

Marine Life Entanglements and WDFW's Conservation Plan

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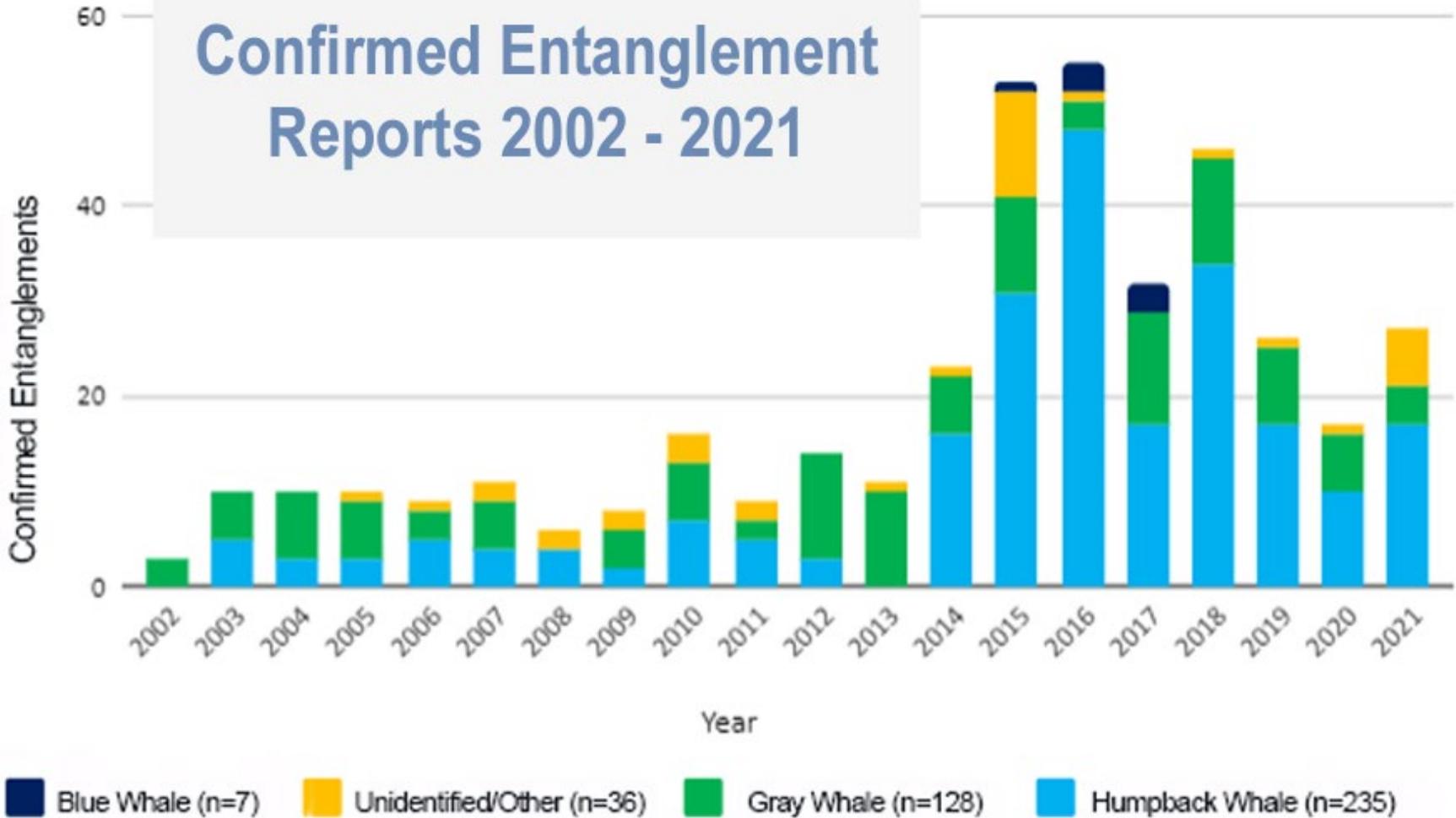


What will this talk cover?

- Conservation Plan Background & Process Pieces
 - Status and timeline
- Monitoring
 - Current and future efforts
 - Opportunities for engagement
- Adaptive Management
 - Overview, menu options, and opportunities for further engagement



Confirmed Entanglement Reports 2002 - 2021



NOAA 2022. Number of confirmed entanglements by species reported to the West Coast Region each year from 2002 to 2021.



Background – CP/ITP

- To bring the fishery into compliance with the Endangered Species Act, WDFW has begun to take steps to apply for an incidental take permit (ITP) under Section 10 of the ESA.
- A conservation plan (CP) is the required first step in the process.
- CP development and implementation is NOT a check-the-box exercise.



