

# State/Federal/PSMFC Whale Entanglement Virtual Meeting

## Friday, July 16, 2021

### States:

- CDFW: Joanna Grebel, Christy Juhasz
- ODFW: Caren Braby, Kelly Corbett
- WDFW: Heather Hall

PSMFC: Dave Colpo

### NOAA

- Barry Thom
- Chris Yates
- Penny Ruvelas
- Dan Lawson

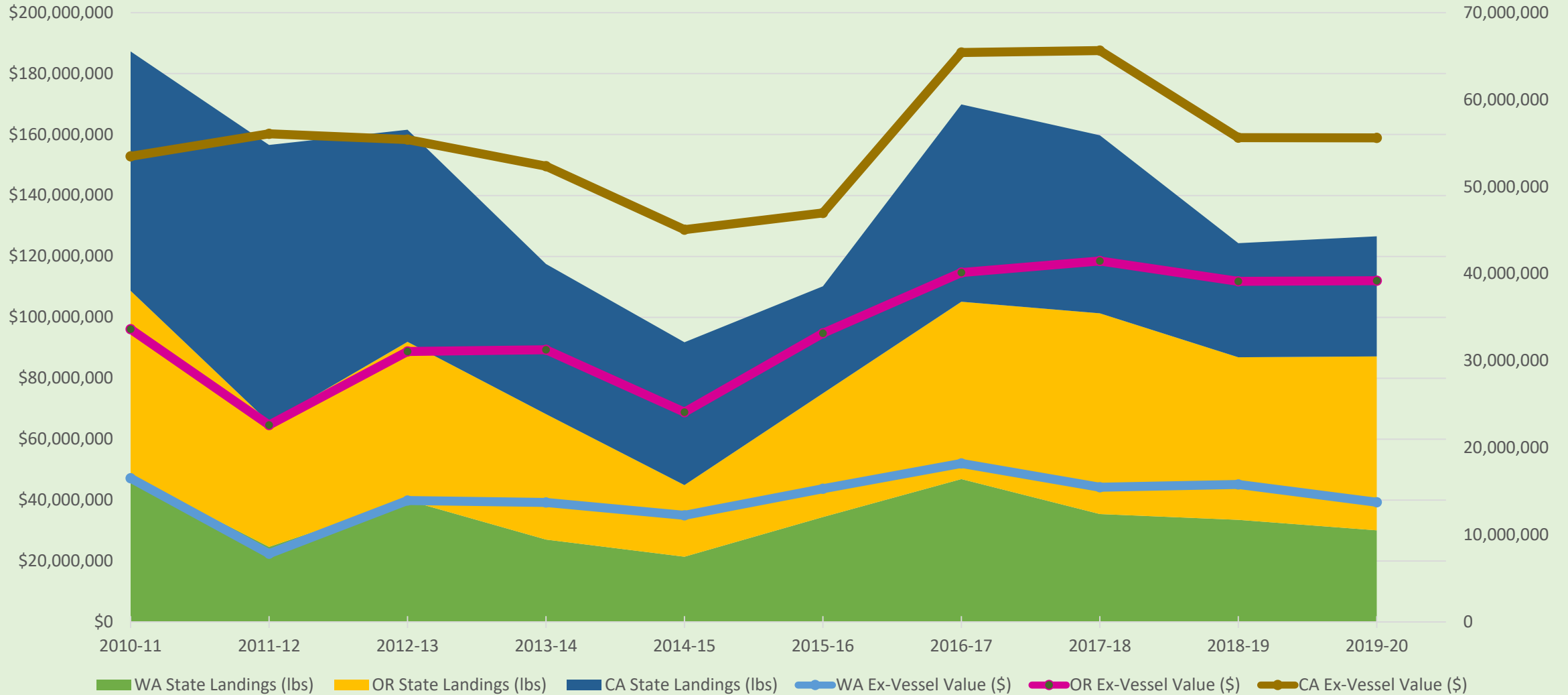
## Problem Statement

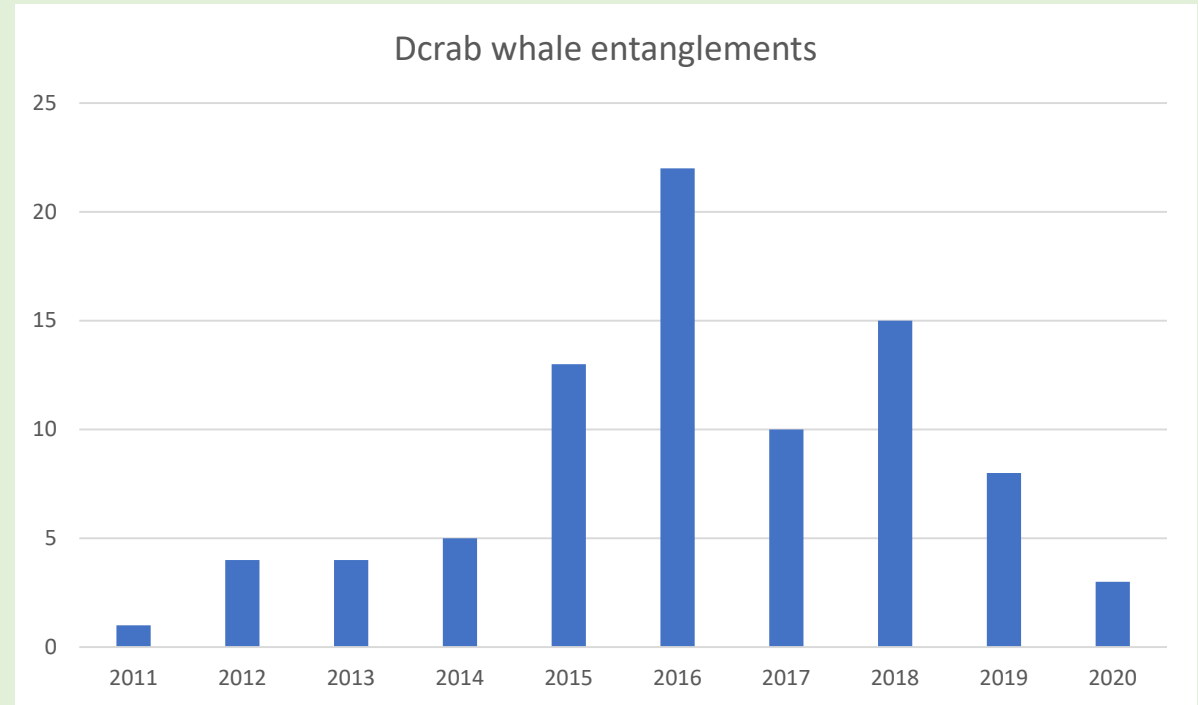
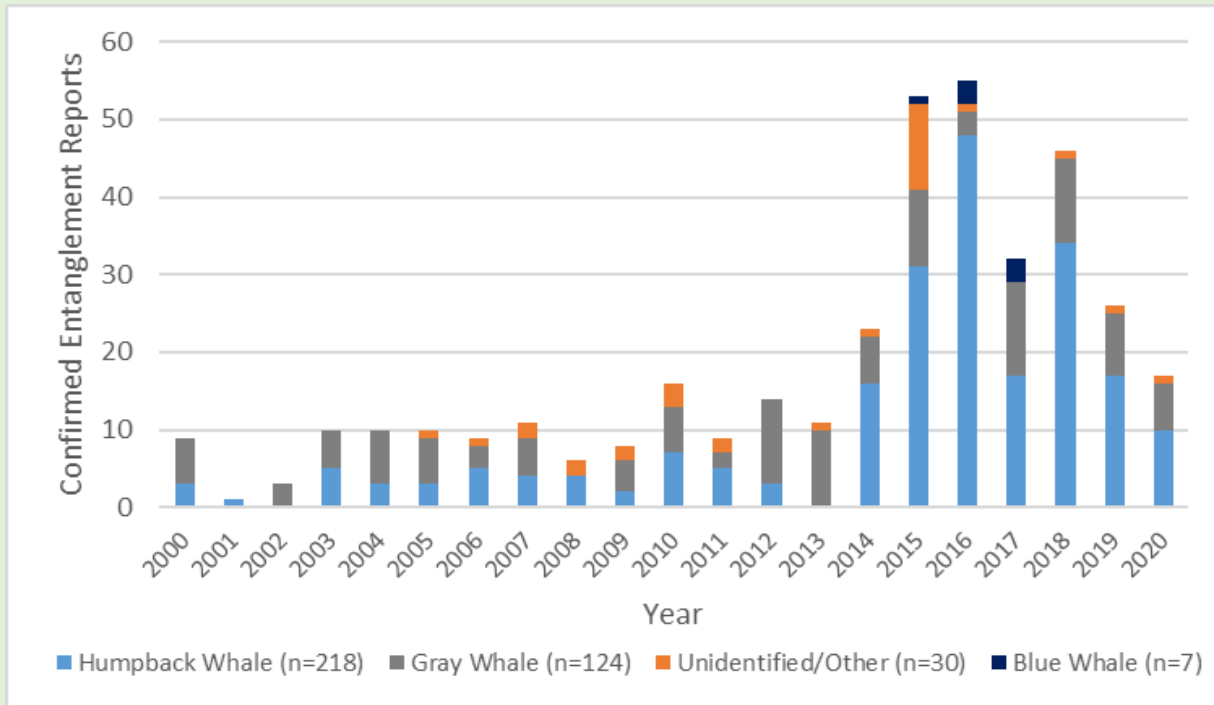
- Elevated whale/turtle entanglements in fishing gear since 2014
  - Most easily attributed to Dungeness crab gear from all 3 states
- 3 States have implemented a number of management measures to mitigate the risks of entanglement
- 3 states have been working on Conservation Plans for submission to NOAA - expect to be submitted to NOAA 2021-2022
  - CPs include state regs, description of incidental take, adaptive management and monitoring measures
  - Efficiencies in 3 states moving forward aligned

