



January 31, 2025

Ms. Angel Drobnica, Chair
North Pacific Fishery Management Council
1007 West Third, Suite 400
Anchorage, AK 99501

RE: Comments on Agenda C-2 Bering Sea Chum Salmon Bycatch Management

Dear Chair Drobnica and Council Members:

The At-sea Processors Association (“APA”) appreciates the opportunity to comment on Agenda item C-2, Bering Sea Chum Salmon Bycatch Management. APA is a trade association representing five companies that own and operate 15 U.S.-flag catcher-processor (“CP”) vessels that participate in the Eastern Bering Sea (“EBS”) Alaska pollock fishery.

I. Areas of Emphasis in the Analysis and Alternatives

As the Council considers this agenda item, it is critical that it continues to focus on its stated goal of minimizing bycatch of **Western Alaska origin chum salmon** in the pollock fishery, and be consistent with the Magnuson-Stevens Act, National Standards, and other applicable law. Against this backdrop, APA’s comments focus on six issues that we believe are especially important, considering the Draft Environmental Impact Statement (“DEIS”). The six main contentions we make in this comment letter are as follows:

1. Alternatives 2 and 3 will not effectively address the Proposed Action’s purpose and need of minimizing Western Alaska origin chum salmon bycatch.
2. Spatio-temporal genetics are crucial for understanding the impacts of the alternatives on WAK chum salmon relative to non-Alaskan chum salmon.
3. Modelling fleet movement at the sector and vessel level is complex, but essential to inform sound management decisions.
4. IPAs provide flexibility, which is a key component of successful management when addressing multiple PSC Species.
5. Impacts of WAK chum salmon savings are minimal and may not change directed fishing opportunities.
6. Other PSC and economic tradeoffs are critical to understand, and they need to be analyzed more extensively and explicitly.

II. Overview of our commitment to continuous improvement

As the analysis makes clear, there is a crisis facing salmon returns to many western Alaska river systems. We recognize that these impacts have profound social, cultural, and economic impacts in many communities throughout western Alaska. The analysis also makes clear that the pollock fishery is an essential socioeconomic driver in coastal fishing and CDQ communities.



APA and its member companies have a long-standing commitment to continuous improvement of our fleet's environmental performance, including salmon bycatch mitigation efforts. This commitment is demonstrated through: dedicated financial support for salmon research, including through our 25-year partnership with the Pollock Conservation Cooperative Research Center; investments in the development of technologies that have reduced salmon bycatch, including salmon excluders, salmon lights, and cameras; investments in real-time data sharing and the rolling hot spot program, to move vessels away from areas of high bycatch; and proactive changes to our Incentive Plan Agreement (“IPA”) to formally strengthen the fleet's salmon bycatch avoidance measures. In this context, APA vessels are committed to continuous improvement and avoidance of salmon in the pollock fishery.

III. History of Salmon Bycatch Reduction Measures in the Pollock Fishery

We believe it is important to review the long history of salmon bycatch management in the pollock fishery, and the rationale that has motivated Council decision making in this area over time. Static area closures with trigger bycatch limits for both Chinook and chum salmon were implemented in 1995 and subsequently abandoned in favor of a rolling hot spot program that was implemented in 2007. This was due to “catch and observer data suggest[ing] that pollock trawl fishing restrictions in Salmon Savings Areas were counterproductive as there were greater bycatch rates outside of these areas.”¹ In 2012, the Council revisited chum management measures, following the implementation of Amendment 91. The final action motion stated:

The Council is concerned that the current suite of alternatives does not provide a solution to the competing objectives outlined in the problem statement and purpose and need, recognizing the overall objective to minimize salmon bycatch in the Bering Sea pollock fishery to the extent practicable, while providing for the ability to achieve optimum yield in the pollock fishery. It is clear from the analysis thus far that measures considered to reduce bycatch of Alaska origin chum **have a high likelihood of undermining the Council's previous actions to protect Chinook salmon.**²

The Council took further action in 2016 via implementation of Amendment 110. This incorporated chum salmon bycatch avoidance measures into the legally binding Incentive Plan Agreements. The Council action included strict financial penalties and clear economic incentives, requiring the fleet to meet 13 specific regulatory objectives in reducing both Chinook and chum salmon at any level of abundance. In their rationale for this management approach, the Council cited the need for flexibility in responding to new genetic information on the spatial and temporal patterns of Alaska chum stocks, while simultaneously not undermining Chinook salmon avoidance measures.

