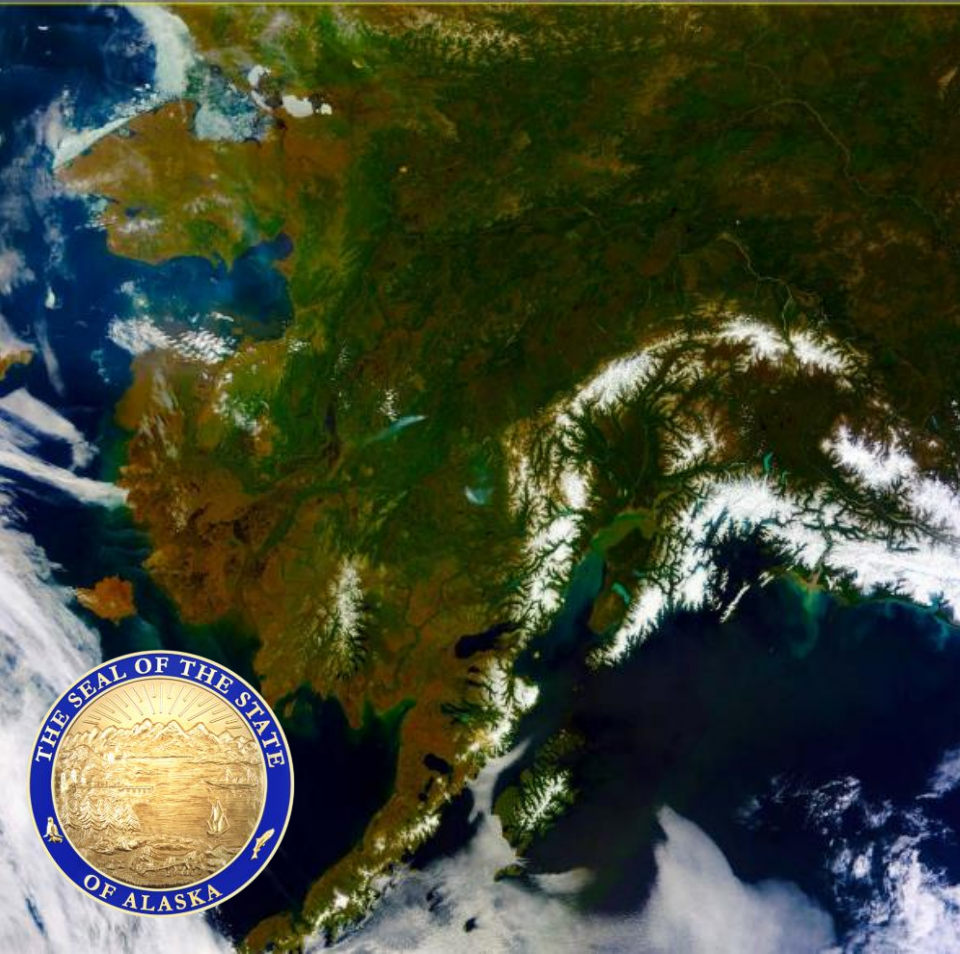


Alaska Bycatch Review Task Force Recommendations

ALASKA BYCATCH REVIEW TASK FORCE
FINAL REPORT — NOVEMBER 2022



Presented by Karla Bush ADF&G

Alaska Bycatch Review Task Force

Background and Purpose

Established under Administrative Order #326 on November 18, 2021

Expanded member composition under Administrative Order #332 on March 16, 2022

17 members total; 15 voting

Bycatch: Fish which are harvested in a fishery but are not sold or kept.

Purpose: Explore the issue of bycatch and provide recommendations to policy makers (i.e., Governor Dunleavy).



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

Alaska Bycatch Review Task Force

Objectives

Study what impact bycatch has on fisheries

Evaluate and recommend policies

Ensure state agencies are leveraging available resources

Utilize the best available science to inform policy makers and the public



Alaska Bycatch Review Task Force Committees

Science, Technology, and
Innovation



Western Alaska Salmon



GOA Salmon and Halibut



BSAI/GOA Crab



Alaska Bycatch Review Task Force

Presentations and Information

Full Task Force:

<https://www.adfg.alaska.gov/index.cfm?adfg=bycatchtaskforce.meetinginfo>

- *Overview of bycatch in Federal and State fisheries*
- *Genetic stock identification of salmon bycatch in groundfish fisheries*
- *SeaShare: salmon/halibut bycatch utilization for hunger-relief*
- *Federal groundfish observer and monitoring programs*

Science, Technology, and Innovation Committee:

https://www.adfg.alaska.gov/index.cfm?adfg=bycatchtaskforce.committees#meetings_abrt

- *“An Ocean Intelligence System for a Changing World”*
- *Alaska Blue Economy Center*
- *Pollock Conservation Cooperative Research Center*
- *Alaska Ocean Cluster*

Alaska Bycatch Review Task Force

Presentations and Information

Western Alaska Salmon Committee:

https://www.adfg.alaska.gov/index.cfm?adfg=bycatchtaskforce.committees#meetings_wasc

