



# Bycatch Management in North Pacific Groundfish Fisheries

David Witherell (Executive Director), North Pacific Fishery Management Council

*November 2021*

# The Guiding Law for U.S. Marine Fisheries

## The Magnuson-Stevens Fishery Conservation and Management Act – Adopted 1976



### 200-mile limit

Established the 3-200 nautical mile exclusive economic zone



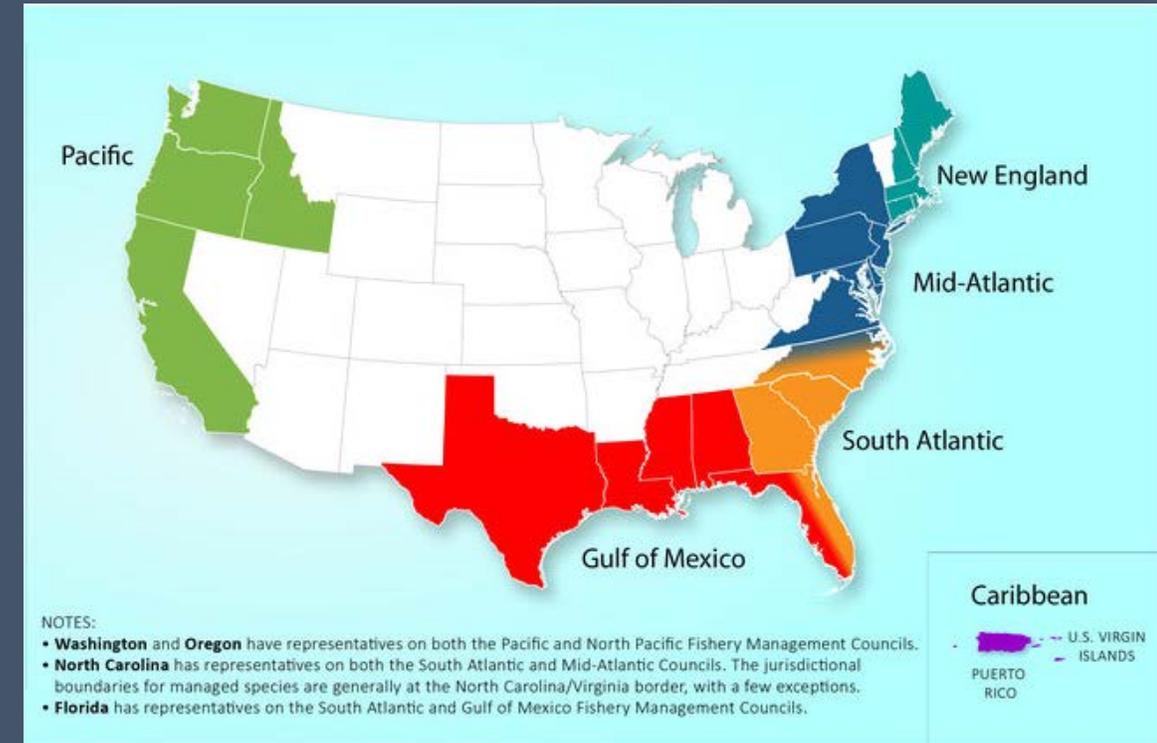
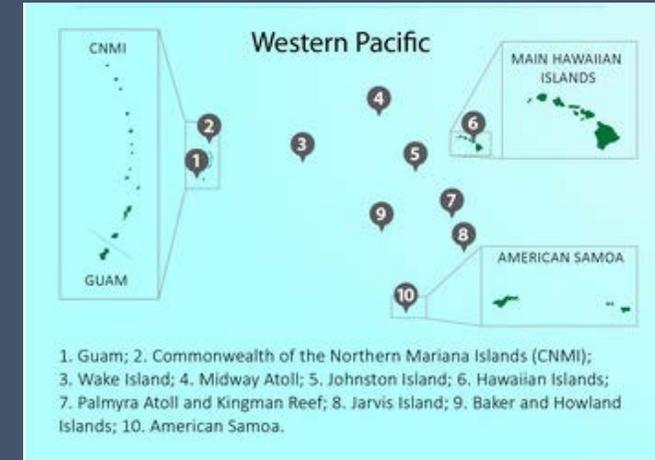
### National Standards

Established National Standards and other requirements for conservation and management of resources.



### 8 Councils

Established a system of 8 Regional Councils, composed of fishermen and gov't representatives, to develop fishery regulations for their specific area.



# Magnuson-Stevens Act - National Standards

1. Prevent overfishing and achieve optimum yield
2. Use best scientific information
3. Manage stocks as a unit throughout its range when practicable
4. No discrimination between residents of different states
5. Promote efficiency in fishery resource utilization
6. Take into account variations in fisheries, fish stocks & catches
7. Minimize costs and avoid duplication
8. Take into account importance to fishing communities
9. Minimize bycatch and bycatch mortality
10. Promote safety at sea

# North Pacific Council Membership



Karla Bush  
ADF&G alternate



Rachel Baker  
ADF&G



David Witherell  
Executive Director



Simon Kinneen  
Chairman



Bill Tweit  
WA DF&G



Dave Hanson  
PSMFC



Steve Marx  
OR DFW



Nicole Kimball



Andy Mezirow



Anne Vanderhoeven



John Jensen

US Dept of  
State  
David Moore

USFWS  
Holly Carroll



Voting



## 11 voting members

*AK (6), WA (3), OR (1), NMFS (1)*

- 7 appointed
- 4 agency representatives

## 4 non-voting members

- US Fish & Wildlife
- US Coast Guard
- PSFMC
- US State Dept.

## 1 Council staff (non-member)

- Executive Director



Cora Campbell



Kenny Down

US Coast Guard  
CAPT Brennell



Jim Balsiger  
NMFS Regional Dir

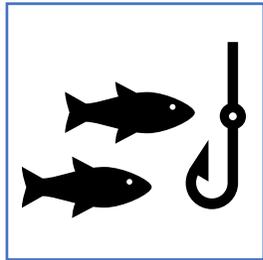


Glenn Merrill  
NMFS alternate

NOAA  
General  
Counsel  
(non-  
member)

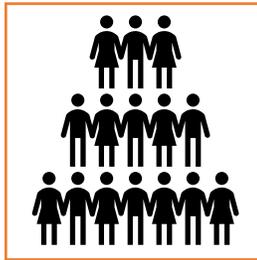
# Council Meetings

Virtual since June 2020



## 5 Meetings Annually

3 in Anchorage  
1 in local fishing community  
1 in Seattle or Portland



## Access

All meetings are open to the public



## SSC & AP

AP and SSC provide input to Council at each meeting.