In response to a 2021 spike in chum salmon bycatch, the Council directed pollock industry stakeholders to implement additional measures to avoid chum salmon bycatch and demonstrate the effectiveness of those measures in annual IPA reporting.³ The outcome was a 55% reduction in overall chum bycatch, but

¹ <https://www.npfmc.org/wp-content/PDFdocuments/fmp/BSAI/BSAIGFAMActionSumm.pdf>.

² https://meetings.npfmc.org/CommentReview/DownloadFile?p=a06bdc4c-02cd-4fcc-83ac-c775a1f3283d.pdf&fileName=D1%20Chum%20salmon%20discussion%20paper_final.pdf (emphasis added).

³ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=02759eb8-8707-46ba-9680-bf186756363c.pdf&fileName=PPT%20C2b%20CP-IPA%20Report.pdf>

an 8% increase in WAK chum salmon bycatch for the 2022 B season.⁴ Further reductions in overall chum bycatch were observed in 2023 and 2024, bringing them to the lowest levels observed in more than a decade.⁵ The proportion of WAK chum salmon bycatch, however, remains variable particularly in the recent years (2020-2023), demonstrating that reductions in overall chum bycatch and reductions in WAK chum bycatch do not always move in tandem.⁶

Since the implementation of these measures, the best available science indicates a variety of environmental factors have contributed to the decline of chum salmon returns to Western Alaska and are well documented in section 3.2.3.1.1 of the DEIS.⁷

IV. Specific APA Comments Relating to the Proposed Alternatives and the DEIS

We commend the authors of the DEIS for the extensive information compiled in the analysis and Appendices. As stated above, our comments on the Proposed Alternatives and the DEIS focus on six issues that we believe are especially important for the Council to consider:

1. *Alternatives 2 and 3 will not effectively address the Proposed Action's purpose and need to minimize Western Alaska origin chum salmon bycatch*

The current DEIS states: “The proposed action is focused on minimizing chum salmon bycatch to the extent practicable...”⁸ This statement, however, does not accurately capture the precise focus of the Council, as reflected in the adopted purpose and need statement:

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. Consistent, annual genetics stock composition information indicates that the majority of non-Chinook bycatch in the pollock fishery is of Russian/Asian hatchery origin; therefore, **alternatives should structure non-Chinook bycatch management measures around improving performance in avoiding Western Alaska chum salmon specifically.**⁹

Alternatives 2 and 3 introduce management strategies that emphasize reductions in *overall* chum salmon bycatch. We believe these alternatives will not effectively address the stated purpose and need for the action, and in fact have the potential to increase the number of WAK chum salmon taken in the pollock fishery.

A hard cap for chum salmon like the caps proposed in Alternatives 2 and 3 will cause vessels to move to areas where chum bycatch rates are lowest. Areas with low chum bycatch rates may have higher proportions of WAK chum salmon. Overall hard cap alternatives risk creating incentives that do not align with the action's purpose and need, and have the potential to move vessels towards areas / times that have

⁴ Bering Sea Chum Salmon Bycatch Management Preliminary Draft Environmental Impact Statement (“DEIS”) (Dec. 20, 2024) at 20.

⁵ https://www.fisheries.noaa.gov/sites/default/files/akro/chum_salmon_mortality2025.html

⁶ DEIS at 92.

⁷ DEIS at 81-83.

⁸ DEIS at 7.