- *Western Alaska Chinook and chum salmon stock status*
- *Regulatory structure of salmon bycatch measures for the Bering Sea pollock fishery*
- *Salmon bycatch reduction Incentive Plan Agreements (IPAs)*
- *Research on salmon excluders used in pollock trawl nets*
- *Updated chum and Chinook salmon bycatch genetic information; Adult Equivalent (AEQ) estimates and impact rate analysis for Western AK Chinook salmon; and North Pacific Fishery Management Council actions.*
- *Current and future research by ADF&G Salmon and Ocean Ecology Program and Alaska Fishery Science Center*

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Presentations and Information

Gulf of Alaska Salmon and Halibut Committee:

https://www.adfg.alaska.gov/index.cfm?adfg=bycatchtaskforce.committees#meetings_goahs

- *Chinook salmon stock status and trends*
- *Chinook salmon bycatch management and genetic information*
- *Halibut bycatch in groundfish fisheries*
- *Summary of the 2021 halibut fishery data and stock assessment results*
- *Halibut deck sorting on non-pelagic trawl vessels*
- *Overview of GOA shoreside trawl fleet and history of trawl fishery rationalization efforts*
- *Discard mortality in the directed halibut fisheries*
- *Industry recommendations for research and management*

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Presentations and Information

Bering Sea and Gulf of Alaska Crab Committee:

https://www.adfg.alaska.gov/index.cfm?adfg=bycatchtaskforce.committees#meetings_bsai

- *Tanner crab stock status and management update*
- *Cooperative research to reduce non-pelagic trawling effects on crab and habitat*
- *Impacts of modified non-pelagic trawl sweep gear on crab bycatch*
- *Tanner crab bycatch and groundfish catch in Central GOA Area*
- *Overview of BSAI crab stock status and management*
- *Seascape-scale modelling of benthic habitat disturbance from fishing activities*
- *BSAI crab bycatch management measures*
- *Industry recommendations for research and management*

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State Engagement Recommendations

- *Establish a process for providing bycatch-related information*
- *Provide an opportunity for input on Council issues before each meeting**
- *Support Education Tax Credit Program; expand to include technology or gear modifications that reduce bycatch*
- *Request information on salmon bycatch in Russian fisheries*
- *Establish a permanent bycatch advisory entity*
- *Develop a Bycatch Policy*

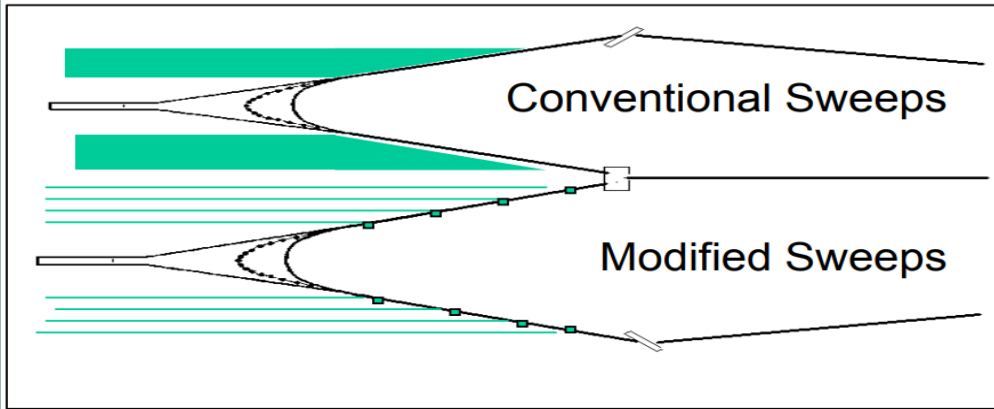


*underway

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Research Recommendations: All Species

