NOAA FISHERIES
Alaska Region

Alaska Bycatch Review Task Force Presentation

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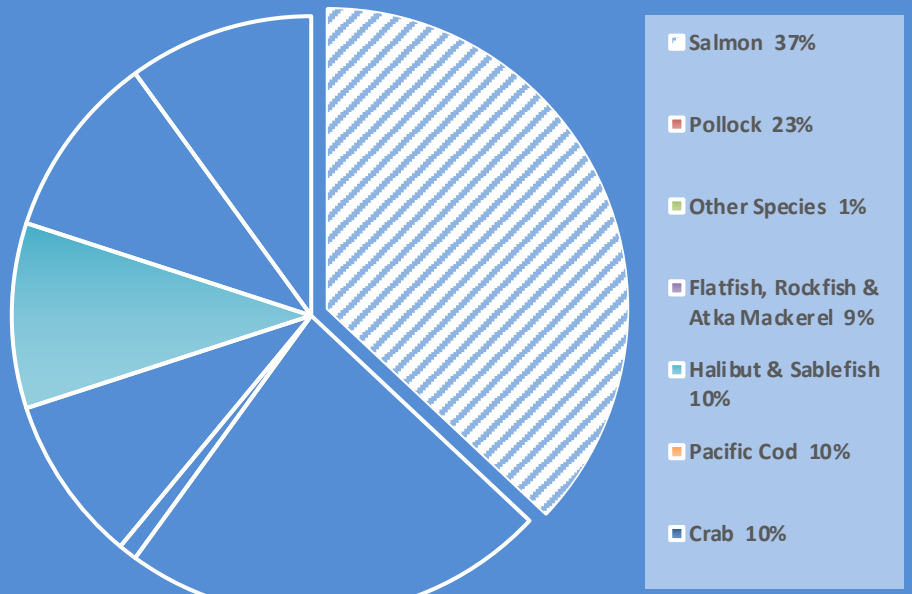
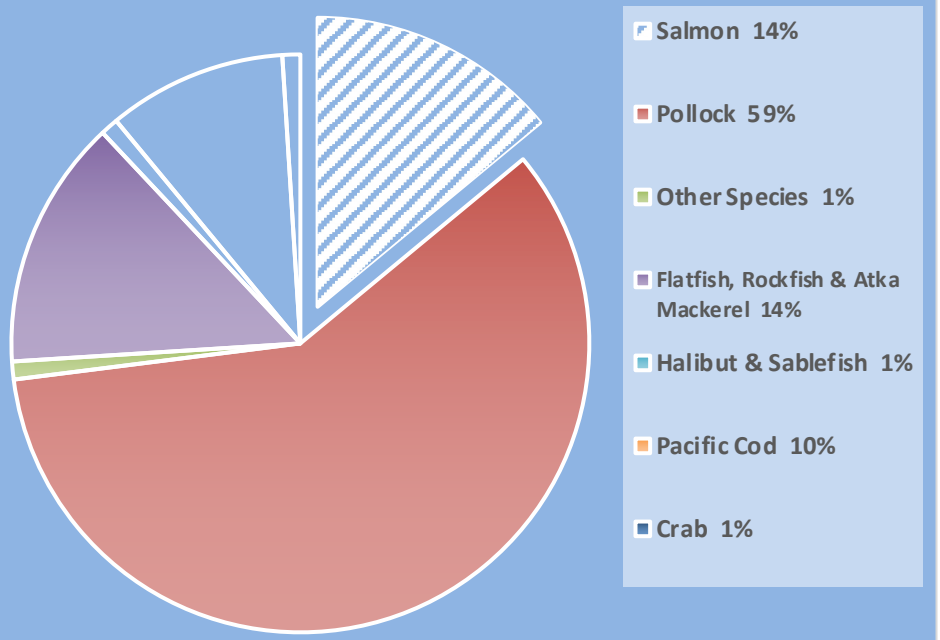
Value and Volume of Fisheries Of Alaska

Exvessel Value of Fisheries
~ $2B annually



Source: ASMI / MacDowell Group
Based on 2017-2018 Data

Volume of Fisheries
~ 5.5B pounds annually



Salmon is managed by the State of Alaska

Other fisheries primarily managed by the North Pacific Council & NOAA Fisheries or in co-management agreements with the State of Alaska

What Is Bycatch?

Bycatch is defined under the Magnuson-Stevens Act

"…fish which are harvested in a fishery, but are not sold or kept for personal use, and includes **economic discards** and **regulatory discards**…."

Why Does Bycatch Occur ?

Bycatch occurs in all fisheries regardless of gear type, area fished, or time of harvest, but the amount and type of bycatch varies

Some bycatch is economic discards – fish are poor quality, no market exists, or other reasons

Most bycatch is regulatory discards – only a specific type of gear is allowed, the fish is caught out-of-season, the fish is too small, or other regulation

How Do We Receive Perspectives on Managing Bycatch ?

The Council process, outreach efforts, Tribal Consultations, and input during the rule making process

There are many views on balancing bycatch with other legal requirements & we strive to provide multiple opportunities to engage

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What Do We Consider When Managing Bycatch ?

The Magnuson-Stevens Act requires balancing…

Minimizing bycatch & bycatch mortality … to the extent practicable

Achieving … the optimum yield from each fishery

Fair and equitable allocation

Sustained participation of communities

& other factors

What Are The Main Types of Bycatch?