⁹ *Id.* at 35 (emphasis added); see also <https://meetings.npfmc.org/CommentReview/DownloadFile?p=5b15695d-d544-4385-87cb-b5cdf54909.pdf&fileName=C4%20Chum%20Salmon%20Bycatch%20Analysis.pdf> at 38.

historically produced high levels of WAK chum salmon bycatch.¹⁰

In 2021, the pollock fishery took an estimated 358,598 chum salmon that originated outside of North America, while the combined WAK chum salmon catch was estimated at 51,512 fish. The resulting June 2022 Council direction was to “take immediate steps to avoid chum salmon in the 2022 B season.”¹¹ Additional efforts taken that season resulted in a reduction of overall chum salmon bycatch by more than half, while WAK chum salmon bycatch increased. This was done by avoiding acute bycatch spikes of chum salmon (i.e., areas with the highest rate of chum salmon per ton of pollock) and moving vessels towards areas with lower rates of bycatch that most likely had higher proportions of WAK chum salmon. The net result was a 262,538 fish reduction in catch of Northeast and Southeast Asian chum salmon, while WAK chum salmon catch rose to 55,724 fish. This demonstrates how a hard cap emphasizing minimization of all chum salmon bycatch, regardless of origin, has the potential to negatively affect WAK chum.¹²

Finally, if this management action is expected to minimize WAK chum salmon bycatch particularly in years when runs to WAK rivers are low and bycatch impacts have the potential to be highest, an overall chum salmon cap would be an especially poor choice. Hard caps that do not increase or are suspended when WAK chum abundance is high will inherently produce the greatest salmon savings when they are least impactful for conservation. According to the retrospective analysis in the DEIS, the CP sector would be expected to have greatest bycatch minimization of WAK chum in 2017, at a cap level of 100,000 salmon.¹³ Yet in that year nearly 6,000,000 chum salmon returned to the Yukon River alone and 100% of escapement goals drainage wide were met or exceeded.¹⁴ If hard caps are meant to be effective at extremely low chum salmon abundance across Western Alaska (e.g. 2020-2023), they must be set so low that they constrain fisheries and produce significant lost pollock yield in most years. Chum salmon hard caps that do not fluctuate with some measure of true abundance will inherently produce the greatest salmon savings when they are least impactful for conservation. Certain applications of the abundance-based indices in Alternative 3 could allow for flexibility during periods of high abundance, however: (i) a time lag in the assessment of run strength; and (ii) a failure to account for increasing prevalence of hatchery chum risks producing unintended outcomes for the pollock fishery and WAK salmon.

In summary, there is no evidence in the DEIS that Alternatives 2 or 3 would provide any additional tools for the CP fleet to minimize WAK chum salmon to the extent practicable (by incentivizing fishing effort in areas or times where WAK chum are least likely to occur). Rather the WAK chum salmon bycatch minimization is achieved solely by restricting total pollock harvests-by up to 90% of the B season allocation for the CP sector alone.¹⁵ Accordingly, these Alternatives would fail to meet the action’s purpose and need, and would be inconsistent with National Standard 1, 8 and 9 of the Magnuson-Stevens Act.

2. *Spatio-temporal genetics are crucial for understanding the impacts of the alternatives on WAK chum salmon relative to non-Alaskan chum salmon*

¹⁰ Genetic Clusters 1 and 2 have historically had higher proportions of WAK chum salmon than Genetic Cluster 3 and 4, while the early B season has higher WAK chum salmon relative to the late B season, see DEIS at 92 and 93.

¹¹ DEIS at 60.

¹² DEIS at 92.

¹³ DEIS at 107-108.

¹⁴ DEIS Appendix 2 at 11-12.

¹⁵ DEIS at 72.

