



Marine
Resources

CaseID: 20211129Mn
NMFS MMHSRP Permit #: 18786-06



Oregon Entanglement Advisory Committee

**March 16, 2023
1-5pm**



Agenda

- **Welcome, introductions, & tech overview**
 - Review agenda
- **Recent entanglement record, Conservation Plan, and Incidental Take Permit status updates**
- **Oregon research updates – *Drs. Leigh Torres and Solène Derville***
 - Section 6 co-occurrence modeling efforts
 - Community Project Funding

---BREAK---

- **2023 Oregon Fish and Wildlife Commission package**
 - Three-year evaluation of primary risk reduction measures
 - Line marking requirement
 - Maximum surface gear allowance
 - Industry-requested changes
- **Public comment**



2022 West Coast whale entanglements

- **29 confirmed entanglements**

- **17 humpback whales** = 3 CA D crab + 2 OR D crab + 1 WA D crab + 2 gillnet + 9 unidentified gear
 - Reported off CA (16) and MX (1)
- **10 gray whales** = 1 WA D crab + 1 gillnet + 2 monofilament line (1 rec) + 6 unidentified gear
 - Reported off CA (6), OR (2), WA (2), and AK (1)
- **1 killer whale** = unidentified D crab gear
 - Reported off OR
 - Genetic analyses conclusively determined as a transient killer whale, *not* ESA-listed SRKW
- **1 fin whale** = unidentified gear
 - Reported off CA

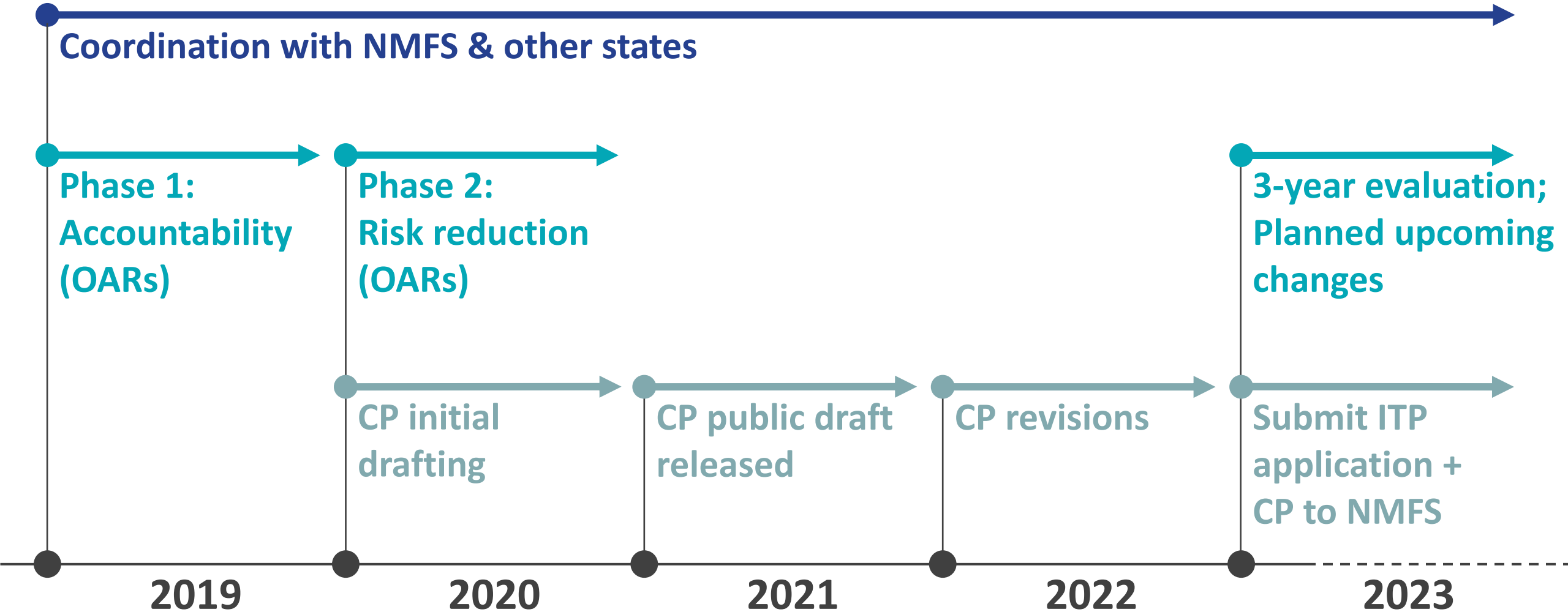
2022 Oregon entanglements

- **Reported in OR waters**
 - June 26 – **Killer whale** (dead)
 - Confirmed in unidentified D crab gear
 - Aug 1 – **Gray whale**
 - Confirmed in unidentified gear
 - Aug 3 – **Gray whale**
 - Confirmed in monofilament line
- **Confirmed in OR commercial crab gear (main season 2021-22 tags only)**
 - Sept 10 – **Humpback whale**
 - Unauthorized disentanglement response
 - Sept 25 – **Humpback whale**
 - Fully disentangled & gear recovered





CP and ITP application status





2023 OFWC package

- Three-year evaluation of primary risk reduction measures
- Line marking requirement
- Maximum surface gear allowance
- Industry-proposed changes

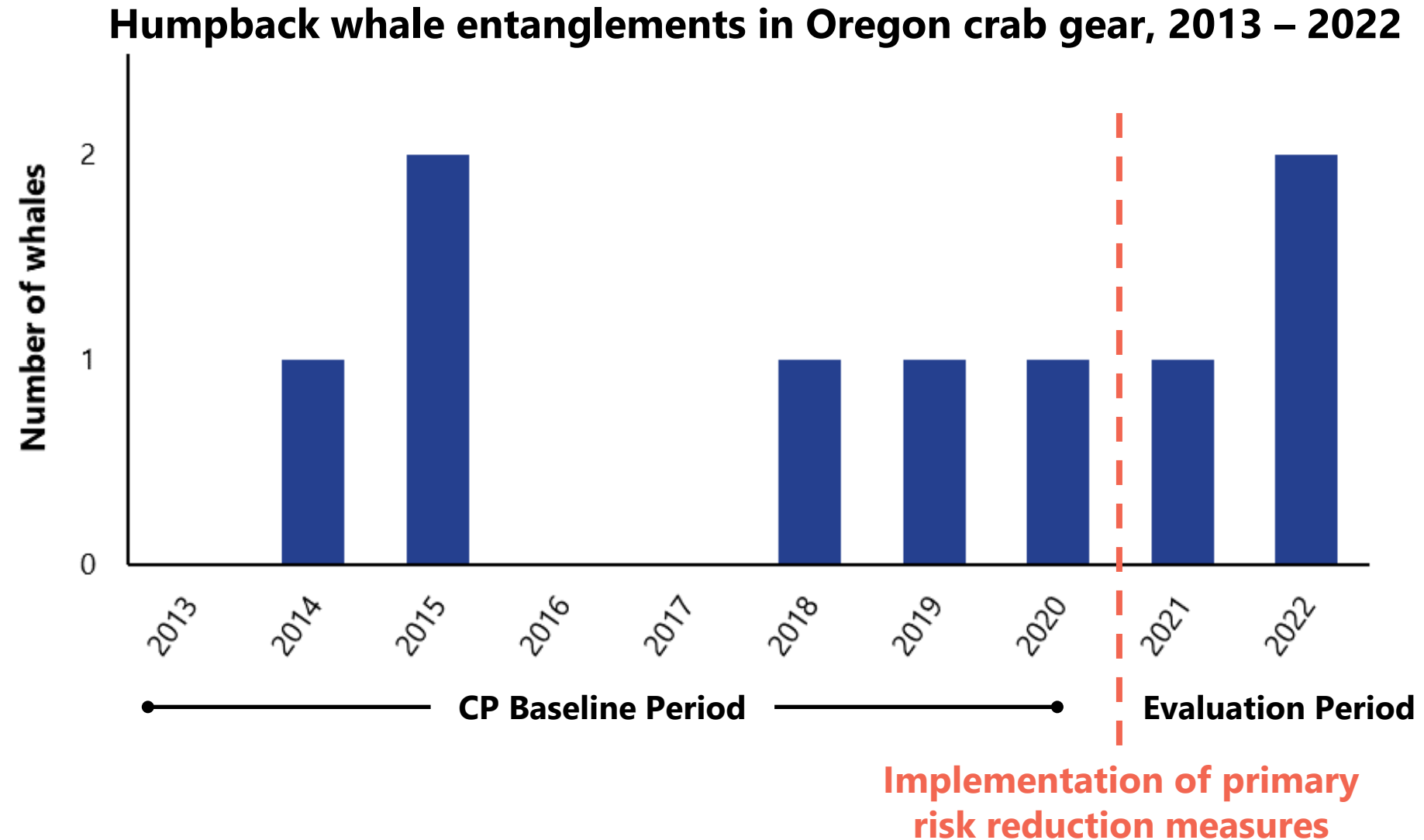
Public notice with staff recommendations will be available one month in advance