Gear Modifications/Improved Technology

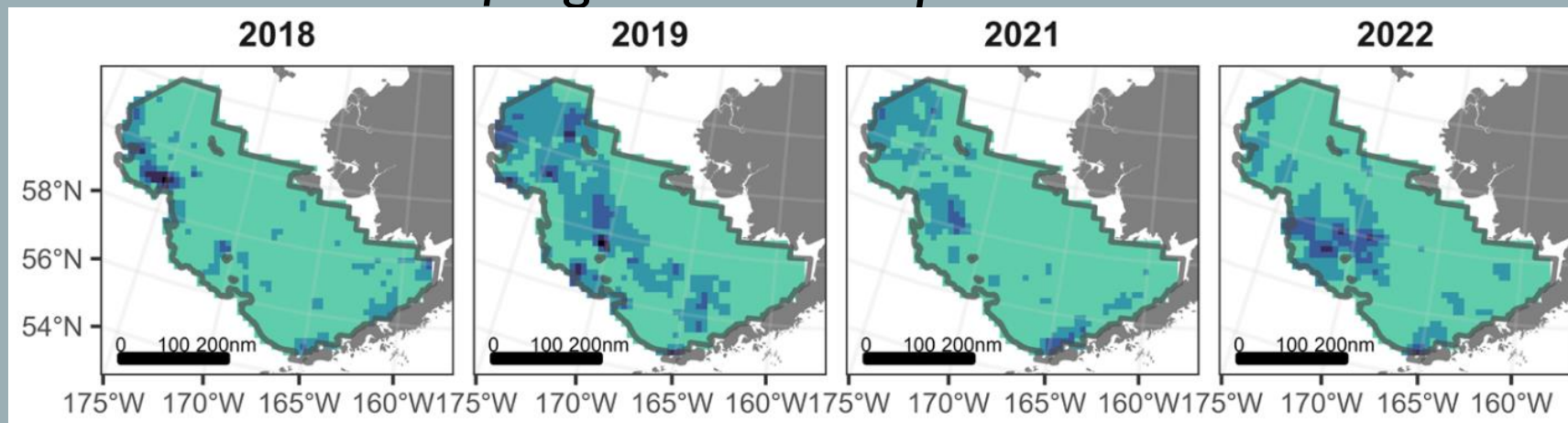


Source: C. Rose, NMFS Alaska Fisheries Science Center.

Update discard mortality rates



Shifting distribution patterns



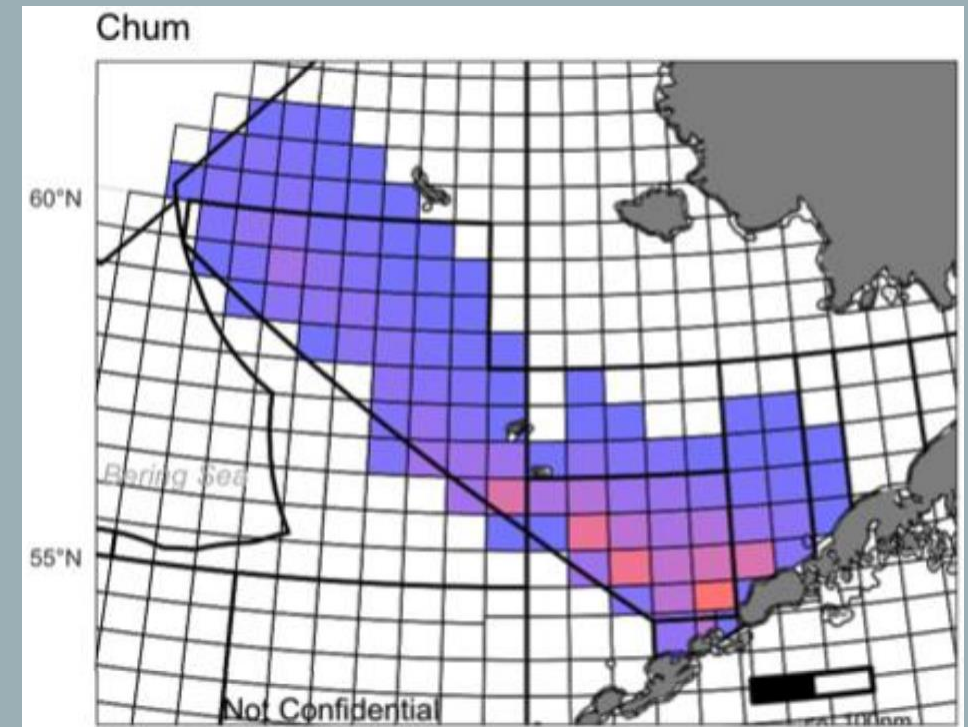
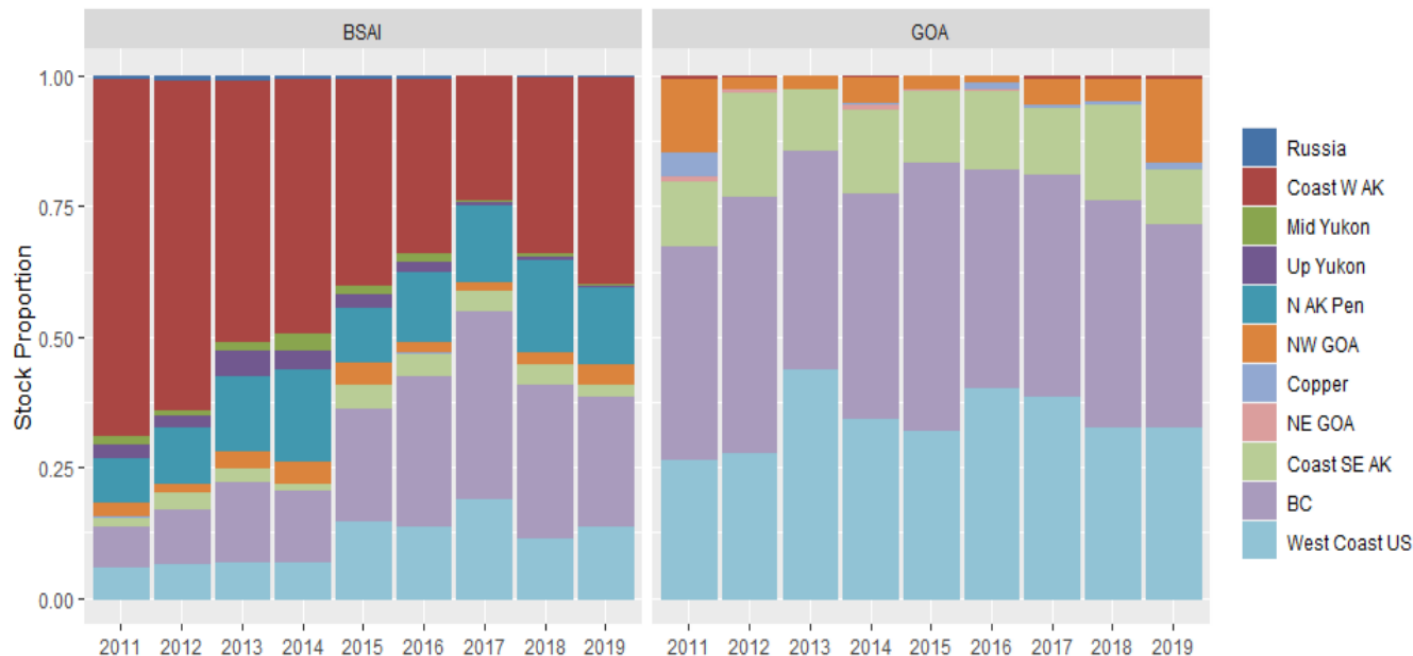
Source: NOAA Fisheries [EBS trawl survey presentation](#). Walleye pollock distribution.

