Coastal Commercial Dungeness Crab Fishery – Industry Meeting

Conservation Plan Update
December 2020

Washington Department of FISH and WILDLIFE

Agenda

5:00 pm Welcome and Introductions

The purpose of the meeting is to provide an update on the development of a conservation plan to reduce the risk of whale entanglements in the coastal Dungeness crab fishery.

5:15 pm Conservation Plan (CP) Overview
6:00 pm Focus: Goals, Objectives, and Adaptive Management
7:00 pm Regulatory Changes
7:30 pm Next Steps
8:00 pm Adjourn

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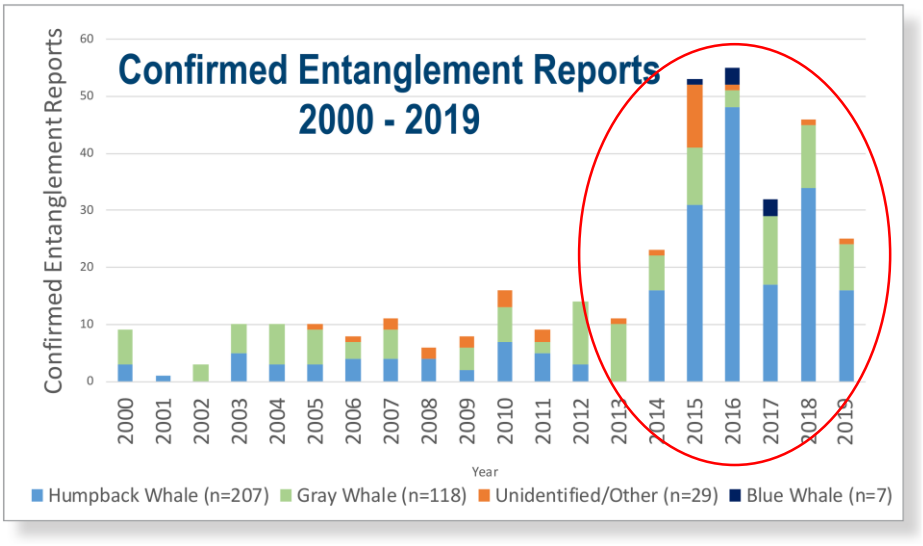
HISTORY OF ENTANGLEMENTS

What is the issue?



