

Update: Coastal Commercial Dungeness Crab Conservation Plan Progress

Fish and Wildlife Commission Meeting
February 26, 2021

Heather Hall

Intergovernmental Ocean Policy Coordinator



Overview

- Background
- WDFW Actions To-Date
- Conservation Plan Review
- Next Steps and Timeline



Background

- In recent years, there has been an increase in entanglements off the U.S. West Coast, including off Washington, with coastal commercial Dungeness crab gear and marine life protected under the Endangered Species Act (ESA) and/or the Marine Mammal Protection Act (MMPA)

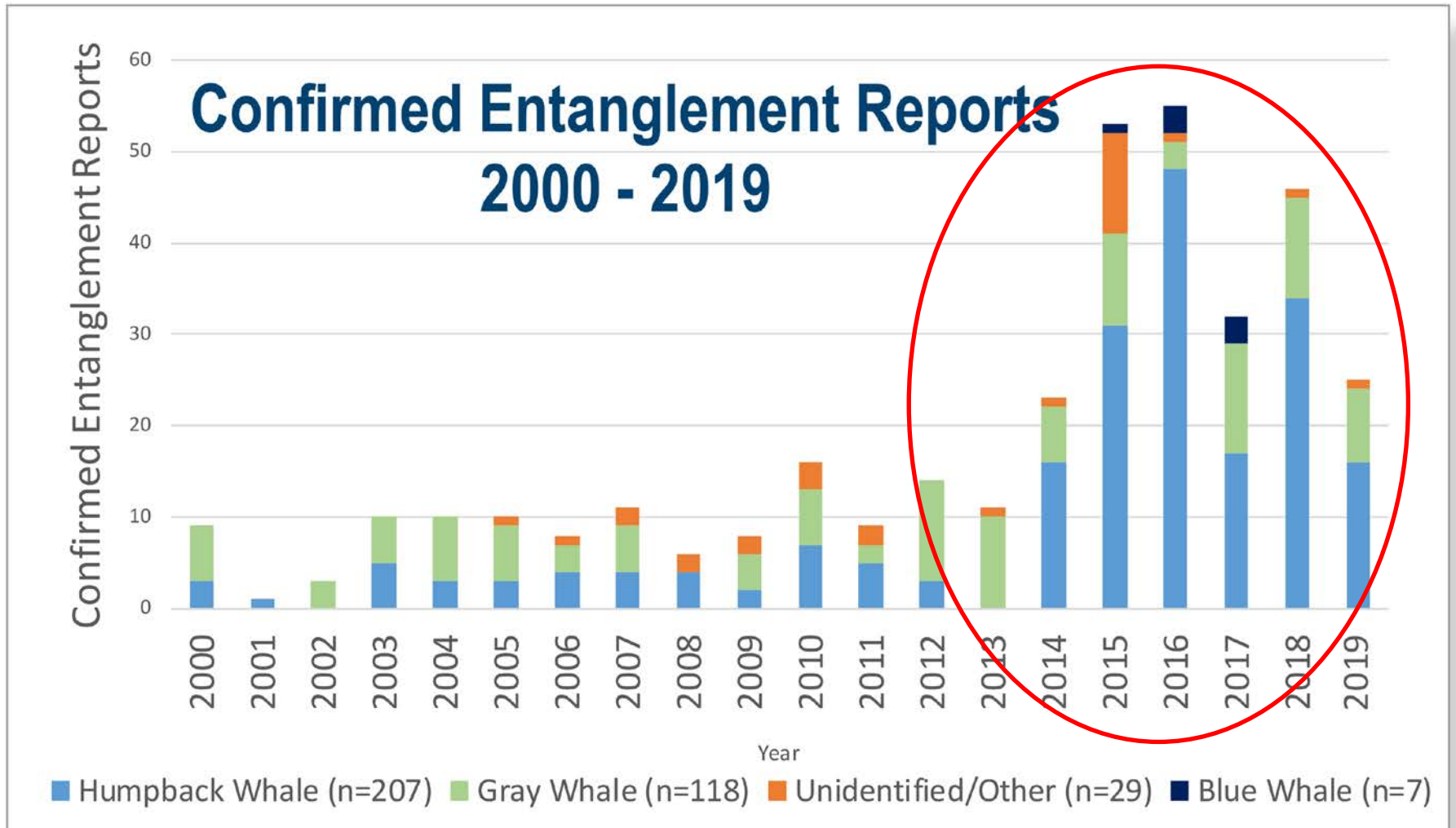


Background

- To ensure compliance with the Endangered Species Act, WDFW indicated our intent 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
- While WDFW staff began drafting the CP in 2020, response to increased entanglements began immediately