Three-year evaluation of risk reduction measures

- **Main risk reduction measures** – effective May 1 each year
 - 20% gear reduction
 - 40 fathom depth restriction
 - Late-season tag requirement
- **Implemented 2020-21 crab season** – adopted by the OFWC Sept 2020
 - Modified regs for 2nd season
 - Ongoing 2022-23 crab season will be 3rd season with measures in place
- **3-year sunset** – evaluate effectiveness and provide recommendations to continue or adjust
- **Draft recommendation to the OFWC** – maintain current regulations and remove sunset date
 - Evaluated first two seasons relative to 8-year historical baseline period (2013 – 2020)

Three-year evaluation - Entanglements





Three-year evaluation – Entanglements

Entanglements in Oregon crab gear

Report Month/Year	Species	Report location	Estimated gear set season	Estimated gear set location	Estimated gear set depth (fm)
May 2014	Humpback	WA	2013-14	Northern OR	30 – 40
July 2015	Humpback	Central CA	2014-15	Northern OR	20
Sept 2015	Humpback	Southern CA	2011-12 & 2012-13*	n/a	n/a
Apr 2018	Gray	WA	2017-18	Northern OR	36 or 41
Oct 2018	Humpback	Central CA	2017-18	Unknown	Unknown
Apr 2019	Humpback	Mexico	2018-19	Central OR	50+
June 2020	Humpback	Central CA	2019-20	Central OR	95
Apr 2021	Minke	Southern CA	2020-21	Central OR	42 – 45
Nov 2021	Humpback	Mexico	2019-20*	n/a	n/a
Sept 2022	Humpback	Central CA	2021-22	Central OR	20+
Sept 2022	Humpback	Southern CA	2021-22	Central OR	30 – 90