Groundfish

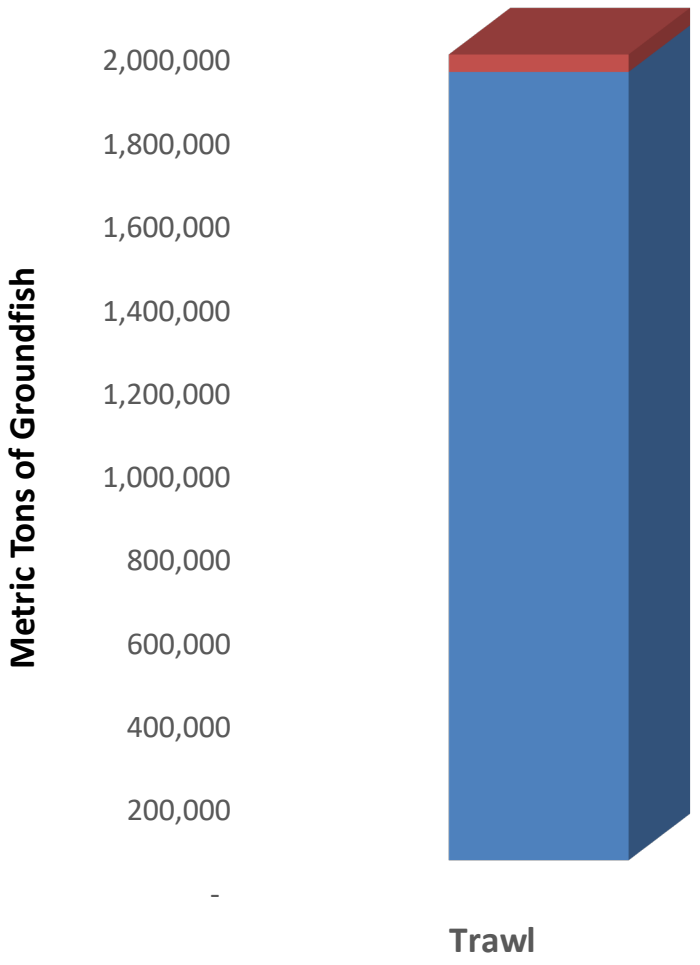
– Bycatch for everything but halibut, salmon, herring, and shellfish

Focus Bycatch Species

Halibut
Salmon
Crab

Subject to strict controls & reporting requirements, "Prohibited Species Catch"

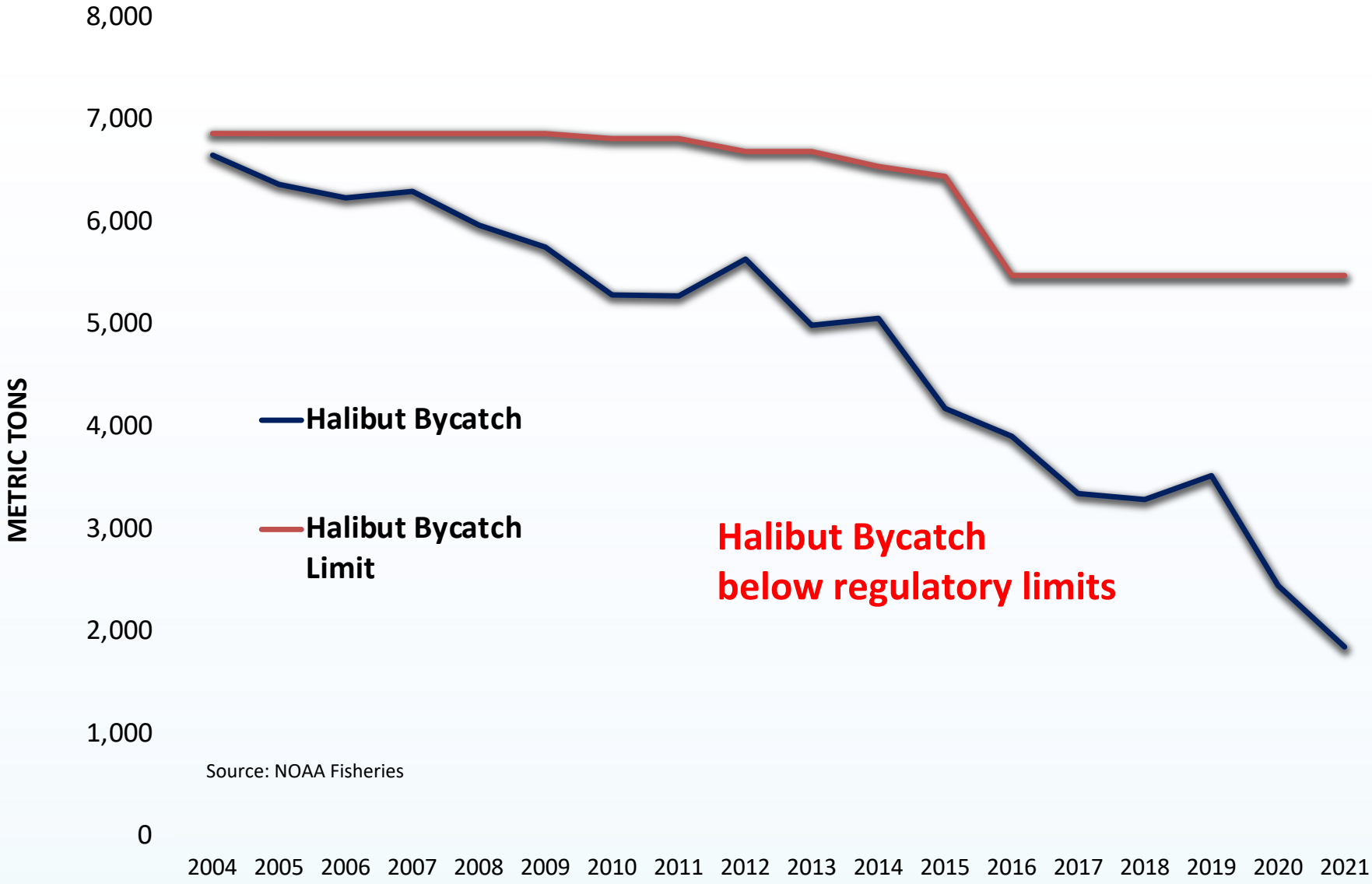
Groundfish Bycatch by Gear in Federal Fisheries Off Alaska (2021)