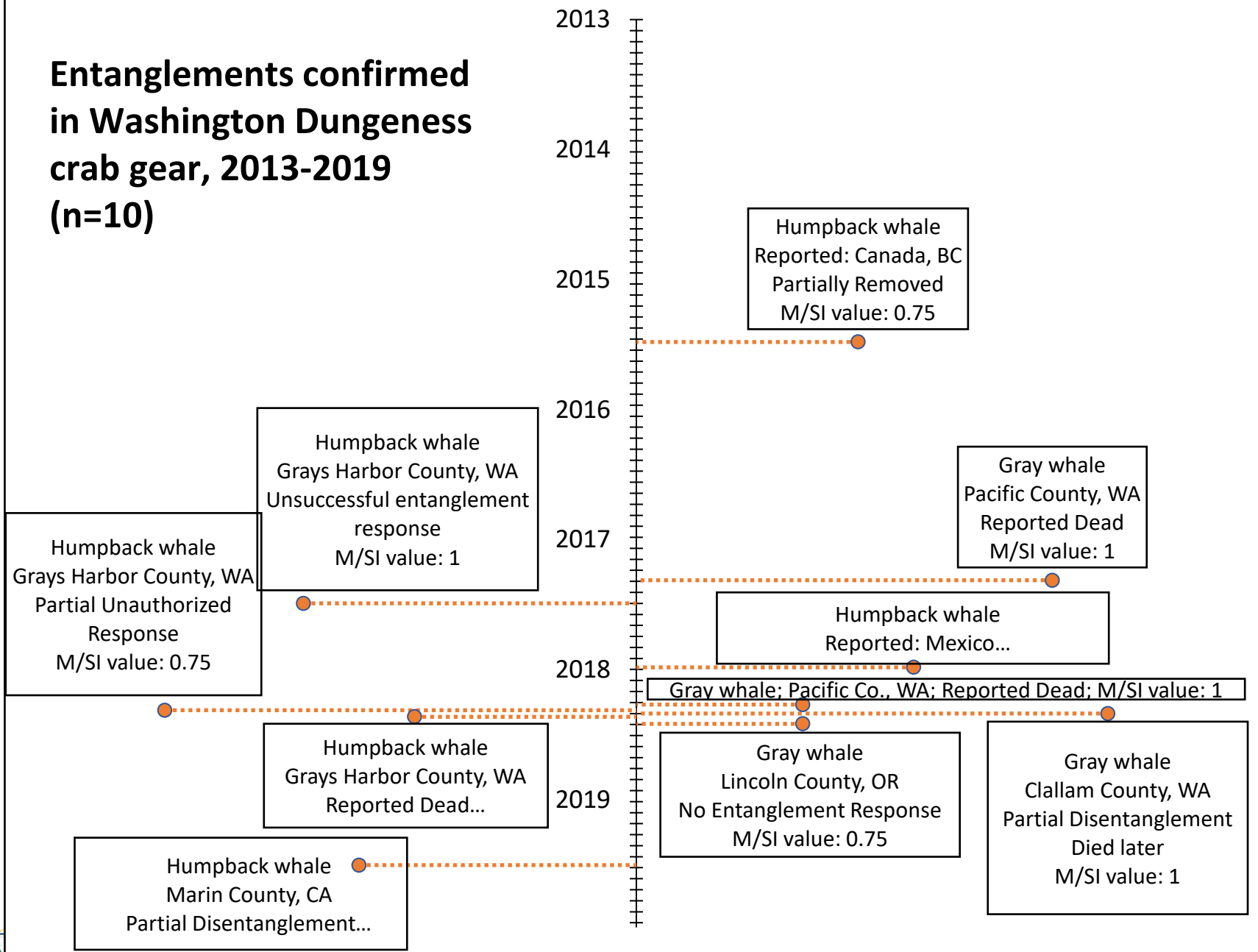


West Coast Entanglements



Source: 2019 NOAA Fisheries West Coast Whale Entanglement Summary

Entanglements confirmed in Washington Dungeness crab gear, 2013-2019 (n=10)



