KUSKOKWIM RIVER
INTER-TRIBAL FISH COMMISSION
OUR RIVER, OUR PEOPLE, OUR FISH
P.O. Box 190 Bethel, AK 99559-0190 | (907) 545-7388 | info@kritfc.org | kuskosalmon.org

March 29, 2024

Angel Drobnica, Chair
North Pacific Fishery Management Council
1007 West Third Ave., Suite 400
L92 Building, 4th floor
Anchorage, Alaska 99501-2252

RE: KRITFC Comments on C2: Salmon Bycatch, April 2024 NPFMC Meeting

Dear Chair Drobnica and Members of the Council:

The Kuskokwim River Inter-Tribal Fish Commission (KRITFC) represents the interests of the 33 federally recognized Tribes of the Kuskokwim River watershed in fisheries management, research, and monitoring. Our Elder Advisors, 27 authorized Commissioners, 7 Executive Council members, and 5 In-Season Managers work to ensure our efforts are guided by our Indigenous Knowledge and values and the best available Western science so we can protect fisheries and traditional ways of life on our river.

KRITFC continues to ask for a **Prohibited Species Catch (PSC) limit on chum (and Chinook) salmon bycatch** in the Bering Sea pollock fishery that is responsive to Tribes' requests, meaningful for Western and Interior Alaska salmon and salmon fisheries, and oriented to protect our interconnected rivers-to-sea ecosystem. We continue to make the case for a **gravel-to-gravel approach** to salmon management that prioritizes salmon conservation and restoration throughout their migratory habitat. We continue to urge this North Pacific Fishery Management Council (Council)—as an advisory body to the federal government, which has a trust responsibility to our Tribes—to **recognize to our Tribes as co-stewards** of salmon and our ecosystems, and to be proactive in protecting our traditional ways of life.

The multi-species salmon declines we are seeing on the Kuskokwim—with the collapse of chum salmon populations on top of Chinook salmon (and coho salmon in 2022)—has pushed our families into a state of insecurity and crisis. How will we heal and nourish our Elders without salmon? How will our babies teethe and develop a taste for fish without dryfish? How will our caribou, moose, berry, and waterfowl populations recover without nutrients from salmon pouring into our land and waters? The anxiety from these questions, the inability to freely fish and practice our fishing traditions to relieve this anxiety, and the sheer lack of salmon—our first food and our lifeblood—can be linked to rising food insecurity, domestic and community crises, mental illness and suicide, and declines in fish camp culture.

Salmon are invaluable to our Tribes. There is nothing that can replace the feel of pulling fish-laden nets from the river, or the first fresh taste of fish in the summer, or the sounds of our families gathering at fish camp, or the smell of smoke and fish oil wafting from our smokehouses. But we are on the brink of losing these vital experiences and practices.

That is why we must act now to reframe the question at hand. Instead of asking what sacrifices are practicable for the pollock fishery to make to protect salmon, **we should consider how we can restore and maintain a resilient, biodiverse rivers-to-seas ecosystem, with protections for salmon, a key**

indicator of ecological, cultural, community, and economic health in Alaska. Here are three ways in which this Council and the National Marine Fisheries Service (NMFS) can pursue this.

1. **The Federal government and Tribes must work together as co-stewards to pursue gravel-to-gravel, ecosystem-based fisheries management.**

Tribes in Western and Interior Alaska have been stewards of our ecosystems for millennia, and we continue to hold a sacred stewardship relationship with salmon. However, it appears that NMFS, as the federal government responsible for overseeing this action, is continuing to ignore our Tribes' voices and misunderstand the gravity of the situation for our people. Our 12,000-year way of life is at stake with the continued depletion of salmon. The resilience of our cultures, diets and health, ecosystems, and economies is faltering without salmon. NMFS has the opportunity—and the authority—to curb one factor affecting it: bycatch in Alaska federal marine fisheries, especially in the Bering Sea pollock trawl fishery. Yet we have not yet seen NMFS take a stand to pursue this opportunity and address our Tribes' concerns.

NMFS has federal obligations to consult, engage, and co-steward with our Tribes, and to work with us to incorporate our Traditional Knowledge as part of the best scientific information available for decision-making. These duties are clearly laid out in numerous Executive Orders, agency policies, and Council policies (e.g., E.O. 13175, White House Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships, Joint S.O. 3403, NOAA Tribal Consultation Handbook, LKTKS Protocol). We have yet to see these federal obligations pursued or prioritized in the Alaska Region, and we have yet to see our Tribes' Traditional Knowledge and science fully incorporated into the suite of scientific information that informs this Council's and NMFS' decision making, as mandated by National Standard 2.