Source: 2019 NOAA Fisheries West Coast Whale Entanglement Summary

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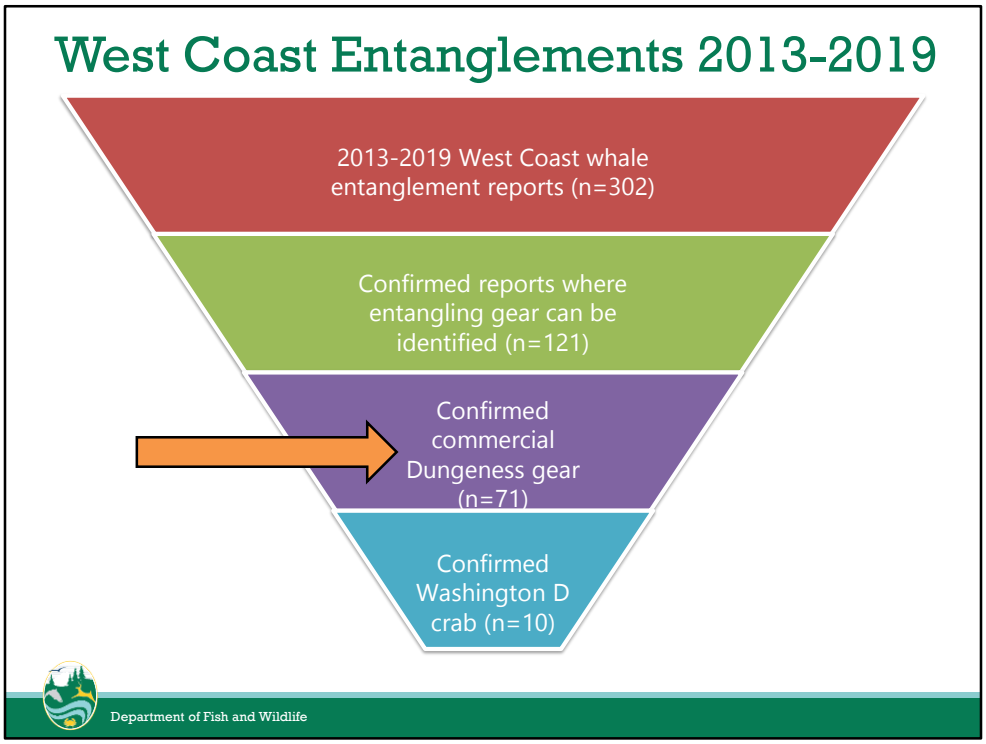
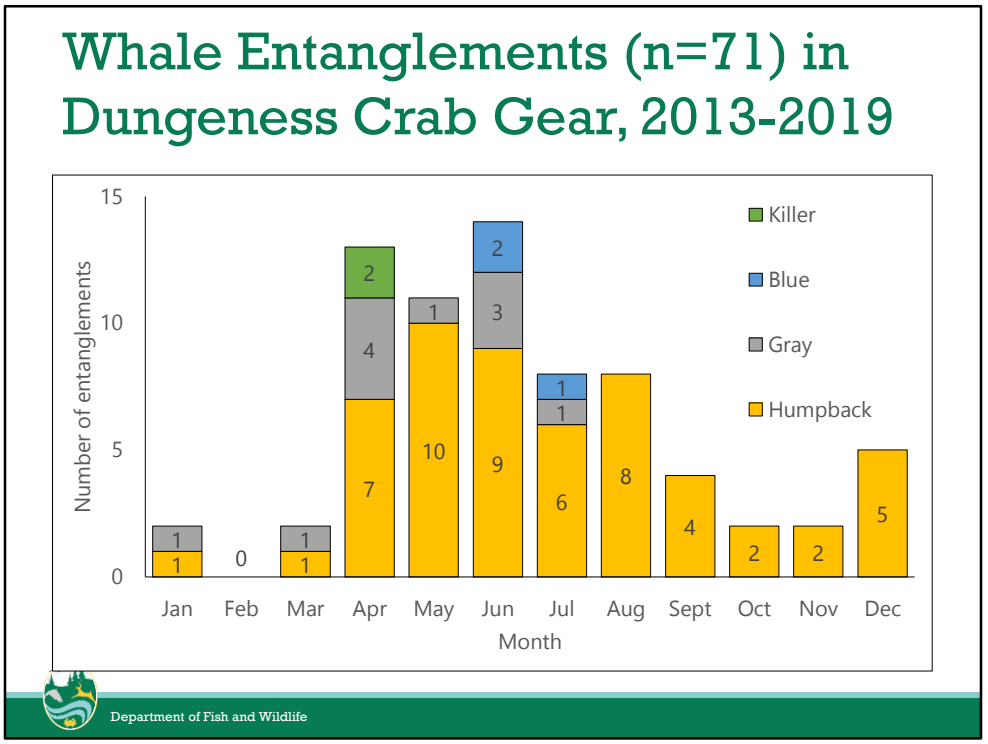
The recent spike in entanglements reported off the U.S. West Coast has driven the development of this CP.

- 2000-2013 averaged ~10 per year (no humpback entanglements in 2013)
- Entanglements increased beginning in 2015, there are multiple factors that likely contributed to this observation
- 2013-2019 “Modern era” of entanglements that we are using for the CP