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Research Recommendations: Salmon

Improve our ability to determine the stock of origin of chum and Chinook salmon taken as bycatch

Trends in Chinook Salmon Stock Composition



Improved understanding of distribution and migration patterns of Alaska chum and Chinook salmon stocks

Source of figures: [NOAA Fisheries presentation](#) to ABRT on genetic stock identification of salmon bycatch

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Research Recommendations: Salmon

Relative importance of mechanisms that drive salmon abundance and fishery impacts

- Marine migration patterns relative to groundfish fisheries
- Improved stock-specific information
- Improved understanding of fishery impacts

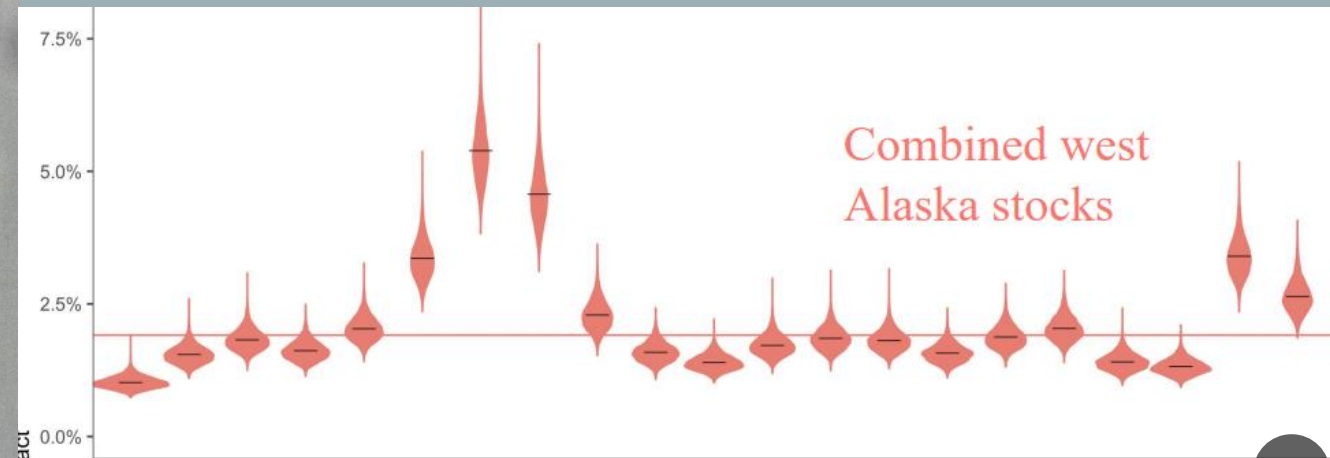
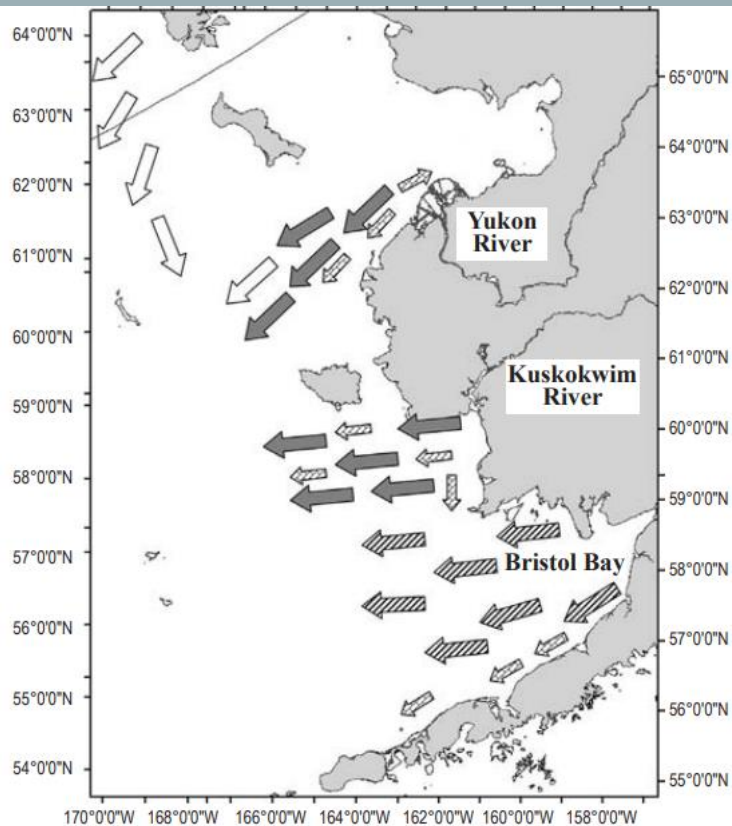