WDFW Actions and Discussions

2017:

- WA Whale Entanglement Working Group
- Two West Coast Entanglement Workshops

2018:

- WDFW letter to NMFS with intent to apply for ITP



WDFW Actions and Discussions

2019:

- ITP workshop for West Coast fixed gear fishery managers
- Emergency rule to implement reduced pot limit effective July 1
- October Commission briefing on permanent regulatory changes for 2020



WDFW Actions and Discussions

2020:

- January Commission decision on permanent regulatory changes to reduce the risk of entanglements
- West Coast Entanglement Science Workshop
- Began drafting the Conservation Plan



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



Conservation Plan Outline

Section 1

- Introduction/Purpose and Need

Section 2

- Description of the Fishery

Section 3

- Description of the Environment and Species

Section 4

- Anticipated Impacts to Covered/Protected Species



Conservation Plan Outline

Section 5

- Goals and Objectives
- Entanglement Risk and Impact Reduction Measures
- Monitoring and Reporting
- Adaptive Management

Section 6

- Plan Implementation

Section 7

- Funding Sources & Assurances

Section 8

- Alternatives



Introduction / Purpose and Need

- The CP communicates biological and ecological goals and objectives for ESA listed species and WDFW's commitment to avoiding and minimizing impacts to these species from otherwise lawful coastal commercial crab fishery activities
- It is also required to accompany the permit application