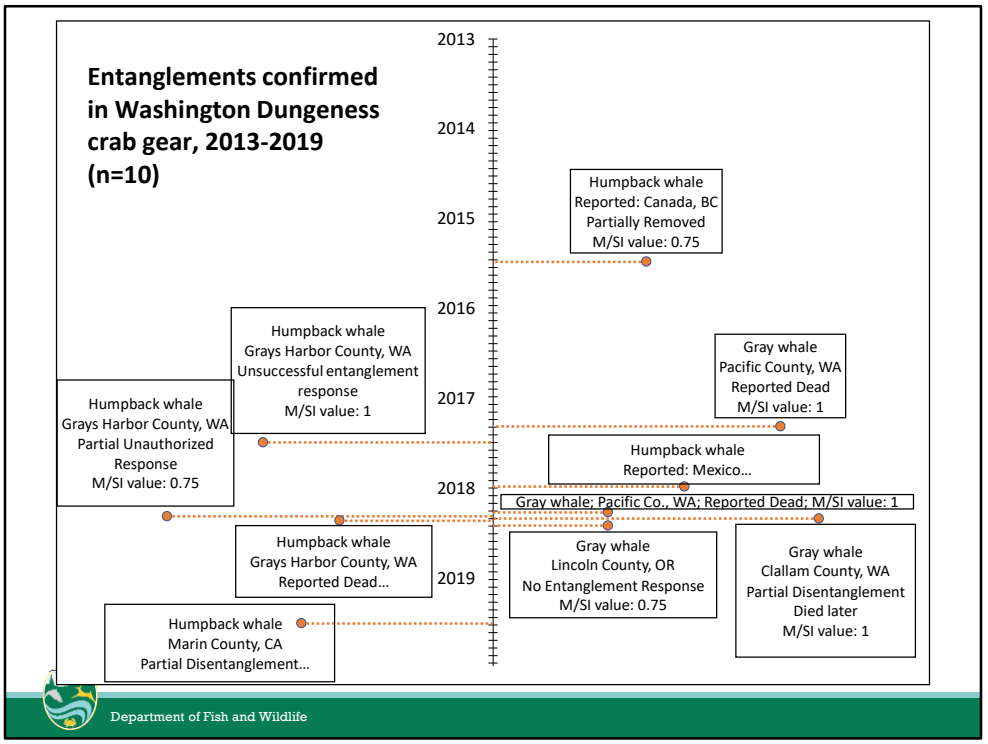
- The next couple of slides show how these west coast entanglements break down by species, by month and by those that can be confirmed in Dungeness crab gear



Note: there is a lot of unidentified gear in the entanglement record. Line marking is a key commitment in the CP designed to help us address this information gap.



It's important to note that this slide is also all west coast entanglements. But this figure shows that in general, the risk of entanglements is highest summer months.



This slide is specific to the 10 confirmed entanglements in WA crab gear from 2013-2019

Note that the prior slide showed 13 entanglements in April. However, when you look at WA specific data, only three were associated with WA crab gear (two Gray whales/one humpback).

Washington didn't have our first confirmed entanglement during the baseline period until 2015

2013: 0
2014: 0
2015: 1 – humpback whale reported in BC, the entangling gear was partially removed
2016: no entanglements reported in 2016
2017: 3 –1 Gray whale Pacific County, (2) Humpback Mexico, Grays Harbor
2018: 5 – (2) Humpback GH, (3) Gray Whale, Pacific Co. Clallam County and Lincoln County
2019: 1 humpback entanglement reported in Marin County CA

In December of 2018, WDFW sent a letter to the NMFS indicating our intent to apply for an Incidental Take Permit

The following spring of 2019 we began working with the National Marine Fisheries Service and the ODFW and CDFW to understand the process for securing and ITP.

Simultaneously, we began working with you to develop regulations to immediately reduce the risk of entanglements in the WA D. crab fishery. We implemented an emergency rule in the summer of 2019 to reduce the number of pots allowed and followed up with permanent rule making this year. Also during 2018 and 2019, many of you were engaged in the Washington Whale Entanglement Working Group – to better understand the issue from a Washington perspective. In addition to learning a lot about whale distribution and entanglements, that group developed a Best Practices Guide for the WA coastal crab fishery.

In the fall of 2019, we started the process to develop a conservation plan which is the first step in securing and ITP.

Conservation Plan

A conservation plan (CP) must describe the fishery and quantify the risks it poses to covered species and include:

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

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A conservation plan (CP) is required to apply for an Incidental Take Permit
This is the first step in our process
It's a long process – estimated to take from 3-5 years
An ITP has never been issued for marine mammals – its new to everyone
It's iterative – requires input from stakeholders and negotiation with the National Marine Fisheries Service