Figure 6. Seaward migration pathways for juvenile pink (clear arrow), chum (solid arrow), sockeye (slashed line arrow), coho, and Chinook (boxed line arrow) salmon along the eastern Bering Sea shelf during August through October 2002.

Source: [Farley et al. 2005](#)

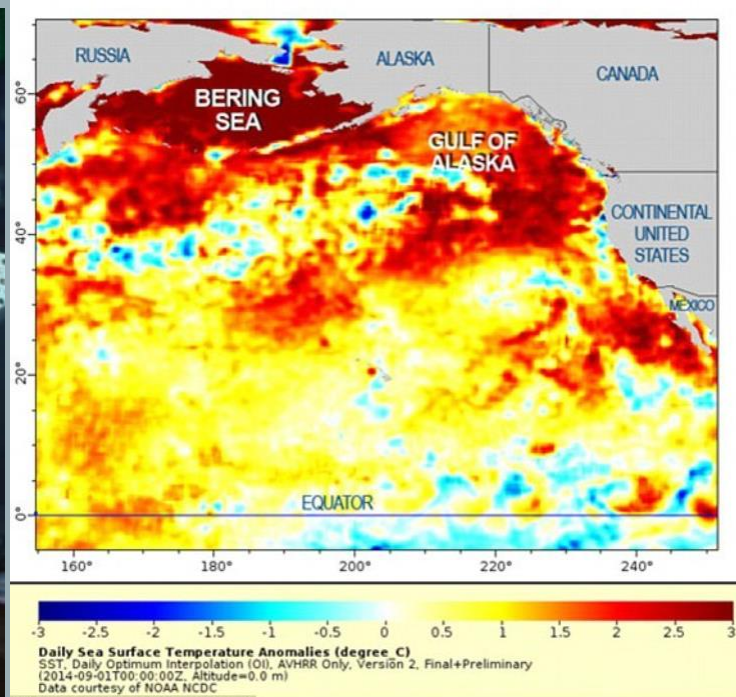
Source: [NPFMC Salmon reports](#) from June 2022 Council meeting

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Research Recommendations: Salmon

Research on additional non-adult abundance estimates

- *Critical survival periods for Western Alaska salmon*
- *Understand how ocean/climate conditions impact future runs*
- *Role of diet, health, disease, on survival and spawning success*