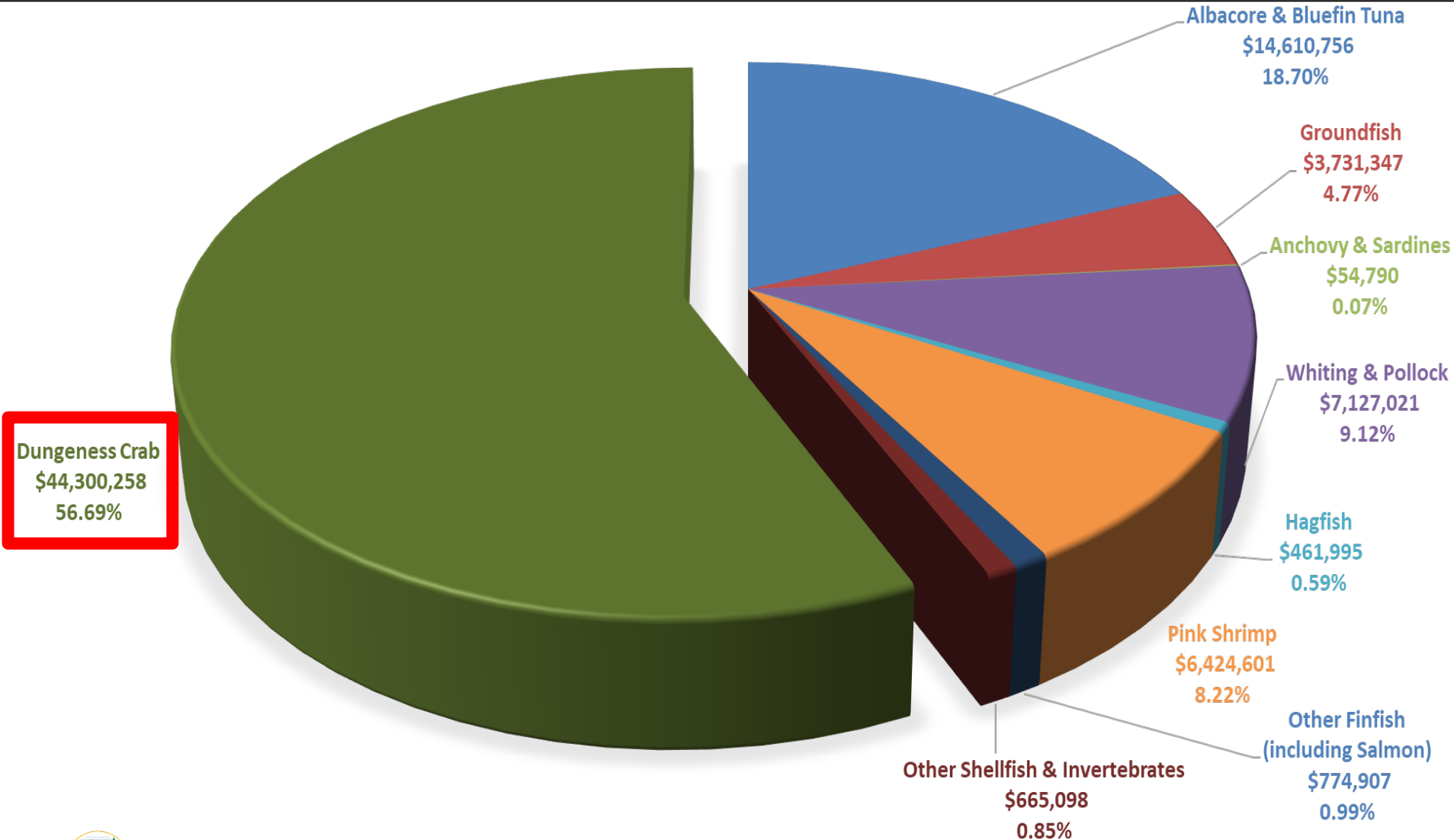
Covered Fishery and Species

The CP/ITP requests coverage for entanglements of the following species in the coastal commercial Dungeness crab fishery for a period of 20 years:

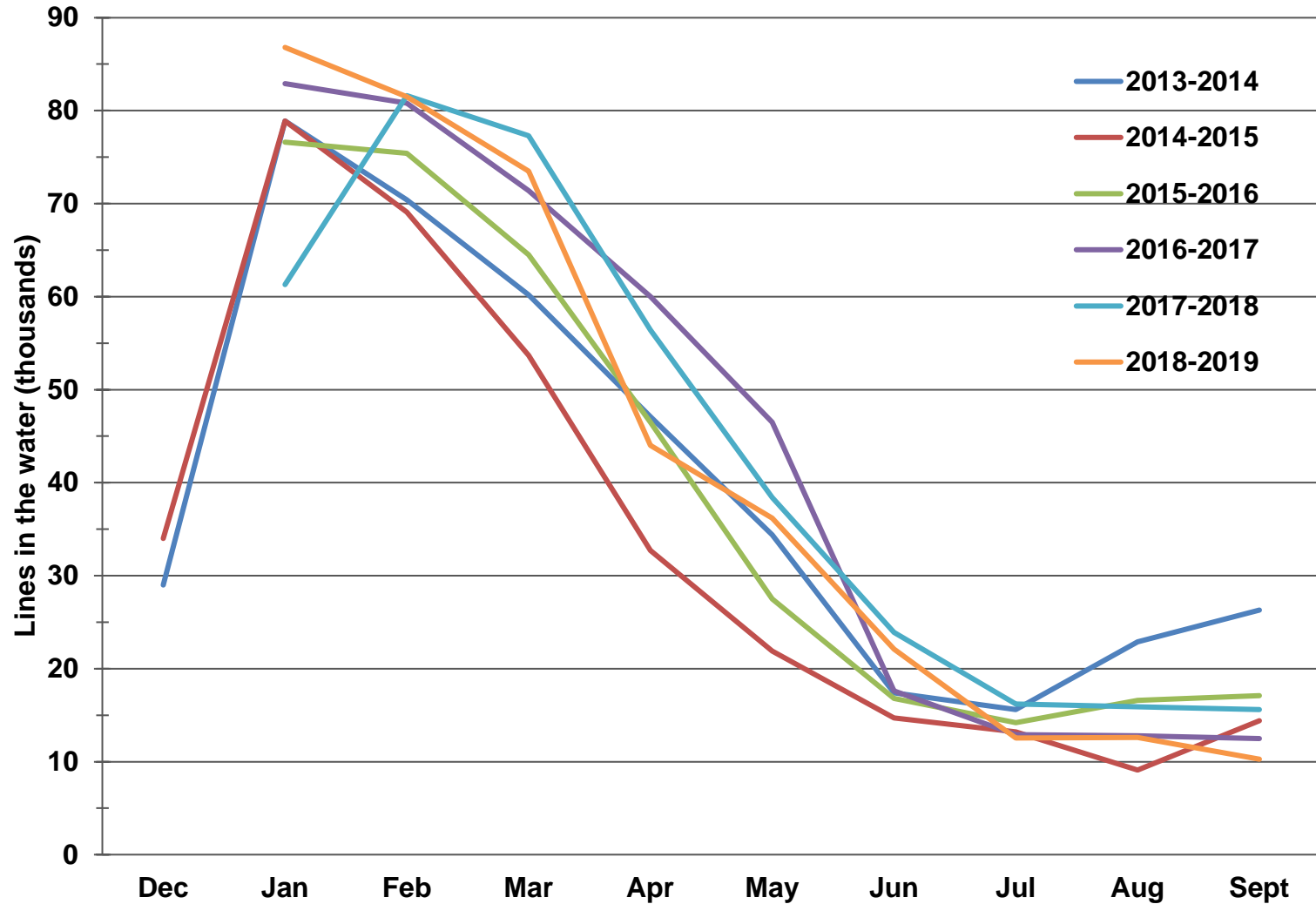
- Humpback whales
- Blue whales
- Leatherback turtles