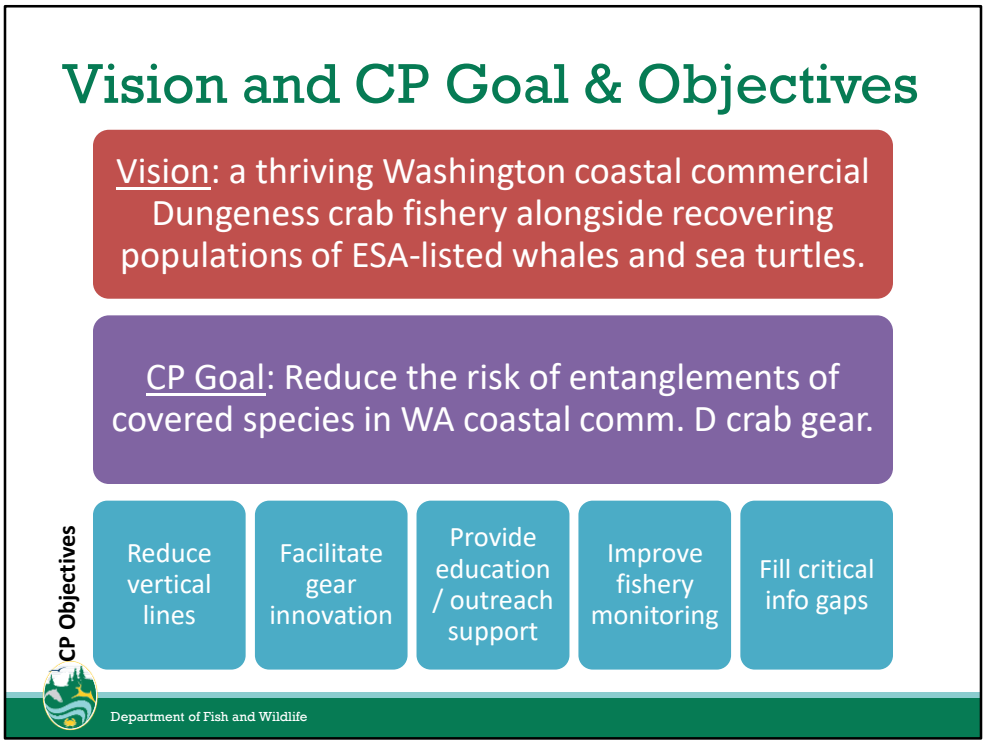
Covered Fishery and Species

Our conservation plan is requesting 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

This meeting we will focus on some key sections of the conservation plan:

