ADVISORY PANEL Motions and Rationale April 2-6, 2024 - Anchorage, AK

C2 Salmon Bycatch

(Formatting key: this motion is based on the previous motion passed by the Council. New text is <u>underlined</u>, removed text is in struck through.)

The AP recommends the Council move forward with the chum bycatch action item to reduce chum bycatch and refine associated alternatives.

The AP recommends the Council revise the alternatives for an initial review analysis as follows. Alternatives and options are not mutually exclusive unless otherwise indicated below.

Alternative 1: Status Quo

All action alternatives apply to the entire Bering Sea pollock B season, the season in which chum salmon are taken as bycatch (prohibited species catch or PSC).

Alternative 2: Overall bycatch (PSC) limit for chum salmon

Option 1: Chum salmon PSC limit based on historical total bycatch numbers: range of $\underline{22,000}$ $\underline{200,000}$ ($\underline{\sim}4,246$ $\underline{35,400}$ Western Alaska chum salmon) to $\underline{^1280,000}$ $\underline{^1550,000}$ ($\underline{\sim}54,040$ $\underline{^197,350}$ to $\underline{^1106,150}$ Western Alaska chum salmon).

Option 2: 2(<u>indices can apply to all alternatives</u>) Chum salmon PSC limit triggered by Western Alaska chum salmon abundance indices based on the prior years' chum salmon abundance. Suboptions below are mutually exclusive.

Suboption 1: Three-area chum salmon index based on <u>summed, rounded value midpoints of Yukon River summer and fall chum escapement goals + ANS + Guideline Harvest Limits (2,539,000) Yukon River summer + Yukon River fall run abundance (950,000 + 575,000); Kuskokwim River composed of the Bethel test fishery CPUE (10,000 2800) + Bethel sonar + Kogrukluk River weir escapement + harvest information (TBD, through work with KRITFC); Norton Sound composed of summed escapement for the Snake, Nome, Eldorado, Kwiniuk, and North Rivers and total Norton Sound harvest (268,421 57,000).</u>

If 3/3 areas are above index threshold, <u>chum salmon PSC limit for the following year is X</u> no chum salmon PSC limit the following year.

If 2/3 areas are above index threshold, chum salmon PSC limit for the following year is X. If 1/3 or no areas are above index threshold, chum salmon PSC limit for the following year is X.

Suboption 2: Chum salmon index based on Yukon River summer + Yukon River fall run abundance

Suboption 2a: Yukon River summer chum salmon (950,000)

If index is above threshold, chum salmon PSC limit the following year is X.

If index is below threshold, chum salmon PSC limit the following year is x.

Suboption 2b: Yukon River summer chum salmon (950,000) and fall chum salmon (575,000) If 2/2 areas are above index threshold, no chum salmon PSC limit the following year:

If 1 or no areas are above index threshold, chum salmon PSC limit the following year is X.

Option 3: (must be selected with Option 1 or 2): PSC limits are apportioned among CDQ, catcher processor, mothership and inshore sectors (using a blended adjusted CDQ bycatch rate as with Amendment 91) based on:

Suboption 1: historical total bycatch by sector using the 3-year average (2020 – 2022)

Suboption 2: historical total bycatch by sector using the 5-year average (2018 – 2022)

Suboption 3: pro rata 25% AFA pollock allocation & 75% historical total bycatch (2020 – 2022)

Suboption 4: pro rata based on AFA apportionment

The sector limits are further apportioned at the cooperative level in proportion to each cooperative's pollock allocation. Chum salmon PSC can be transferred between sectors and among vessels within a cooperative. Reaching a limit closes the pollock fishery sector to which the limit applies.

³Alternative 3: Chum salmon PSC limit with an associated Western Alaska chum salmon byeatch annual limit

³Establish an annual limit of <u>4,246 to 54,040</u> 40,000 to 53,000 Western Alaska chum salmon PSC based on the 3-year average 2020-2022 range of historical bycatch numbers and an overall chum salmon PSC limit from Alternative 2. Both the overall PSC limit and the Western Alaska chum salmon annual limit will be apportioned according to the options considered under Alternative 2.