## Public Testimony

Public testimony is taken for each agenda item at the SSC, AP, and Council.



## Agenda & Schedule

Meeting agendas and schedules are published online.



## Listen Live

Audio is available to listen to the Council meetings online in real-time.

# Who Manages What Fisheries off Alaska?

	North Pacific Fishery Management Council	National Marine Fisheries Service	Alaska Board of Fisheries/ Alaska Dept. Fish & Game	International Pacific Halibut Commission
<b>Groundfish</b> (pollock, cod, flatfish, etc.)	Allocation & conservation	Implements Federal regulations	Some state fisheries (0-3)	
<b>Crabs</b> (king, snow, Tanner crabs)	Bering Sea fisheries – joint management	Bering Sea fisheries - regulations	State & Jointly managed fisheries	
<b>Scallops</b>	License limits	License regulations	Fishery mgmt.	
<b>Halibut</b>	Allocation	Allocation regulations		Conservation
<b>Herring</b>			Fishery mgmt.	
<b>Salmon</b>			Fishery mgmt.	
<b>Others</b> (shrimp, urchins, etc.)			Fishery mgmt.	

# What is bycatch?

## Magnuson-Stevens Act definition:

The term "bycatch" means fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program.

In other words:

**Bycatch = Discarded fish**

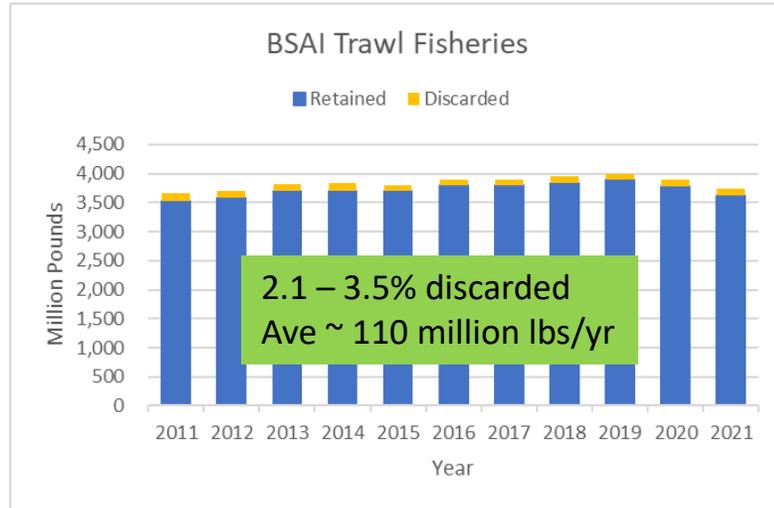
Economic discards: fish harvested which could be legally retained, but are of insufficient value to retain (e.g., sculpins, grenadiers, brittle stars)

Regulatory discards: fish harvested which are required by regulation to be discarded whenever caught, or are required by regulation to be retained but not sold

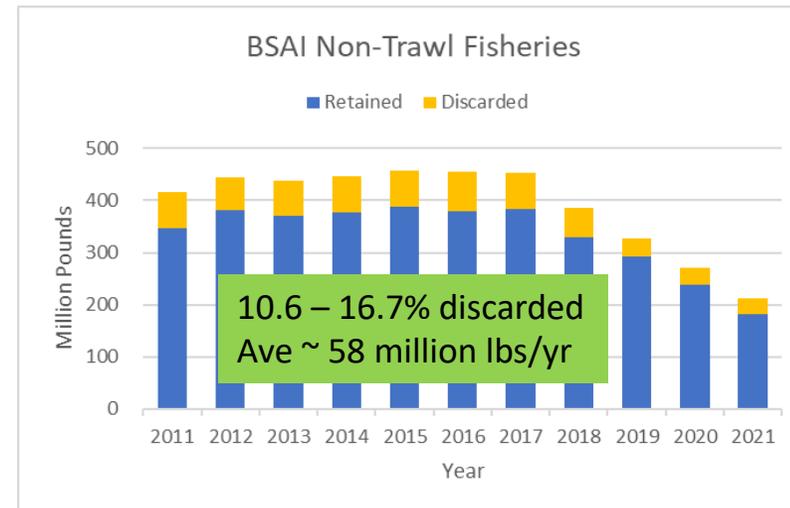
- Prohibited Species Catch (PSC) : A special type of regulatory discard. Fish caught that must be returned to sea with a minimum of injury = Pacific halibut, Pacific herring, Pacific salmon, steelhead, king crab, bairdi, opilio crab.