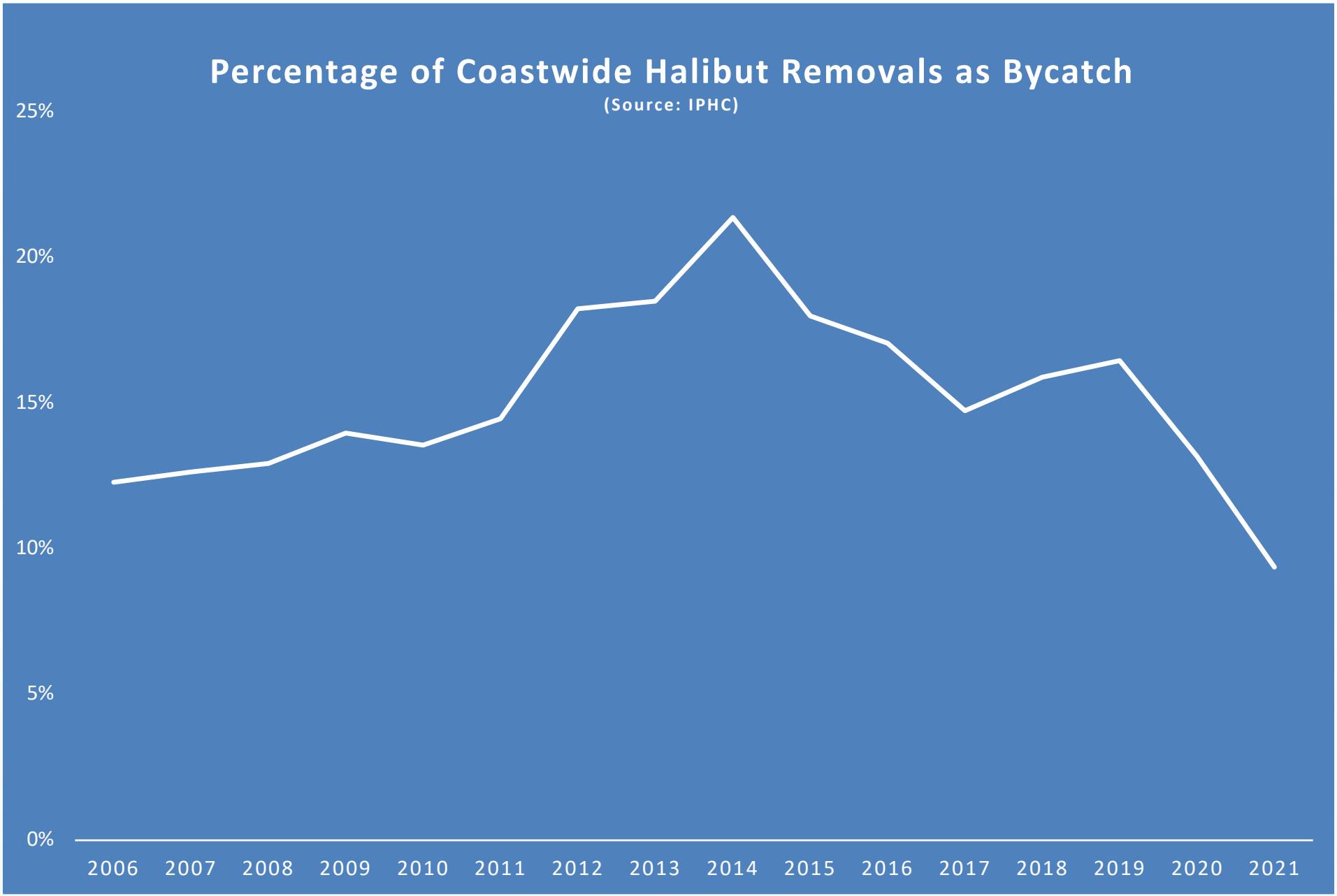
2020 Federal Groundfish Fisheries	Retained (mt)	Bycatch (mt)	% Retained
Trawl Fisheries	**1,804,602**	**36,221**	**98%**
Retained Species: Pollock, Flatfish, Rockfish, Sablefish, and Sculpins *Primary Bycatch Species: Pollock, Flatfish, Skates, and Rockfish*			
Hook-and-Line Fisheries	**72,910**	**14,535**	**83%**
Retained Species: Pacific Cod , Sablefish, and Greenland Turbot *Primary Bycatch Species: Skates, Sculpins, Pacific Cod, and Sharks*			
Pot Fisheries	**27,739**	**928**	**97%**
Retained Species: Pacific Cod and Sablefish *Primary Bycatch Species: Octopus and Sculpins*			

