

ADVISORY PANEL
Motions and Rationale
April 5-7, 2023 - Anchorage, AK

C2 Salmon Bycatch Reports

Substitute Motion 1

The AP recommends the Council initiate an analysis for the management of chum salmon incidental catch in the BSAI pollock fishery. For an initial analysis, the AP supports all of the recommendations made by the Salmon Bycatch Committee for both a potential Purpose and Need Statement and potential management alternatives. Recognizing the Salmon Bycatch Committee did not reach consensus on proposed Alternative 2 for a hard cap PSC limit, the AP supports inclusion of a PSC limit alternative in an analysis and requests the Council take into account the rationale provided by Committee members on this alternative during their discussion and as outlined in their March 2023 meeting report.

The committee reached consensus to recommend to the Council the following purpose and need statement.

SBC consensus purpose and need

Salmon are an important fishery resource throughout Alaska, and chum salmon that rear in the Bering Sea support subsistence, commercial, sport, and recreational fisheries throughout Western and Interior Alaska. Western and Interior Alaska salmon stocks are undergoing extreme crises and collapses, with long-running stock problems and consecutive years' failures to achieve escapement goals, U.S.-Canada fish passage treaty requirements, and subsistence harvest needs in the Yukon, Kuskokwim, and Norton Sound regions. These multi-salmon species declines have created adverse impacts to culture and food security and have resulted in reduced access to traditional foods and commercial salmon fisheries.

The best available western science suggests that ecosystem and climate changes are the leading causes of recent chum salmon run failures; however, non-Chinook (primarily chum) salmon are taken in the Eastern Bering Sea pollock trawl fishery which reduces the amount of salmon that return to Western and Interior Alaska rivers and subsistence fisheries. It is important to acknowledge and understand all sources of chum mortality and the cumulative impact of various fishing activities. Therefore, in light of the critical importance of chum salmon to Western Alaska communities and ecosystems, consideration of additional measures to further minimize Western Alaskan chum bycatch in the pollock fishery is warranted.

The purpose of this proposed action is to develop actions to minimize bycatch of Western Alaska origin chum salmon in the Eastern Bering Sea pollock fishery consistent with the Magnuson-Stevens Act, National Standards, and other applicable law. Recent genetics stock composition information indicates that the majority of non-Chinook bycatch in the pollock fishery is of non-domestic hatchery origin; therefore, alternatives should structure non-Chinook bycatch management measures around improving performance in avoiding Western Alaska chum salmon specifically.

The Council intends to consider establishing regulatory non-Chinook PSC management measures that reduce Western Alaska chum bycatch; provide additional opportunities for the pollock trawl fleet to improve performance in avoiding non-Chinook salmon while maintaining the priority of the objectives of the Amendment 91 and Amendment 110 Chinook salmon PSC management program; meet the requirements of the Magnuson-Stevens Act, particularly to minimize salmon PSC to the extent practicable under National Standard 9; include the best scientific information available including Local Knowledge and Traditional Knowledge as required by National Standard 2; take into account the importance of fishery resources to fishing communities including those that are dependent on Bering Sea pollock and subsistence salmon fisheries as required under National Standard 8; and to achieve optimum yield in the BSAI groundfish fisheries on a continuing basis, in the groundfish fisheries as required under National Standard 1.

Council staff organized the alternatives proposed by committee members into the four alternatives presented below. The committee agreed to move forward all conceptual alternatives, and there was consensus on all but one. There was not consensus on the details of Alternative 2, which was the primary point of dialogue for committee members.

Alternative 1: No action,

Alternative 2: PSC limit for chum salmon and/or area closures

Option 1: PSC limit of zero chum salmon.

Option 2: PSC limit based on historical (32-year time series) total bycatch numbers.

Option 2a: Closure of directed pollock fishery when bycatch exceeds 22,000 (10th percentile of 1991-2022 PSC levels).

Option 2b: Closure of directed pollock fishery when bycatch exceeds 54,000 (25th percentile of 1991-2022 PSC levels).

Option 3: Weighted, step-down PSC limit triggered by a three-river chum index (Kwiniuk, Yukon, Kuskokwim) that is linked to prior years' chum abundance/ANS/escapement and weighted to account for variance in stock sizes across river systems.

Option 3a: If the chum index is average/above average for 3/3 river systems, then the PSC limit is set at 54,000 (25th percentile of 1991-2022 PSC levels).

Option 3b: If the chum index is average/above average for 2/3 river systems, then the PSC limit is set at 22,000 (10th percentile of 1991-2022 PSC levels).