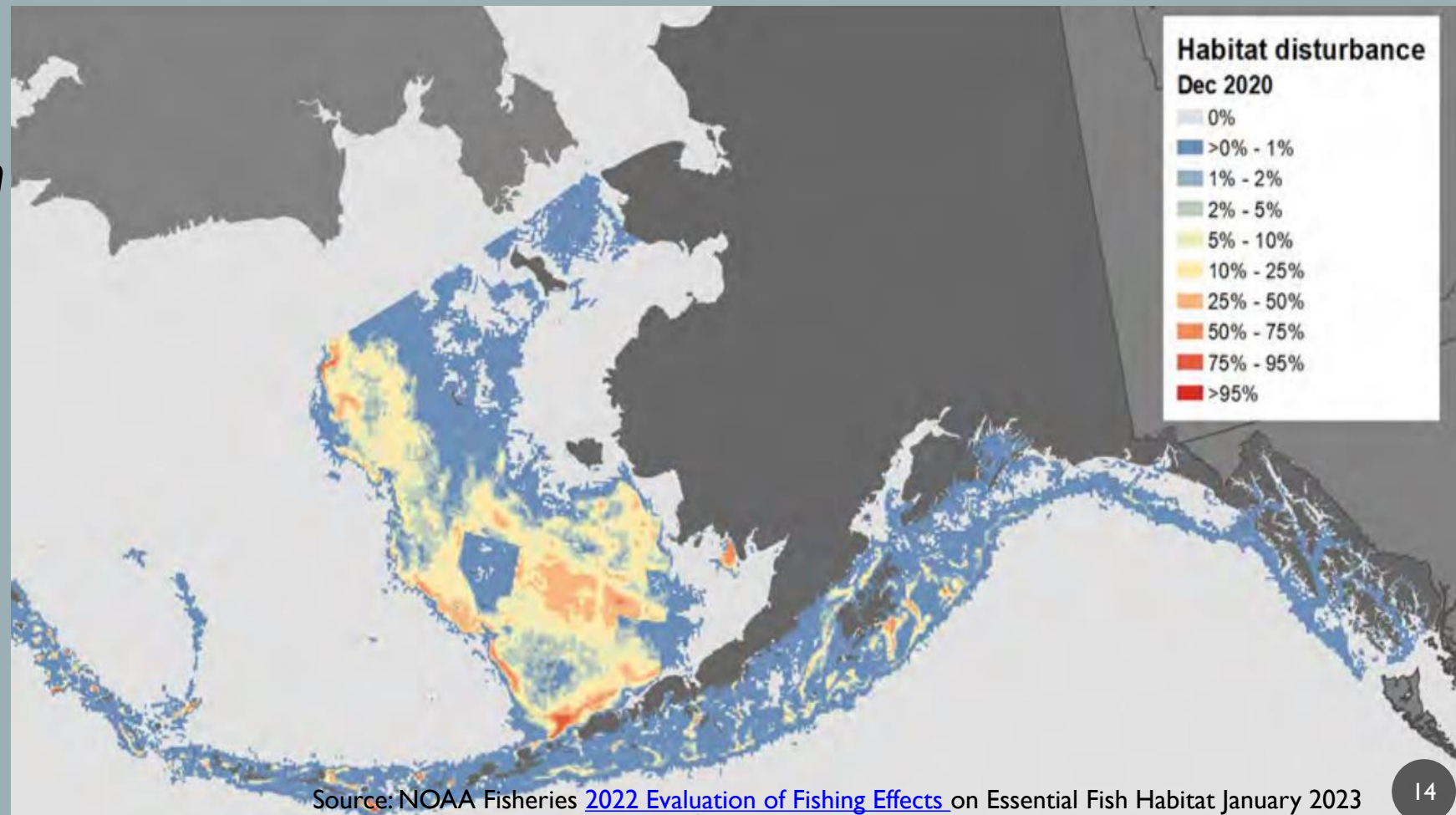


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Research Recommendations: Crab

Address observed and unobserved mortality caused by gear interactions

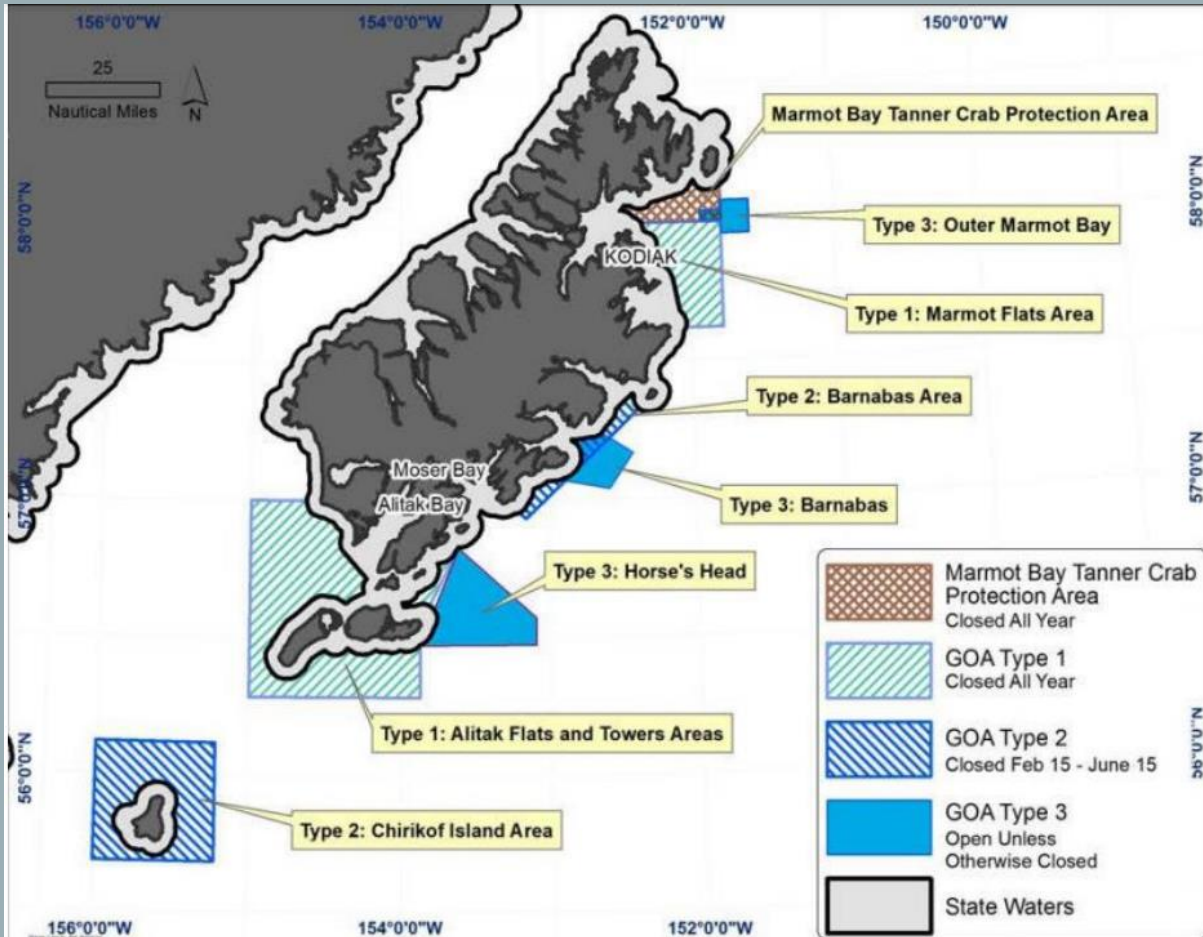
- *Impacts of repeated capture/discarding*
- *Data gaps: uncertainties in the directed crab fishery and unobserved state pot cod fishery*
- *Habitat disturbance: effects of bottom contact gear*