The goals and objectives and also the adaptive management approach

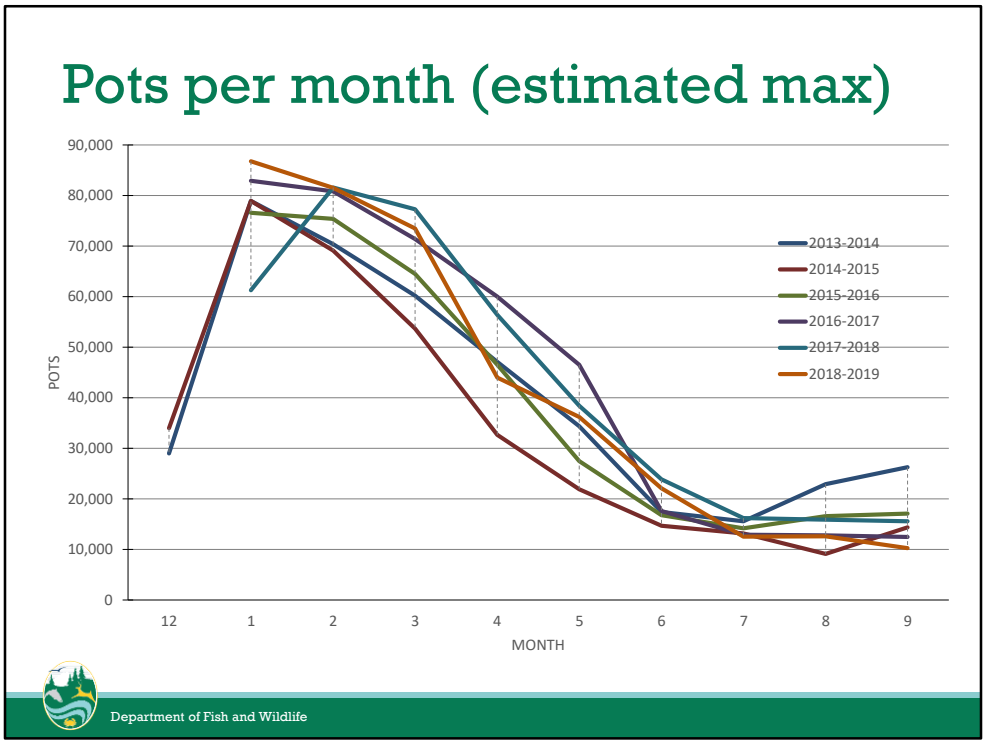


Our vision is for a thriving fishery that operates alongside recovering populations of humpback whales, blue whales, and leatherback sea turtles.

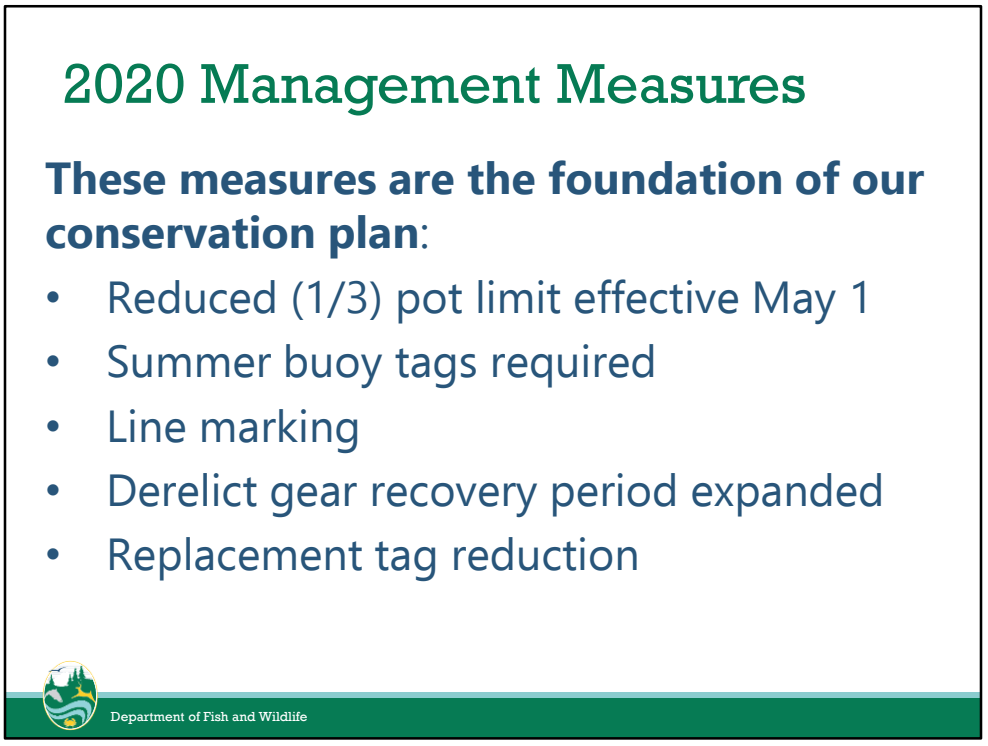
Our agency's mission and fishery management policies serve to guide WDFW staff in the first half of this vision, management of the crab fishery to benefit the commercial fishery and the coastal communities that depend on it.

Our CP's goal is focused on actualizing the second half of this vision – to reduce the risk of entanglement the fishery poses for covered species.

We have broken this goal down into measurable objectives we hope to achieve during the 20-year permit period. Your handout includes more details.



We have a long history of fishery data from fish tickets reporting of pots used overtime
Information on changing effort is valuable



These measures are the foundation of our conservation plan

The measures were informed by what we know about the timing of entanglements in Washington

We can show that these tools reduce risk, but through monitoring we will need to continue to show that these are effective tools

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 (present)	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.

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The CP requires that our management tools are not only effective but measurable

This table shows the average pots used during the 2013-2019 period but also the reduction we saw in 2020 and the expected cumulative reduction in lines in the water when you consider the pot limit, expanded gear recovery program and elimination of replacement tags. Example: by 2023 after we have the chance to analyze all of the reduction measures together, we are expecting line reduction to range from 37 to 42 percent of what was in the water during the recent past.