Option 3c: If the chum index is average/above average for 1/3 or 0/3 river systems, then the PSC limit is set at 0.

Option 4: Implement area hard caps in genetic sampling Cluster 1 and/or implement entire area closures in genetic sampling Cluster 1 during the B-season.

Option 4a: PSC limit of 10th percentile of genetic cluster 1 chum PSC during the B Season in Region 1.

Option 4b: PSC limit of 25th percentile of genetic cluster 1 chum PSC during the BSeason in Region 1.

*Option 4c: Area Closure of genetic cluster 1 during the entire B-Season (weeks 22-45). •
Option 4d: Area Closure of genetic cluster 1 during the B-Season Early Weeks (weeks 22-32).*

Option 5 (applies to all): Implement ways for alternative measures to evolve and be refined to protect W. Alaska/Upper and Middle Yukon stocks as real-time genetic sampling becomes available.

Alternative 3: Time/area closures (these would be managed by either NMFS or within the IPAs)

Option 1: Establish a Chum Salmon Reduction Plan Agreement (RPA) during the B season requiring pollock vessels to avoid identified subareas in genetic cluster areas 1 and 2 for a specified amount of time based on two triggers being met: 1) an established chum salmon incidental catch rate and 2) historical genetic composition (proportion) of Western Alaska chum salmon to non-Western Alaska chum salmon.

Alternative 4: Additional regulatory requirements for IPAs

Option 1: Additional regulatory provisions requiring IPAs to utilize the most refined genetics information available to further prioritize avoidance of areas and times of highest proportion of WAK chums in years of low abundance.

Substitute Motion passed 16/1

Main Motion failed (in strikethrough below after rationale)

Rationale in Favor of Substitute Motion:

- *Western and Interior Alaska salmon stocks are undergoing extreme crises and collapses with long-running stock problems and consecutive years' failures to achieve escapement goals. U.S.-Canada fish passage treaty requirements are not being met, nor are subsistence harvest needs in the Yukon, Kuskokwim, and Norton Sound regions. These multi-salmon species declines have created adverse impacts to culture and food security and have resulted in reduced access to traditional foods and commercial salmon fisheries.*
- *Chum salmon returns to Western and Interior Alaska are at record lows. Yukon and Kuskokwim chum stocks have declined 85% and more compared to long-term averages. There is nothing more that Tribal communities are able to sacrifice to meet salmon escapement and rebuilding goals.*

- *The loudest request heard is action now and at this time, recommending the Council initiate analysis of the recommended alternatives and support the consensus Purpose and Need and Alternatives that were recommended by the Salmon Bycatch Committee is the best next step.*
- *While not all alternatives reached consensus, many on the AP agree we should move them forward to be analyzed including the inclusion of a hard cap. This provides the Council with the pros/cons of a range of alternatives.*
- *Many AP members had concerns about the set of numbers used in the alternatives, but felt that it was necessary to move the action forward, because it brings forward the concerns of all participants.*
- *Although there are strong reservations about the potential impact of Alternative 2 if implemented as written, many AP members and members of the public feel strongly about it. It is important at this stage to consider all alternatives in the analysis so that the Council can make more educated decisions moving forward.*
- *It is important to acknowledge and understand all sources of chum mortality and the cumulative impact of various fishing activities. Therefore, in light of the critical importance of chum salmon to Western Alaska communities and ecosystems, consideration of additional measures to further minimize Western Alaskan chum bycatch in the pollock fishery is warranted.*
- *Some AP members felt that the motion would benefit from the inclusion and analysis of a bycatch management option to implement a 3-5 day window closure for chum salmon. The AP heard public testimony that included Traditional Knowledge that spoke to the observation of chum salmon and other salmon species and the amount of time they need to traverse through natal streams and bodies of water. The use of window closures may allow the time necessary for additional salmon to successfully return to their spawning grounds.*
 - *This would be best added as an option under alternative 2 or a stand alone alternative which would add language to include an analysis on a 3 day window closure during peak chum bycatch in clusters 1 & 2. This was brought up too late in the process to be considered as an amendment. While the "Window" closure as originally described potentially disrupts the Rolling Hot Spot closure program in the IPA, it is important to let innovative ideas such as this evolve into useful management tools.*
- *Public comment indicated that the Council is encouraged to work with Tribes and in-river managers to identify stock assessment projects from Western Alaska river systems that could adequately compose a multi-river chum index.*