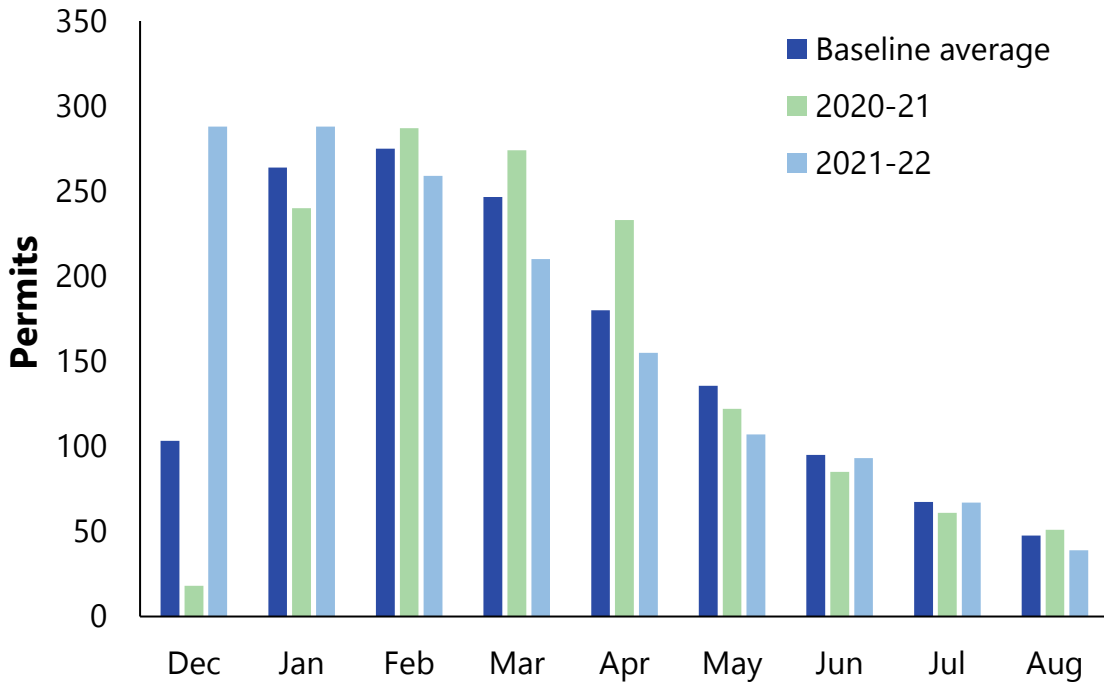
*Likely derelict gear

Implementation of May 1 primary risk reduction measures

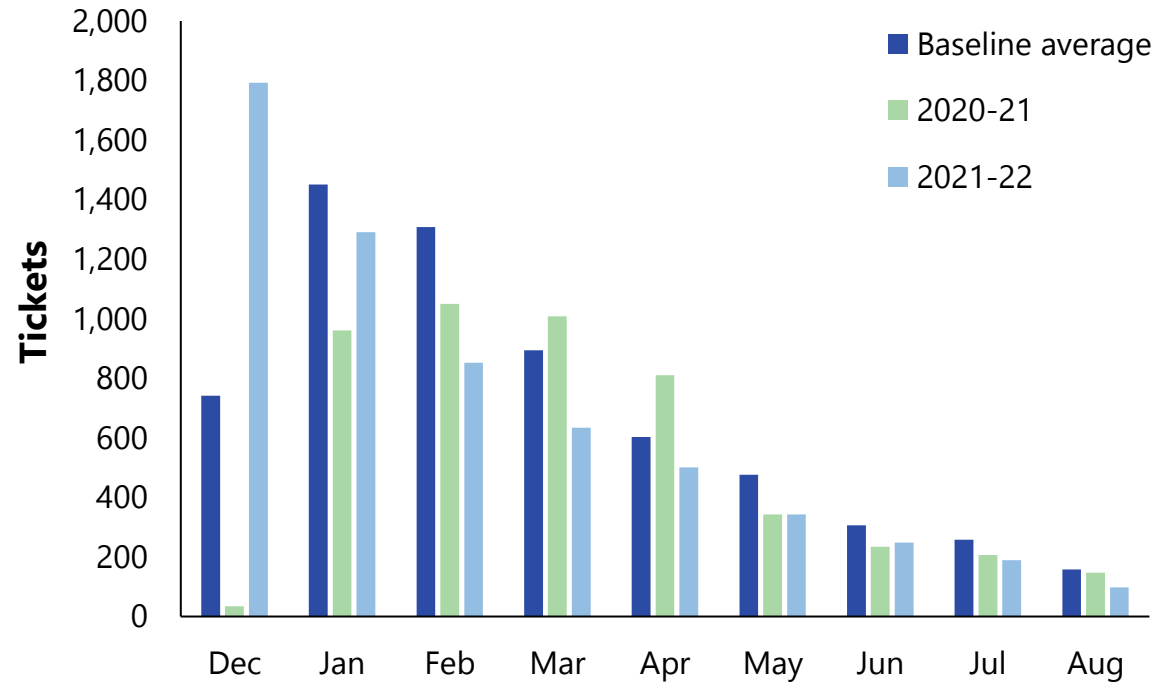


Three-year evaluation – Effort

Permits

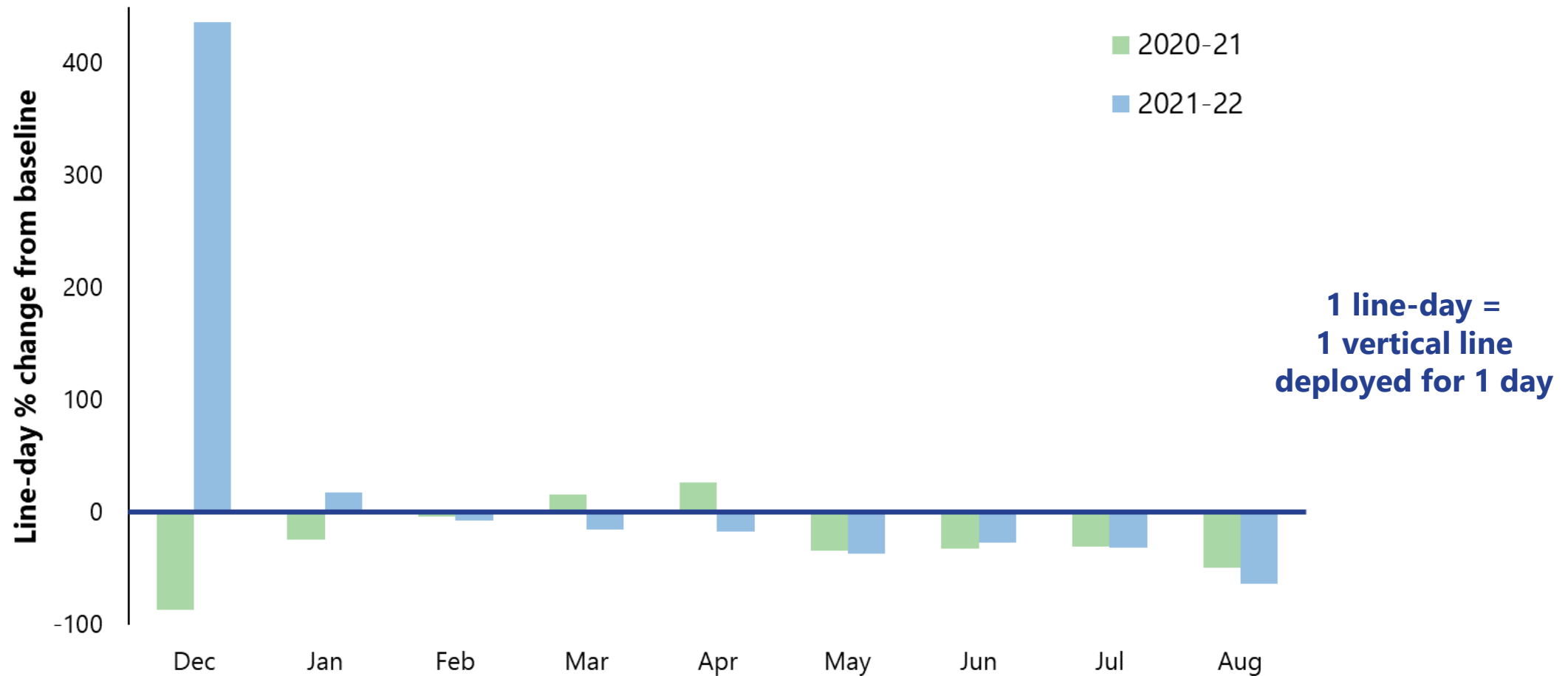


Tickets



Three-year evaluation – Line-days

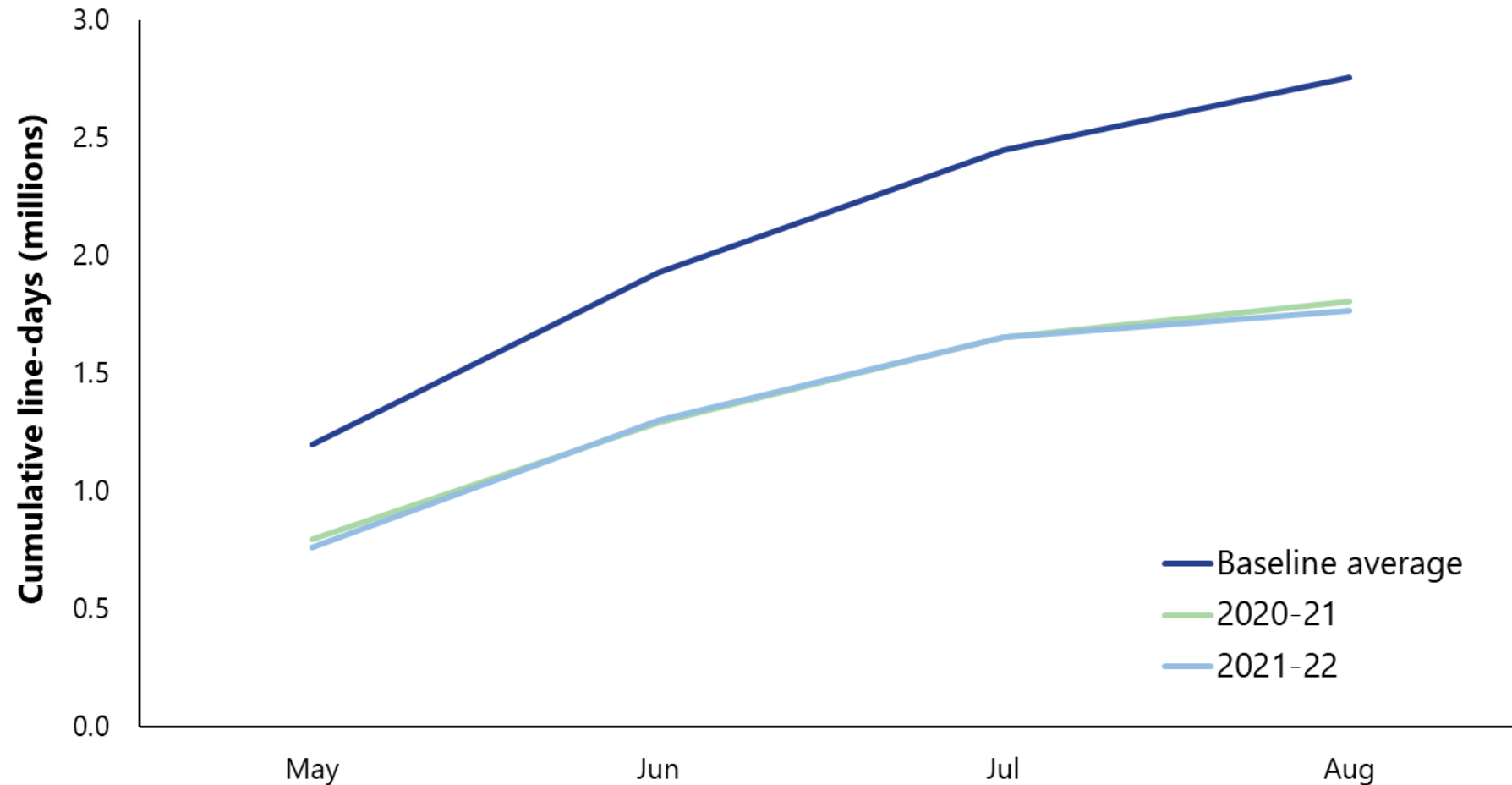
Percent change in monthly line-days relative to baseline period (2012-13 through 2019-20)





Three-year evaluation – Line-days

Cumulative line-days throughout the late-season (May 1 to season closure)