Description of the Fishery



Pots by Month (Estimated Max)



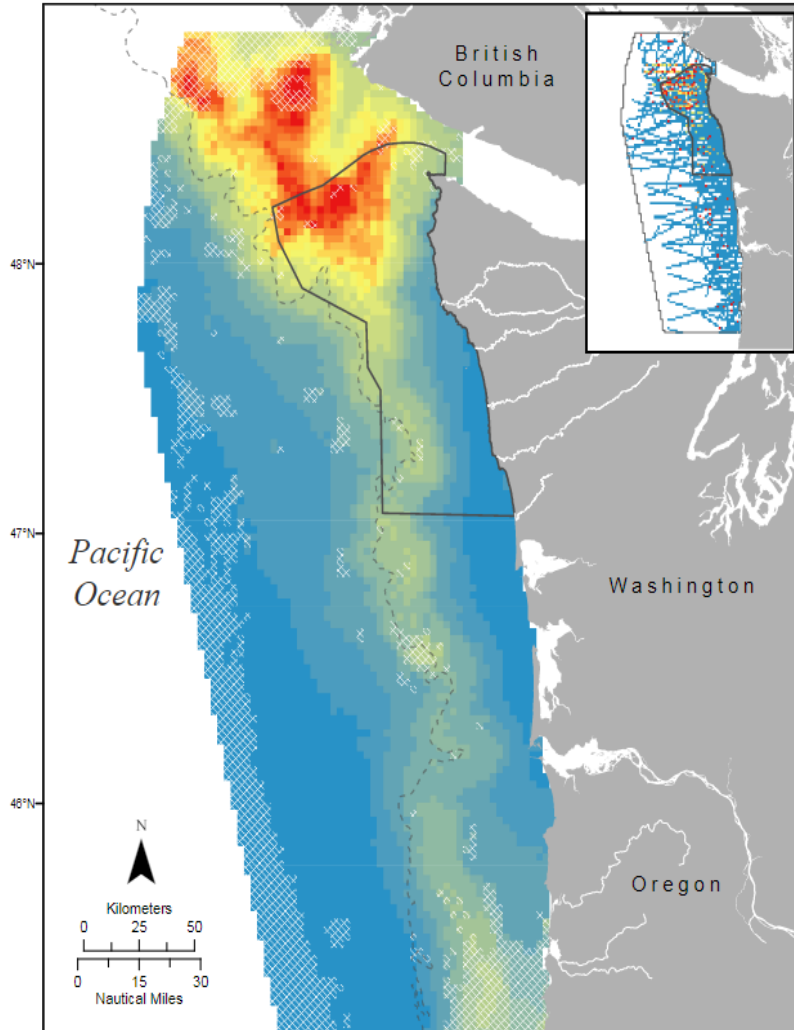
Description of the Environment

- El Nino and La Nina
- Marine Heatwaves “the blob”
 - Toxic algae bloom
 - Shift in prey availability
- Ocean warming
- Ocean acidification
- Harmful algal blooms