Source: NOAA Fisheries

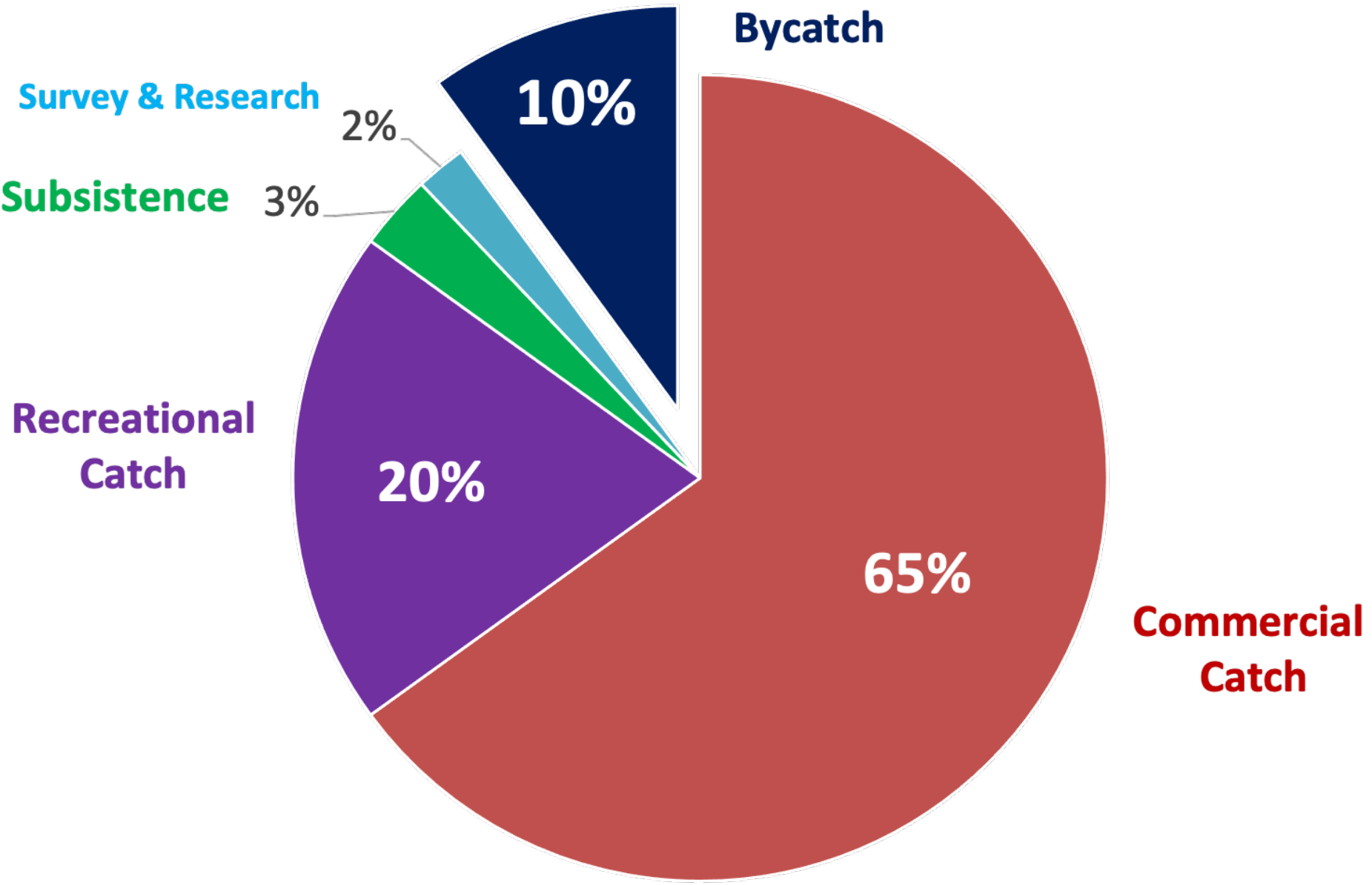
Halibut Bycatch off Alaska (2004 - 2021)



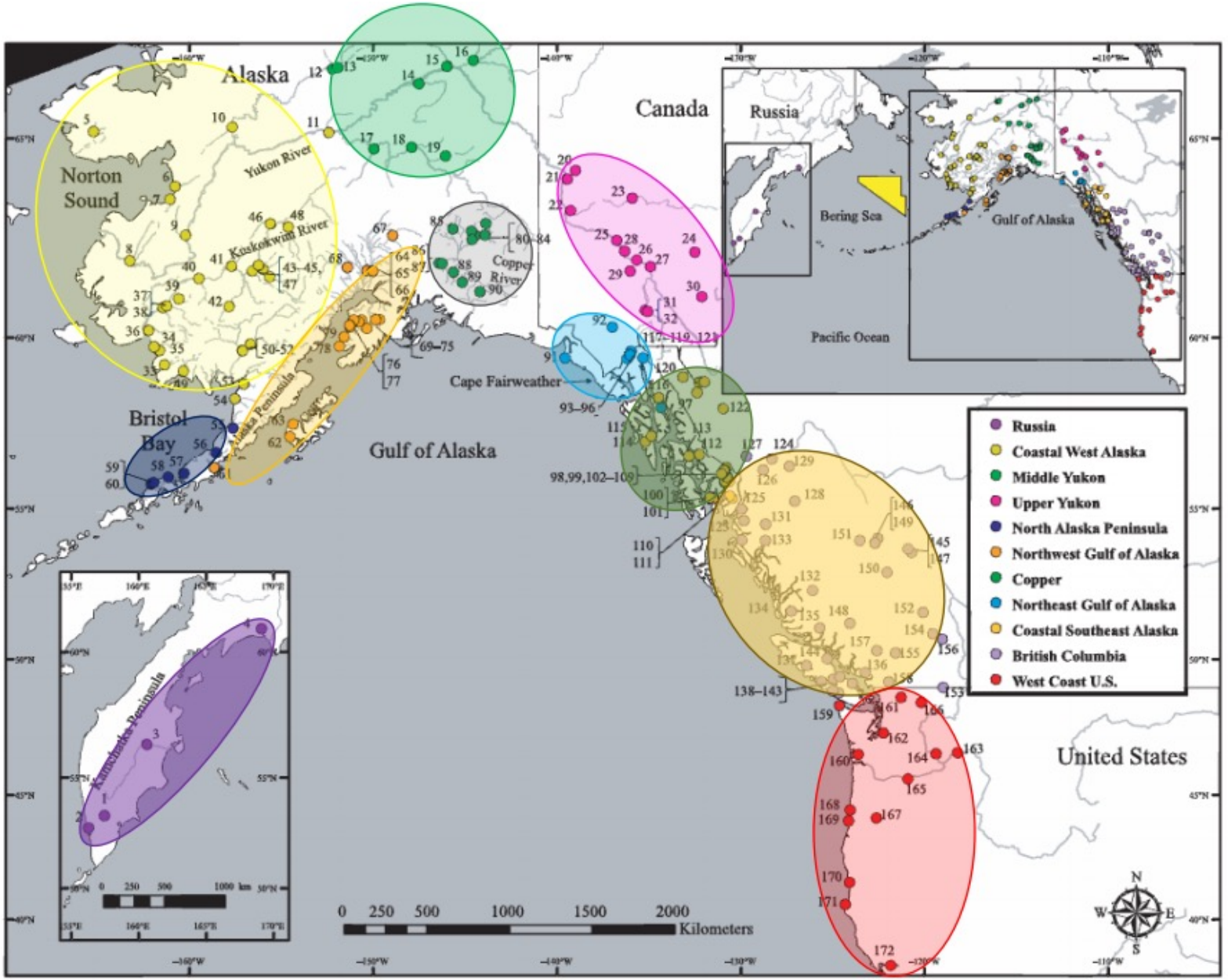
Halibut Bycatch off Alaska (2006 - 2021)



