adjust the length of pot lines by adjusting shots (i.e., measured length of line) to maintain taut vertical lines.
- No excess lines should be floating at the surface. Floating line should only be between the main buoy and trailer buoy(s).
- Remove any fishing gear you are not actively tending during the season.
- Avoid setting gear in the vicinity of whales whenever possible.
- Communicate the locations of high whale activity with other fishermen.



Keep line between pot and main buoy running taut and as vertical as possible.

Why Report?

Understanding where, when, and how entanglements occur is essential to prevent future entanglements. Timely reporting is critical to facilitate response efforts, when appropriate.

Report Entangled Whales

1-877-SOS-WHALE



Report entangled whales **IMMEDIATELY** to the NMFS whale entanglement response hotline at 1-877-SOS-WHALE (1-877-767-9425) or hail the U.S. Coast Guard on Channel 16. If possible, stand by.

Photograph Entangled Whales

WHALE: side view of dorsal fin (or hump); flukes (especially if underside is raised); head; any part of the body where gear may be present.

ENTANGLEMENT: buoy(s); tags; lines on the body; trailing lines (including distance from whale); netting (if present); other gear if present. *Do not approach within 100 yards.*

Respond Promptly if Contacted

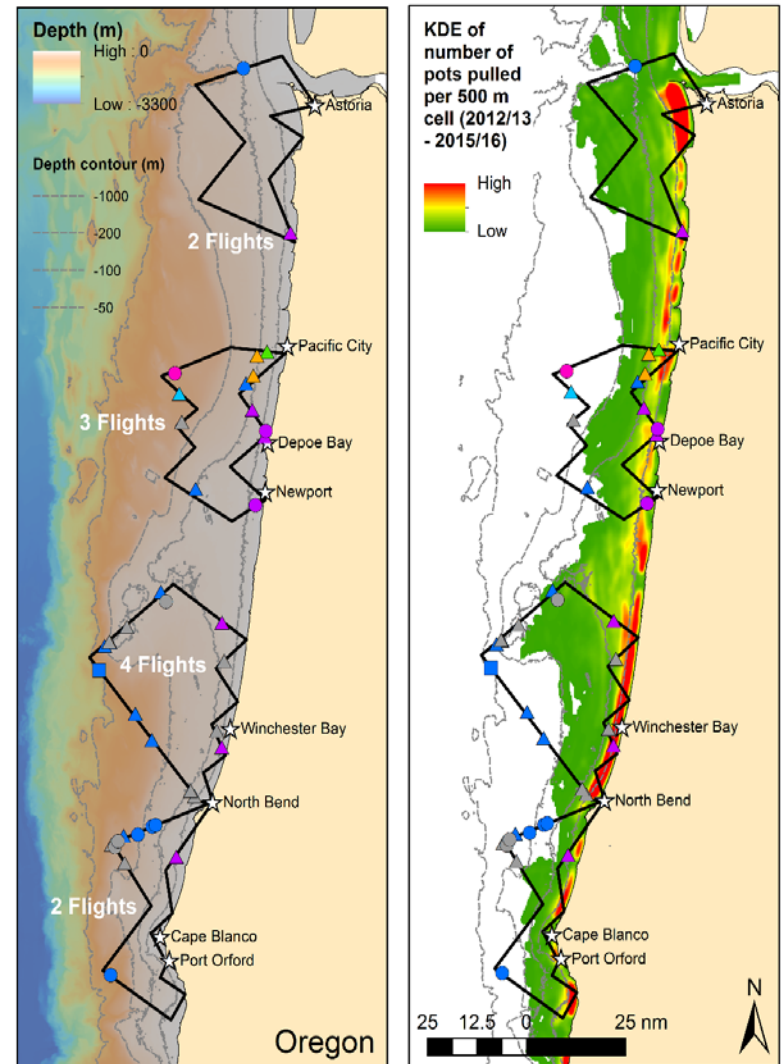
If you are contacted about a whale entangled in your gear, please respond. You can help prevent future entanglements by providing as much information as possible about your fishing gear and practices.

Oregon whale surveys and co-occurrence modeling project

- Funding – Oregon Dungeness Crab Commission; NOAA Section 6 grant
- Primary goal – better understanding of the who, when, where and why of whales off Oregon
- Survey methods - aerial surveys with USCG, small boat surveys and citizen science opportunistic whale sighting data collection