Another important component of the CP is an adaptive management program

We can't just set it and forget it, we need to be responsive to changes so that our plan and our goals are upheld throughout the permit period.

Compliance – what are we managing to and monitoring?

Species / stock	MMPA / ESA Status	Anticipated Take Totals (for 20-yr permit)
Humpback whale, CA/OR/WA stock	Strategic / Endangered and Threatened DPSs	≤40 (up to two animals per year)
Blue whale	Strategic / Endangered	≤4 (approx. one animal every five years)
Pacific leatherback sea turtle	N/A / Endangered	≤2 (approx. one animal every 10 years)

The Section 10 process has more complexity to it than the Section 7 process, which is used for federally managed fisheries

ESA authorization means that take must first meet the criteria of a negligible impact determination, which is no more than 10% of PBR for any individual fishery. This determination can only be given for a 3 year period, so the PBR and the NID will be revisited frequently, but we do not need to revisit the ITP that frequently.

We have not had more than two humpback entanglements attributed to our fishery in a single year

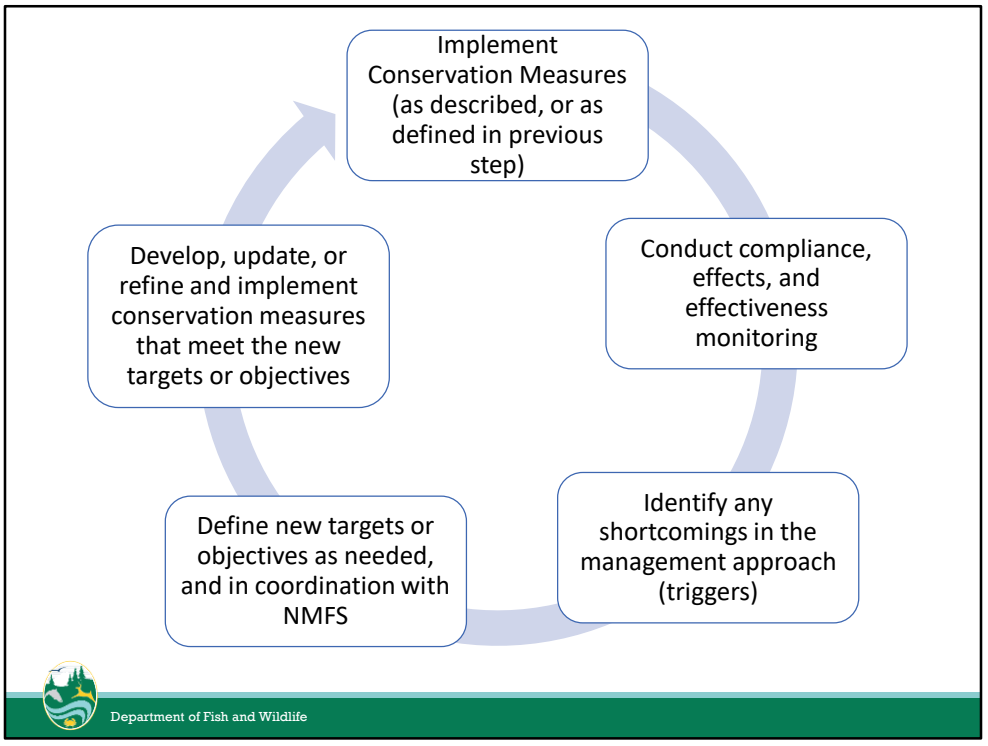
We have no recorded entanglements of blue whales or leatherback turtles attributed to our fishery

Adaptive Management is Key:

We need to have a plan that describes what we will do if the number of entanglements in our fishery exceeds our expectations or a take threshold

There are other circumstances that may also warrant adaptive management (stay tuned)

Changes to requested take must be made through a separate, more formal process than AM. But these changes can also be done during the 20-year permit, as needed.



This approach is based on the same concept behind the summer fishery management plan: if x, then y. But here, WDFW just has a list of potential "x" variables (triggers), and a list of potential "y" variables (mgmt. responses). These are <u>not</u> paired together in a prescriptive way in the CP, which allows us more flexibility.