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Research Recommendations: Crab

Continued research on critical crab habitat to better inform on open and closed areas for commercial fishing activity

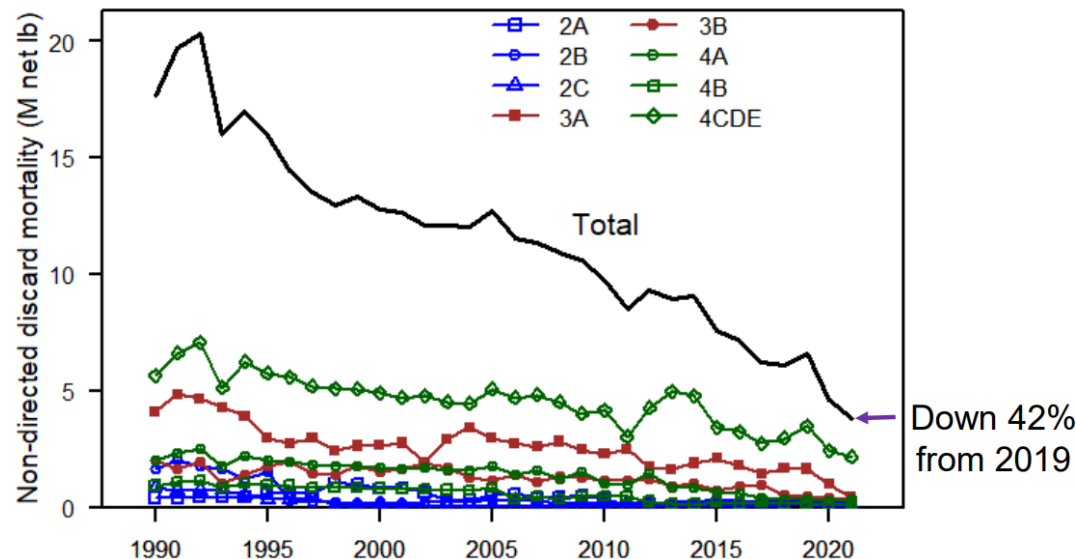


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Research Recommendations: Halibut

- **Investigate better ways to estimate total removals and discard mortality**
- *Impacts of repeated capture/discarding*
- *Impacts of fishing gear on habitat*
- *Better understand movement between management areas*
- *Investigate halibut diet and growth rate; changes in length at age*
- *Studies on commercial fishery size limit and trade-offs*
- *Determine relative fecundity of halibut based on size and age*

Recent non-directed discard mortality



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Management Recommendations: All Species

The State of Alaska should support taking incremental measures through the regulatory process to improve bycatch utilization with a particular focus on species that are otherwise marketable but are caught with non-targeted gear or discards in a directed fishery that are required by regulation.



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Management Recommendations: Fixed Gear

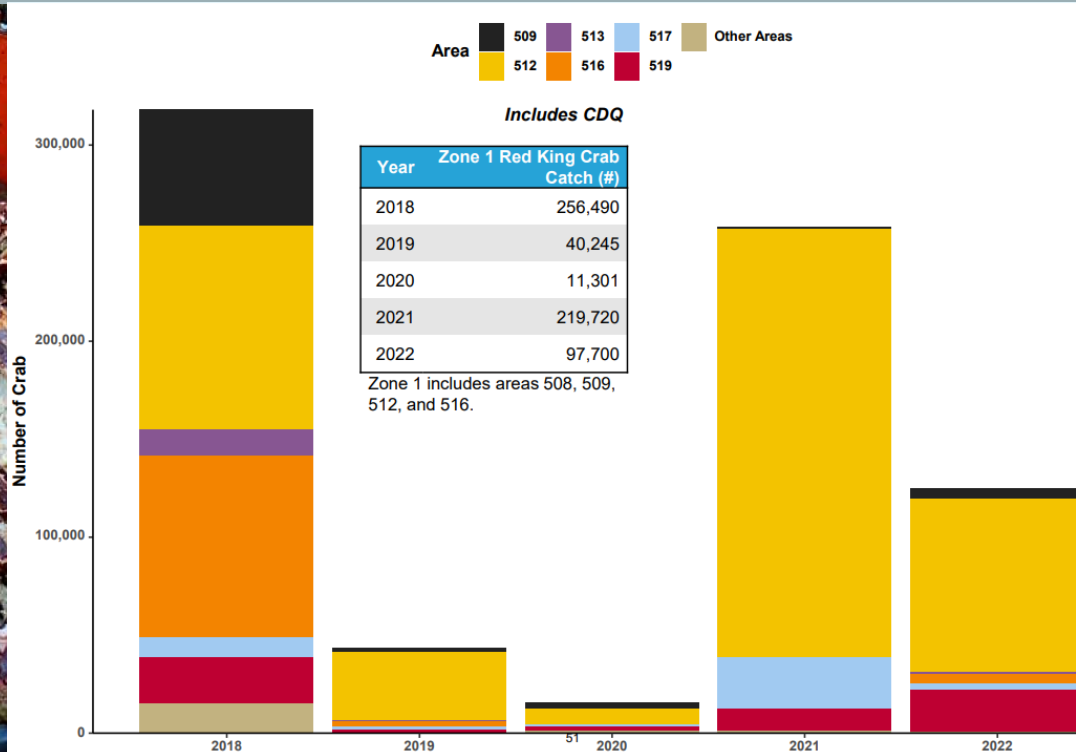
- *Reduce incidental take of bycatch through pot gear modifications.*
- *Address the lack of monitoring in the directed Gulf of Alaska Tanner crab fishery and the state-managed pot cod fisheries.*