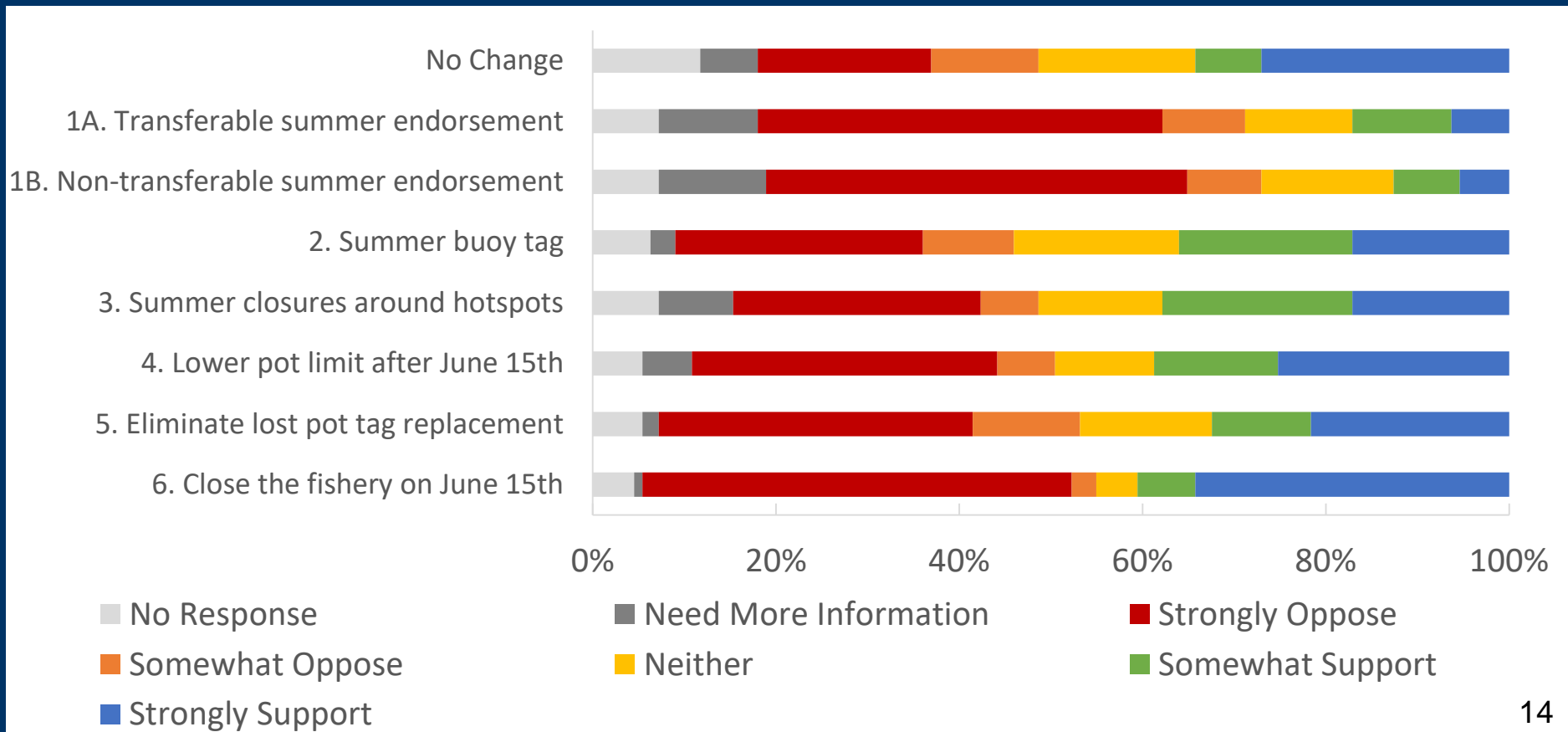
Cetacean sightings to date (1-May-2019) during USCG surveys



Month	Species	
● April	● Fin Whale	● Northern Right Whale Dolphin
■ February	● Gray Whale	● Sperm Whale
▲ March	● Humpback Whale	● Unidentified Dolphin
	● Unidentified Whale	

OWEWG Whale Entanglement Survey

- Lots of concern about entanglements amongst the fleet
- Fleet following many best practices for entanglement avoidance
- Industry is very divided on potential mitigation measures



Entanglement Mitigation Measures - Phase 1

Outreach – OWEWG, Oct industry mtgs, newsletters and industry notices

Planned OFWC exhibit – September 2019

Target implementation - start of 19-20 season

1. Control date of August 15, 2018 for potential “late season” LE fishery
2. Mandatory electronic tickets for all crab landings
3. Buoy color and pattern registration
4. Double-sided buoy tags (non-rulemaking)

May include:

5. Require recreational gear marking
6. Require remaining fixed-gear commercial gear marking
7. Eliminate the two-week gear clean-up period after the season ends