Rationale in Opposition to Substitute Motion:

- *AP members felt that the substitute motion does not provide analysts with direction in regard to a reasonable or feasible range of potential PSC Caps for Chum. Further there is no support in the motion for use of dynamic referencing within the timeframe used to establish said caps. Without unbounding these elements for a more extensive analysis, opposition felt that all the motion achieved was to advance the oppositional principles of public testifiers, concerned industry groups, and tribal members through a non-consensus suite of alternatives offered by the Salmon Bycatch Committee.*

Main Motion - (in strikethrough)

The AP recommends that the Council adopt the following purpose & need statement as recommended by the Salmon Bycatch Committee:

~~Salmon are an important fishery resource throughout Alaska, and chum salmon that rear in the Bering Sea support subsistence, commercial, sport, and recreational fisheries throughout Western and Interior Alaska. Western and Interior Alaska salmon stocks are undergoing extreme crises and collapses, with long-running stock problems and consecutive years' failures to achieve escapement goals, U.S.-Canada fish passage treaty requirements, and subsistence harvest needs in the Yukon, Kuskokwim, and Norton Sound regions. These multi-salmon species declines have created adverse impacts to culture and food security and have resulted in reduced access to traditional foods and commercial salmon fisheries.~~

~~The best available western science suggests that ecosystem and climate changes are the leading causes of recent chum salmon run failures; however, non-Chinook (primarily chum) salmon are taken in the Eastern Bering Sea pollock trawl fishery which reduces the amount of salmon that return to Western and Interior Alaska rivers and subsistence fisheries. It is important to acknowledge and understand all sources of chum mortality and the cumulative impact of various fishing activities. Therefore, in light of the critical importance of chum salmon to Western Alaska communities and ecosystems, consideration of additional measures to further minimize Western Alaskan chum bycatch in the pollock fishery is warranted.~~

~~The purpose of this proposed action is to develop actions to minimize bycatch of Western Alaska origin chum salmon in the Eastern Bering Sea pollock fishery consistent with the Magnuson-Stevens Act, National Standards, and other applicable law. Recent genetics stock composition information indicates that the majority of non-Chinook bycatch in the pollock fishery is of non-domestic hatchery origin; therefore, alternatives should structure non-Chinook bycatch management measures around improving performance in avoiding Western Alaska chum salmon specifically.~~

~~The Council intends to consider establishing regulatory non-Chinook PSC management measures that reduce Western Alaska chum bycatch; provide additional opportunities for the pollock trawl fleet to improve performance in avoiding non-Chinook salmon while maintaining the priority of the objectives of the Amendment 91 and Amendment 110 Chinook salmon PSC management program; meet the requirements of the Magnuson-Stevens Act, particularly to minimize salmon PSC to the extent practicable under National Standard 9; include the best scientific information available including Local Knowledge and Traditional Knowledge as required by National Standard 2; take into account the importance of fishery resources to fishing communities including those that are dependent on Bering Sea pollock and subsistence salmon fisheries as required under National Standard 8; and to achieve optimum yield in the BSAI groundfish fisheries on a continuing basis, in the groundfish fisheries as required under National Standard 1.~~

The AP recommends that the Council include the following Alternatives for analysis:

~~o **Alternative 1:** Status Quo~~

~~o **Alternative 2:** PSC limit for chum salmon and/or area closures~~

- ~~Option 1: PSC limit of zero chum salmon.~~
 - ~~Option 2: PSC limit based on historical bycatch numbers (PSC limit range 22,000–54,000)~~
 - ~~Option 3: PSC limit linked to an abundance index of Western Alaska chum salmon (PSC limit range 22,000–54,000).~~
 - ~~Option 4: Area specific hard caps in genetic sampling Cluster area 1 (Cluster area 1 PSC limit range 66,000–80,000 chum)~~
 - ~~Option 5: Implement area closures in Cluster area 1 or 2 during the B season.~~
 - ~~Option 5a: Area Closure of genetic cluster 1 during the entire B-Season (weeks 22–45).~~
 - ~~Option 5b: Area Closure of genetic cluster 1 during the B-Season Early Weeks (weeks 22–32).~~
 - ~~Option 5c: Triggered area closures in Cluster areas 1 and 2 based on chum salmon incidental catch rate and historical genetic proportions.~~
 - ~~Option 6: (applies to all): Implement ways for alternative measures to evolve and be refined to protect W. Alaska/Upper and Middle Yukon stocks as real-time genetic sampling becomes available.~~
- o ~~Alternative 3: Additional regulatory requirements for IPAs~~
- ~~Option 1: Additional regulatory provisions requiring IPAs to utilize the most refined genetics information available to further prioritize avoidance of areas and times of highest proportion of WAK chums in years of low abundance.~~

Motion 2

The AP recommends the Council task the Salmon Bycatch Committee with developing alternatives and options for reducing Chinook salmon bycatch, and to develop recommendations for addressing the salmon crisis more broadly.