Halibut Bycatch as a Percentage of All Halibut Catch (2021)

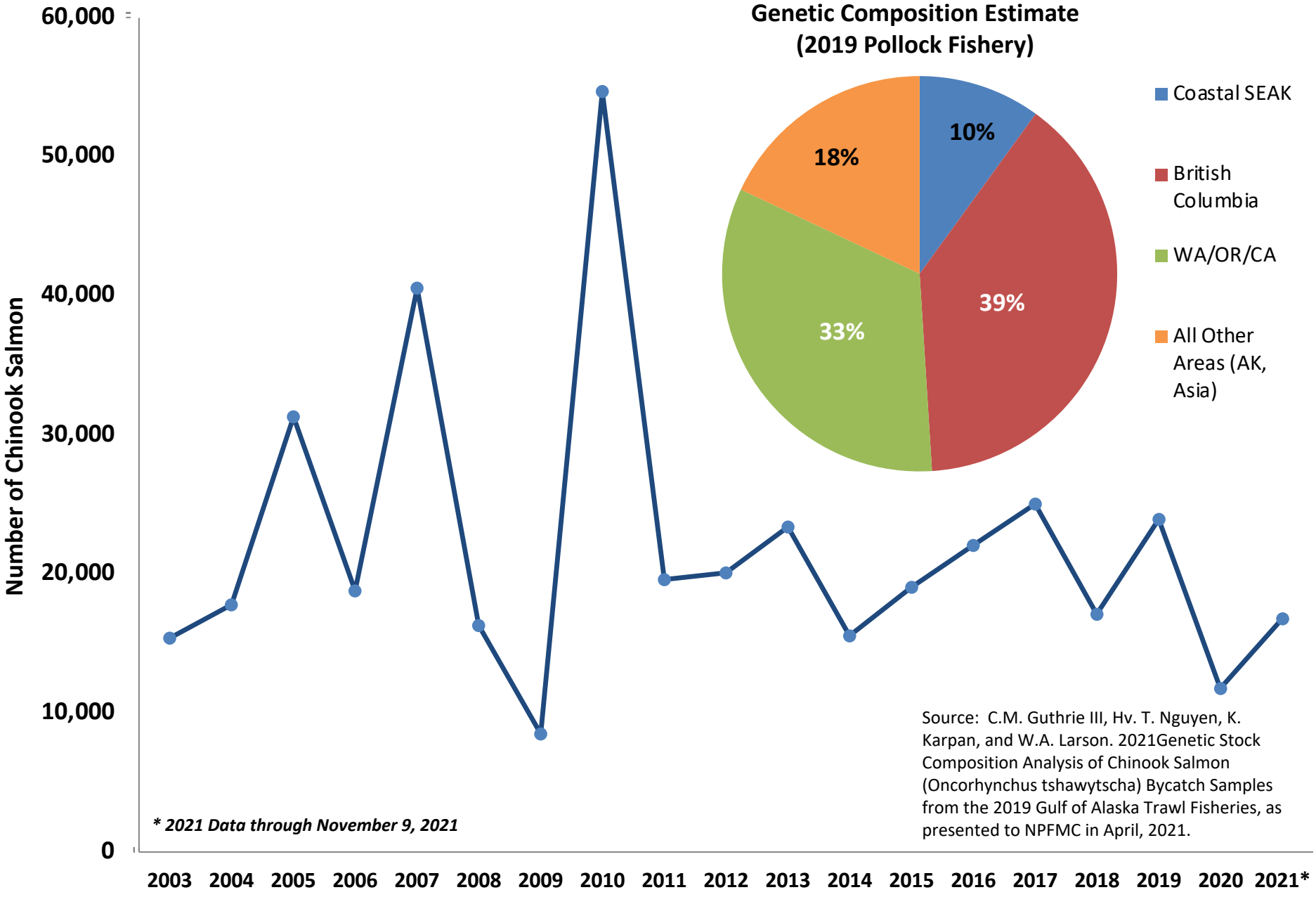


Chinook Salmon Genetic Composition Areas

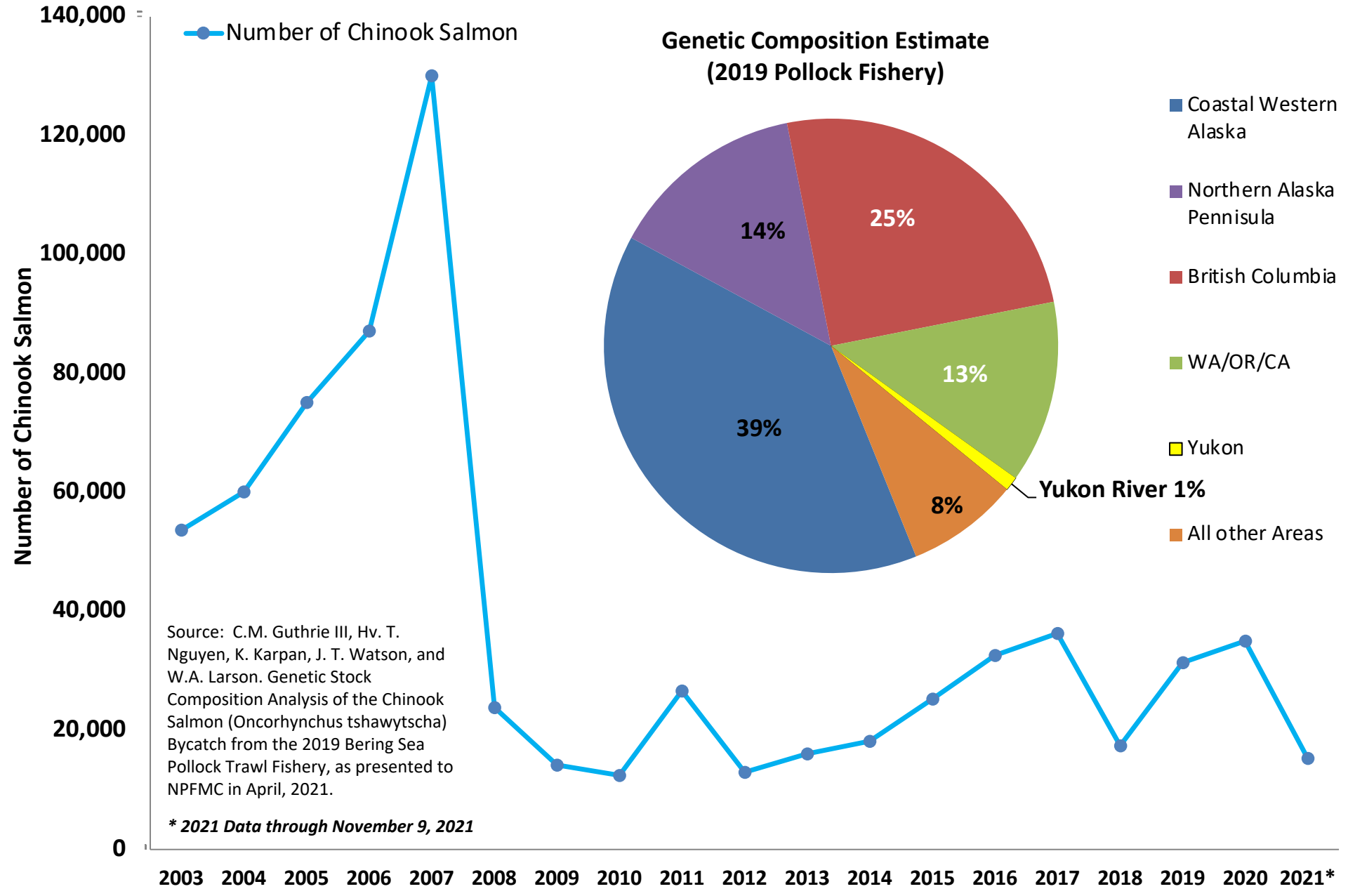


Templin et al., 2011

Gulf of Alaska Chinook Salmon Bycatch (2003 – 2021)



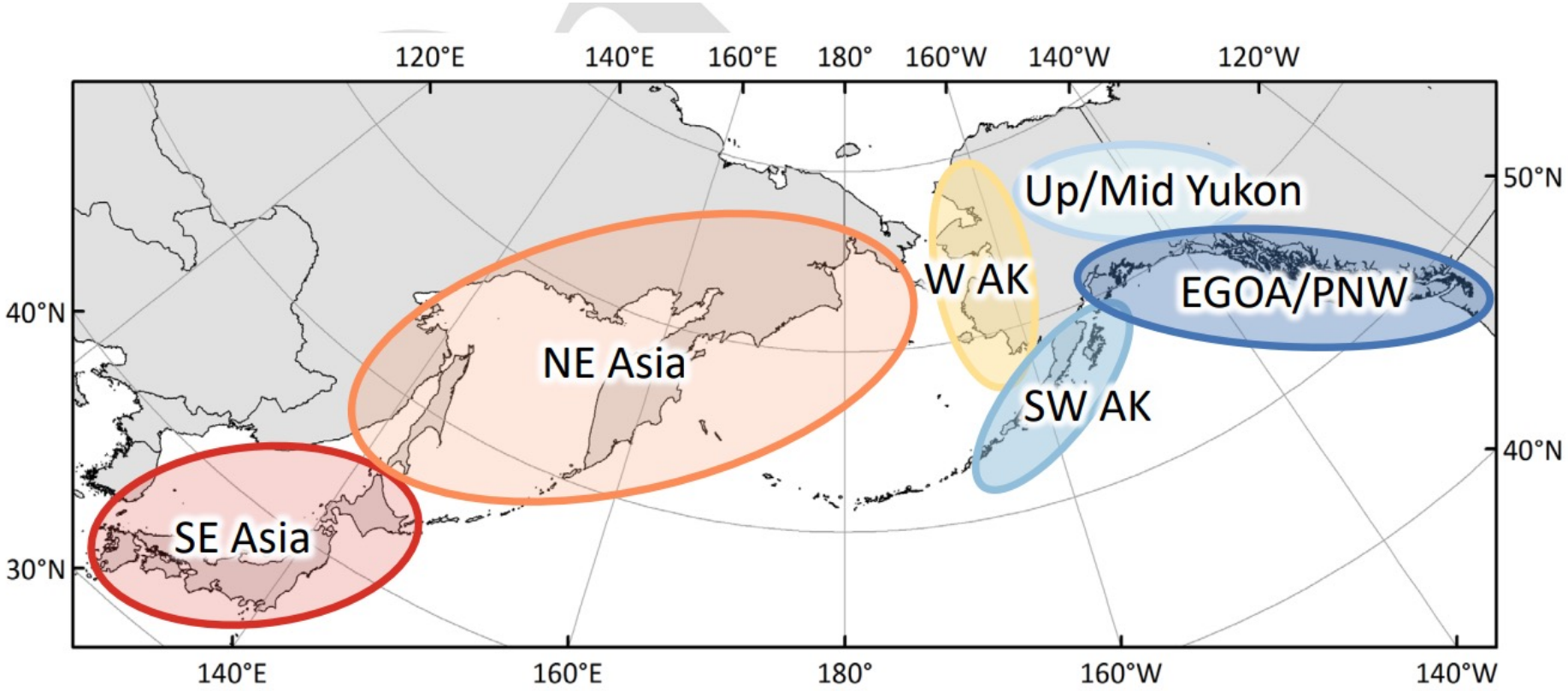
Bering Sea Chinook Salmon Bycatch (2003 -2021)



Source: C.M. Guthrie III, Hv. T. Nguyen, K. Karpan, J. T. Watson, and W.A. Larson. Genetic Stock Composition Analysis of the Chinook Salmon (Oncorhynchus tshawytscha) Bycatch from the 2019 Bering Sea Pollock Trawl Fishery, as presented to NPFMC in April, 2021.