Entanglement Mitigation Measures - Phase 2

Additional Outreach – October 2019

Planned OFWC exhibit – February/March 2020

Target implementation – Spring of 19-20 season

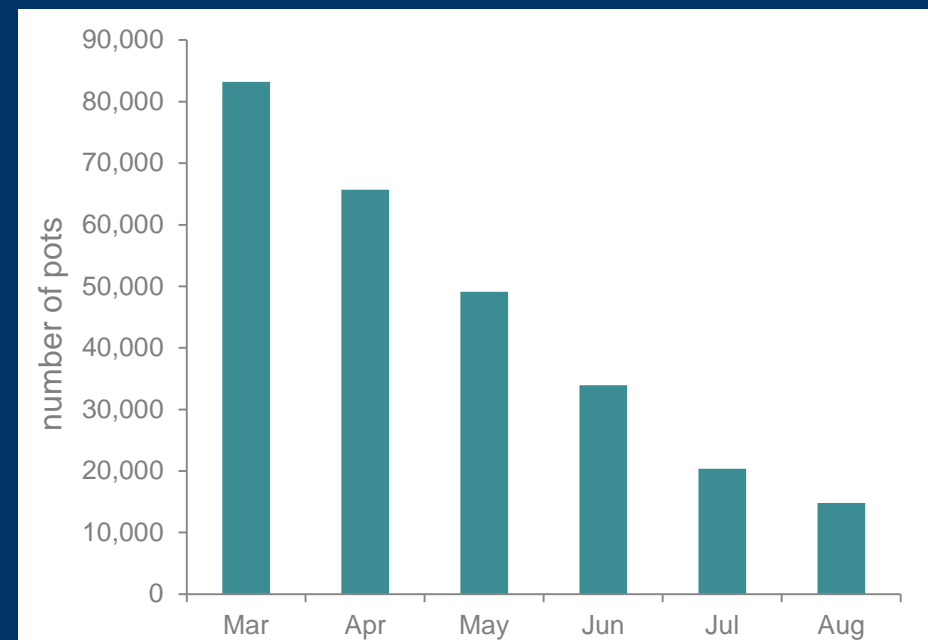
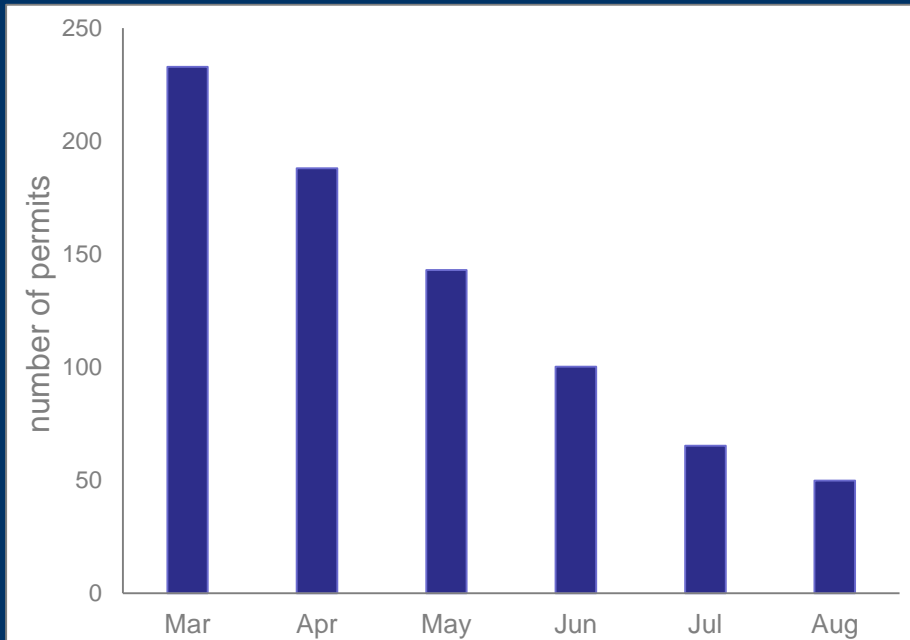
1. “Late season” reduced pot limit and buoy tag
2. Initiate “late season” derelict gear removal, once the regular season ends (requires legislative action)
3. Season opening protocol changes to open earlier when possible

“Late season” Effort Reduction

Development needed:

1. When to implement within the season?
2. How to reduce pot limits?

10 season average



10 yr ave. pots used per season = 115,120

Future Entanglement Mitigation Measures

Additional Outreach Planned – Oct 2019; more as needed

Planned OFWC exhibit – TBD

Target implementation – TBD

1. Near-real time vessel monitoring requirement
2. Late season limited entry
3. Others as determined necessary?

Next Steps

1. Consider emergency rule to eliminate 2-week clean up period for end of current season
2. Ongoing industry and public discussions: additional commercial measures, recreational buoy marking, etc.
3. September 2019 OFWC: consider phase 1 measures
4. October 2019 industry meetings: further develop phase 2 measures
5. Feb/Mar 2020 OFWC: consider phase 2 measures
6. Work with NMFS on ITP: ODFW capacity needs, include management measures in ITP development
7. Develop additional management measures as needed

Questions?