What are "triggers?"

Monitoring - related	Environmental	Informational
• Not meeting CP commitments • Exceeding permitted take • Not meeting CP objectives	• MHW • HAB	• New data becomes available • New and promising tech available • New info on risk, etc.

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)
- **Other Effort Reductions**
  - Pot stacking, buyback
- **Other**

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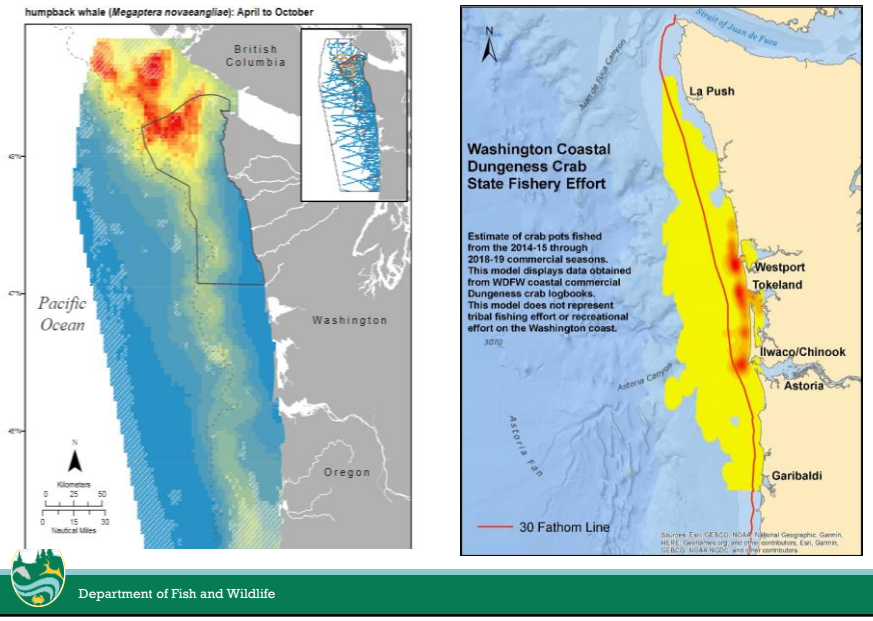
Refer to your handout for more details.

Whales and Crab Gear



Looking ahead: we are working with NW and SW Science Centers to build on current knowledge about the timing and areas where whales are off the Washington coast

Using logbook data to see how whales and crab gear overlap

And using ecosystem data to develop predictive tools to help us be responsive

These types of tools will help us with adaptive management and hopefully allow us to be more precise rather than blunt in our approach. That ability to be more refined in our adaptive management will benefit the fishery participants.

WHAT'S NEXT ?

CP Timeline & Next Steps

Jan – Nov 2020	• Industry Meeting: Adaptive Management & CP • Industry Meetings: Process Updates, Industry Survey
Dec 4 –Dec 18	• CP: Internal review by WDFW staff • Public Meeting – CP update (you are here!)
January 2021	• Fish and Wildlife Commission Briefing • Submit draft CP to NMFS
Jan-Dec 2021	• Electronic Monitoring (EM) pilot • Rulemaking package

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Electronic Monitoring

- Submitted a proposal to the National Fish and Wildlife Federation to implement a pilot project – funded!
  - Initially 2 vessels, expanding to 10 vessels in the second year (separate funding request)
  - Working with Archipelago
  - Similar system as used by Quinault
- Working with PSMFC to test solar loggers
- WDFW submitting a supplemental budget request to build support for EM

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Electronic monitoring provides a more efficient tool
This tool will not only be valuable for our CP and effectively operating under an ITP but will also help us with our state-tribal co-management

During our overview of the CP objectives, we noted areas where we need to expand looking ahead to meet those objectives

We have been discussing regulatory changes that would eliminate the replacement tag program and move to mandatory electronic fish tickets

We also want to make sure there is a regulatory pathway to allow some gear testing – right now, experimental gears are prohibited under existing rules for the coastal Dungeness crab fishery but, using experimental fishing permits could open the door to that testing in a way that allows for engagement with WDFW managers and enforcement and also that includes the engagement with coastal crab industry members.

Questions

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