³Each sector's portion of an overall chum salmon PSC limit of (option 1: 200,000 and option 2: 280,000 option 1: 450,000 and option 2: 550,000) is in effect. If a sector exceeds its western AK chum salmon PSC annual limit in any three of seven consecutive years, the sector's portion of an overall chum salmon ³PSC limit of (option 1: 22,000 and option 2: 54,000 option 1: 200,000 and option 2: 300,000) is in effect until Western Alaska chum salmon PSC does not exceed the sector annual limit for three years.

Alternative 4: Additional regulatory requirements for Incentive Plan Agreements (IPAs) to be managed within the IPAs

Incorporate industry proposed measures developed to further prioritize avoidance of areas and times of highest proportion of Western Alaska and Upper/Middle Yukon chum salmon stocks and analyze the associated savings and tradeoffs.

⁴Include in the IPA regulatory language at 50CFR 679.21(f)(12)(iii)(E) the following additive changes

- 1. 4Require the pollock sectors to describe in their IPA how historical genetic stock composition data is included in chum salmon avoidance measures.
- 2. 4Require the pollock sectors to describe in their IPAs how they monitor for potential chum salmon avoidance closures more than once per week.
- 3. 4Require the use of salmon excluders for the duration of A and B season.
- 4. 4Require the pollock sectors to describe in their IPA the restrictions or penalties for vessels that have significantly higher chum bycatch.
- 5. 4Require IPAs to provide weekly salmon bycatch reports to Western and Interior Alaska salmon users to allow for more transparency in reporting.
- 6. 4Require the catcher processor (CP) sector IPA to prohibit fishing in bycatch avoidance areas for all vessels regardless of performance when ADFG weekly stat area bycatch rates exceed 5 chum per ton of pollock.
- 7. 4Require the catcher processor (CP) sector to develop chum salmon vessel outlier provisions and implement within their IPA.

Option 1: Require a chum salmon reduction plan agreement to prioritize avoidance 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.

Option 2: Additional regulatory provisions requiring Incentive Plan Agreements to utilize the most refined genetics information available to further prioritize avoidance of areas and times of highest proportion of Western Alaska and Upper/Middle Yukon chum salmon stocks.

Industry should submit a detailed proposal of IPA changes under Alternative 4 for inclusion into the Initial Review analysis prior to the February Council meeting. The proposals should consider a process to include local and traditional knowledge from Western and Interior Alaska salmon users in the development of IPA measures. The following is a list of potential measures that could be developed for incorporation into the IPAs and/or through regulation.

- Option 1 trigger 1 and trigger 2 values
- Adjusted base rates to implement a closure
- Adjusted closure area size
- Adjusted closure duration
- Application of the closures to all vessels not just those above the base rate

- Genetic data
- Genetic cluster thresholds
- Additional vessel level incentives/penalties for chum salmon avoidance

Alternative 5: Time and area closure

Consider times and areas for closure to maximize avoidance of WAK chum and/or a regionally specific cap prioritizing genetic cluster area 1, to enact a conservation corridor for WAK chum. Analysis should consider work regarding the development of a salmon conservation corridor in the State-managed Area M fishery.

⁵Include the following information in the analysis to the extent practicable (in bold and underlined)

- 5An impact analysis that includes all removals of WAK chum and known returns of WAK chum to determine the magnitude of impact the bycatch of WAK chum in the pollock fishery has on the WAK chum stock.
- 5Additional ecosystem impacts to the Bering Sea and Alaskan river systems, including but not limited to predator-prey dynamics important to chum and pollock, species shifts north due to warming conditions, and conservation concerns of increased proportions of SE and NE Asian Hatchery Chum in the Bering Sea.
- ⁵Additional context to better understand the impact to CDQ programs by capturing revenue streams via additional communications and estimated percentage of pollock associated with CDQ and/or some additional description of potential implications for harvesting partnerships.
- 5 Potential unintended consequences of apportionment schemes that disproportionately affect individual sectors, including CDQ, in the Bering Sea Pollock fishery.
- Vessel level apportionments under Alternative 2 and vessel level impacts of the alternatives.
- Include in the economic analysis a review of the AFA Mothership, CP, and CV licenses and endorsements to determine the extent to which those vessels could move to other fisheries in the BSAI and GOA. This should also include a review of applicable regulations such as sideboards that would further limit vessels with the correct LLP endorsements to participate in other fisheries and areas.
- (½)Data on the Salmon decline to Western Alaska rivers around the turn of the century (½)1996-1976-2005
- (½)Data on pollock harvest & PSC Rates in the Trawl fisheries and numbers for the same time frame (½)1996-1976-2005
- (%)Data on Subsistence harvest same time frame (%)1996-1976-2005
- (%)Data on return to the rivers and escapement (%)1996-1976-2005

⁵The AP recommends the Council request a status report by BBSRI detailing the 2024 in-season genetic testing pilot project, at either the October or December 2024 NPFMC Meeting.