Motion failed 7/10

Rationale in Favor of Motion:

- *Chinook bycatch this year (as of March 2023) already exceeds all Chinook bycatch of 2022. Meanwhile, Chinook salmon runs continue to decline throughout Western Alaska and are dangerously approaching endangered species status. Tribes and Indigenous people whose cultures and food security are inextricably linked to salmon continue to forego any harvest because runs continue at such low levels.*
- *The Salmon Bycatch Committee has been an important platform to discuss reductions of all salmon species as bycatch. This motion helps to perpetuate the conversation and continue to encourage further improvements in bycatch reduction. This does not intend to take the focus away from chum salmon avoidance measures rather it intends to maintain Chinook salmon avoidance, at the same priority level as chum salmon.*
- *This motion does not intend to distract nor discourage from the efforts being made across all fleets to monitor and reduce salmon bycatch. In the IPA presentations given to the AP, there were "Next Steps" recommendations on ways to further improve their process. These alone could be considered options or recommendations on addressing this issue.*
- *The intention of the motion seeks to improve the health and utilization of salmon throughout its range. The motion seeks to balance optimum yield under MSA National Standard 1 and continued community participation under MSA National Standard 2. MSA National Standard 3 encourages cooperation and understanding among entities concerned with the fishery. This motion includes elements that would be derived from output of the Salmon Bycatch committee which includes Fishery Stakeholders, Tribal representatives, as well as State & Federal interests. Under MSA National Standard 5, the cultural and social needs of the near shore and in river individuals and communities should be considered. The access, harvest, processing, and consumption of chum and Chinook salmon by Alaskan Natives and Tribal members are essential to their well being, identity, and continued existence. MSA National Standard 9, seeking to minimize bycatch is always first priority in this issue.*
- *When salmon stock returns are low, the individual salmon has an exponentially larger impact on the stock's rebuilding ability. The input curve for recovery is initially steep and levels off quickly. When we speak about the importance of an individual spawning salmon it is generally in a context under healthy or robust spawning numbers.*

Rationale in Opposition to the Motion:

- *In the process preceding Amendment 91, Chinook and Chum were originally combined and resulted in Chinook taking priority and chum being bifurcated from that process. Given the urgency of chum bycatch reduction, there's concern that adding it to the process would take the focus away from chum. Compliance with A91 and A110 has resulted not only in a reduction of Chinook bycatch in the BSAI pollock fishery, but also in the reliability and certainty of the Chinook census numbers across all sectors. To attempt to change that regulatory structure while simultaneously working on a massive improvement for chum would detract from the effort that could be put into chum bycatch, and also potentially jeopardize the analysis of both.*
- *The December 2022 Council directive to the Salmon Bycatch Committee was to focus on Western Alaska Chum as the priority, and the prioritization on chum should continue.*
- *Chinook bycatch is already a priority PSC for the pollock fleet to avoid, and it would be more effective to work with the IPA representatives and pollock fleet to more quickly improve their Chinook bycatch avoidance measures.*
- *Although it may seem counterintuitive, it shouldn't be seen that a lack of improvement of Chinook runs since the implementation of Amendment 91 and 110 means that those regulatory measures have failed. The AP heard both public testimony and AP discussion about the success of those measures, and the attention paid by fishermen in season. The small amounts of Chinook available to individual shoreside participants to harvest millions of pounds of pollock was noted and it is uncertain how much more the fishery can be constrained without closing it, or creating extensive consolidation.*
- *We have better resolution of data for Chinook compared to chum. Primarily, the results of the updated AEQ indicate that the impact rate of incidental take of Chinook is very low at ~3%.*
- *Moving forward on Motion 1 focuses future action on chum salmon bycatch management, which includes evaluating IPA changes. Motion 2 may also result in exploring IPA changes and there was a concern that this would result in a more complicated analysis for both species.*
- *There was concern expressed by the public that 2023 chinook bycatch has been high. Despite this increase, Chinook bycatch remains at all-time low levels, with 2023 as the second lowest Chinook catch in the last 20 years – only last year was lower.*