Moreover, these obligations were not simply achieved through accepting KRITFC as a cooperating agency in this EIS process for minimizing chum salmon bycatch. While we are encouraged by our trail-blazing work with NMFS and Council staff in this analysis, **a cooperating agency relationship is not the same as a co-stewardship or co-management relationship.** KRITFC is interested in pursuing the latter with NMFS. We expect to be recognized and to work as co-stewards with the federal government.

Additionally, we recognize that the U.S. Fish and Wildlife Service (FWS) holds a seat on this Council. 2024 marks KRITFC's 9th year of collaborative salmon management with FWS on the Kuskokwim River. **We urge FWS and its representative on this Council to also work with us as we seek gravel-to-gravel, ecosystem-based management of salmon**, spanning both their freshwater and marine life stages.

2. **We should consider how discrete spawning populations of salmon matter for stock resilience.**

"Every fish counts." This mantra from Interior and Western Alaska Tribes has been repeated time and again at this Council, and we continue to hear pushback on what it means and what can be done to address it.

To KRITFC, every fish counts means that we must be doing all we can to protect every spawning salmon, because every spawner today is a climate survivor, containing the genetic potential to produce salmon that can withstand the threats stacked against it.

When we discuss this at this body, we are met with **mathematical models, like Adult Equivalency analyses (AEQs) and impact rates, that minimize the importance a single fish provides to a tributary, stock, and fishery.** Moreover, these mathematical models, aimed at Optimum Yield and Maximum Sustainable Yield, do not and cannot incorporate Traditional Knowledge or steps toward climate resilience. We know from our own fisheries management work that mathematical models are insufficient compared to holistic data that includes Traditional Knowledge.

In our cooperating agency work on this DEIS, **KRITFC provided information, including text and a graphic, on how discrete spawning populations of Western Alaska salmon are more vulnerable to fish removals, including bycatch, when abundance is low** (see Figure 1 below). This is the story that AEQs and impact rates minimize; that the stewardship principles of our Tribes uphold; and that reaches the heart of why every fish counts. It was not included in the DEIS, and thus we include it here for the Council's deliberations:

> In addition to assessing natural marine mortality of WAK chum stocks, it is equally important to assess and consider the relative impact of a sustained amount of chum salmon removals, including from bycatch, on WAK stocks when they are severely declined versus abundant. WAK salmon populations vary in their productivity, carrying capacity, and life history characteristics. This variation contributes to their sustainability as a result of portfolio effects, and it is especially important for climate resilience of chum salmon stocks. Sustained levels of WAK chum salmon removals may have greater negative impacts to viability of discrete spawning populations, or tributary stocks with significant spatial separation such that they may be genetically distinct, at times of low abundance (e.g., in 2020–2023) compared to periods of high abundance. **In other words, as chum salmon decline, every salmon that returns becomes biologically more important for the sustainability of its discreet spawning population as well as overall stock abundance.**

Figure 1, provided by KRITFC in their cooperating agency status, illustrates this point through three scenarios of varying (e.g., low, medium, high) chum salmon removals.

