C2 Chum Salmon Bycatch
Council Motion
April 8, 2023

The Council adopts the following Purpose and Need statement and alternatives for analysis.

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 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. In light of the critical importance of chum salmon to Western Alaska communities and ecosystems, the Council is considering additional measures to further minimize Western Alaskan chum bycatch in the pollock fishery.

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.

The Council intends to consider establishing additional regulatory non-Chinook bycatch 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 bycatch avoidance program; meet and balance the requirements of the Magnuson-Stevens Act, particularly to minimize salmon bycatch 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.

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 (range to be informed by PSC data)

PSC limits are apportioned among CDQ, catcher processor, mothership and inshore sectors based on historical total bycatch by sector. The inshore limit is further apportioned among the inshore cooperatives. The CDQ limit is further apportioned among the CDQ groups. Reaching a limit closes the pollock fishery to which the limit applies.

Option 2: Weighted, step-down PSC limit triggered by a three-river chum index (Kwiniuk (or index developed for Norton Sound area), Yukon, Kuskokwim) that is linked to prior years' chum abundance/ANS/escapement and weighted to account for variance in stock sizes across river systems.

PSC limits would be triggered and in effect when one or more Western Alaska chum index areas fails to meet index thresholds. As more areas fail to meet index thresholds, chum PSC limits would step-down and become more restrictive. PSC limits are apportioned among CDQ, catcher processor, mothership and inshore sectors. The inshore limit is further apportioned among the inshore cooperatives. The CDQ limit is further apportioned among the CDQ groups. Reaching a limit closes the pollock fishery to which the limit applies.

Alternative 3: Bycatch (PSC) limit for Western Alaska chum salmon

Option 1: Western Alaska chum salmon PSC limit (range to be informed by PSC data)

PSC limits are apportioned among CDQ, catcher processor, mothership and inshore sectors based on historical total bycatch by sector. The inshore limit is further apportioned among the inshore cooperatives. The CDQ limit is further apportioned among the CDQ groups. Reaching a limit closes the pollock fishery to which the limit applies.

Option 2: Weighted, step-down Western Alaska chum PSC limit triggered by a three-river chum index (Kwiniuk (or index developed for Norton Sound area), Yukon, Kuskokwim) that is linked to prior years' chum abundance/ANS/escapement and weighted to account for variance in stock sizes across river systems.

PSC limits would be triggered and in effect when one or more Western Alaska chum index areas fails to meet index thresholds. As more areas fail to meet index thresholds, chum PSC limits would step-down and become more restrictive. PSC limits are apportioned among CDQ, catcher processor, mothership and inshore sectors. The inshore limit is further apportioned among the inshore cooperatives. The CDQ limit is further apportioned among the CDQ groups. Reaching a limit closes the pollock fishery to which the limit applies.

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

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 stocks.

The analysis should provide information to inform a reasonable range of PSC limits and an index under the action alternatives including:

- Chum PSC data by year from 2011 through 2022; 3-, 5-, 10-yr average PSC levels from 2011 through 2022; and potential ranges for average PSC levels during warm/cold years from 2011 through 2022.
- Are the identified areas (Kwiniuk (or Norton Sound area), Kuskokwim, Yukon) appropriate as indices? Are there data to support consistent use of each area in an index?
- Which criteria should be used to define low index abundance (i.e., a number of chum defining poor abundance) for each area? Examples:
  - abundance (e.g., a percentile of historical abundance)
  - subsistence harvest performance (e.g., subsistence harvest in relation to historical subsistence harvest and/or ANS)
  - achievement of escapement goals (e.g., a percentage of total escapement goals met or exceeded)
- Determine feasibility of NMFS implementation of a Western Alaska chum cap under Alternative 3. For example, apply Western Alaska stock proportion available in spring 2025 to total chum PSC at the end of year 2024 to trigger management measures in B season 2025? Or Western Alaska chum cap is reduced if exceeded for a maximum number of consecutive years (e.g., 2 out of 5 years or 3 out of 7 years)?
- Additional information necessary to analyze IPAs such as the base rate for triggering action, proportion of Western Alaska and non-Western Alaska chum salmon for the second trigger in option 1.
- Provide a summary of research and TK that can be gathered to understand all of the causes of the population decline.