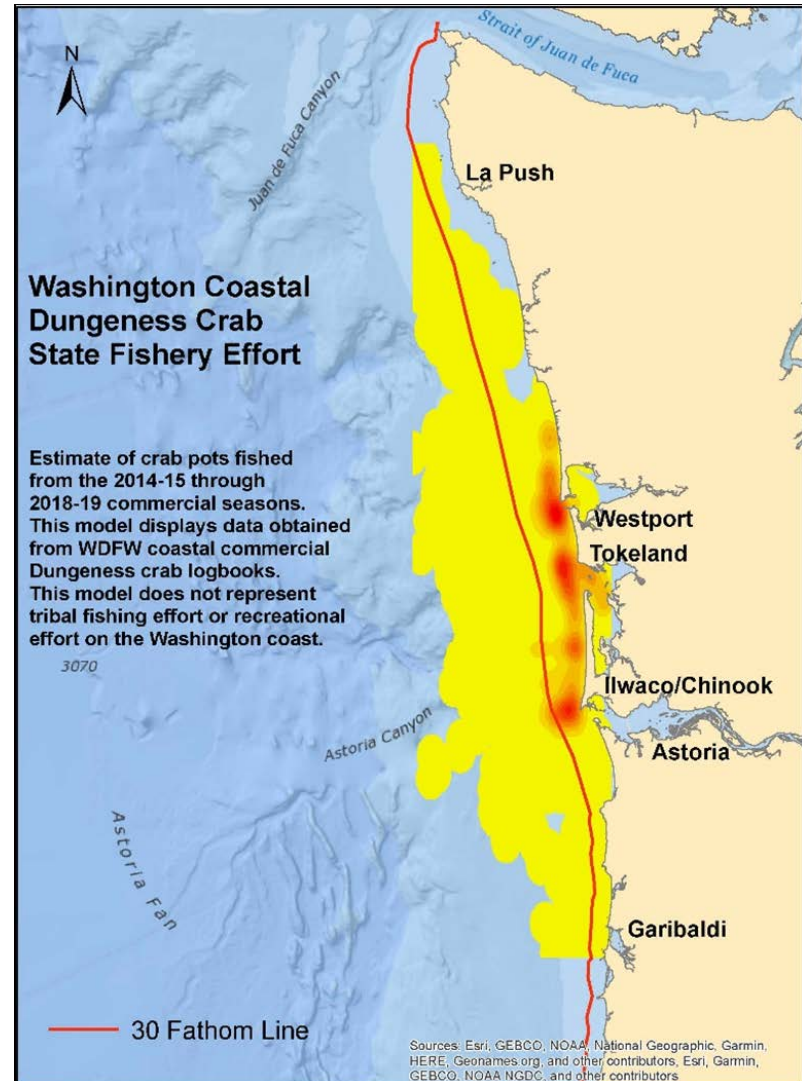


Whales and Crab Gear

humpback whale (*Megaptera novaeangliae*): April to October



Menza et al. 2016



Anticipated Take - Preliminary

Species	Anticipated Annual Take (on average)	Anticipated Take Totals (for 20-yr permit)
Humpback whale (including de-listed animals)	1.73, or about 2 animals per year	≤40 animals
Blue whale	0.2 per year, or about 1 animal every 5 years	Approximately 4 animals
Pacific leatherback sea turtle	0.1 per year, or about 1 animal every 10 years	Approximately 2 animals



Conservation Program

- Goals and Objectives
- Conservation Measures
- Monitoring and Reporting
- Performance and Success Criteria
- Adaptive Management Strategy



Vision and CP Goal & Objectives

Vision: a thriving Washington coastal commercial Dungeness crab fishery alongside recovering populations of ESA-listed whales and sea turtles.