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Management Recommendations: Fixed Gear

- Evaluate seasonal closures in bycatch hot spot areas for pot gear.
- Examine the impact of retaining all legal crab in the directed crab fishery.
- Recommend a rationalization program for the >60' Bering Sea pot cod fishery.



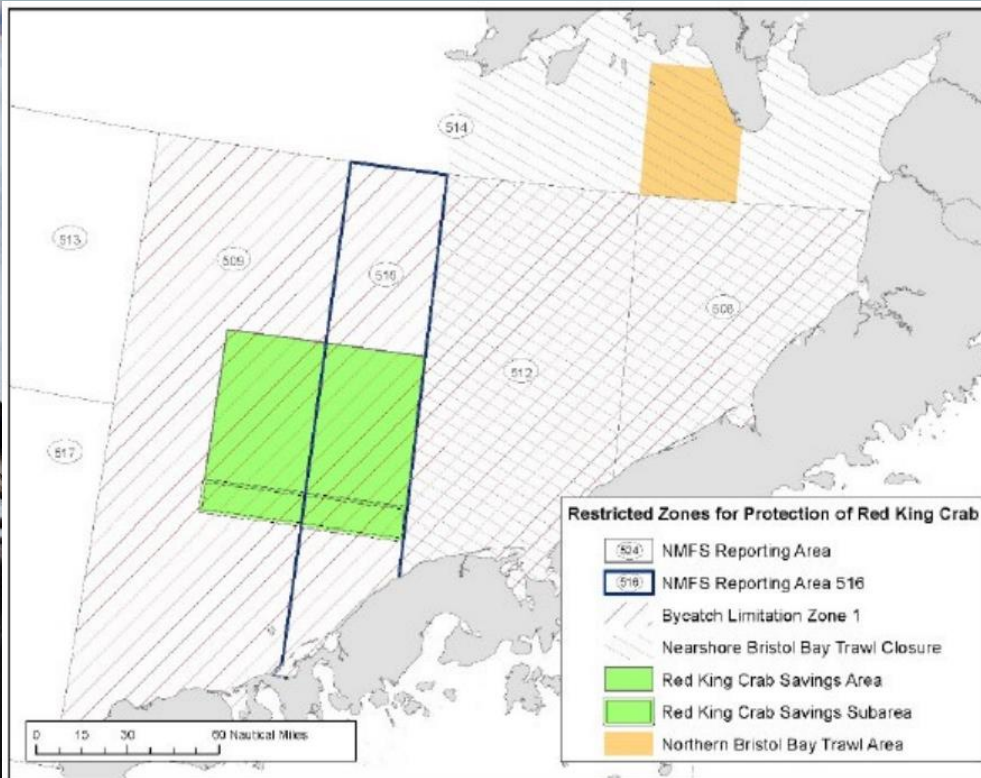
Source: NOAA Fisheries, [BSAI inseason management report](#).

Fixed Gear incidental catch of red king crab

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Management Recommendations: Trawl Gear

- Review effectiveness of fixed open and closed areas for trawling; continue to develop flexible spatial management.
- Require full observer coverage on non-pelagic trawl catcher vessels in the GOA.
- Require full monitoring on GOA pelagic trawl catcher vessels and tenders.



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Management Recommendations: Trawl Gear

- *Consider an abundance-based management program for halibut bycatch in the GOA.*
- *Consider requiring full retention of Tanner crab in all GOA trawl fisheries for a period of time to adequately assess removals.*
- *Consider rationalization-type management tools for GOA trawl fisheries.*



Alaska Bycatch Review Task Force

Management Recommendations: Trawl Gear

- *Work to achieve real time genetic reporting that provides the composition of Western Alaska salmon in the bycatch.*
- *Work to establish a scientific-based chum salmon cap.*
- *Consider applying Bering Sea crab bycatch limits across the entire stock boundary.*



Questions?