# Total Bycatch by Gear Type in the Groundfish Fisheries

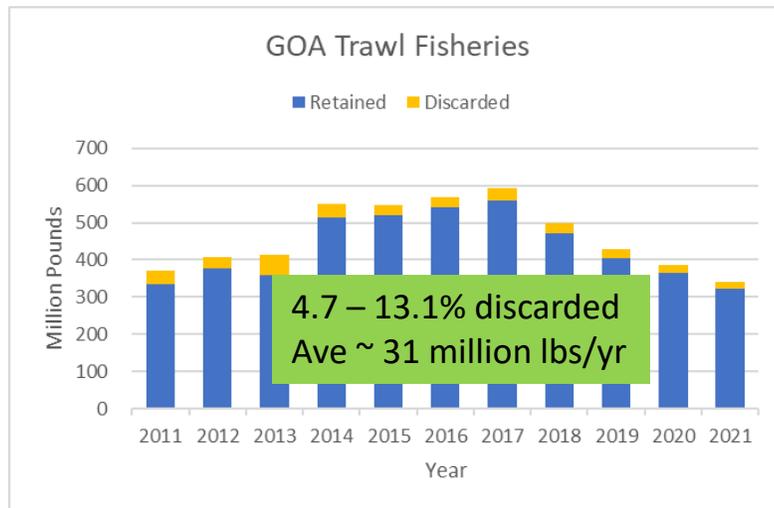
## Trawl Gear



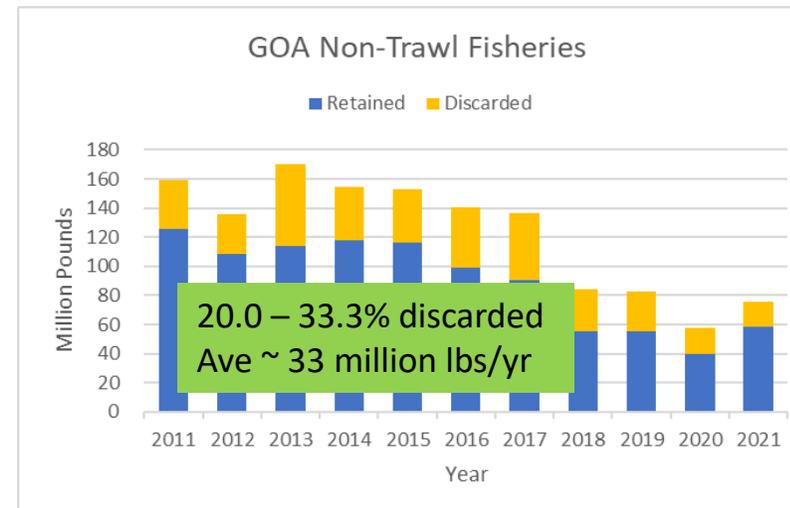
## Longline and Pot Gear



## GOA Trawl Fisheries



## GOA Non-Trawl Fisheries



# PSC Limits and Catch

	Gear Type	Overall Limit	2021 Catch Thru 10/23/21	Apportionment
<b>Halibut</b>				
BSAI	trawl	2,805 mt	1,233	Am 80, TLAS,CDQ
	hook and line	710 mt	80	CV/CP, seasonal
GOA	trawl	1,706 mt	306	seasonal & species depth
	hook and line	257 mt	56	seasonal and DSR
<b>Chinook Salmon</b>				
BSAI	pollock trawl	47,591 fish	13,488	cooperatives
GOA	pollock trawl	25,000 fish	9,257	Western & Central GOA
	non-pollock trawl	9,690 fish	5,488	CVs, CPs, rockfish CVs
<b>Herring</b>				
BSAI	trawl	2,723 mt	1,877	
<b>Crab</b>				
King	bottom trawl	97,000 crab	15,224	Zone 1
Tanner	bottom trawl	3,071,678 crab	506,803	Zones 1 and 2
Opilio	bottom trawl	5,990,225 crab	224,549	COBLZ

# Measures to Minimize Salmon PSC in the BSAI

Note: Only Chinook and Chum salmon are caught in any numbers in BSAI and GOA groundfish fisheries.

## Regulatory measures

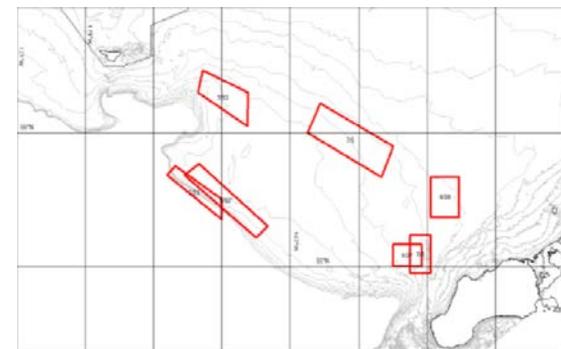
- Chinook Salmon PSC Limits

<u>Amendment 91</u>	<u>Amendment 110</u>
<p><b>Performance Standard</b> <b>47,591</b> Each pollock sector (shoreside, at-sea, mothership, CDQ) gets relative share of total for year.</p> <p><b>Incentive</b> – If a sector exceeds its share in 2 or 7 years, it is limited to the performance share thereafter.</p> <p><b>Overall PSC Limit</b> <b>60,000</b> The entire pollock fishery is shut down if this limit is hit.</p>	<p>If Western AK 3-river system index &gt; 250,00 then Performance standard = <b>47,591</b> and Overall PSC Limit = <b>60,000</b></p> <p>If Western AK 3-river system index &lt; 250,00 then Performance standard = <b>33,318</b> and Overall PSC Limit = <b>45,000</b></p> <p>Western AK 3-river system index: Each year, ADF&amp;G provides a Chinook salmon abundance using the 3-System Index for western Alaska based on the post-season in-river Chinook salmon run size for the Kuskokwim, Unalakleet, and Upper Yukon aggregate stock grouping</p>