A significant majority of chum salmon bycatch is of Asian origin. Specifically, from 2011-2023, 68.8% of the chum salmon originated from the Northeast Asia and Southeast Asia reporting groups combined. Comparatively, 18.6% of the chum salmon bycatch originated from WAK river systems.¹⁶

In all years, a greater number of WAK chum are taken in Cluster 1 relative to all other clusters (Figure 3-12). In the two years of highest chum salmon bycatch (2017 and 2021) there was no statistically significant difference in the number of WAK chum encountered in clusters 1 or 2, but even in those years both were significantly greater than the number of WAK chum taken in cluster 3 and 4.¹⁷

A detailed understanding of when and where WAK chum salmon are encountered in the pollock fishery relative to when and where Asian origin chum salmon are taken is critical for the Council to focus this action on its stated intent outlined in the Purpose and Need of ‘...*minimizing bycatch of Western Alaska origin chum salmon*...’. In this context, we note that the DEIS lacks a table showing the estimated number of WAK chum salmon caught by Cluster (1-4) and Time Period (early-late) for all years (2011-2023). Such a table would provide the best information possible about when and where minimization of WAK chum salmon bycatch should be emphasized and if those trends have changed over time.

The DEIS makes abundantly clear the critical importance of designing management measures that focus specifically on minimizing WAK chum salmon bycatch and cautions against the perverse management outcomes for WAK chum that may result from management actions that incentivize moving pollock fishing effort to areas with lower chum bycatch rates regardless of genetic stock composition to avoid reaching a chum salmon PSC limit.¹⁸

We urge the Council to give serious consideration to the possibility that this management action could inadvertently result in avoidance of Asian origin hatchery rather than WAK chum salmon especially in light of the actions of foreign nations, most notably Russia. Combined hatchery releases of chum salmon from all countries have ranged between 1.1-1.3 billion fish annually from 2020-2023. Russia, however, has increased chum salmon hatchery production by 500% since 1994,¹⁹ and there’s a very real danger that this upward trajectory of releases could continue or even accelerate in the years ahead. Since Russia’s 2022 escalation of its war against Ukraine, an effort to maximize production and revenue from its seafood sector has been evident. This is demonstrated, for example, by the Kremlin’s imposition of new export duties on seafood products²⁰ and sharp increases in Russian harvests of key species such as pollock.²¹

There is reason to expect that this Kremlin strategy may result in further expansions of Russian chum salmon hatchery production. Indeed, the governor of the Sakhalin region was recently quoted in Interfax as stating that the region plans to double the volume of fish hatchery production by 2027.²² Neither the Council nor the Alaska pollock fleet has any control over future releases of foreign hatchery chum salmon in the North Pacific Ocean. It is therefore imperative that management actions focus specifically on the conservation of WAK chum, and that they carefully anticipate scenarios where variations in the volumes of foreign hatchery chum could impact management outcomes. Indeed, given the scale of geopolitical tensions between the United States and Russia, it is reasonable to anticipate scenarios where Russia could

¹⁶ DEIS at 10.

¹⁷ *Id.* at 93.

¹⁸ *Id.* at 320.

¹⁹ *Id.* at 76-77.

²⁰ <http://government.ru/en/docs/49567/>.

²¹ See, e.g., <https://www.intrafish.com/fisheries/russias-pollock-fleet-sets-record/2-1-1766106>.

²² <https://interfax.com/newsroom/top-stories/104211/>.

respond to a poorly designed management action in relation to chum salmon bycatch by increasing releases, with the explicit aim of shutting down the U.S. pollock fleet, which would in turn provide the Russian pollock industry with enormous benefits in global markets.

We urge the Council to carefully review the salmon genetics information contained in the DEIS, and to assess whether Alternatives 2 and 3 are worthy of further consideration in light of that information.

3. Modelling fleet movement at the sector and vessel level is complex, but essential to inform sound management decisions

One area where the DEIS is lacking is in its efforts to model fleet movement under different scenarios. The realities of the Alaska pollock fishery are such that modelling of this nature is complex—yet it is critical that the Council try to understand the specific consequences of different management actions in terms of fleet movements and corresponding fishing outcomes.

Section 3.2.4.4.1.1 of the DEIS utilized a fleet movement model to estimate retrospective pollock fishery outcomes for the options in Alternative 5. Pollock catch was redistributed on a weekly basis for each option, and resulting estimates of chum and Chinook PSC were calculated. Several difficulties were identified in the analysis, and full quantitative results were not provided since they were “not a likely depiction of future outcomes for fleet behavior, PSC savings, or PSC increases.”²³ We believe that while the magnitude of PSC outcomes estimated from the fleet movement model may be overstated, the unintended consequences of some options under Alternative 5 resulting in significant increases of chum salmon bycatch are real. A lack of complete quantitative analysis results for Alternative 5 represents a significant shortcoming in the DEIS.