Include a discussion on impacts of crab and crab habitat as a result of changes in fishing behavior by the directed pollock sectors in their effort to avoid prioritized PSC species and potential increased effort in RCKSA.

Amendment¹ (Under Option 1; Alt 2: change from 280,000 to 550,000 and 54,040 to 97,350 for WAK)

Amendment 1 passed: 18/2

Amendment to Amendment¹ (change from 97,350 to 106,150)

Amendment to the Amendment 1: passed 17/3

Amendment² (add the following language to Alt 2; Option 2: "indices can apply to all alternatives")

Amendment 2 passed: 20/2

Amendment³ (strike Alternative 3)

Amendment 3 passed: 11/9

Amendment⁴ (revise Alternative 4; new language replaced with **bold and underlined** language)

Amendment 4 passed: 20/0

Amendment⁵ (include the following bullet points in the analysis to the extent practicable)

Amendment 5 passed: 18/3

Amendment¹ to Amendment⁵ (include the additional four following bullets under Amendment⁵)

Amendment¹ to Amendment⁵ passed: 20/0

Amendment² to Amendment⁵ (change 1996-to 1976-2005)

Amendment² to Amendment⁵ passed: 20/0

Amendment⁶ (include information on impacts of crab and crab habitat)

Amendment 6 passed: 14/7

Main Motion as Amended Passed: 21/0

Rationale in support of main motion:

- AP members noted appreciation that there was respect and collaboration around the table that allowed the AP to unanimously agree to an amended main motion that meets everyone's needs for a second initial review.
- The Council is required to develop a reasonable range of alternatives under NEPA which is congruent with various mandates including National Standard 2 and National Standard 9. This was precluded by the range the Council selected in its October 2023 motion. Tribal input and TK was not included to an acceptable degree (NS2), and a range of PSC values was selected whose floor is near the historical average and which barely constrains the industry.
- AP members felt this broader range of alternatives will better allow the Council to explore a reasonable range of alternatives and make progress towards reducing bycatch of western Alaska chum.
- The salmon crisis as a whole is extremely dire. Bycatch is part of the equation. We need to consider strong management action because of the grave nature of the crisis and because of the long history of inequity regarding the burden of conservation on this issue.
- AP members felt developing a reasonable range was important and that this goal was responsive to Tribes which are in a fisheries crisis. Further AP members felt this goal respects and incorporates Traditional Knowledge.
- Every salmon counts, especially at this point in the context of Western Alaska salmon declines.