- Incentive Plan Agreements (IPA) Requirements

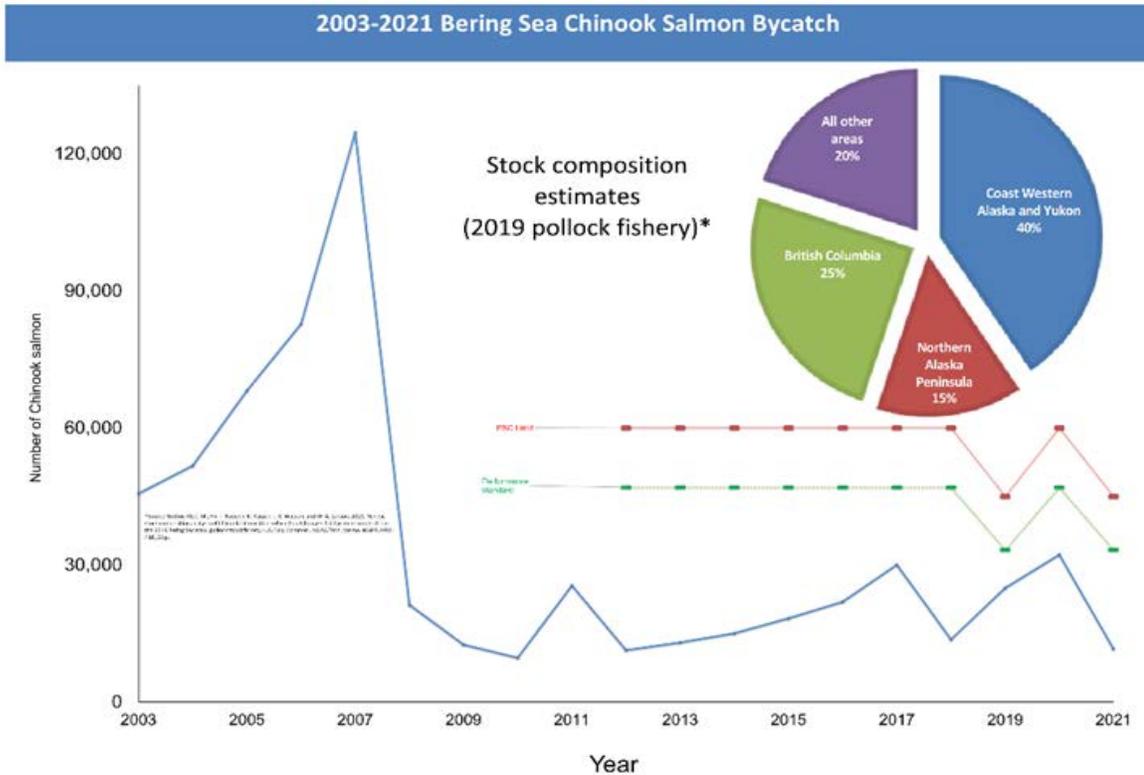
## Voluntary measures

- Pollock fishery cooperative IPAs: incentives for captains to avoid Chinook salmon and chum salmon bycatch under any condition of pollock and Chinook salmon abundance in all years; rewards for avoiding Chinook salmon, and penalties for failure to avoid Chinook salmon at the vessel level.
- Hotspot reporting and closures
- Salmon escape panels
- Donation to foodbanks



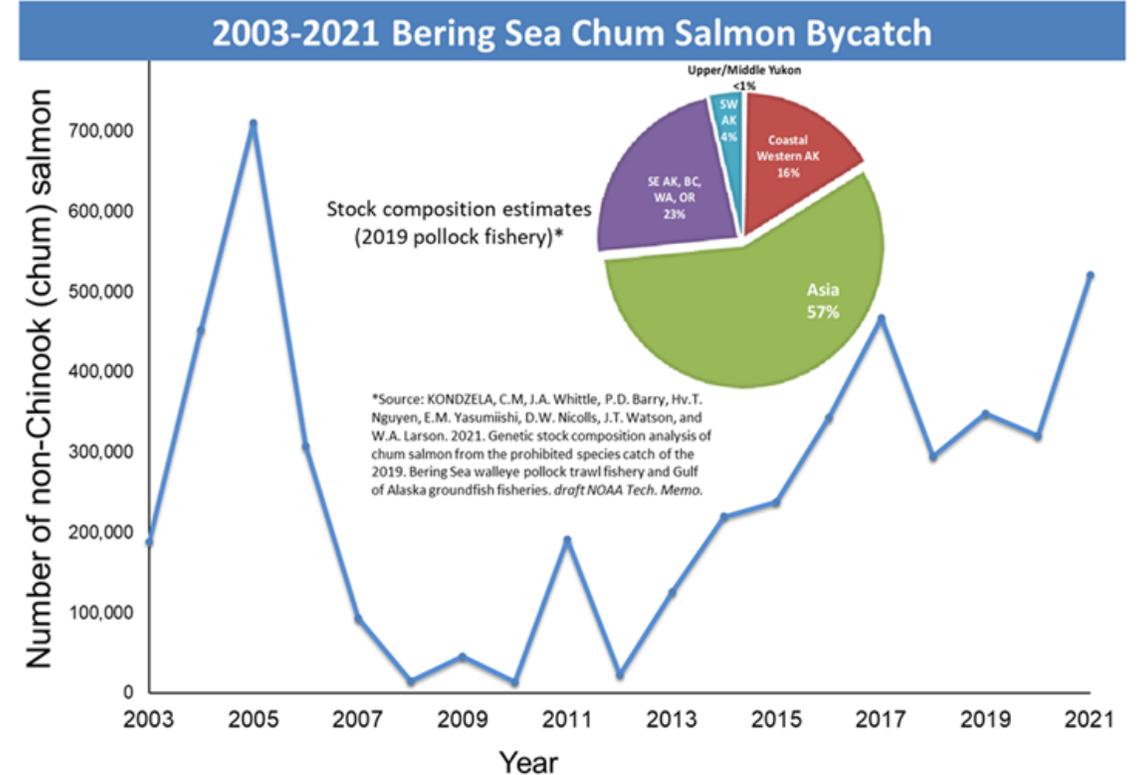
# Bering Sea Salmon PSC trends and genetic breakouts