Tables 3-34, 3-35, and 3-36 highlight the difference between bycatch rate and bycatch number: “Moving CV pollock catch from Cluster 1 or Unimak to Cluster 2 or some areas further northwest would result in increased chum and WAK chum salmon PSC. This is because the chum salmon bycatch rates have typically been much higher in Cluster 2.”²⁴ By moving pollock catch out of Cluster 1 and into Cluster 2 in this scenario, the fleet would have caught an additional 100,078 salmon.²⁵

APA recommends further analysis of different variations of the Alternative 5 corridor concept. The analysis should focus on the number of WAK chum salmon encountered by the fleet in clusters 1 and 2, in contrast with clusters 3 and 4. Quantitative assessment from a broader geographic range, which could provide the Council with valuable information about how to minimize WAK chum salmon bycatch, and how to avoid unintended management outcomes that may result in higher WAK chum salmon bycatch.

4. IPAs provide flexibility, which is a key component of successful management when addressing multiple PSC Species

As discussed above, the Council’s previous management actions in relation to salmon bycatch evolved from static area restrictions to more flexible and dynamic management measures. This evolution reflected an understanding that the specific steps necessary to minimize salmon bycatch in any given season vary significantly based on highly variable pollock and salmon distributions.

²³ DEIS at 129, 133.

²⁶ *Id.* at 141.

²⁶ *Id.* at 141.

APA continues to view IPAs as the most adaptive and responsive management tool to account for these factors. This is because IPAs can enact closures and re-direct fishing effort in close to real time and at the vessel level, something that NMFS in-season management cannot do given the federal rulemaking process and other statutory constraints.

IPAs are subject to NMFS approval, which ensures compliance with regulatory requirements, and provides annual reports to the council per 50 CFR 679.21(f)(13). APA has proactively implemented additional provisions to its IPA and supports their incorporation in regulation. **We believe that Alternative 4 builds on the proven success of the IPA model, and we therefore recommend Alternative 4 as best positioned to address variation in pollock and WAK chum salmon distributions into an uncertain and climate changing future.**

In considering management measures that go beyond the use of the existing IPAs, we urge the Council to carefully weigh the potential downsides of adopting overly-broad, inflexible management actions that constrain the fleet and potentially lock in negative on-the-water outcomes. **To counter that inflexibility, elements of proposed measures under Alternative 5 could also be included in IPA requirements, striking a balance between accountability for public assurance while providing an avenue to incorporate the best available genetics data, observer data, and local knowledge.** We would also like to highlight that the IPA’s will continue to operate in the background of any Alternative being considered and at any level of abundance.

While the longer-term trends of discrete WAK chum stocks are highly variable, our understanding of the location and timing of WAK chum on the pollock grounds is constantly improving. Management actions that preserve operational flexibility for the fleet have the potential to enable continuous improvement in performance specifically in relation to WAK chum bycatch over time.²⁶

5. Impacts of WAK chum salmon savings are minimal and may not change directed fishing opportunities

The DEIS presents for the first time the results of a simplified adult equivalency analysis (“AEQ”). This responds to SSC concerns regarding the lack of measurable statistics for quantifying impacts of status quo management to WAK chum salmon stocks, and the relative benefits of management outcomes proposed by the alternatives.