- Ap members noted that the SIA showed Tribes and rural subsistence users and commercial salmon fishers cannot bear the entire burden of conservation without serious consequences.
- AP members noted they support working towards solutions that are focused on the purpose and need, recognizing that the future analysis will include better impact analysis on issues that are important to the public, including impacts on the processing sector.
- The motion as a whole includes potential measures both dynamic and static for analysis, resulting in an overall better suite of alternatives.
- An analysis derived from the amended motion shall reveal the presumed foundation that the pollock industry provides for other commercial fishing opportunities in BSAI and GOA, and is expected to reveal the trickle-down impacts to the communities and their dependence on the pollock industry.
- Specific to Alternative 2
 - There have been consistent calls from Tribes for the PSC range to include low values; and this has support from NMFS to comply with NEPA (see NMFS' letter)
 - A 22,000 chum limit represents a Salmon Bycatch Committee recommendation and 10th percentile of chum bycatch 1991-2022. 22,000 was achieved in 2012
 - o An AP member noted that analyzing a cap below 200,000 is responsive to supplemental DIES comments provided by NMFS. Further it was noted that the council provides NMFS with recommendations and in that process NMFS is the only structural component in the process that is liable to federal trust responsibilities to the tribes. Honoring those responsibilities and incorporating NMFS recommendations to the analysis to meet NEPA guidelines was important to some members of the AP.
 - Analysis shows that reductions in chum salmon bycatch which are likely to happen with a cap will also help reduce Chinook salmon bycatch.
 - Some AP members noted that while there was a lot of public testimony for a 0 hard cap, it was appreciated that the motion presented requested that 22,000 be analyzed further rather than 0.
 - Some AP members noted that while they were not supportive of overall chum hard caps, Alternative 2, with limits up to 550,000 chum, maintains a range of limits that is reasonable.
- Specific to Alternative 2, option 2
 - There needs to be a cap at ALL levels of chum (and pollock) abundance. Alternative 2 Option 2 as adopted by the Council in October contains a version which allows chum bycatch out to infinity.
 - The Yukon-only index was removed because an index based approach should be multi-regional all 3 relevant regions (Norton Sound, Yukon, Kuskokwim) should be used to determine abundance. There are important nuances that may not be captured if only Yukon data is used.
- Specific to Alternative 5
 - The maker of the motion and some AP members felt Alternative 5 is not intended to be subsumed into Alternative 4 (IPAs); but can be used in conjunction with any of the Alternatives.
 - An AP member noted that public testimony from tribes indicated a desire to see an alternative for time/area closures that is regulated outside of the IPA Rolling Hot Spots.
 - Some AP members felt that for the optimal utility and adaptability of a corridor, it should be maintained and managed under the IPA.
 - AP members were hopeful this alternative may provide an opportunity to have some discussions with LK/TK holders in the Area M region.

- AP members were hopeful that this new alternative could provide an opportunity to analyze the idea of windowed openers/closures. Doing so, through coordination with work regarding establishing a conservation corridor in the State-managed Area M fishery, could result in building towards conservation corridors for migratory chum applicable to the Bering Sea.
- Progress on Alternative 5 would be a major advance in Ecosystem Based Fisheries Management (EBFM).
- AP members were hopeful that analysis of Alternative 5 may reveal data that has the potential for maximizing pollock fishing opportunities while also allowing for WAK chum stocks to rebuild.
- Alternative 5 provides a collaborative approach and opportunity for the council, industry, and salmon users to develop a time area triggered conservation corridor closure.
- The AP notes that the broad range of alternatives and requested analytical improvements may continue to bring the action in alignment with the MSA National Standards, in particular: NS1 (Optimum Yield); NS4 (Allocations); NS 8 (Communities); and NS 9 (Bycatch).
- One AP member noted for the record that while the AP is more inclusive with three tribal-related members, more inclusiveness across all Council bodies would be helpful when discussing these types of issues.

Concerns with Amended Main Motion

- Despite not supporting some components of the motion the 22,000 ceiling under Alternative 2 for example some AP members supported the motion because it provides a broad range of alternatives and a new alternative that may provide a more targeted means of meeting the purpose and need of reducing impact on WAK chums.
 - The likelihood of closing the pollock B season after hitting the 22,000 chum cap is high considering the amount of hatchery fish on the grounds, this harms not just pollock harvesters and processors, but also threatens the viability of shoreside infrastructure. This could impact the ability for shoreside processors to process other species, such as fixed gear deliveries of halibut and sablefish
 - Some AP members felt a chum hard cap of 22,000 is not practicable. Including a low PSC cap of 22,000 sets up unrealistic expectations for the public which is unfair and misleading.
 - A chum hard cap of 22,000 does not meet the purpose and need of this action to reduce impacts from the pollock fleet on Western Alaska chum while also balancing the national standards, and sets up the pollock fleets for failure.
 - A hard cap is expected to primarily protect Asian hatchery fish (not Western Alaskan chum salmon), particularly with billions of hatchery fish being released each year (and those releases being completely out of our control).
- The industry working with Alaska natives could incorporate traditional knowledge into Alternative 4 and start achieving success much quicker than a rigid and overly burdensome regulatory process.
 - There is a lot of unknown information in the villages about the salmon Incentive Plan Agreements and how they work in the pollock fleet and also about the benefits of the CDQ program to the villages and how threats to the pollock fishery could flow out to the villages.