## Chinook Salmon



2019 Chinook salmon bycatch: 39% from western coastal Alaska and <1% from Upper/Middle Yukon

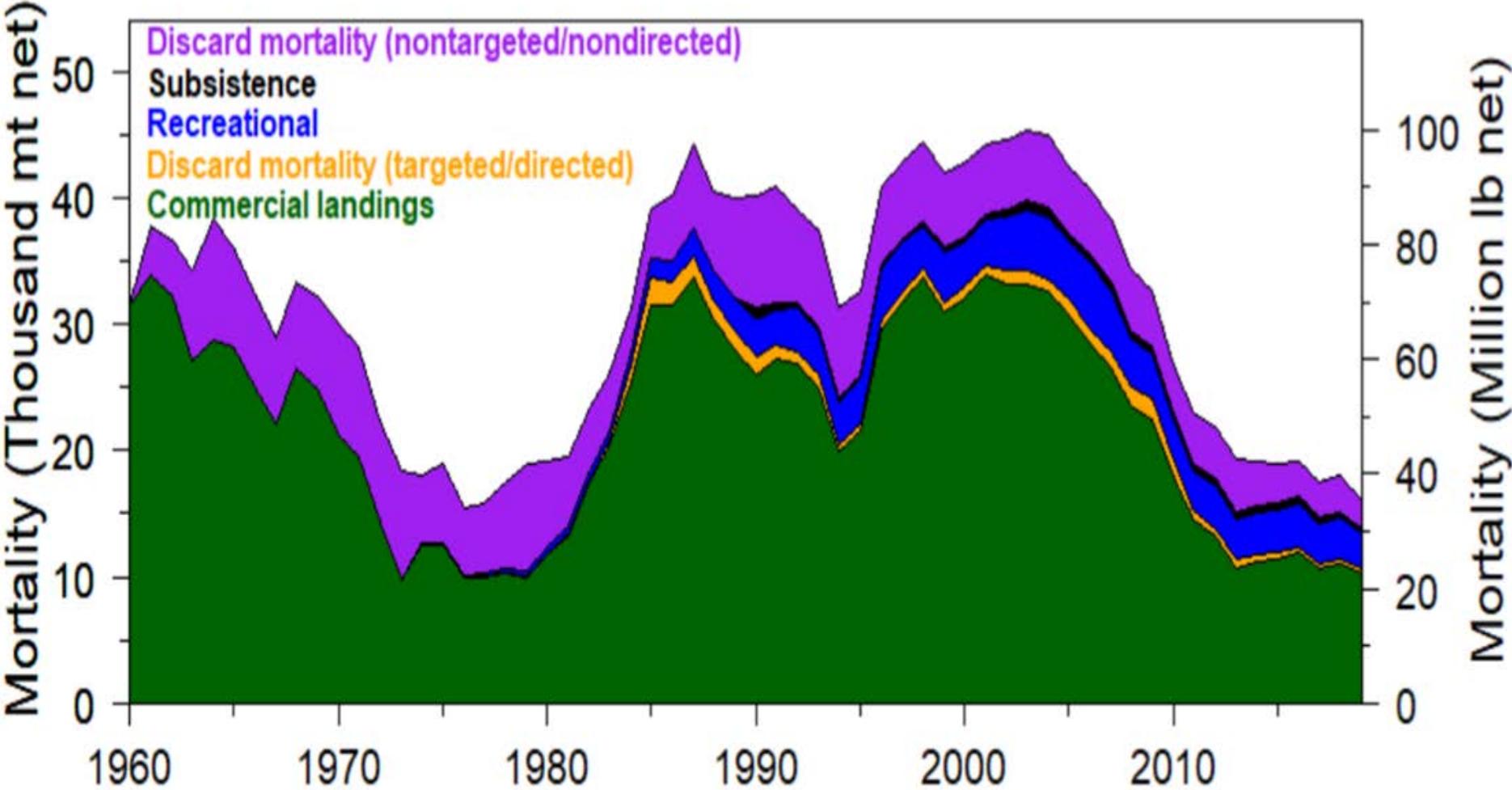
## Chum Salmon



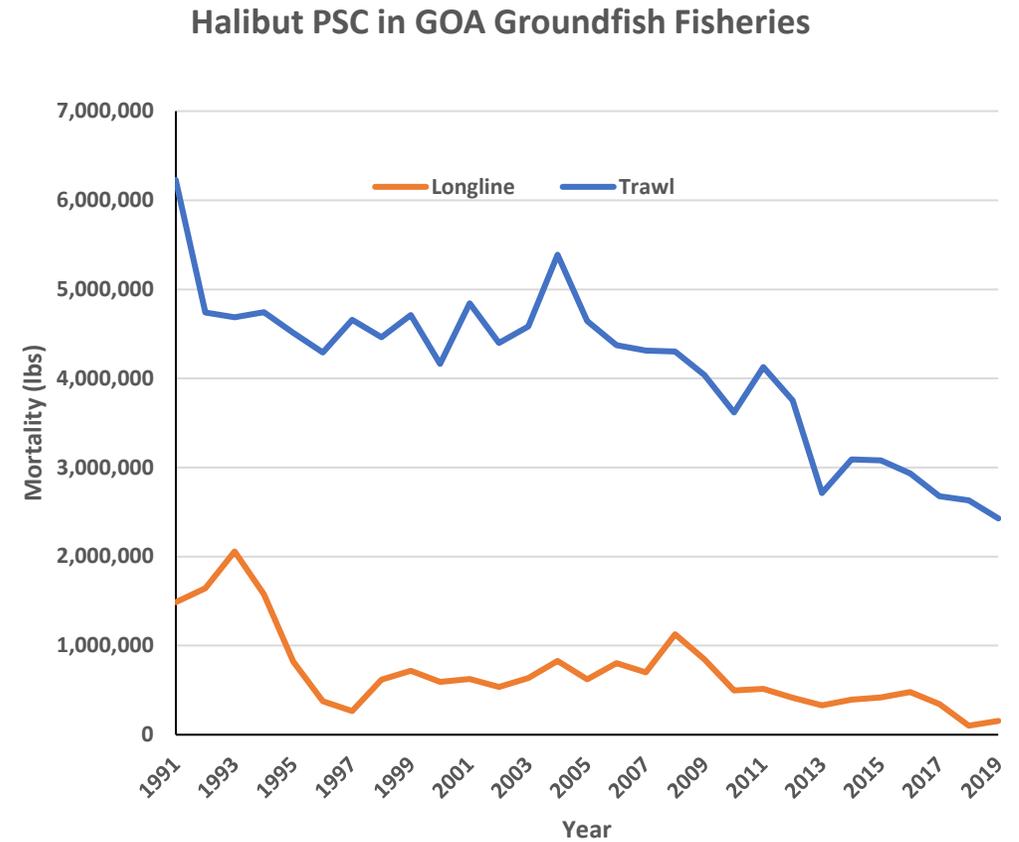
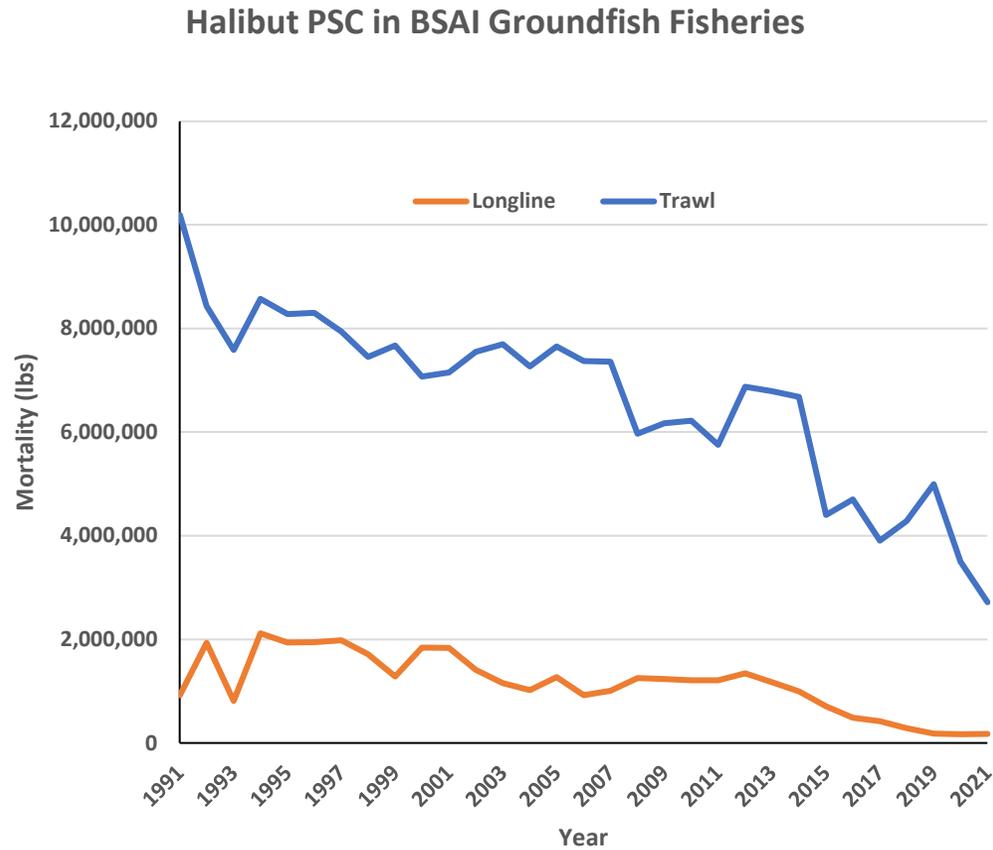
2019 chum salmon bycatch: 16% from coastal western Alaska and 0.3% from Upper/Middle Yukon