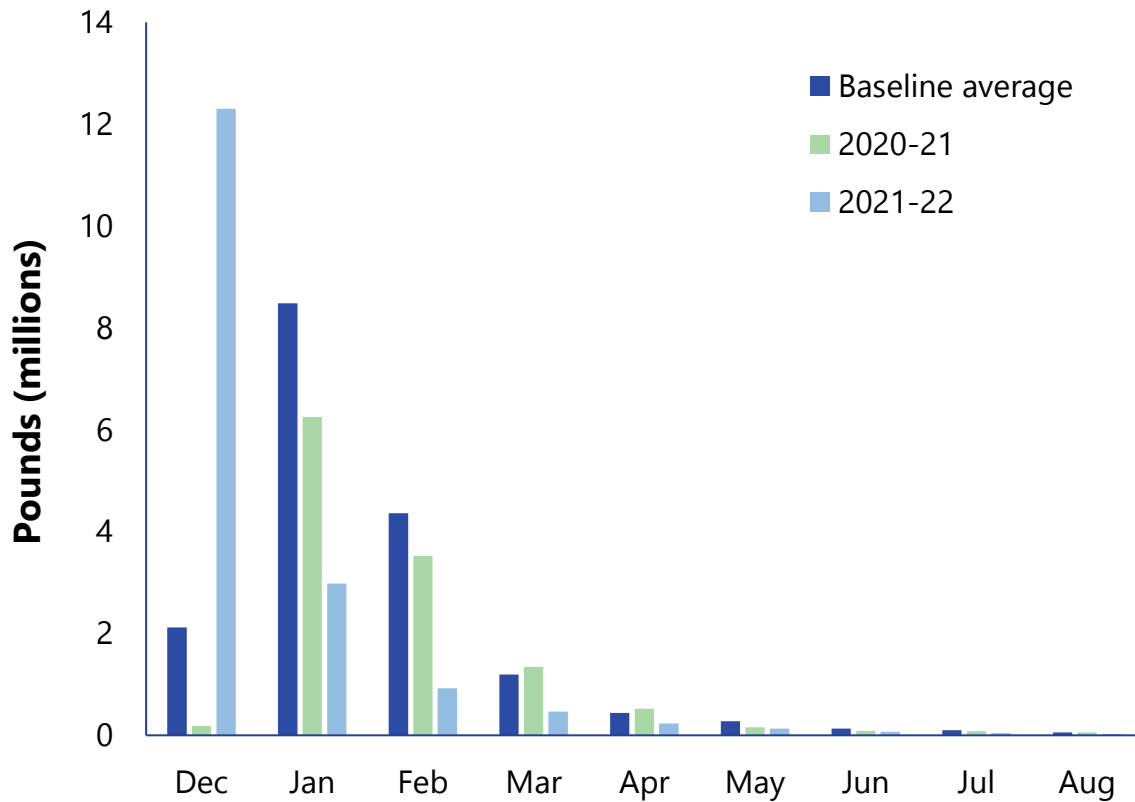




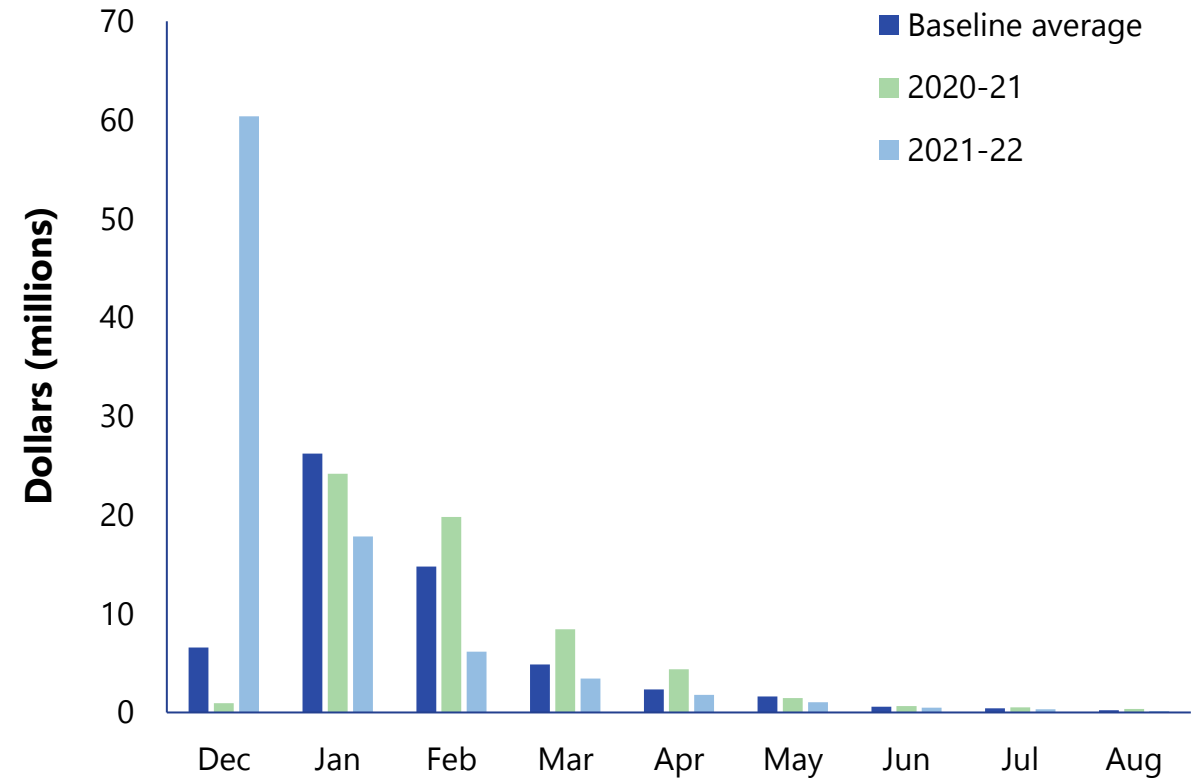
Three-year evaluation – Fishery impacts

Full season comparison by month

Pounds



Value

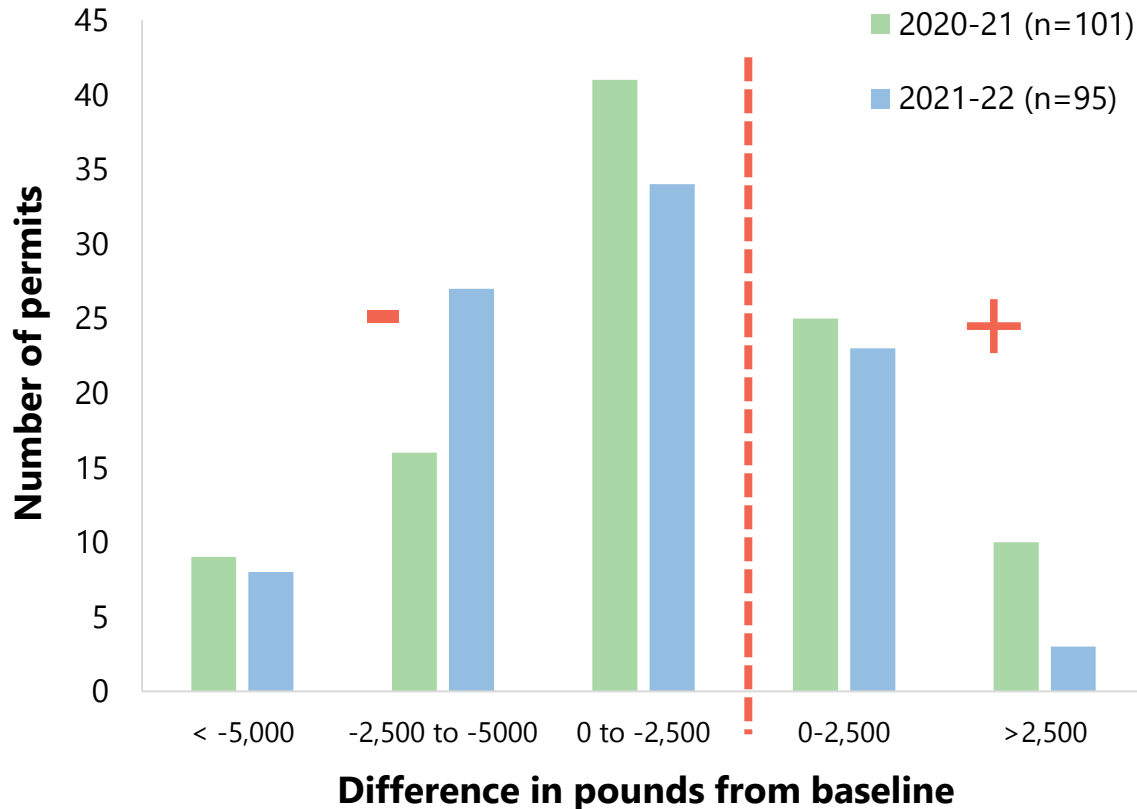