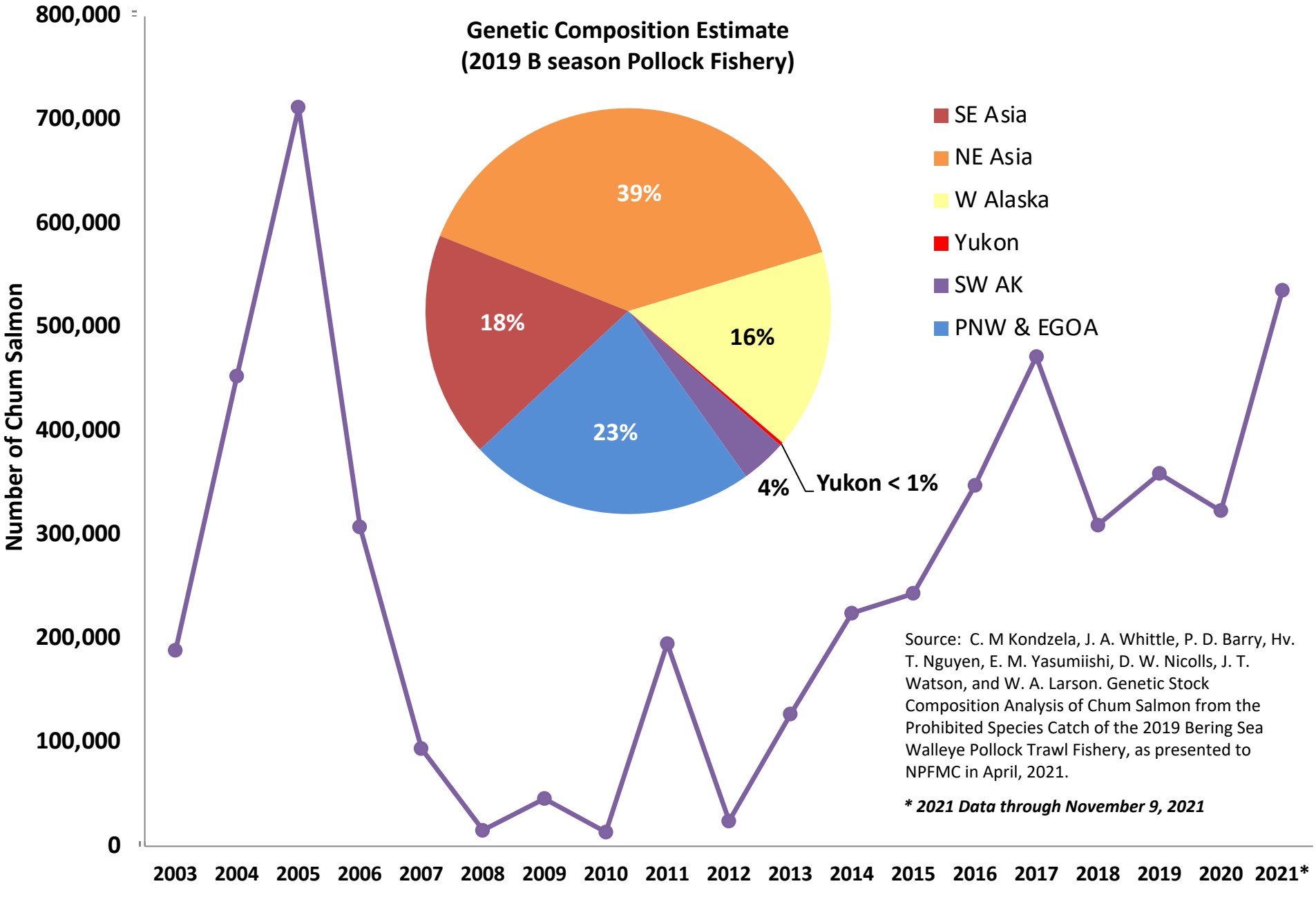
**** 2021 Data through November 9, 2021***

Chum Salmon Genetic Composition Areas



Source: C. M Kondzela, J. A. Whittle, P. D. Barry, Hv. T. Nguyen, E. M. Yasumiishi, D. W. Nicolls, J. T. Watson, and W. A. Larson. Genetic Stock Composition Analysis of Chum Salmon from the Prohibited Species Catch of the 2019 Bering Sea Walleye Pollock Trawl Fishery, as presented to NPFMC in April, 2021.

Bering Sea Chum Salmon Bycatch (2003 – 2021)



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**** 2021 Data through November 9, 2021***

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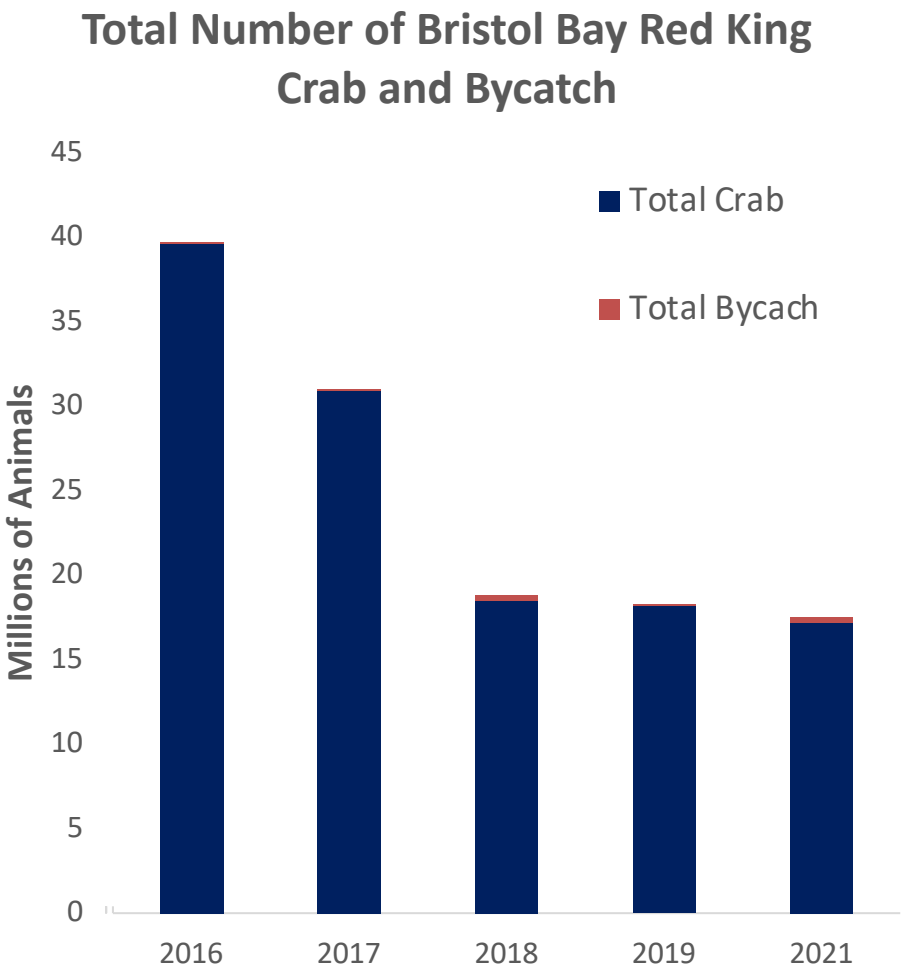
Chinook salmon bycatch in the Bering Sea is **~ 3 %**

