

Alaska Bycatch Review Task Force

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Representative Bryce Edgmon

Senator Peter Micciche

Alaska Bycatch Review Task Force

Governor Dunleavy created the 17-member Alaska Bycatch Review Task Force (ABRT) to help better understand unintended bycatch of high-value fishery resources in state and federal waters

Bycatch is defined as:

Fish which are harvested in a fishery, but are not sold or kept

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

Administrative Order #326 - Purpose of the ABRT:

- Study what impacts bycatch has on fisheries.
- Evaluate and recommend policies informed by a better understanding of the issue of bycatch of high-value Alaska fishery resources.
- Ensure state agencies are leveraging available resources to better understand the issue of bycatch.
- Utilize the best available science to inform policy makers and the public about these issues.

Alaska Bycatch Review Task Force Process

- ABRT members agreed to operate on a consensus-based process.
- Focused on the high-value species of salmon, halibut and crab. Regions addressed were the Gulf of Alaska and Bering Sea. ABRT did not address Southeast or Aleutian Islands.
- Four committees were formed and prepared recommendations which were submitted to the full Task Force for review in August, 2022.
- Recommendations were made on three categories; State Engagement, Research and Management. All recommendations were unanimously approved, with the exception of one management proposal.
- Final report (43 pages) was submitted to Governor Dunleavy on November 30, 2022.

Alaska Bycatch Review Task Force Committees



Science, Technology and Innovation

Tommy Sheridan, Chair Ragnar Alstrom Linda Kozak Stephanie Madsen Peter Micciche



Western Alaska Salmon

Co-Chairs – George Guy and Stephanie Madsen Ragner Alstrom Bryce Edgmon Karma Ulvi

Alaska Bycatch Review Task Force Committees





Gulf of Alaska Halibut and Salmon

Brian Gabriel, Chair
Kevin Delaney
Duncan Fields
Mike Flores
Linda Kozak
Raymond May

Bering Sea and Gulf of Alaska Crab

Linda Kozak, Chair Kevin Delaney Stephanie Madsen Erik Velsko

Alaska Bycatch Review Task Force Meeting Information

Meetings were held from January 28 – November 15, 2022

Full Task Force	14 Meetings
Science, Technology & Innovation Committee	5 Meetings
Western Alaska Salmon Committee	10 Meetings
Gulf of Alaska Halibut and Salmon Committee	8 Meetings
Bering Sea & Gulf of Alaska Crab Committee	8 Meetings

Total 45 Meetings

One meeting was held in-person and all other meetings conducted online. Public testimony was taken at 43 of the 45 meetings.

Alaska Bycatch Review Task Force Presentations

The ABRT received 30 presentations – all available on the ABRT website Agencies/Organizations Presenting (Partial List)

Alaska Department of Fish & Game

NOAA Fisheries – Sustainable Fisheries Division

International Pacific Halibut Commission

Alaska Pacific University/Cornell University

FishNext Research – Dr. Craig Rose

Sea State, Inc.

Alaska Charter Association

Alaska Marine Conservation Council

Pollock Conservation Cooperative Research Center

Alaska Groundfish Data Bank

North Pacific Fishery Management Council

Alaska Fisheries Science Center (NOAA)

University of Alaska Fairbanks

Alaska Ocean Cluster

Alaska Seafood Cooperative

SeaShare

United Catcher Boats

Groundfish Forum

At-Sea Processors Association

Alaska Bering Sea Crabbers

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 program.

Science, Technology & 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.

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 in pollock trawl nets.
- ➤ Updated chum and Chinook salmon bycatch genetic information; Adult Equivalent (AEQ) estimates and impact rate analysis for Western Alaska 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.

Gulf of Alaska Halibut and Salmon 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 fishery.
- Industry recommendations for research and management.



Bering Sea and Gulf of Alaska Crab Committee:

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

- Gulf of Alaska Tanner crab stock status and management update.
- > Cooperative research to reduce non-pelagic trawling efforts on crab and habitat.
- > Impacts of modified non-pelagic trawl sweep gear on crab bycatch.
- > Tanner crab bycatch and groundfish catch in the Central Gulf of Alaska.
- Overview of Bering Sea/Aleutians stock status and management.
- > Seascape-scale modeling of benthic habitat disturbance from fishing activities.
- Bering Sea/Aleutian Islands crab bycatch management measures.
- > Industry recommendations for research and management.