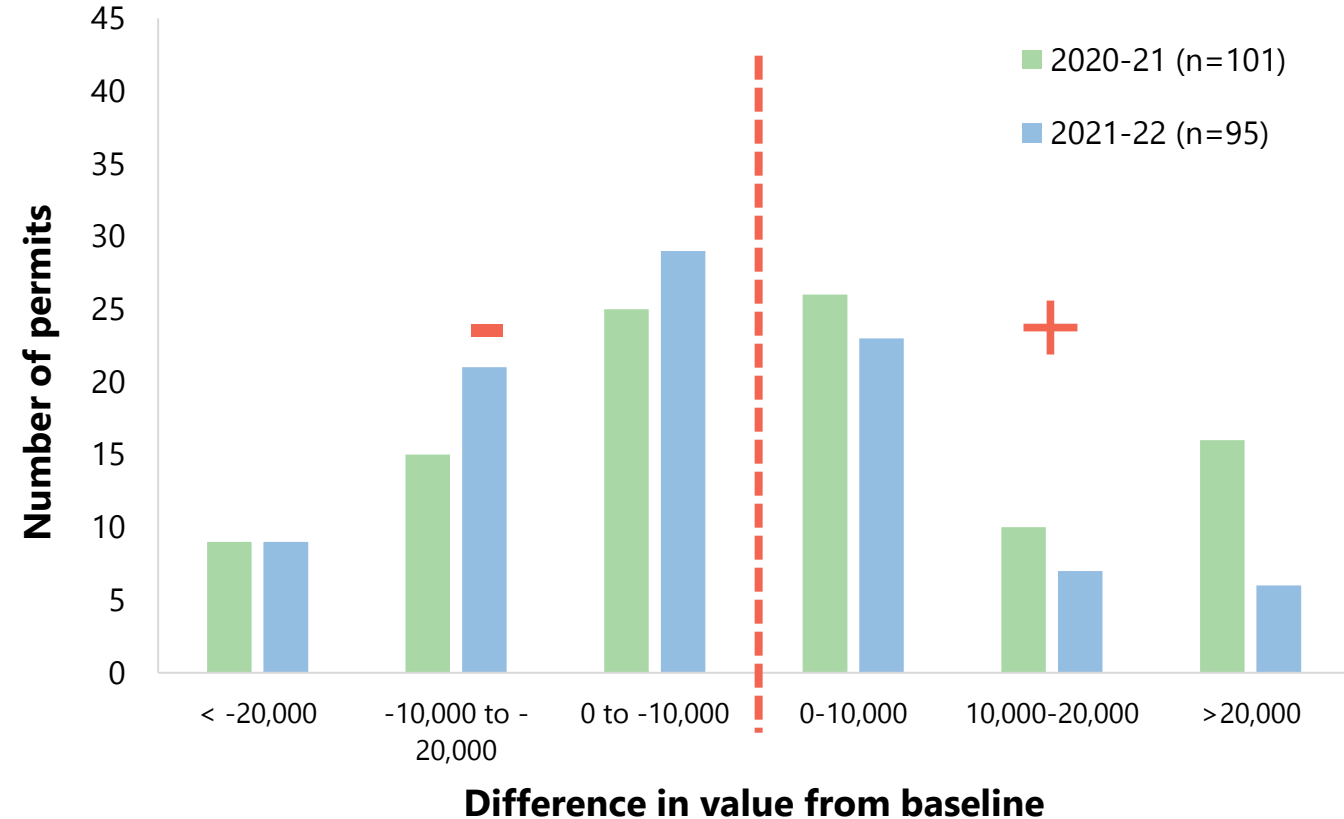
Three-year evaluation – Fishery impacts

Late-season comparison by permit

Pounds



Value

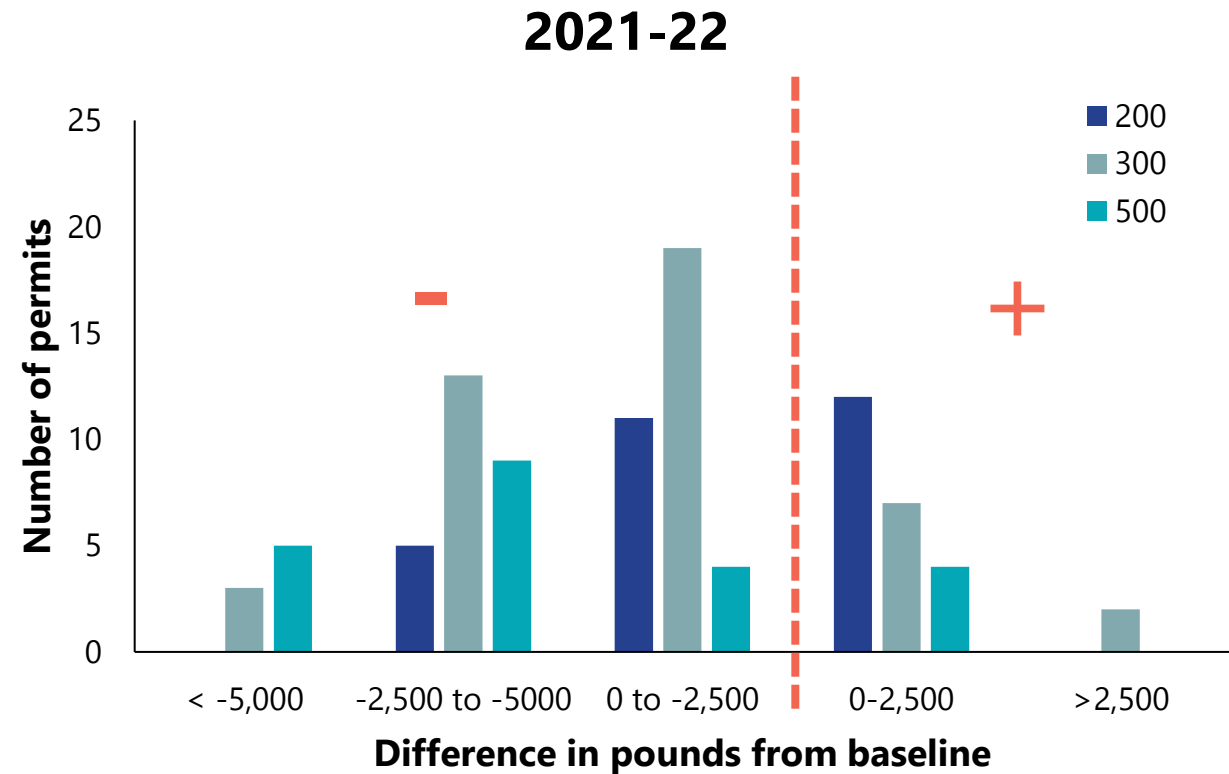
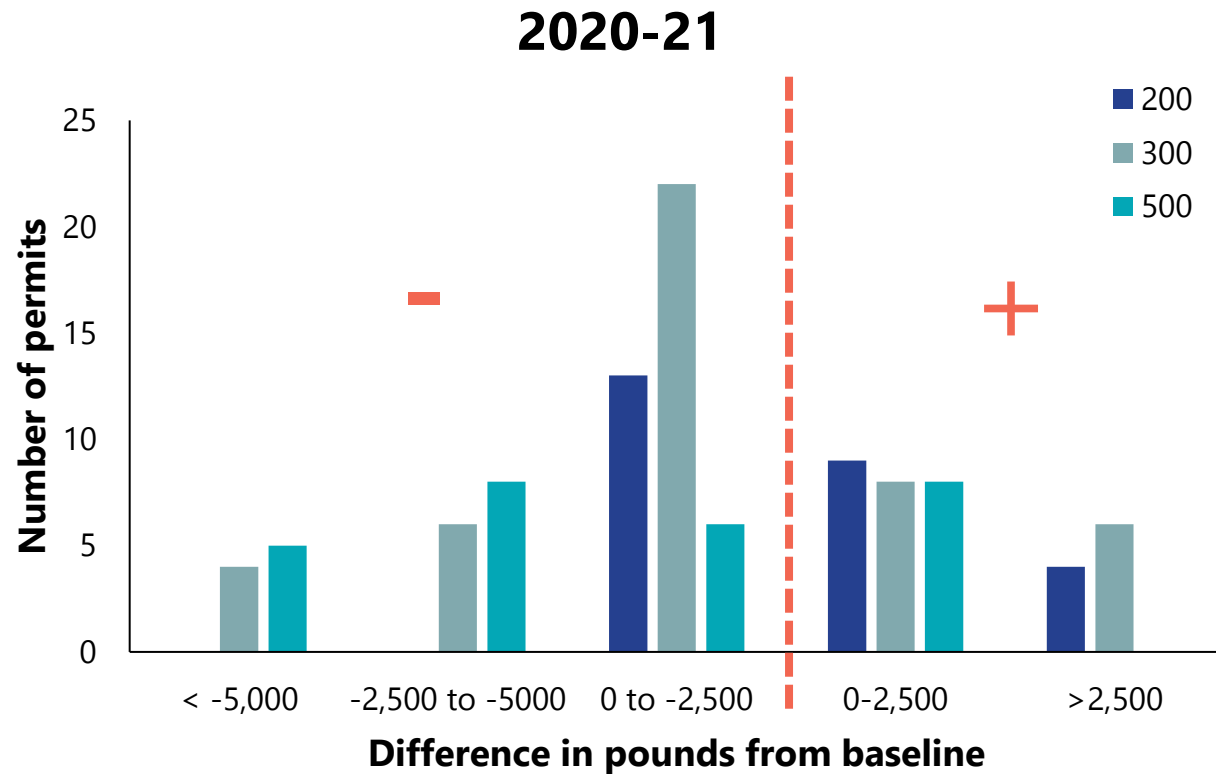