Last impact assessment (2017) showed <2.5% impact on aggregate WAK and <1% on Yukon Chinook salmon runs.

# Halibut Mortality - Coastwide



# Halibut PSC Trends by Area and Gear Type



Catch data through 10/23/2021

# Measures to minimize halibut PSC

## Regulatory measures

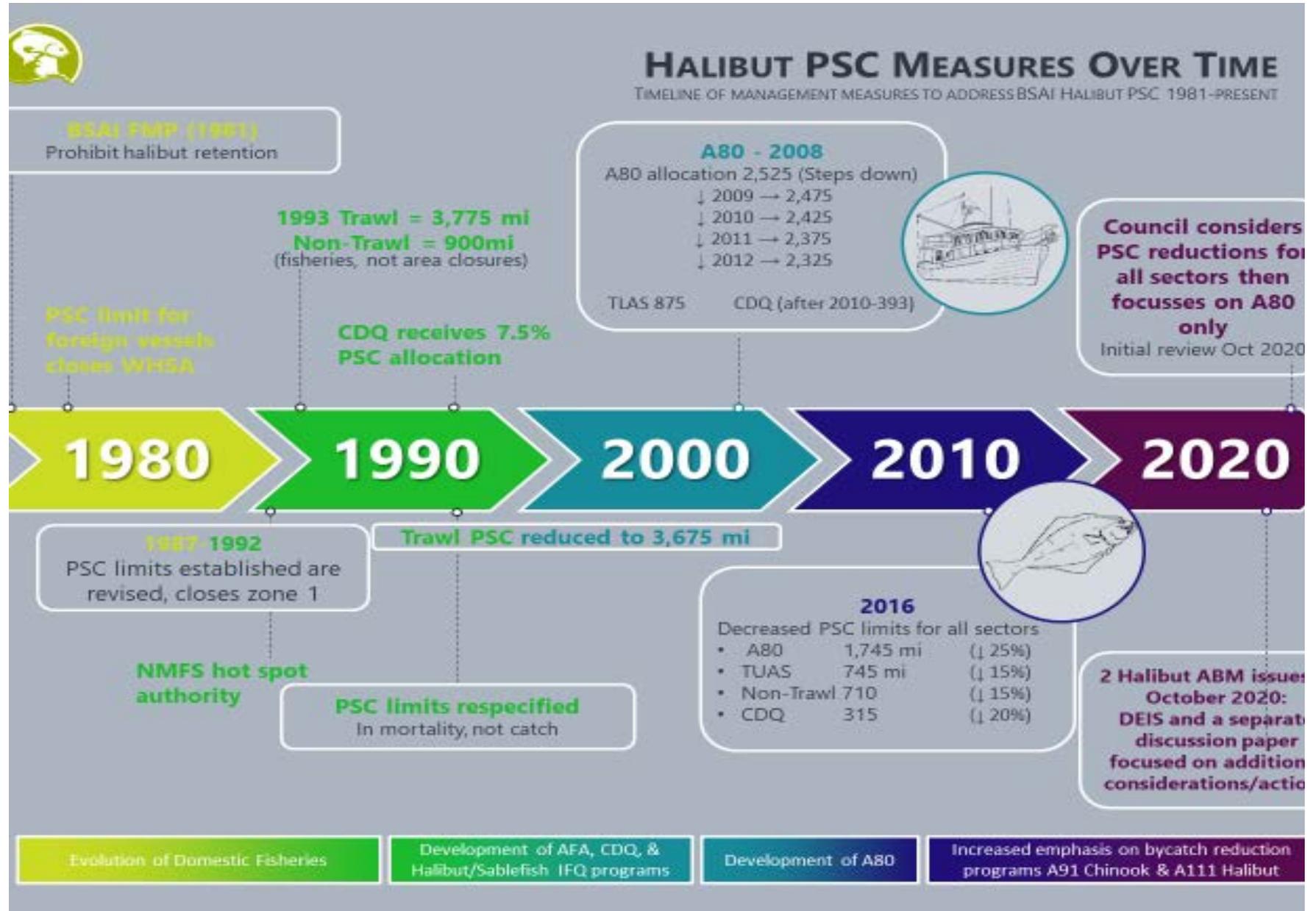
- Strict PSC Limits: Fishery stops if reached
- Deck sorting regulations
- Careful release requirements for longliners