Alaska Bycatch Review Task Force Recommendations



Three categories for recommendations

State Engagement - Research - Management

Alaska Bycatch Review Task Force State Engagement Recommendations

Information and Communication

- Establish a process for providing bycatch-related information and resources to Alaskans in a format that is understandable and easily accessible.
- Continue to offer the public an opportunity to provide input on North Pacific Council issues before each meeting. Consideration should be given to additional methods to seek input from stakeholders, tribal entities and communities on bycatch issues.

Alaska Bycatch Review Task Force State Engagement Recommendations

Government Engagement

- ➤ Support legislative action to continue the Education Tax Credit Program and expand it to include gear modifications or technology improvements that would help reduce bycatch.
- > State should work with other entities, including the State Department, to request information on Chinook and chum salmon taken in Russian waters, as well as the genetic origin of these salmon.

Alaska Bycatch Review Task Force State Engagement Recommendations

Continued Focus on Bycatch

- ➤ Using the Alaska Bycatch Review Task Force as a template, the state should establish a permanent bycatch advisory entity.
- ➤ Work with Alaska Board of Fisheries, stakeholders and a bycatch advisory entity to develop a State of Alaska Bycatch Policy. This policy could be used by the Alaska Board of Fisheries for statemanaged fisheries and the State of Alaska representative to the North Pacific Fishery Management Council when developing the State of Alaska position regarding bycatch in federally managed waters.

Alaska Bycatch Review Task Force Research Recommendations

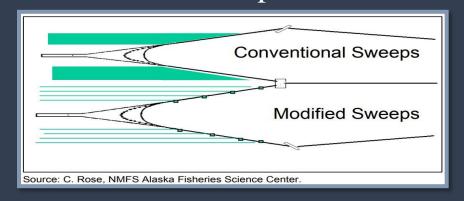
General Recommendations for Process in Developing Research Priorities

The Task Force recommends the state develop an inclusive process for identifying bycatch research, broadly share those research needs and seek partnerships to fund the necessary research.

- Develop State bycatch research priorities, utilizing input from communities, Alaska Native tribes, industry, and the public, to share with funding entities that would help identify and acquire research funds.
- Implement strategies to encourage and facilitate industry/agency cooperative research to reduce bycatch and associated mortality.
- ➤ Create methods for collaboration with Alaska Native tribes, organizations and other research entities to better track proposed or funded bycatch research, along with developing opportunities for cooperative projects and combined reporting of findings.