* Includes permits that fished in ≥ 3 seasons in baseline seasons and fished in one or both post-measure seasons



Three-year evaluation – Fishery impacts

Late-season difference in pounds by pot limit

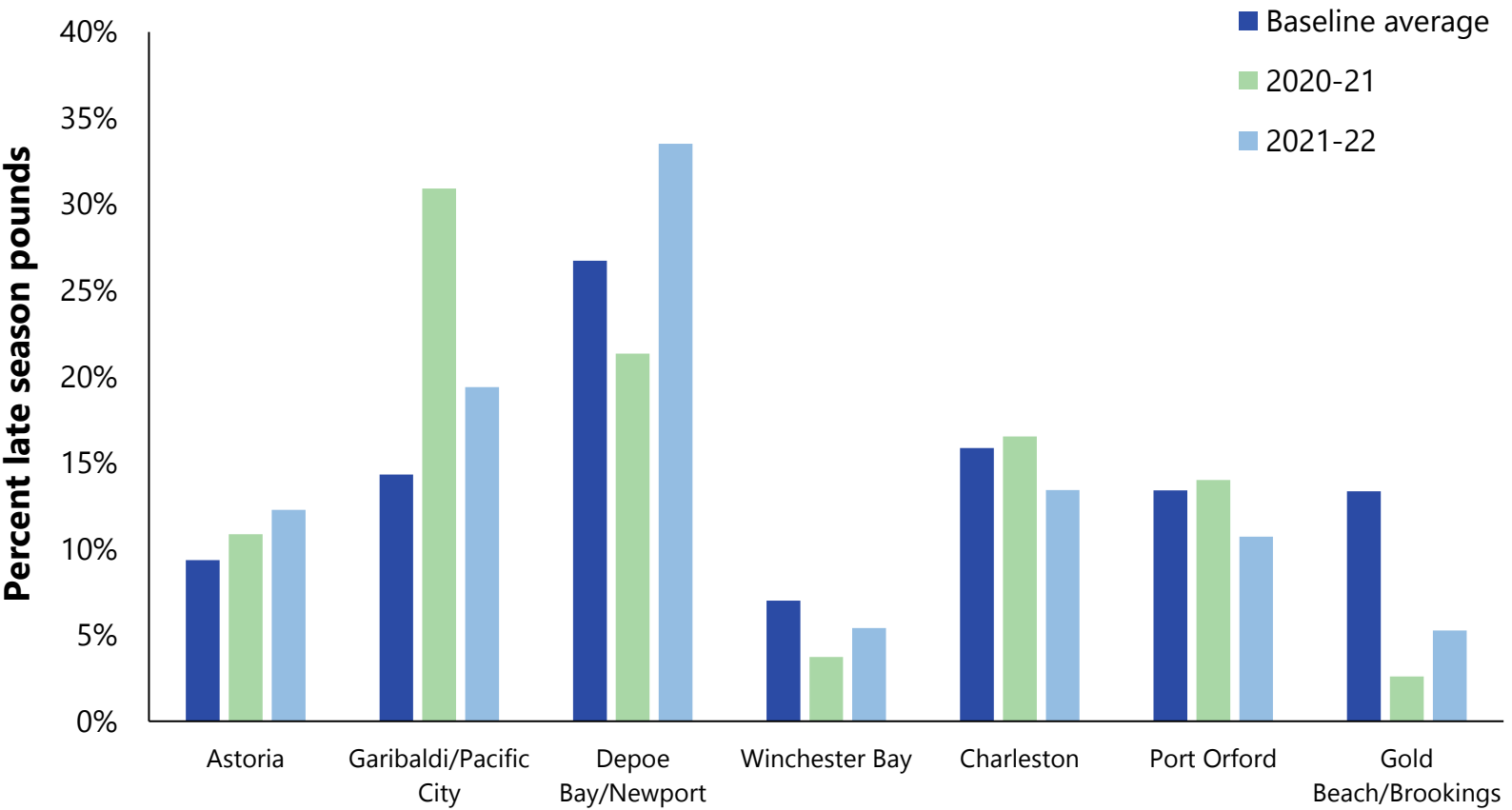


*Some permits removed for confidentiality



Three-year evaluation – Fishery impacts

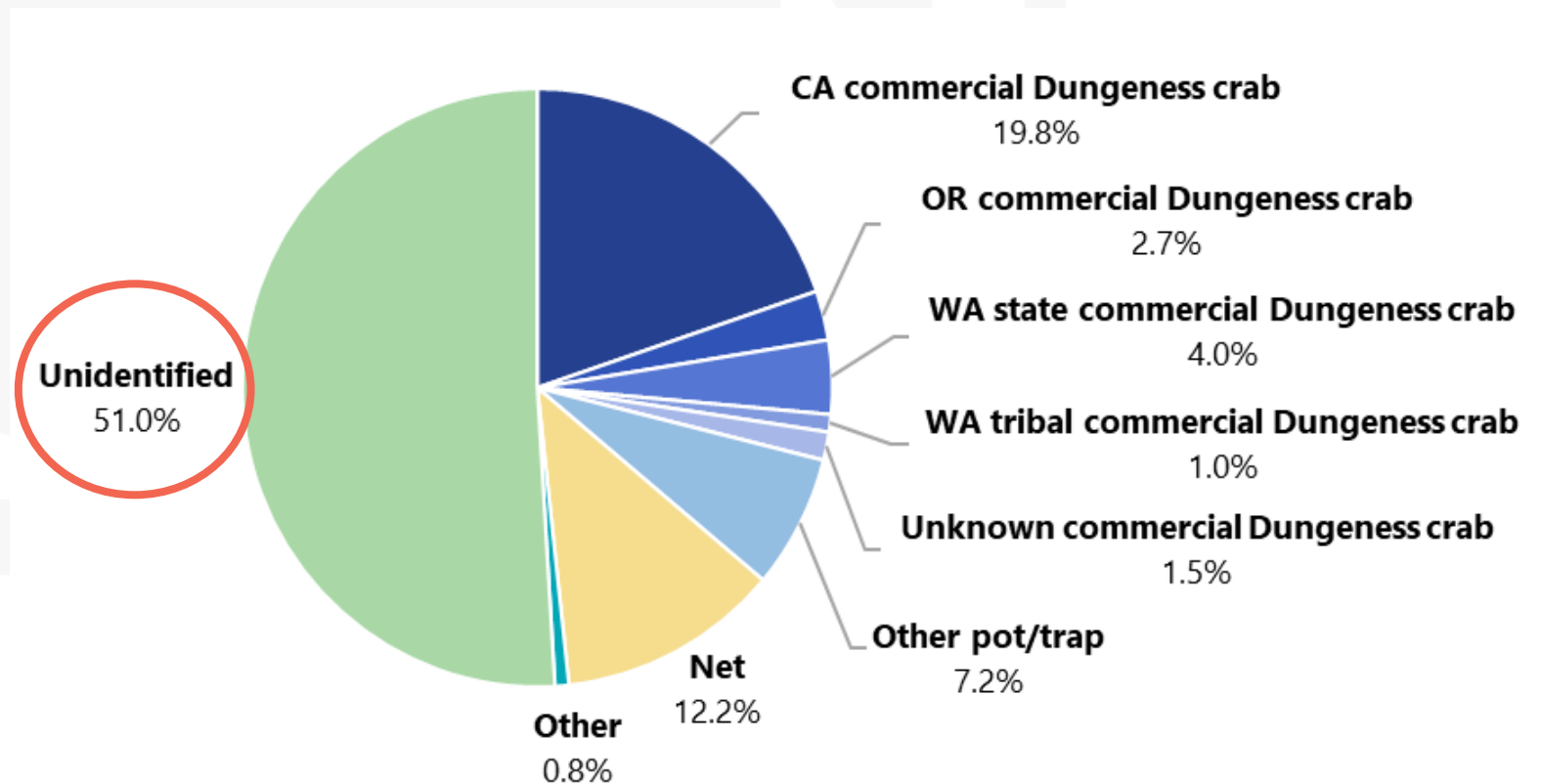
Proportion of late-season pounds by port



Why line marking?