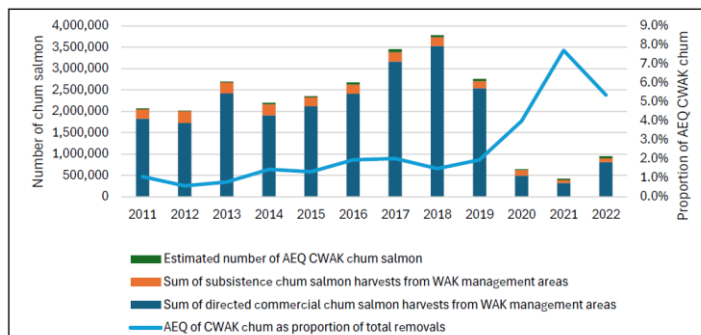


Figure 3-16 Comparison of simplified AEQ CWAK chum salmon estimates to subsistence and commercial harvests of WAK chum, 2011–2022

The estimated AEQ CWAK chum salmon bycatch was then compared with all known

²⁶ *Id.* at 141.

anthropogenic removals (catch) from both subsistence and commercial harvests of chum salmon in WAK management areas. The pollock fishery has accounted for 1.4% of those removals on average from 2011-2019 and 5.7% on average from 2020-2022.²⁷ **Stated another way, this management action has the ability to minimize total known human removals of WAK chum salmon in WAK management areas by an average of ~2.5%.²⁸**

The DEIS states: “Across all years and sectors, the highest estimate for WAK chum salmon savings was estimated to occur in 2019 from the inshore sector at 28,567 fish under the AFA apportionment for a 100,000 cap.”²⁹ The DEIS goes on to state that there are further temporal and spatial dynamics that would affect the potential for future savings,³⁰ yet it fails to state the impact of those savings once they are further attributed to individual drainages and tributaries.

Under Alternative 2, the highest estimate on AEQ chum salmon savings from the Upper/Middle Yukon reporting group would have occurred in 2017 at 11,553 fish. The 2017 Yukon fall chum salmon run was 2,315,583 fish which was well above the drainage wide escapement goal of 300,000–600,000 fish. In 2017, limited subsistence fishing opportunities were provided due to Chinook salmon conservation measures. The lowest year of return for Yukon fall chum salmon was 2021 at 95,249 fish. In 2021, **the highest estimate for AEQ Upper/ Middle Yukon savings would have occurred in 2021 under a 100,000- chum salmon cap and the AFA apportionment at 3,255 fish.**³¹

Under the two scenarios above, one being that of the highest possible savings, and the other being at the period of lowest abundance—the analysis fails to indicate if either scenario would have changed the outcome for directed fishing opportunities. Rather, it asserts that savings could have resulted in generally improved conservation toward meeting escapement goals.³²

6. *Other PSC and economic tradeoffs need to be analyzed more extensively and explicitly*

Potential new management actions in relation to chum salmon must be considered in the broader context of other management objectives. These include management actions relating to other PSC species, such as Chinook salmon and herring, and the economic impacts of different management measures. We are concerned that the DEIS does not currently provide enough analysis of these considerations to facilitate effective and fully informed Council decisions.

The CP sector is the primary harvester for CDQ pollock. B season landings comprise between 30-50% of the CP sector’s total fisheries revenue. While the benefits of the CDQ program are clearly demonstrated and well documented in the analysis, the current DEIS does not explicitly provide tables or figures for cost-benefit analysis. Rather, there are opportunities to make these inferences by cross referencing sections within the document. For instance, Alternative 2, Option 4 (estimated to have achieved the greatest proportional conservation benefit in 2021 for the Fall Yukon chum run) can be contrasted with the potential costs to the pollock fishery.³³ Table 3-20

²⁷ *Id.* at 101.

²⁸ *Id.*

²⁹ *Id.* at 108.

³⁰ *Id.*

³¹ *Id.* at 22 (emphasis added).

³² *Id.*

³³ *Id.* at 109 & 227.

and Table 4-16 in the analysis, meanwhile, show the average annual (2011-2022) first wholesale forgone revenue total under Alternative 2, Option 4.