Alaska Bycatch Review Task Force Research Recommendations: All Species & Gear

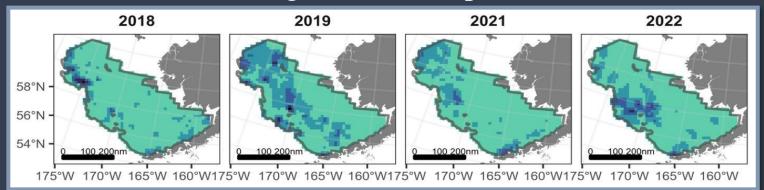
Gear modifications/improved technology



Update discard mortality rates

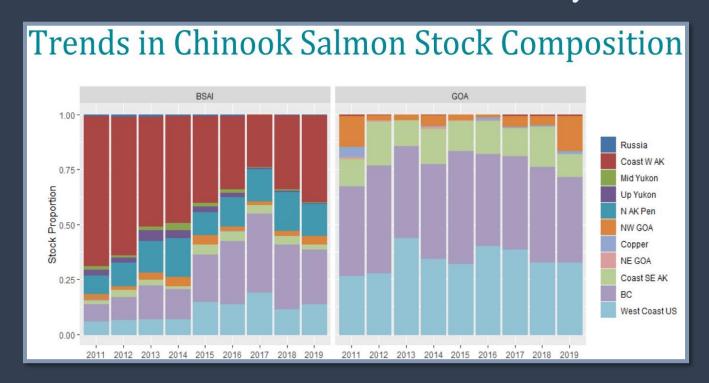


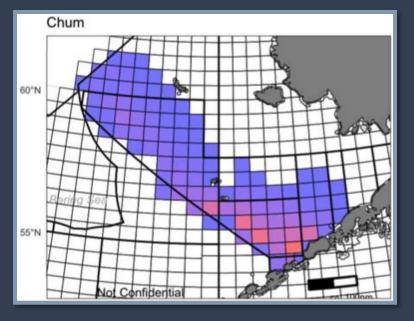
Shifting distribution patterns



Alaska Bycatch Review Task Force Research Recommendations: Western Alaska Salmon

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





Reduce bycatch through Improved understanding of distribution and migration patterns of Alaska chum and Chinook salmon stocks.

Alaska Bycatch Review Task Force Research Recommendations: Western Alaska Salmon

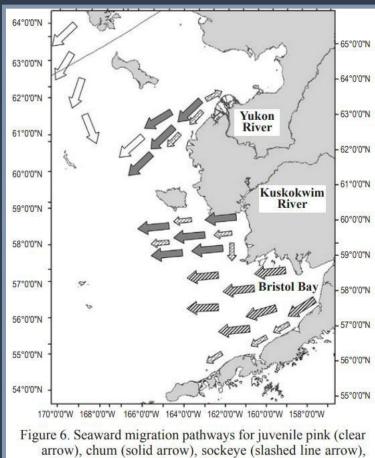


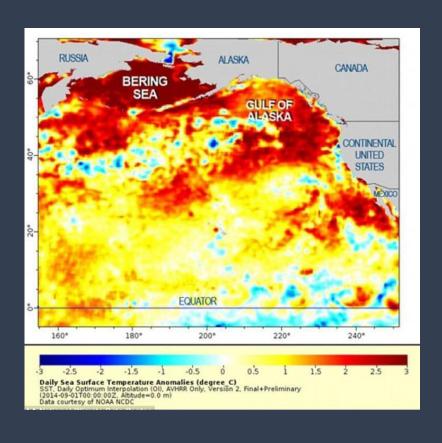
Figure 6. Seaward migration pathways for juvenile pink (clear arrow), chum (solid arrow), sockeye (slashed line arrow), coho, and Chinook (boxed line arrow) salmon along the eastern Bering Sea shelf during August through October 2002.

Research that helps us understand the relative importance of particular mechanisms for driving abundance of Western Alaska Chinook and chum

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

Alaska Bycatch Review Task Force Research Recommendations: Western Alaska 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, and disease on survival and spawning success.

Alaska Bycatch Review Task Force Research Recommendations: Gulf of Alaska Salmon

Note: Much of the salmon research recommendations apply to both the Bering Sea and Gulf of Alaska.

Gulf of Alaska specific salmon research recommendation:

Conduct annual genetic and spatial assessment of Gulf of Alaska (GOA) Chinook salmon.

Alaska Bycatch Review Task Force Research Recommendations: Gulf of Alaska Halibut

Top Priority

Investigate better ways to estimate total halibut removals and discard mortality

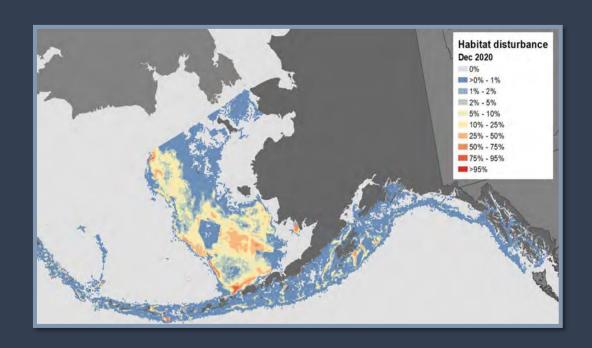
- > Impacts of repeated capture/discarding of females, sublegal and legal males.
- > Impacts of fishing gear on habitat.
- > Increase tagging to better understand movement between management areas.
- > Investigate halibut diet and growth rate; changes in length at age.
- > Studies on commercial fishery size limit and trade-offs.
- > Determine relative fecundity of halibut based on size and age.