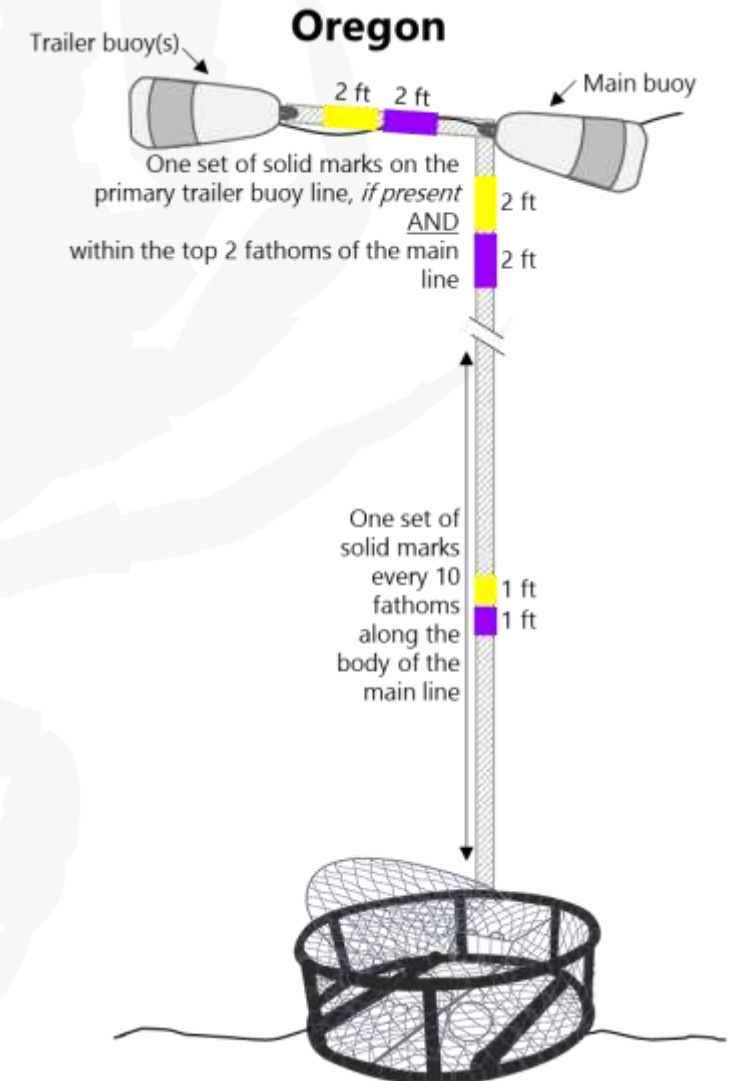
- **Improve gear attribution rates**
 - Increase positive attributions
 - Enable negative attributions
- **Decrease % of unidentified**
- **Essential to getting an ITP**
 - Need to be able to better monitor gear involved in entanglements
- **Committed to rulemaking prior to the 2023-24 season**

**West Coast entanglement record
2013 – 2020
(n=263)**





Original Line marking proposal (Oct 2022)

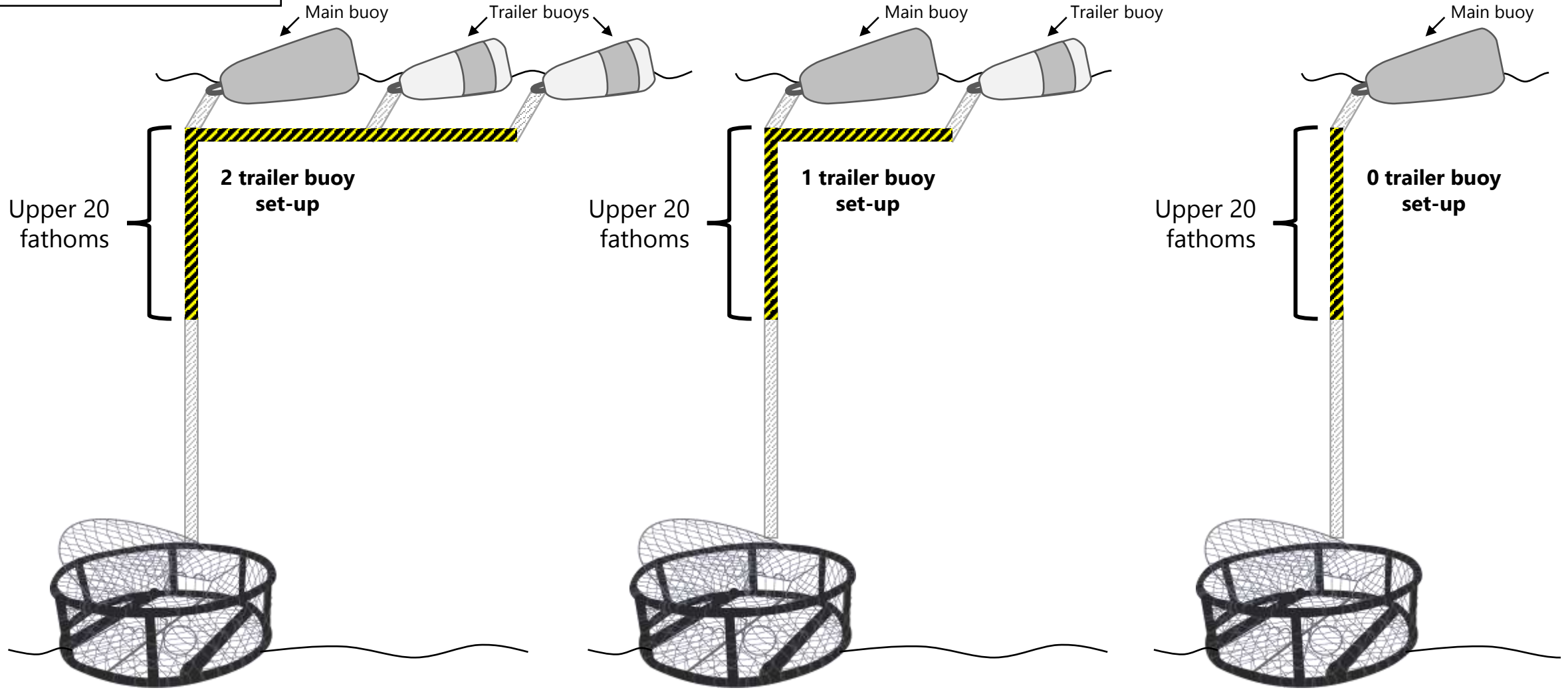
- Stakeholder feedback
 - Uncertainty about the effectiveness/adequacy of line marking proposals to-date
 - Desire for evidence-based proposals
 - Strong concerns over the cost, burden, and environmental impacts of marking
 - Uncertainty about the practicality of different marking techniques (e.g., paint, tape)
 - Desire for measures that focus on entanglement risk reduction over gear identification
 - Desire for field testing prior to implementation



Draft Oregon Commercial Dungeness Crab Line Marking Proposal (Mar 2023)