- While the motion maker's intention and rationale behind Alternative 5 was appreciated and respected, one AP member wished to reiterate for the record that the Council process has no jurisdiction over the state-managed fishery Area M fishery.
- AP members expressed concerns with Alternative 1. Although many sacrifices have been made, looking at the highest historical bycatch, status quo isn't working.

Rationale for Amendment 1 (Increase ceiling to 550,000)

- The NMFS letter puts emphasis on including all reasonable alternatives for NEPA compliance and at this point in the process, it is important to consider the full range that the public is asking for.
- There are differing perspectives as to how hard caps function and their purpose (e.g., whether they're meant to be constraining, behavior inducing, or serve as a 'backstop'). It is important to continue consideration of a broad range.
- Need to have a broad range because we haven't had an analysis that looks at how Alternative 2 would interact with other alternatives, particularly Alternative 4. This is important because it is possible that the Council will adopt a mix of alternatives.
- Looking at an average can be misleading, particularly given the high annual variability of chum bycatch in the pollock fishery, the 43% increase in Russian hatchery production, and the increased likelihood of increased sea temperatures (which may be a driver of increased bycatch) in the future. A limit up to 550,000 allows for the analysis to account for interannual variability in the Bering Sea chum encounters.

Rationale in Opposition to Amendment 1

- The lower bound of 200,000 chum is not significantly below the historical average from 2011 onwards. Some AP members felt that an average can be thought of as a way of saying the status quo, which is what we're trying to improve upon.
- The fleet was below 250,000 chum bycatch in 7 of the last 13 years. The fleet was below 200,000 in 4 of the last 13 years. The fleet was at ~113,000 in 2023 and ~22,000 in 2012. 280,000 chum is average bycatch from the last 12 years, and should be the upper limit of what is considered.
- The fleet has approached or exceeded 550,000 chum PSC in only 2 years since 1991: 710,000 in 2005, and 546,000 in 2021. Yet in the original Council motion, the upper end of the range was placed at 550,000 (or higher in an abundance-index option).
- AP members felt there was a need to lower both the ceiling and the floor of the PSC limit range to be reasonable; to meaningfully curb bycatch; to not "overspend" the chum salmon "budget" available to restore runs and fisheries.

Rationale for Amendment 2 (indices can apply to all alternatives)

• The indices may have applications under any of the alternatives. It is important that they be analyzed under new alternatives and Alternative 4, for potential application.

Rationale for Amendment 3 (strike Alternative 3)

- The analysis states, "It is not possible to manage a PSC limit specific to WAK chum salmon bycatch in season because real-time genetic data are not available. Therefore, the proportion of WAK chum in the overall bycatch is, and would be, assessed after the B season pollock fishery is over. As an example, genetic information on the chum salmon caught as bycatch in the 2024 B season pollock fishery is available in April 2025." The analysis also noted that this genetics information would also be after NMFS has published the BSAI groundfish harvest specifications for the year.
- In their presentation, Council Staff pointed out potential issues with the legality of the approach described in Alternative 3, given that the Bering Sea pollock fishery would be unable to know in-season whether they have exceeded a WAK chum threshold.
- Although the AP recognizes the importance of being able to prioritize WAK chum stocks rather than Russian and Asian hatchery chum, the scientific capabilities are not currently available to implement real time genetic testing at the the scale the pollock fishery would require, into a potential regulatory package. The timing of the availability of the genetic results that we do have available does not function in a practical or effective way for this Alternative.
- Given constant changes in the BS ecosystem and how fish move year to year, moving the fleet based on genetics from the previous year may likely not provide the intended benefit of avoid WAK in the current year, if this Alternative were to be pursued further and ultimately implemented.
- Given the breadth and complexity of the work we are asking the Council staff to take on with other alternatives, continuing to explore an alternative that we don't currently have the operational ability to implement at scale, is not a good use of effort.
- While there is going to be a pilot project conducted by BBSRI in the 2024 B season, the timeliness of the data and feasibility of implementation at scale is unknown and cannot be analyzed at this time. Given that this project is still in pilot stage, it did not seem appropriate to include this or any other measure in a substitute to Alternative 3; thus the decision was preferred to strike it altogether. There are other ways to ensure the latest genetics work continues to be included in this action, and Amendment 5 covers that.