CP Goal: Reduce the risk of entanglements of covered species in WA coastal comm. D crab gear.

CP Objectives

Reduce vertical lines

Facilitate gear innovation

Provide education / outreach support

Improve fishery monitoring

Fill critical info gaps



Conservation Measures

These measures are the foundation of our conservation plan:

- Reduced (1/3) pot limit effective May 1
- Summer buoy tags required
- Line marking
- Derelict gear recovery period expanded
- Replacement tag reduction



Monitoring - Work in Progress!

Required part of the CP, must track the following:

1. Compliance with permit terms and conditions
 2. Impacts the fishery has on species of concern
 3. Progress / achievement of CP goals and objectives
- Historically, entanglement reporting has been exclusively opportunistic, but this does not meet minimum requirements for ITP issuance.
 - Observer programs are commonly used to monitor bycatch – but this would be an impractical monitoring tool for fixed gear entanglements
 - More creative thinking is required



Electronic Monitoring

- National Fish and Wildlife Federation to implement a pilot project – funded!
- Working with PSMFC to add additional systems
- WDFW submitting a supplemental budget request to support EM



Performance and Success Criteria

Vertical Line Reduction

Max Estimated Vertical Lines	March	April	May	June	July	August	Sept.
2013-2019 average	66,767	47,783	34,150	18,750	14,106	14,983	16,028
2023-2040 average	66,409	47,067	21,512	11,069	7,973	8,552	9,241
Reduction (%)	0.6%	1.5%	37.0%	41.0%	43.5%	42.9%	42.3%
2019-2020 (most recent season)	69,500	36,400	19,860	15,620	11,580	10,520	8,400
2020 Reduction (%)*	-4.1%	23.8%	41.8%	16.7%	17.9%	29.8%	47.6%

*The 2019-2020 crab fishing season was significantly impacted by the COVID-19 pandemic. It also saw differing implementation dates for line reduction measures due to regulatory timelines. It is included in this table to illustrate the estimation methodology and provide a point of reference for interested readers.



Adaptive Management (AM)

- AM is an in-season tool that promotes flexible decision making by providing options for additional management tools
- AM helps us account for uncertainty
- Decisions can be adjusted as outcomes from management actions and other events become better understood.



Adaptive Management Tools

- **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 future R&D)
- **Electronic Monitoring**
 - Real time fishery data
- **Other Effort Reductions**
 - Pot stacking, buyback
- **Other**



What triggers the need for AM?

Monitoring - related

- Not meeting CP commitments
- Exceeding permitted take
- Not meeting CP objectives

Environmental

- MHW
- HAB

Informational

- New data becomes available
- New and promising tech available
- New info on risk, etc.



Plan Implementation

- Changed and unforeseen circumstances
- Amendment process
 - Major and Minor amendments
- Permit renewal, transfer, suspension, and revocation processes



Funding Sources & Assurances

Costs associated with implementing the CP including:

- Conservation strategy
- Monitoring and reporting
- Adaptive management measures

WDFW will need to provide the funding sources and assurances that they will be in place for the term of the permit



Alternatives

Section 10 of the ESA requires that alternatives to the taking of species be considered and reasons why these alternatives are not implemented be discussed

Example: close the commercial Dungeness crab fishery (completely)



CP Timeline & Next Steps

January 2021

- Coordinate with Science Centers, Researchers and NMFS

February

- Fish and Wildlife Commission Update

March – September

- Complete Draft
- NMFS Coordination

June / August

- 2021 F&W Commission Rule Making

Late Fall

- Final Review and Director Approval

Winter

- ITP Application



Draft 2021 Regulatory Package

- Remove replacement tag program
- Mandatory E-tix
- Permit experimental gear testing

Considering:

- Tools to improve identification of recreational crab gear



Fish and Wildlife Commission Policy

C-3604 Management Objectives for Coastal Dungeness Crab

- An update to the current policy will likely be needed to maintain management alignment with WDFW's mission and the commitment to reducing entanglement risk as described in the conservation plan



Questions