# What Do We Think We Have Learned

- Recent humpback whale population estimates suggest West Coast abundance has been steadily increasing – problem is getting harder
- Co-occurrence is fundamental to risk in aggregate; can be used
- Habitat compression and ecosystem indicators appear to offer avenue to track entanglement risk to some degree, potentially in near real-time
- Gear marking is useful – recent cases with new “spring” tag, recent surface marking improvements in CA
  - fuzziness of identifying gear ~50% cases is exhausting and problematic

# West Coast Dungeness Crab





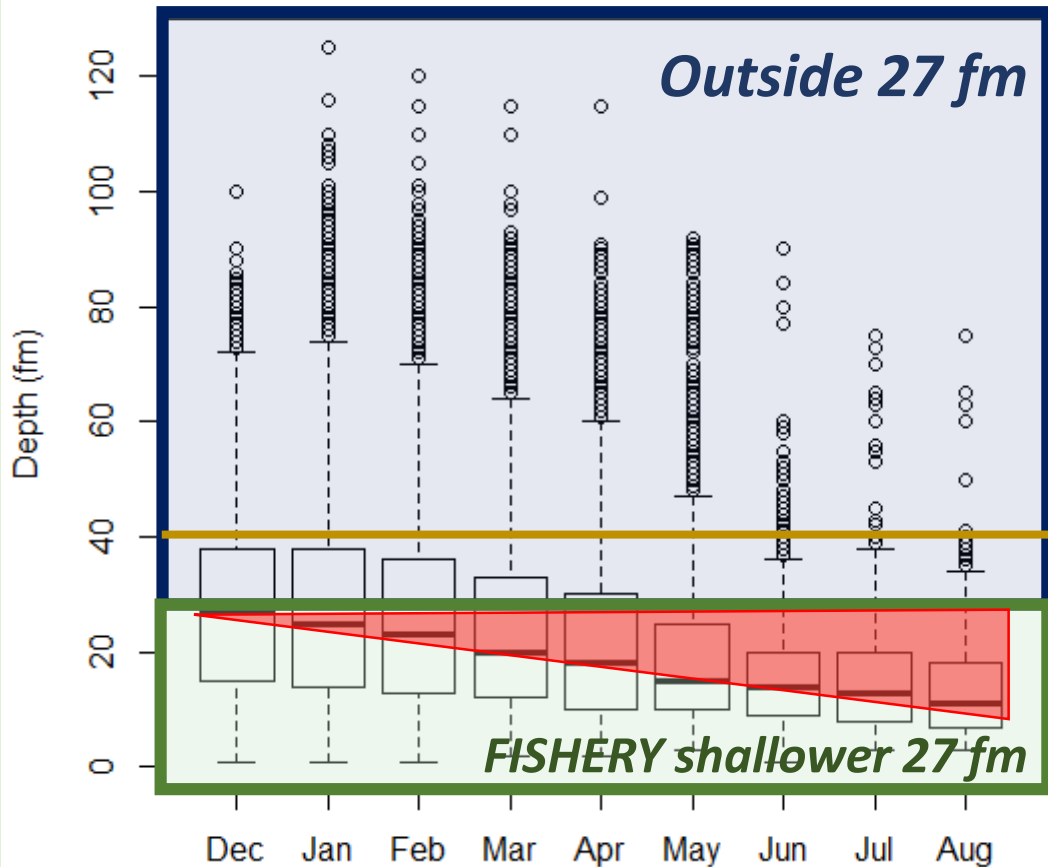
- 286 confirmed whale entanglements reported since 2011
  - 180 humpback (89 unid, 56 State com. Dcrab, 4 rec Dcrab, 2 tribal Dcrab\*, 1 Dcrab unk)
  - 7 blue (4 unid, 3 State com. Dcrab)
  - 79 gray whales (41 unid, 17 State com. Dcrab, 1 tribal Dcrab)
  - 2 transient killer whales in State com. Dcrab
- 3 leatherback turtle (1 State com. Dcrab, 1 unid)