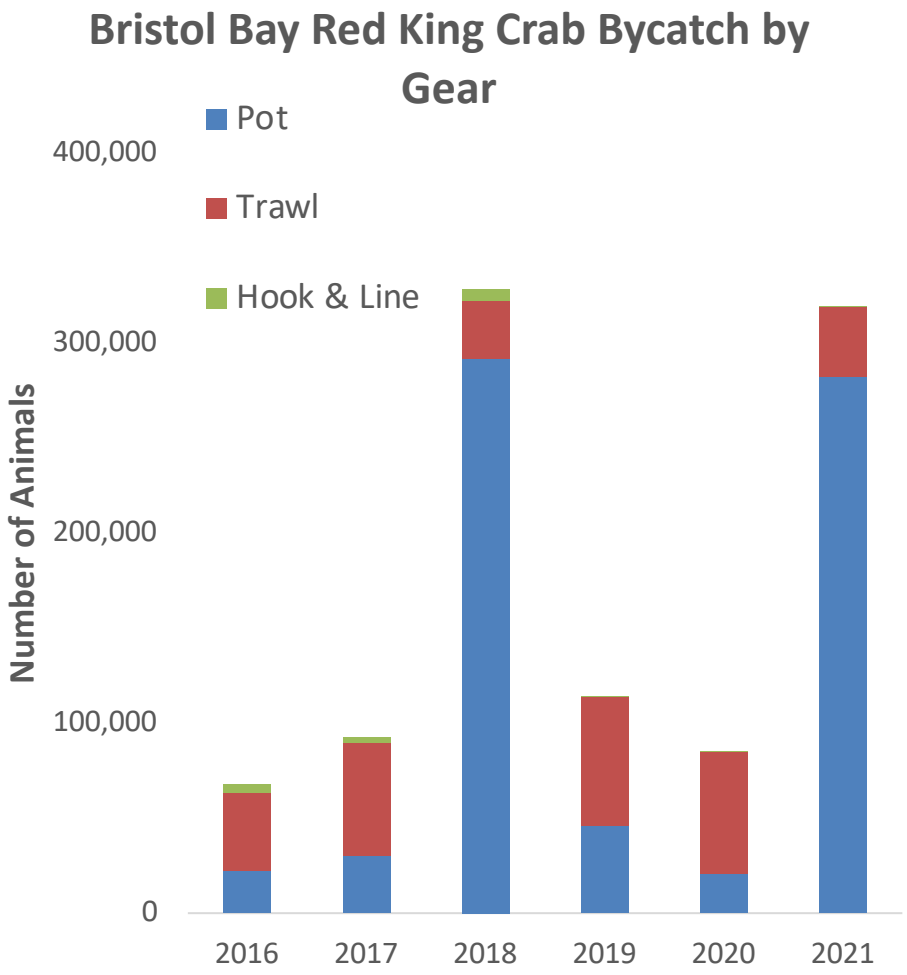
&

Chum salmon bycatch in the Bering Sea is **~ 1 %** of the total returns to Western Alaska Rivers

Percentage of returns is low, but bycatch amounts remain a concern

Bristol Bay Red King Crab Bycatch (2016 – 2021)





Source: Zacher et al. 2021, Table 7, & NOAA Fisheries

**** 2021 Bycatch data through November 5, 2021***

How Do We Measure Bycatch?

- **Largest At-sea monitoring program in the Nation**
  - Over 40,000 observer days of observation.
  - 100% (or 200%) observer coverage on vessels in catch share programs, and all trawl catcher/processors
  - Electronic monitoring program on pot and hook & line vessels, and pollock vessels
  - Annual scientific review process allowing continuous improvement

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How Do We Control Bycatch?

- **Bycatch caps (limits)**
- **Closure areas**
- **Limit fishing for certain species**
- **Limit the use of specific gear**
- **Link Chinook bycatch caps to Western Alaska returns**
- **Catch share management** allows fleets to avoid a "race for fish", share information, and adopt better fishing practices
- **Experimental Fishing Permits** that allow testing of new methods to reduce bycatch through gear modifications
- **Constant communication** with the fleets to help them avoid bycatch "hot spots" and manage effort
- **Facilitate industry efforts** voluntary cooperatives, and "stand downs"

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What Will We Be Doing in the Future?

- **Implement Pacific cod catch share program with reductions in halibut & crab bycatch**
- **Link halibut bycatch caps to abundance**
- **Improve communication** with communities, Tribal Governments, and the fishing fleets
- **Encourage more industry efforts** -- voluntary cooperatives, and "stand downs"
- **Facilitate additional catch share programs** through the Council process
- **Constantly review performance !**

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Alaska Region

More Information & Contacts

- **NOAA Fisheries Alaska Region**
  www.alaskafisheries.noaa.gov
- **North Pacific Fishery Management Council**
  www.npfmc.org
- **State of Alaska Department of Fish and Game**
  www.adfg.Alaska.gov
- **International Pacific Halibut Commission**
  www.iphc.int