Alaska Bycatch Review Task Force Research Recommendations: Crab

Recommendations apply to crab in all regions of the state

Address observed and unobserved mortality caused by gear interactions

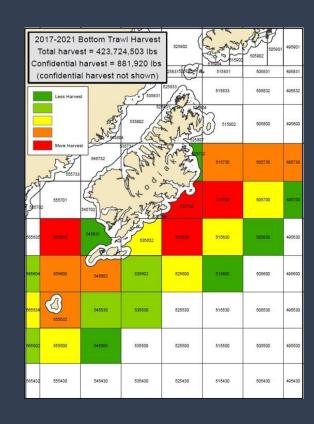
- > Impacts of repeated capture/discarding.
- Address data gaps regarding uncertainties in the directed crab fisheries and unobserved state pot cod fishery.
- Research habitat disturbance utilizing tools such as the fishing effects model.

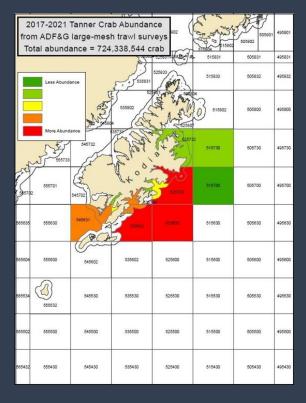


Alaska Bycatch Review Task Force Research Recommendations: Crab

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

- Tagging studies and other research to determine seasonal movement and distribution.
- Improve understanding of preferred habitat at various life stages.
- Examine Vessel Monitoring System use in developing essential fish habitat models.





Management recommendations were developed at the committee level after many meetings, dozens of informational presentations and public comment. The ABRT had additional discussion, made some revisions and came to consensus on all but one issue.

The ABRT considered and adopted 17 management recommendations by unanimous consent for fixed (longline and pot) and trawl gear for the Bering Sea and Gulf of Alaska.

The following recommendation applies to all species, gear groups and regions



Bycatch Utilization

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.

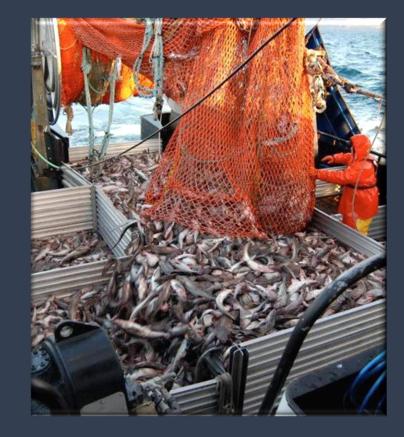


Bering Sea Fixed Gear (longline and pot)

- Evaluate the observer coverage and monitoring for the directed crab and pot cod fisheries.
- Evaluate possible seasonal closures in hot spot areas for pot gear both inside and outside of state managed waters.
- Examine the impact of retaining all legal crab in the directed crab fishery and counting toward IFQ.
- Recommend a rationalization program for the 60' and greater pot cod vessels as a way to manage bycatch and examine prohibited species caps as part of a rationalization program.

Bering Sea Trawl Gear

- Work to achieve real time genetic reporting that provides the composition of Western Alaska salmon in the bycatch. This can then be used in management of the pollock fishery to avoid areas and times when Western Alaska salmon are on the grounds in the Bering Sea.
- The State should work to establish a scientific-based chum salmon cap to reduce bycatch of Western Alaska salmon in the pollock fishery in the Bering Sea.



Bering Sea Trawl Gear



- Review effectiveness of fixed open and closed areas for trawling and continue to examine methods to develop flexible spatial management.
- A review is recommended for the Bering Sea trawl prohibited species caps (PSC) in relation to crab, to be supported by the State of Alaska. This review would examine the impacts to the resource and trawl sector if trawl crab PSC were to be applied across the entire Bering Sea, instead of only the current sub-areas.

Gulf of Alaska Fixed Gear (longline and pot) Two Management Recommendations

- Following gear modification research, consider regulations for the directed crab fishery and pot cod fishery to reduce incidental take and discard mortality.
- Address the lack of monitoring in the directed Tanner crab and state waters pot cod fisheries.



