

C2 NPFMC Salmon Bycatch Committee meeting report overview

April, 2023



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Committee membership

Rachel Baker	ADF&G and NPFMC (co-chair)
Andy Mezirow	Gray Light Fisheries and NPFMC (co-chair)
Ruth Christiansen	United Catcher Boats
Oscar Evon	Coastal Villages Region Fund
Serena Fitka	Yukon River Drainage Fisheries Association
Jennifer Hooper	Association of Village Council Presidents
Mellisa Johnson	Arctic-Yukon-Kuskokwim Tribal Consortium
Stephanie Madsen	At-Sea Processors Association
Elizabeth Reed	Westward Fishing Company
Steve Ricci	Bristol Bay Economic Development Corporation
Kevin Whitworth	Kuskokwim River Inter-Tribal Fish Commission
Dr. Mike Williams, Sr.	Aniak Native Community

Terms of Reference

1. **Purpose:** The North Pacific Fishery Management Council (Council) will establish a Salmon Bycatch Committee (Committee) to address a number of Council related issues on salmon bycatch and research.

2. **Tasks for Committee:**

Task 1: Review the discussion paper on chum salmon bycatch for the December Council meeting (2022)

Task 2: Review salmon bycatch findings and recommendations from the State of Alaska's Bycatch Task Force and the work of the Western Alaska salmon subcommittee

Task 3: Review current information, including Local, Traditional, and Subsistence knowledge, and needed research to determine what is driving western Alaska salmon declines.

The committee will review and discuss these items as they become available and provide comments and any recommendations to the Council in their Committee report.

The committee will attempt to achieve consensus. In the absence of consensus the Committee will provide rationale and discussion of items that were not agreed upon by all members.

December Council motion

The Council directs the Salmon Bycatch Committee to develop recommendations for potential regulatory and non-regulatory chum salmon bycatch management measures, including a cap. The committee should develop alternative management measures with focus on avoidance of Western Alaska chum salmon. The committee could recommend concepts or specific components of alternatives for metrics to evaluate bycatch performance, including management measures linked to abundance indices or other triggers and metrics to evaluate bycatch performance. The Council will review committee recommendations following two additional committee meetings.

The Council approves the terms of reference as modified by the committee. The Council supports staff providing the committee with information in response to items 1-8 of the itemized list of requests for the next committee meeting, to the extent possible. At its next meeting, the committee should review the information provided by staff and the State of Alaska Bycatch Review Task Force recommendations for Western Alaska salmon to inform its development of recommendations for management measures.

January 2023 meeting overview

- Overview of State of Alaska Bycatch Task Force report and Western Alaskan salmon subcommittee recommendations
- Process and timeline for initiating an amendment/analysis
- Regulatory and non-regulatory measures for consideration
 - Review of 2012 chum alternatives and analysis
 - IPA overview and 2022 chum measures
- Public testimony
- March meeting requests and charge for committee

Information requests of staff

The following is a list of information requests of staff for March Salmon Bycatch Committee meeting (items in ~~strike out~~ were covered at the January 25th meeting)

1. Temperature changes (warm and cold patterns) compared to bycatch.
2. How do temperature changes interact with prey conditions?
3. Salmon encounter rates compared to pollock total allowable catch (TAC).
4. How or what conditions have changed since 2012? E.g., increased CDQ dependance on pollock; in river subsistence restrictions, some synthesis of local and traditional knowledge by in river salmon users across western Alaskan regions.
- ~~5. Review State of Alaska Bycatch Task Force recommendations and information available on the Task Force website.~~
- ~~6. Pollock fishery avoidance measures in 2022 for chum salmon.~~
- ~~7. Process for initiating analysis of alternative management measures for chum salmon bycatch.~~
8. Expansion of the discussion of Council rationale for current management priorities for salmon bycatch (i.e., Chinook).
9. Information to help inform consideration of indexing to some estimate of chum salmon abundance (eg run reconstructions that exist, additional escapement and weir information across other river systems)

Request for Committee members

**PROPOSED
PURPOSE AND
NEED STATEMENT**

**CONCEPTUAL
ALTERNATIVES**

March 2023 overview of information presented

Salmon Bycatch Committee - Hybrid Meeting in Anchorage, Alaska

March 20-21, 2023, 9:00 AM - 5:00 PM AKT

UAA Gorsuch Commons Room 107

3700 Sharon Gagnon Lane, Anchorage

March 2023 meeting overview

- Information Requests to staff
- Committee recommendations for purpose and need statement
- Committee recommendations for conceptual alternatives
 - Rationale and discussion of individual alternatives
- Public Comment

Information Requested of Staff

[SBC information requests of staff _updated Jan 25](#) -Uploaded: 03/06/2023 01:38 PM AKST

[ChumBycatch2022_genetics_SBC](#) -Uploaded: 03/16/2023 02:42 PM AKDT

[1.3. 10. ChumMarch2023_lanelli](#) -Uploaded: 03/16/2023 02:40 PM AKDT

[2. Distribution, Diet and Bycatch of chum salmon EBS Murphy et al, 2016](#) -Uploaded: 03/05/2023 11:20 AM AKST

[4. Compendium of LK and TK_SBC_March2023](#) -Uploaded: 03/08/2023 08:15 PM AKST

[4. 2022 Kusko Situation Report_Feb 23_print v2](#) -Uploaded: 03/08/2023 08:16 PM AKST

[4. Yukon Kuskokwim Subsistence Harvest Overview_SBC_March2023](#) -Uploaded: 03/08/2023 08:17 PM AKST

[4. KRITFC Salmon Situation_March 2023](#) -Uploaded: 03/17/2023 04:48 PM AKDT

[4. CDQ FINAL 3.19.23](#) -Uploaded: 03/20/2023 08:47 AM AKDT

[8. Amd 110 Rationale for preferred alternative](#) -Uploaded: 03/06/2023 11:43 AM AKST

[9. AYK Region Chum Salmon - v2.22.2023](#) -Uploaded: 03/05/2023 11:20 AM AKST

[10. CP IPA](#) -Uploaded: 03/08/2023 01:44 PM AKST

[10. SSIP IPA](#) -Uploaded: 03/08/2023 01:45 PM AKST

Purpose and need

Purpose and Need proposals

- 4 proposals put forward by SBC members
- Staff synthesized commonalities and differences between submissions
- Consensus Purpose and Need recommended by the SBC

Consensus Purpose and Need (part 1)

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.

Consensus Purpose and Need (part 2)

*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.***

Conceptual Alternatives

Conceptual alternatives submitted

- 3 proposals submitted by SBC members
- Staff synthesized submissions into single alternatives set without modifying submitted alternative concepts
- Committee included all of the alternatives in the report but without consensus
- Rationale is provided in the report both for and against individual alternatives

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 B-Season 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.*