Source: 2019 NOAA Fisheries West Coast Whale Entanglement Summary

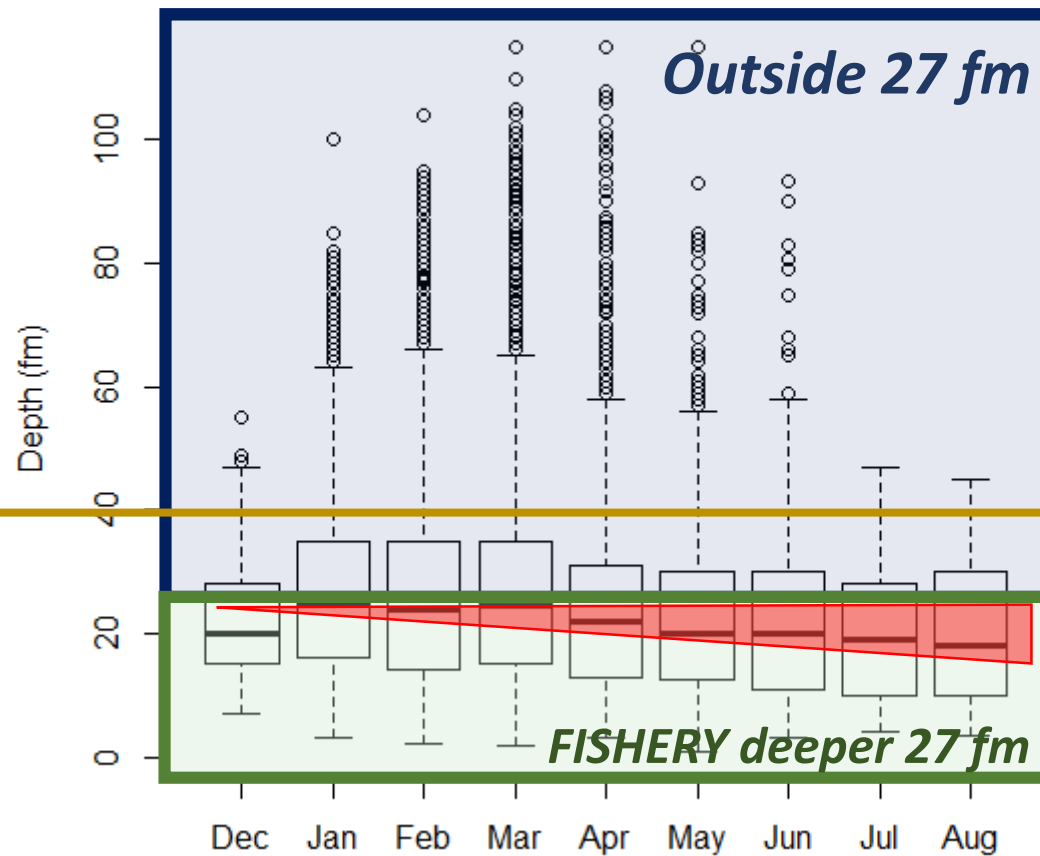
# Research – fishery depth exclusion cost

***In recent years,  
fishery has stayed  
deeper (increasing  
co-occurrence)***

### Depth of Pot Pulls by Month (2007-2015)



### Depth of Pot Pulls by Month (2015-2018)



# State mitigation strategies

- Gear working groups in all 3 states
- Reduce pot limits in late season (May 1)
- Gear excluded outside certain depths (40 fm in OR)
- Season tag
- Elimination of replacement tags
- Elimination of post-season gear clean-up grace period (2 weeks)
- Taut line provisions
- Reduction of meat yield criteria to open season
- Prohibit gear markings from other states, for accountability
- Double-sided buoy tags (non-rulemaking)
- Derelict gear recovery period expanded
- Electronic fish tickets with crab harvest areas
- E-logs for better monitoring
- Alternative gear testing

# Issue 1 – Washington

## Crab/Whale entanglement (updating 2016, 2019 resolutions)

PSMFC strongly supports sufficient federal funding necessary to meet National Environmental Policy Act (NEPA) requirements and for the development, implementation, and ongoing management of the West Coast Dungeness crab fishery under implemented Conservation Plans (CP) and Endangered Species Act (ESA) Section 10 incidental take permits. As an alternative to federal management, the states of Washington, Oregon, and California were delegated the authority and responsibility under the Magnuson Stevens Conservation and Management Act to manage Dungeness crab fisheries in state and federal waters along the West Coast. The management needs for the Dungeness crab fishery have become increasingly complex as the states transition management to meet the requirements of the Marine Mammal Protection Act and the ESA. Additional funding is necessary to complete the required NEPA process and support future management which will require robust monitoring and adaptive management plans for the foreseeable future.