Gulf of Alaska Trawl Gear Six Management Recommendations



Gulf of Alaska Trawl Gear

- Recommend the State of Alaska initiate review of the open and closed areas in the Gulf of Alaska for pelagic and non-pelagic trawl gear and consider closing new/additional areas to reduce the bycatch of halibut, salmon and Tanner crab.
- ➤ To better quantify removal of prohibited species, it is recommended that trawl catcher vessels in the Gulf of Alaska be required to have 100% observer coverage when engaged in non-pelagic trawling. It is further recommended that the State of Alaska work to obtain funding, either through specific appropriations and/or grants for the additional coverage.

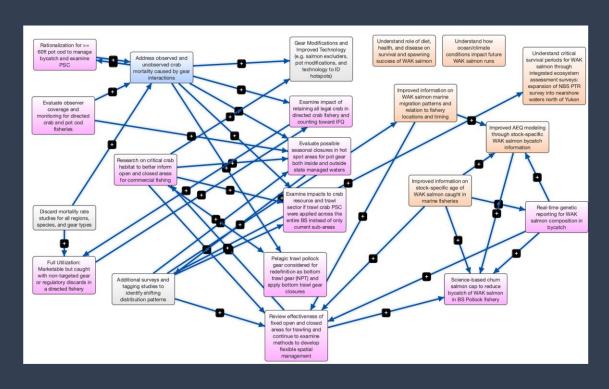
Gulf of Alaska Trawl Gear

- ➤ It is recommended that a regulatory requirement be approved for the Gulf of Alaska pelagic trawl fleet, including any tenders of pelagic trawl caught fish, to have 100% electronic monitoring. It is further recommended that the State of Alaska work with National Marine Fisheries Service, our federal delegation, and others to work to acquire funding to install electronic monitoring equipment on all GOA catchers and tenders.
- It is recommended the State of Alaska propose that the NPFMC consider development of an abundance-based management program for halibut bycatch in the GOA as a way to address bycatch during fluctuations of halibut biomass.

Gulf of Alaska Trawl Gear

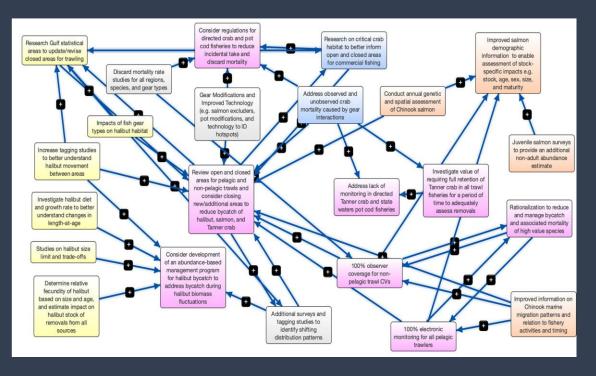
- ➤ It is recommended that the State of Alaska investigate the value of requiring full retention of Tanner crab in all GOA trawl fisheries for a period of time to adequately assess removals.
- As a means of reducing and managing bycatch and associated mortality of high-value species within the Gulf of Alaska, it is recommended that rationalization-type management tools be considered.

Alaska Bycatch Review Task Force Research and Management Relationships



Bering Sea Research and Management Linkages for Management Decision Making

Gulf of Alaska Research and Management Linkages for Management Decision Making



Next Steps



Bycatch Advisory Council

The Bycatch Advisory Council was formed on March 10, 2023 under the ADF&G Commissioner's authority and will advise the department on ways to implement recommendations contained in the final report of the Alaska Bycatch Review Task Force.

Bycatch Advisory Council

Membership

The members of the Bycatch Advisory Council are comprised of six individuals who served on the Alaska Bycatch Review Task Force.

Kevin DelaneyLinda KozakBrian GabrielJohn JensenKarma Ulvi

These individuals represent the interests of coastal communities, and the commercial, sport and subsistence fisheries. They will continue to focus on the issues of salmon, crab and halibut bycatch.