Implemented start of 2027-28 season

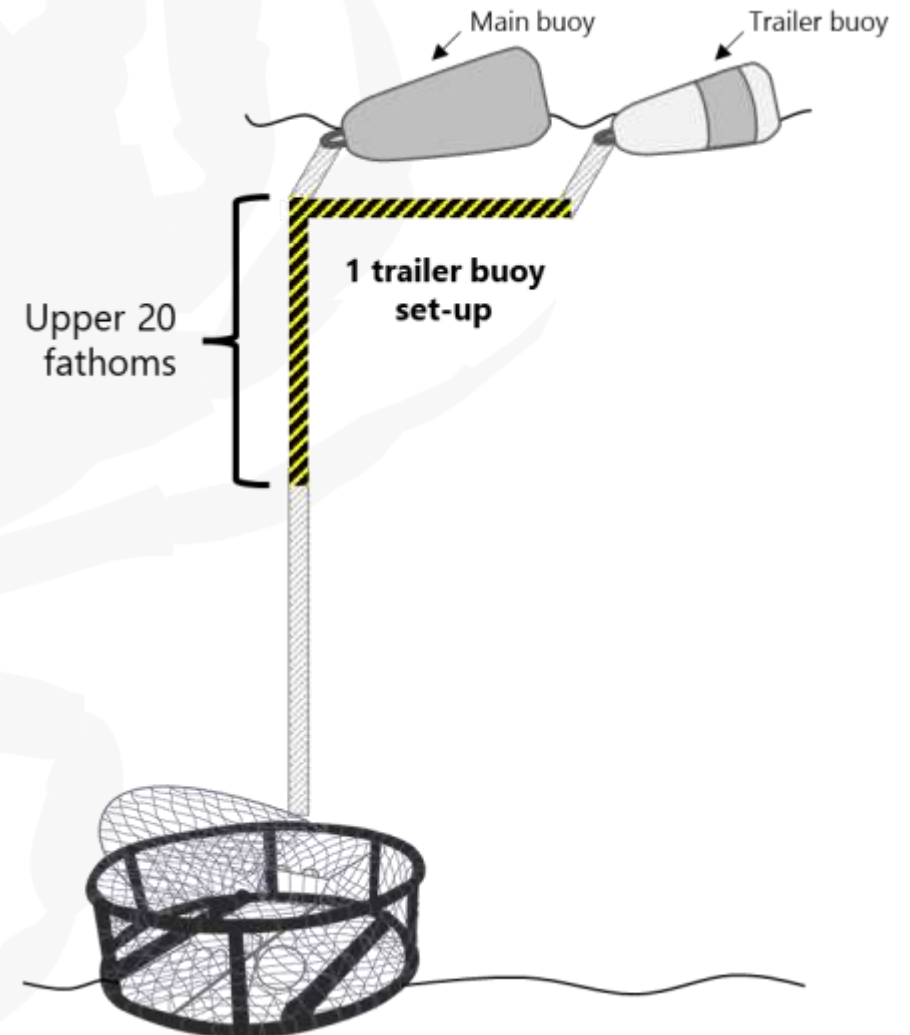
 = Oregon
 = Commercial Dungeness crab



Base regulation: Manufactured yellow and black bi-colored line along all trailer buoy lines and the upper 20 fathoms of the main line extending from the trailer buoy line to the crab pot

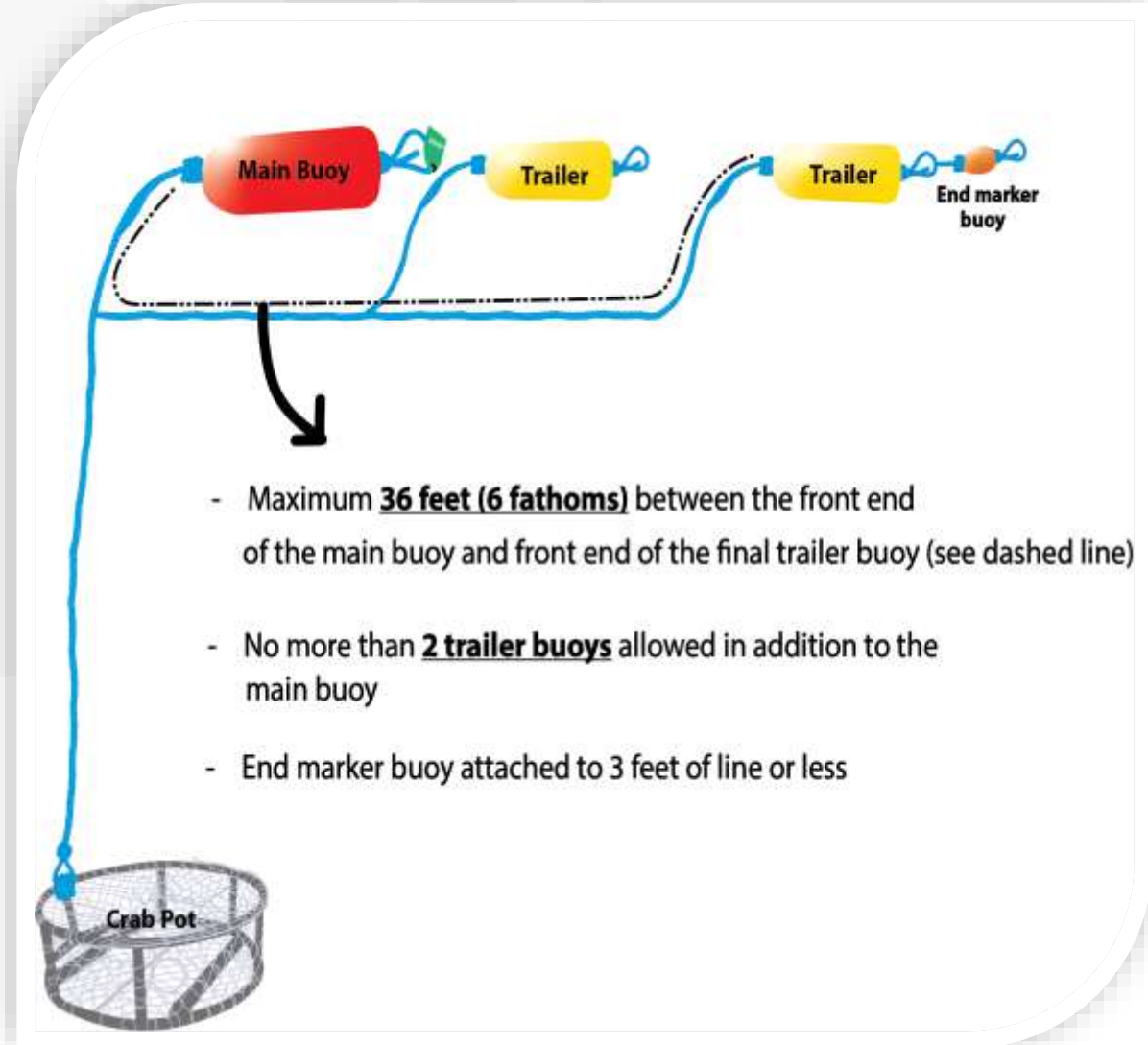
Draft Line marking proposal - rationale

- **Method** – manufactured bi-colored line
 - Provide clear, higher contrast, durable marks
 - Reduce the burden of making/maintaining marks
 - Reduce the environmental impact of marking
 - Easier enforcement of marking
- **Placement** – surface and upper gear
 - Maximize line coverage within the surface system and upper portion of gear
 - The proportion of marked line will be highest later in the season
- **Implementation time** – four seasons out
 - Provide sufficient time for natural attrition of some line



Maximum surface gear proposal

- **Rationale** – reduce potential entanglement points
 - Knots, buoys, splices & slack line are all thought to increase entanglement risk
 - Buoys are involved in a high proportion of entanglements, which likely means surface gear is contributing to elevated risk
- **Stakeholder feedback** – overall supportive
 - Simplify from CA's version to remove differences inside/outside 35 fathoms



Industry proposed changes

- Allow retention of crab from **all** derelict pots
 - Rationale – further incentivize recovery of derelict gear
 - Feedback – strongly supported
- Switching tags at-sea
 - Rationale – increases fleet flexibility
 - Feedback – well supported