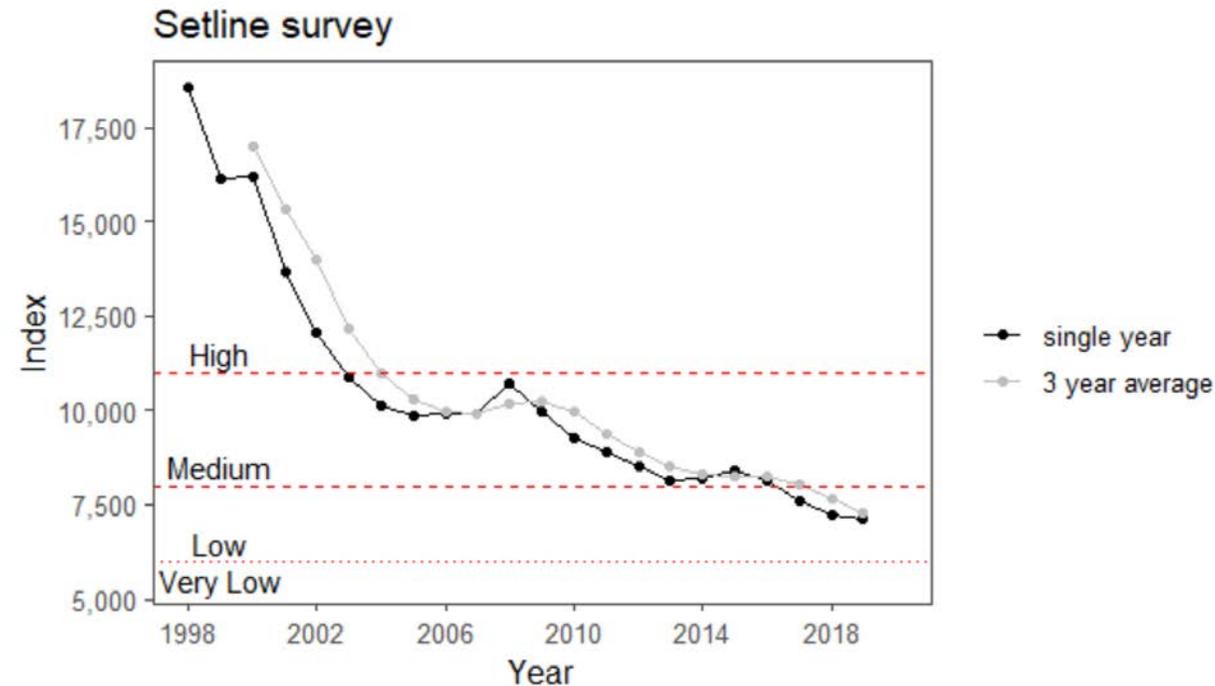
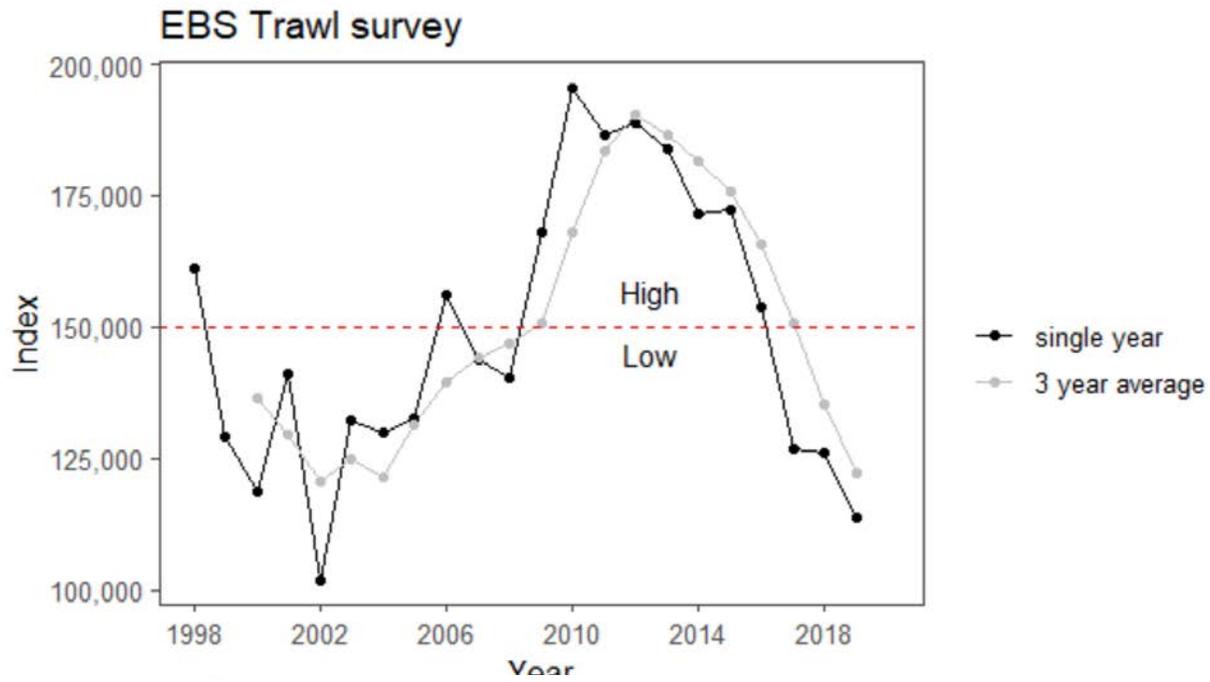
## Voluntary measures

- Deck sorting of halibut to get fish released alive
- Halibut Avoidance Incentive Program: data shared across BSAI fleet, testing and use of halibut excluder panels, limitations on trawling at night, etc.
- Annual report to the Council from the Amendment 80 fleet on bycatch performance and avoidance program
- Donation to foodbanks

# History of BSAI halibut PSC management



# Halibut PSC Alternatives



		EBS shelf trawl survey index (t)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,571 mt (10% below current)	1,745 mt (current limit)
	Medium 8,000 – 10,999	1,483 mt (15% below current)	1,571 mt (10% below current)
	Low < 8,000	1,396 mt (20% below current)	1,483 mt (15% below current)

		EBS shelf trawl survey index (t)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,745 mt (current limit)	2,007 mt (15% above current)
	Medium 8,000 – 10,999	1,396 mt (20% below current)	1,745 mt (current limit)
	Low 6,000-7,999	1,309 mt (25% below current)	1,396 mt (20% below current)
	Very Low < 6,000	1,222 mt (30% below current)	1,309 mt (25% below current)