Rationale in favor of Amendment 4 (revise Alternative 4)

- This amendment updates Alternative 4 to reflect industry proposals and recommendations.
- Altering Alternative 4 with proposed changes to regulations is responsive to the Council's request, and provides additional accountability and transparency.
- Updating the Alternative allows for more opportunity to incorporate proposed provisions, benefits, and tradeoffs into the analysis.
- This amendment is responsive to broad support encouraging the industry to continue improvements and adaptations to WAK chum salmon avoidance measures within the IPAs.
- IPAs are our best tool for inseason management and while requirements like this are outlined in regulation, it allows for annual changes based on new information and data to be included in the IPA to continue meeting the intended objective.

Rationale for Amendment 5 (request more info and updates on inseason genetics)

- All proposed additions are responsive to AP questions to staff and requests from public testimony to address particular gaps in the analysis.
- Some of the suggestions were additional data or analyses or methods that Council Staff felt would be appropriate and have utility.
- Holistic assessment of all removals of WAK Chum and known returns of WAK Chum are important to trying to better understand the more realistic estimated benefit or impact these measures might have, and to understand magnitude so that management decisions are less based on assumptions of magnitude.
- Rapidly changing climate and warming ocean and river conditions have been identified as likely reasons for observed species shifts, ecosystem changes, predator-prey dynamic changes, etc., and should be more fully focused on.
- The large and increased proportions of the NE and SE Asian hatchery chum are seriously concerning conservation impacts, have caused concerns among fishermen in the Bering Sea about the carrying capacity and pressure on the Bering Sea Ecosystem, and should be assessed further to provide the council with more adequate information to make management decisions based on ecosystem and conservation impacts or benefits.
- Assessment of impacts to CDQ groups were not as well addressed as could or should be. The Council staff identified the road blocks in terms of getting more detailed information on revenue but also described ways to capture the missing revenue streams and therefore impacts to the CDQ communities, directly and indirectly.
- The CDQ impacts and benefits should be assessed for more than just their activity in the CP sector but also their investments and involvement in the shoreside and mothership sectors.
- Sector specific impacts are still too broad of a scale. The analysis didn't take into account the potential ways limits would or could be apportioned down to the coop and vessel levels therefore not addressing the more significant potential impacts at the vessel level and disproportionately between the sectors.
- Including 2023 information into the impact analysis should be considered as it would bring in an additional year of data that is the most relevant to current ecosystem and economic conditions, with particular impact to bullet points 1 and 3.

- The AP heard comments and testimony that presumed if shut down in the pollock fishery, vessels in the three AFA sectors could just participate in other fisheries. The economic analysis should further explore the LLPs and endorsements that vessels in the three sectors hold that would allow them to participate in other fisheries in the BSAI and GOA. This should also include additional regulations such as sideboards that would further limit vessels ability to participate in other fisheries that they may be endorsed for.
- The shoreside fleet is cooperating with the BBSRI project team, and insight into the potential viability of the program after the B season would be informative and transparent to the public and Council. The AP recommends the Council request information on the logistical viability, successes and potential challenges, and funding outlook of the project.
- There is a graph on page 122 of the DEIS that shows chum salmon run size for the Yukon with similar declines in the run as we are seeing over the last few years. Understanding the cause of the decline will better inform the AP in the decision making process.
- The DEIS is lacking adequate information on impacts at the individual vessel level.

Rationale for Amendment 6 (impacts on crab)

- Responsive to public testimony
- The AP recognizes that a quantitative analysis cannot be made at this time due to unknown potential changes in fishing behavior based on the outcome of this action. However, a qualitative discussion on potential impacts is appropriate to be included in the next iteration of the document.
- An AP member noted concern for the potential of chum bycatch management measures to potentially extend the pollock B-season into fall crab fishing seasons.
- AP members expressed interest in a similar expanded discussion of chum PSC trade-offs with halibut, but considered it could be brought to the Council's attention through the AP rationale.

Rationale Against Amendment 6

• Council staff indicated that this (plus impacts on all PSC species) would be done regardless of AP motion (provided there was sufficient guidance provided by the alternatives), rendering the Amendment unnecessary.