Background – WC Coordination

CDFW's draft CP:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=195807&inline>

ODFW's draft CP:

[https://www.dfw.state.or.us/MRP/shellfish/commercial/crab/docs/2021/Public CP DRAFT 8.18.21.pdf](https://www.dfw.state.or.us/MRP/shellfish/commercial/crab/docs/2021/Public_CP_DRAFT_8.18.21.pdf)



WA Coastal D. Crab's CP Status, Focused Efforts, and Timeline

To date:

- Primary management measures implemented, additional measures under development
- Preliminary (not yet published) research by NWFSC indicates success of primary mgmt. measures

Currently:

- Learning from ODFW & CDFW
- Focused on Monitoring Program

Timeline:

- Some uncertainty
- Targeting late fall for public release of draft



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Marine life entanglement information and resources

Fishing & Shellfishing

- Fishing regulations
- Shellfishing regulations
- Places to go fishing
- Fishing and stocking reports
- Fishing & shellfishing basics
- Managing fish populations
- Tribal fishing

Marine life entanglement information and resources

An increase in marine life entanglements has occurred in recent years along the U.S. West Coast relative to rates recorded prior to 2013. Commercial Dungeness crab fishing gear collectively makes up the largest portion of identifiable gear found in West Coast entanglement cases ([NOAA 2020](#)). Large whale and marine turtle species are among those most impacted by fishing gear entanglements off the West Coast, and these animals are federally protected under the Marine Mammal Protection Act and/or the Endangered Species Act. To bring the fishery into compliance with federal regulations and



url: <https://wdfw.wa.gov/fishing/commercial/crab/coastal/marine-entanglements>



So, what is a Conservation Plan?

A conservation plan (CP) describes the fishery and quantifies the risks it poses to covered species and includes:

- Management measures that reduce the risk of entanglement (e.g., reduced pot limit, expanded gear recovery)
- An adaptive management plan that clearly describes what we will do to maintain compliance with the terms of the permit
- A monitoring program for compliance and assessing the effectiveness of the management approach



The basics:

The CP/ITP requests coverage for entanglements of the following species in the coastal commercial Dungeness crab fishery:

- Humpback whales – about 2/yr
- Blue whales – about 1/10 yrs
- Leatherback turtles – about 1/20 yrs



Monitoring - Overview

Required part of the CP, must track:

- Compliance with permit terms and conditions
- Impacts the fishery has on species of concern
- Progress / achievement of CP goals and objectives



Monitoring Program Req'd Elements

- a) Improve the reporting and documentation of entanglements using standardized protocols. → Get more eyes on the water, improve reporting rate.
- b) Improve the ability of NMFS and the States to identify the origins of reported entanglements. → Improve gear identification.
- c) Estimate the number or level of takes that occur but are not observed or reported. → Develop co-occurrence models, scar accumulation rate info, and a statistically robust method for estimating unobserved take.



More eyes on the water, improve reporting rate

- Increased staff use of Whale Alert
- Increased staff training for entanglement response
- Provide support for initiatives to supply coastal WA with ent. response resources



More eyes on the water, improve reporting rate

- ❑ Download and use Whale Alert app <http://westcoast.whalealert.org/index.php?page=download-whale-alert>
- ❑ Complete FREE, 1hr, Level 1 Entanglement Response Training https://west-coast-training.whaledisentanglement.org/#/?_k=zwgv4h

Links also available on WDFW Marine Life Entanglements Webpage



Improve gear marking

- Entanglement reports often involve photos taken under sub-optimal conditions; buoy tags not readable
- WAC 220-340-430 requirement to register unique buoy color/pattern
- Updating line marking requirements / specifications
- ☐ Come to the next industry meeting on September 21!



Adaptive Management (AM)

- AM is a concept that promotes flexible decision making in the face of uncertain or data-poor situations.
- Decisions can be made in-season from a menu of options to ensure continued compliance with the terms of the ITP.
- What are these menu options?



AM Menu Options

- **Pot Limits**
 - Expanding by time, area, or a combination
 - Coastwide pot limit (e.g., May – Sep)
- **Closed Areas** (e.g., seaward of 30 fm)
- **Gear Modifications**
 - Weak buoy links; floating, sinking, neutral line; multiple pots per line; pop up gear (pending R&D)
- **Other Effort Reductions**
 - Pot stacking, buyback
- **Other**



implement
conservation
measures (as
described, or as
defined in previous
step) and conduct
CP Monitoring

WDFW evaluates whether
recommended action(s) will
ensure take limits are not
exceeded, and proceeds with
rule making accordingly

Reach a take limit
or encounter high-
risk conditions

WDFW reviews and
compiles relevant
data/info

Entanglement Advisory
Group reviews available
info and provides
recommendation(s) for
mgmt. action

WDFW convenes
Entanglement
Advisory Group



Entanglement Advisory Group

- Key to successful AM
 - A forum for industry input to inform mgmt. relative to entanglements, including (but not limited to) in-season management
 - Similar in structure and purpose to Oregon Entanglement Advisory Committee:
https://www.dfw.state.or.us/MRP/shellfish/commercial/crab/docs/2022/OEAC_Charter.pdf
- Interested in participating? Stay tuned!



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Questions