Furthermore, the analysis assumes that there are costs associated with fleet movement and avoidance because, “when fishing effort moves because of regulation ... there is a cost associated with that movement because if that area was optimal or preferred, the fishery would already have been there.”³⁴ The analysis clearly demonstrates that as a chum cap becomes more constraining pollock fishing is slowed down or delayed until later in the fishing season, when pollock catch rates are generally lower and Chinook salmon bycatch rates are typically higher.³⁵

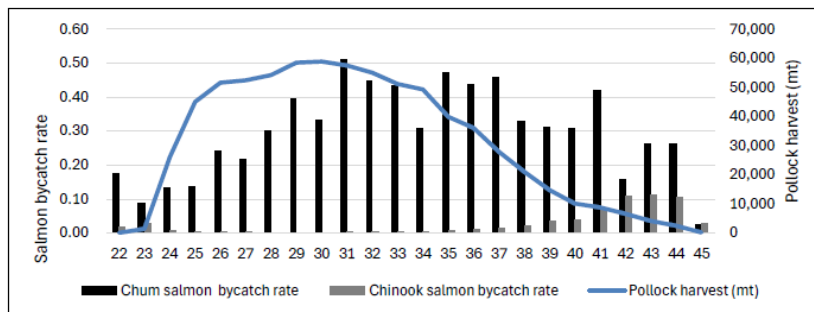


Figure 3-29 Comparison of the weekly fleet-wide weekly average chum salmon bycatch rate, Chinook salmon bycatch rate, and pollock harvest (mt), 2011-2023

Existing management measures are in place for herring, which are triggered by time and area closures based on a percentage spawning biomass.³⁶ Under a scenario where the pollock fleet changes fishing behavior in response to chum salmon, the likelihood of increased herring bycatch is high. Triggering closures in most of Cluster 1 (HSA 1 and 2) for the Catcher Vessel and Mothership sectors potentially moves effort into Cluster 2, where chum salmon bycatch rates are higher. Triggering the HSA 3 closure would primarily impact the CP fleet in the late B season, forcing the offshore fleets to move out of a very large area that historically has had extremely low catches of WAK chum salmon and either moving their effort into Cluster 2 (with higher chum salmon PSC rates) or leaving them with limited fishing opportunities if a cluster 2 corridor was already triggered.³⁷

To facilitate Council decision-making that appropriately accounts for the myriad tradeoffs that come with spatial and temporal shifts in fishing activity, additional analysis should provide more detailed information about the fleet’s ability to juggle multiple PSC caps for different species and explicitly include cost-benefit analyses to impacted communities.

V. Conclusion

Thank you for the opportunity to provide comments, and we look forward to the Council’s discussion and input to staff at this meeting.

The history of this action notes that significant environmental changes resulting in shifting food web

³⁴ *Id.* at 224 & 252.

³⁵ *Id.* at 148.

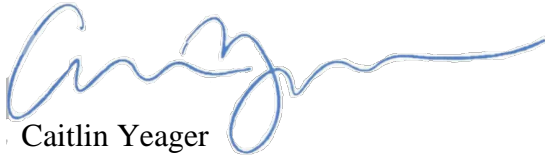
³⁶ *Id.* at 154-155.

³⁷ *Id.* at 157.

structure, combined with rapidly escalating hatchery inputs and variable marine survival confound the ability of the Council to surgically target WAK chum minimization without also causing significant harm to pollock participants and coastal and CDQ communities. As a result, we continue to support facilitating fleet flexibility to move in space and time using the best available genetic information to minimize WAK chum. Our IPAs are the primary tool that can consistently produce improved outcomes from WAK chum while also minimizing harm to the pollock fishery. Any consideration of management actions focused on Western Alaska chum salmon must also ensure our IPAs can function as designed and any management changes should be analyzed under both a regulatory and IPA structure to determine which is most responsive and effective.

We commend the authors of the DEIS for their analysis, including their attempts to put forward quantitative estimates of both the costs and benefits for many of the alternatives. Nonetheless, as detailed above we are concerned that gaps and other shortcomings in the DEIS present a challenge for the Council in assessing the suitability of various potential management actions. We encourage the Council not to select a Preferred Preliminary Alternative at this meeting given the clear need for further alternative refinement and additional study.

Sincerely,



Caitlin Yeager
Vice President of Policy & Engagement
At-sea Processors Association