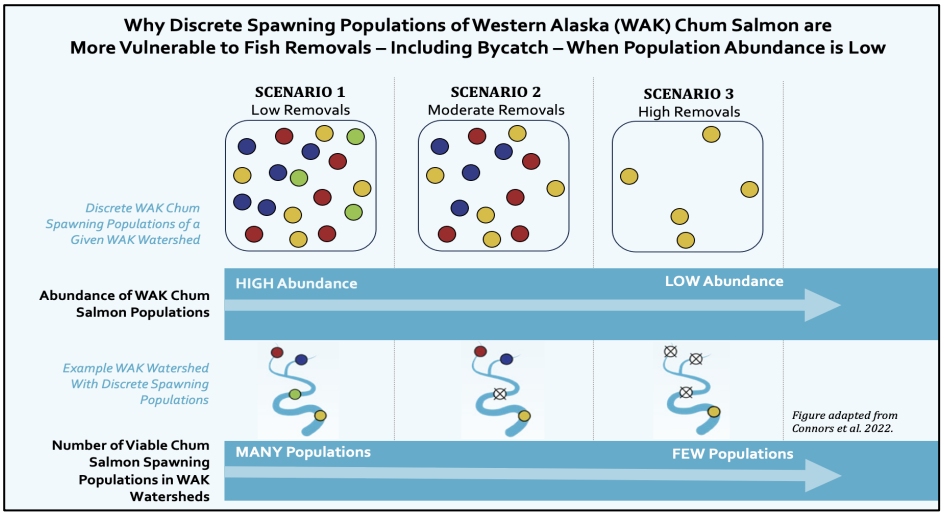

Figure 1: *Schematic showing why discrete spawning populations of WAK chum salmon are more vulnerable to overharvest when populations are low, as adapted from Connors et al. 2022. Different color circles represent discrete spawning populations within chum salmon stocks of a Western Alaska river. Moving from left to right: (1) When fish removals (e.g., from fisheries, predation, bycatch, etc.) are low, abundance of all populations is likely to remain high. The impact on genetic diversity within the watershed is low, and genetic diversity of discreet spawning populations remains high. (2) When fish removals are moderate, abundance of a population(s) may decrease, and the risk for losing genetic diversity of a discreet spawning population(s) increases moderately. (3) When fish removals are high, abundance of most populations may decrease, and the risk for losing genetic diversity of most discrete spawning populations may increase significantly.*

When coupled with other factors, like climate change, sustained high removals at times of low WAK abundance will impact genetic diversity of discreet spawning populations, and of an entire river's chum salmon stock. **Ultimately, when a population declines in abundance, or is extirpated, it may not recover in a tributary that provides food for subsistence salmon communities.**

3. **<u>The alternatives in this EIS process should be amended so those selected as preliminary and final preferred alternatives are meaningful for salmon and for salmon-dependent Tribal communities and ecosystems.</u>**

Kuskokwim Tribes argue that a cap on chum salmon bycatch is a meaningful way to minimize bycatch of chum salmon, and potentially of Chinook salmon, according to the draft EIS analysis. There must be a limit on the number of salmon that can be legally caught and discarded in the pollock fishery to promote reductions in chum salmon bycatch. As we just outlined (and as is also outlined in Section 5.2.3.1-2 of the Social Impact Assessment), any reductions in removals of our vulnerable chum salmon can have significant positive consequences for our rivers and people.

KRITFC requests the Council consider the following amendments and additions to the alternatives:

- **There should be a PSC limit regardless of chum salmon or pollock abundance.** All options and sub-options of the action alternatives should be connected with an PSC limit at any level of chum salmon (or pollock) abundance.
- **A PSC limit should be implemented regardless of any other alternative or option chosen.** There needs to be a ceiling to the number of fish that can be legally caught and discarded.
- **The range of PSC limits in Alternative 2 must be lowered and include limits from 0–200,000 chum salmon in the range of alternatives moved forward at this meeting.** The present range of PSC limits is unreasonable as it begins with a floor (200,000) that is barely below the 12-year (2011–2022) average bycatch of 280,000 fish, and has a ceiling (550,000) that has only been surpassed once (in 2005) and approached once (in 2021) in the history of the pollock fishery. Moreover, it does not incorporate Traditional Knowledge that waste of any sort is unacceptable and poses negative consequences to species health; had this knowledge been included in the alternatives, we would see a PSC limit of 0 in the analysis. Lowering the range of PSC limits will allow this action to comply with the requirements of NEPA for a reasonable range of alternatives, as well as with National Standard 2 to incorporate the best scientific information available, which includes Traditional Knowledge.
- **A PSC limit linked to in-river abundance (Alternative 2, Option 2) should be comprised of a 3-Area Index**, and not just reliant upon Yukon River run reconstructions.
- **The data used to compile Kuskokwim River chum salmon abundance for Alternative 2, Option 2 must be made more holistic.** While there is no run reconstruction for Kuskokwim chum salmon at present, Bethel Test Fishery (BTF) cumulative catch-per-unit-effort (CCPUE) data is not the only—nor the most reliable—source of chum salmon abundance on our river. In our salmon co-management role, KRITFC uses a holistic source of data to determine in-season chum salmon abundance, including data from Bethel Test Fishery (BTF; 1980–current), Bethel sonar (2017–present), the Community-Based Harvest Monitoring (CBHM) program (2017–present), and local and Traditional Knowledge. There is also one weir-based tributary escapement goal on the Kogrukluk River (15,000–49,000 fish) that can be evaluated post-season to indicate abundance. An abundance threshold that is compiled and evaluated post-season should include more than BTF CCPUE data, and **we encourage NMFS to work directly with our Tribes, government to government, to determine this threshold and its associated metrics.**
- At a minimum, **if BTF CCPUE is the only source of information used for an Kuskokwim abundance threshold (Alternative 2, Option 2), the current threshold of 2,800 fish must be raised**. The proposed threshold of 2,800 would not have been triggered in 2023, despite last year's chum salmon return coming in well-below historical abundance and failing to meet escapement goals or subsistence harvest needs. This threshold also would not be proactive when chum salmon stocks begin to decline, such as in 2019, by heightening restrictions on bycatch to minimize controllable impacts to salmon abundance. See Figure 2 below to visualize this data.