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	Medium 8,000 – 10,999	1,222 mt (30% below current)	1,396 mt (20% below current)
	Low 6,000-7,999	1,047 mt (40% below current)	1,222 mt (30% below current)
	Very Low < 6,000	960 mt (45% below current)	1,047 mt (40% below current)

# Council addresses PSC/bycatch minimization at most meetings

## Some examples in the past few years:

### 2015

- Reduced BSAI halibut PSC by 21% overall
- Reviewed AM 80 halibut avoidance program

### 2016

- Started evaluation of abundance-based halibut PSC
- Initial analysis of GOA Trawl Bycatch Mgmt program

### 2017

- Evaluated Bristol Bay red king crab PSC limits
- Evaluated GOA Tanner crab protection measures
- Recommended EFP for Chinook salmon excluders
- Set separate MREs for skate species

### 2018

- Evaluated Chinook salmon PSC limits for non-pollock fisheries
- Authorized retention of halibut in pot gear

### 2019

- Evaluated release of small sablefish
- Required full retention of rockfish on fixed gear CVs
- Reviewed analysis of snow crab bycatch measures

### 2020

- Deck sorting of halibut on BSAI bottom trawl CPs authorized
- Evaluated herring PSC management
- Allowed processing of squid and sculpins

### 2021

- Established standardized bycatch reporting methodology
- Evaluated overages of sablefish in trawl fishery
- Established LAPP program for BSAI Pacific cod trawl CVs, and reduced PSC limits for this sector (-25% halibut, -35% crab)
- Reviewed salmon genetics and avoidance plans
- BSAI abundance-based halibut PSC limits (Dec.)

# How to Participate in the Process

## Meet

Get to know your Council representative, committee members and/or staff

## Learn

- Visit the Council website
- Research the issue
- Talk to an expert

## Serve

Join a workgroup or committee

## Speak-up

Provide a written comment and/or testify in person at a meeting

## Attend a meeting

All meetings are open to the public. Visit [www.npfmc.org](http://www.npfmc.org) for meeting schedule

## Join a group

Find a group that represents your interests. If you can't find a group, create one

# Navigating the Council Website: npfmc.org

**North Pacific Fishery Management Council** is one of eight regional councils established by the Magnuson-Stevens Fishery Conservation and Management Act in 1976 to manage fisheries in the 200-mile Exclusive Economic Zone. [Learn More →](#)

## Spotlights



### December 2021 Meeting

The Council will meet the first two and a half weeks of December via webconference [Agenda](#). SSC and AP: Dec 2-3, 6-9, Council Dec 8-10 and 13-16. [Schedule Learn More](#)



### Groundfish Plan Team Meetings

The BSAI and GOA Groundfish Plan Teams will be meeting November 15-19, 2021 via webconference. For more information view the [AGENDA](#) and [SCHEDULE](#). [Learn More →](#)



### Charter Halibut Committee

The Committee's [agenda](#) will review an analysis on 2022 charter management measures and make final recommendations to the Council. [Learn More →](#)

## UPCOMING MEETINGS

### Monday, November 15

8:00am Joint Groundfish Plan

### Tuesday, November 16

8:00am BSAI Groundfish Plan

8:00am GOA Groundfish Plan

### Wednesday, November 17

BSAI Groundfish Plan Team

GOA Groundfish Plan Teams

### Thursday, November 18

BSAI Groundfish Plan Team

GOA Groundfish Plan Teams

### Friday, November 19

[+ Google Calendar](#)

[View Calendar →](#)

## RECENT UPDATES

- [Current \(or next\) Council Meeting](#)
- [Archive of Council Meetings](#)
- [Future Council Meetings](#)
- [Charter Halibut Management](#)

Items for upcoming meetings appear on the homepage

# How to be Heard

## Testimony at the Meeting

- **You can testify on any agenda item to all three bodies: the SSC, the AP, and the Council**
- You need to sign up to testify before the staff reports for your issue are completed.
- Before the Council, individuals or businesses get 3 minutes to testify, and persons representing organizations or associations get 6 minutes

## Written Comments

- **You can also provide written comments on any or all agenda items**
- The Council accepts comments online via the Agenda
- Comments must be for an item on the agenda, must include the submitter's name and affiliation, and must be submitted before the deadline [e.g., Nov. 15-30 for December 2021 meeting]

### C. MAJOR ISSUES / FINAL ACTION ITEMS

- |    |  |  |
|----|--|--|
| C1 |  0 Comments   | <b>C1 Charter halibut - 2022 annual management measures,</b><br><u>Attachments:</u> <a href="#">Oct. Charter Halibut eAgenda</a> -Uploaded: 11/03/2021 09:51 AM AKDT<br><a href="#">C1 Charter Halibut Management Committee Report</a> -Uploaded: 11/03/2021 09:51 AM AKDT |
| C2 |  0 Comments | <b>C2 BSAI Halibut abundance-based management (ABM)</b><br><u>Attachments:</u> <a href="#">C2 Halibut ABM DEIS 0921</a> -Uploaded: 10/29/2021 02:05 PM AKDT<br><a href="#">Comments submitted on DEIS (link)</a> -Uploaded: 10/29/2021 02:06 PM AKDT                       |
| C3 |  0 Comments | <b>C3 BSAI Groundfish - Final harvest specifications, Joint a</b>  |
| C4 |  0 Comments | <b>C4 GOA Groundfish - Final harvest specifications, GOA P</b>   |

### D. OTHER ISSUES

- |    |  |   |
|----|--|---|
| D1 |  0 Comments | <b>D1 Red King Crab Savings Area Extension - Consideratio</b> |
|----|--|---|

## Additional Resources:

North Pacific Fishery Management Council:

<https://www.npfmc.org/>

National Oceanic and Atmospheric Administration, National Marine Fisheries Service:

<https://www.fisheries.noaa.gov/region/alaska>

National Oceanic and Atmospheric Administration, Alaska Fisheries Science Center:

<https://www.fisheries.noaa.gov/region/alaska>

Alaska Department of Fish and Game:

<https://www.adfg.alaska.gov/index.cfm?adfg=fishing.main>

U.S. Regional Fishery Management Councils:

[www.fisherycouncils.org](http://www.fisherycouncils.org)

International Pacific Halibut Commission:

<https://www.iphc.int/>

# Questions?

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