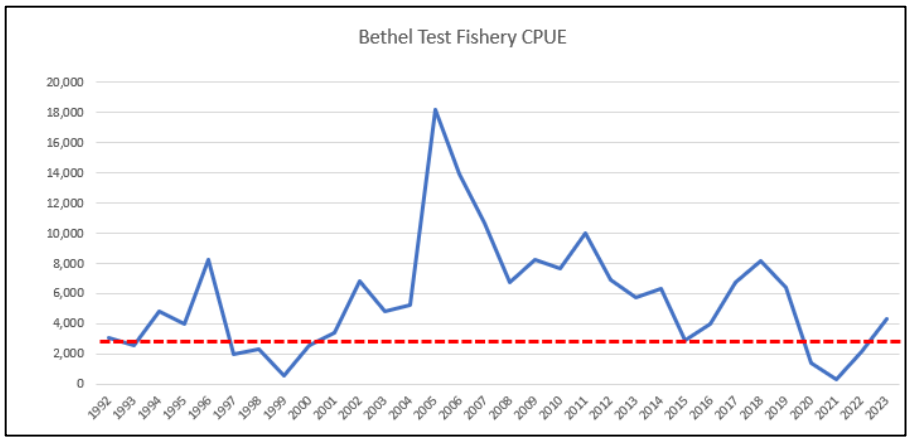

Figure 2: Bethel Test Fishery cumulative CPUE, 1992–2023, in blue. The red line indicates the proposed 2,800 fish threshold, which would not have triggered low abundance in 2023. Source: ADF&G AYK Database Management System.

- **An alternative should be added to evaluate time/area closures, including as windowed open/close dates, that are regulated outside of the industry's Incentive Plan Agreements**. Chum salmon from the Western and Interior Alaska region are caught predominantly in genetic cluster areas 1 and 2, and throughout the early, middle, and late periods of the B-season. These times and areas should be prioritized for closures. Regulatory windowed opener/closure fishing opportunities (e.g., X days closed to fishing followed by Y days open to fishing, repeated) in these times/areas should be explored as a management tool to develop a conservation corridor, allowing migrating salmon to pass without molestation during closed windows. This is a management tool that has been successfully used on the Kuskokwim, where windowed closures in the lower river allow spawners to pass through lower river fisheries and onto upper river fisheries and spawning grounds. Additionally, t**ime/area closures should be informed by real-time genetic analysis as soon as possible.** KRITFC is encouraged and eager to see the results of the near real-time genetic sampling that Bristol Bay Science and Research Institute is undertaking this year and hopes that can be implemented fleet-wide as soon as possible.
- **The request in Alternative 4 for industry to develop a proposal to include salmon users' Traditional Knowledge in their Incentive Plan Agreements (IPAs) should be removed.** Private contractual agreements that Tribes are not privy to are not appropriate avenues to incorporating Traditional Knowledge into this decision, nor were our Tribes consulted on this provision before it was adopted in October 2023. KRITFC encourages NMFS to work with our Tribes in a government-to-government manner to determine the appropriate way to include Traditional Knowledge into this decision. We also urge the Council, NMFS, and industry to make the process of developing the IPA agreements, implementing them, and procuring data to inform them more transparent for our Tribes.

In closing, we encourage this Council and NMFS to refocus its intent on protecting salmon and salmon ecosystems. We look forward to continuing our engagement on this issue.

Tsen'anh, Quyana,

Kevin Whitworth
Executive Director