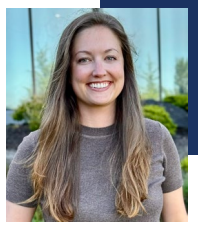
C2 Bering Sea Chum Salmon Bycatch, Draft Environmental Impact Statement

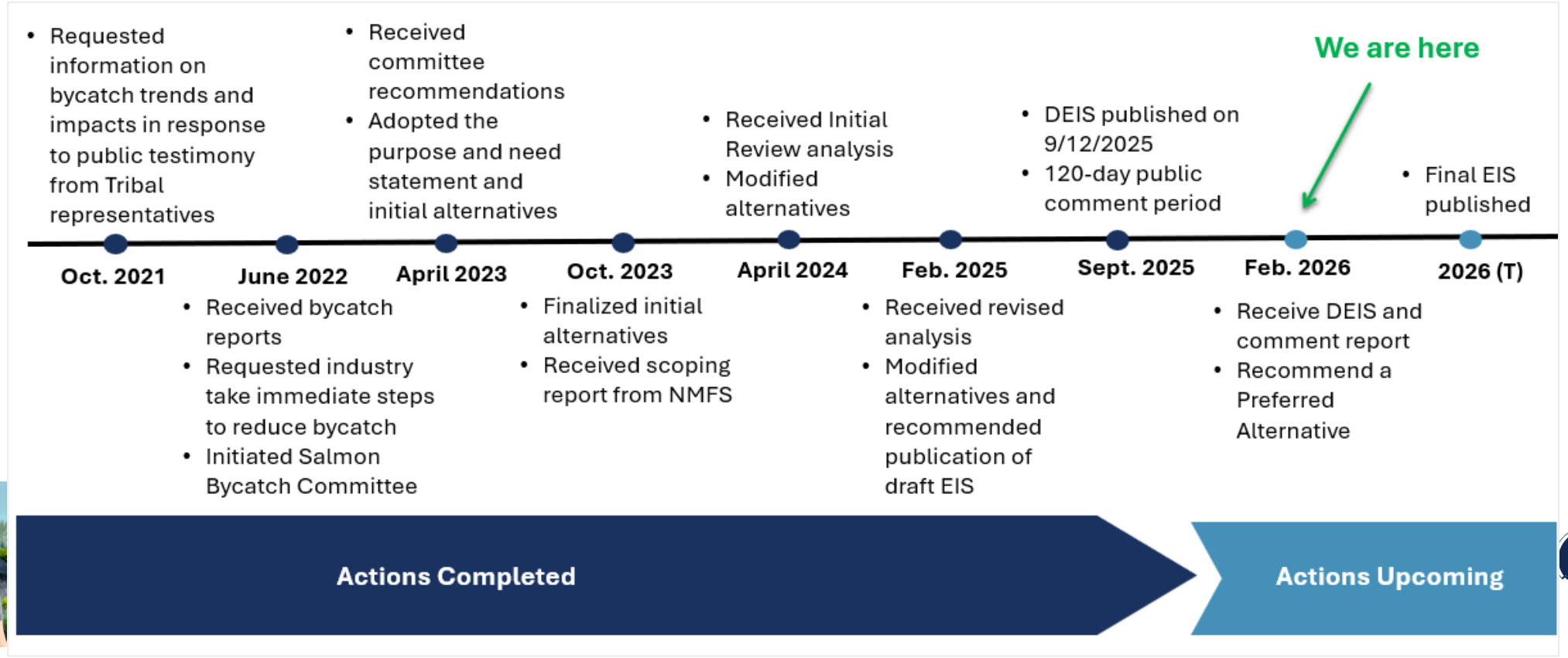
North Pacific Fishery Management Council– ***Final Action***

Dr. Kate Haapala & Ms. Sarah Marrinan, Council Staff



Action timeline

- The Council is considering new management measures 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



Summary of the major changes made to the alternatives in February 2025

Alternative 5

- 3 new inseason corridor options — include both larger and more discrete corridor closures
- Modified corridor bycatch cap range (50,000–350,000 chum salmon)
- Added Option 3 for an abundance threshold
- Added Option 4 to adjust the start date for the Winter Herring Savings Area if the herring PSC limit is met

Alternative 3

- Replaced Bethel Test Fishery cumulative CPUE with the Kuskokwim Sonar as the data source for the Kuskokwim Area under Option 1

Alternatives 2, 3, and 5

- Added a CDQ reserve pool apportionment suboption

Summary of major changes to the DEIS since February 2025

Summary of major changes	Section
• CDQ reserve pool apportionment suboption • Implications	• Sections 2.4.1.1 (Alt 2/3) and 2.7.4.1 (Alt 5) • Sections 3.3.4.1 and 4.3.3.1 (Alt 2/3) and Sections 3.3.4.6.9 and 4.3.5.6 (Alt 5)
• Alternative 5	• Section 2.7
• Comparison of alternatives	• Section 2.8
• Expanded analysis for AEQ savings under additional hard cap amounts	• Section 3.4.2.2.1
• Impact rate reduction for Yukon fall chum (Upper/Middle Yukon)	• Section 3.4.2.2.2
• Expanded vessel-level analysis	• Section 4.3.2.1
• Genetic stock composition estimates for the inseason corridor	• Section 3.3.4.6.1
• Fleet Movement Model results for Suboption 1 of Alternative 5	• Sections 3.5.1 (methods), 3.3.4.6.4 (chum/WAK chum), and 3.4.1.4.2 (Chinook)
• Option 3 of Alternative 5 abundance thresholds	• Section 3.3.4.6.1 (Chum/WAK chum)
• Winter Herring Savings Area start date under Option 4 of Alternative 5	• Section 3.3.4.6.8 (chum/WAK chum), Section 3.4.1.4.5 (Chinook), and Section 3.5.1.4.5 (herring)
• Impacts to essential fish habitat for crab under Alternative 5	• Section 3.8.1.4
• Vessel-level impacts	• Section 4.3.2.1
• Net Benefits	• Section 4.6
• Evaluation of the National Standards	• Chapter 6
• Initial Reg Flex Analysis	• Section 4.7

Milestones associated with selecting a preferred alternative

- If the Council recommends a preferred alternative, the next steps and anticipated milestones (tentative) are:
  - Response to comments received on DEIS and prepare Final EIS
  - Draft FMP amendment and Proposed Rule development
  - Final EIS, Proposed Rule, and Notice of Availability published (*anticipated late 2026, early 2027*)
  - Decision on FMP Amendment (*Anticipated early 2027)*
  - Final Rule development, including response to public comment
  - Final Rule publication and implementation period
  - New rules apply (*Anticipated 2028*)

Presentations under the C2 agenda item

- Receive revised Draft Environmental Impact Statement (DEIS) and Regulatory Impact Review (RIR)
  - Changes reflect modified alternatives and recommendations from the Council, SSC, AP, as well as public input in February 2025
- NMFS summary comment report
  - Reminder: Comment period open from September 12, 2025, through January 5, 2026

Summary of recent Council outreach and engagement

Outreach Event	Date and Location	Council Members	Staff
TCC Fall Special Convention	November 13, 2024 Fairbanks, Alaska	Ms. Angel Drobnica, Ms. Rachel Baker, Mr. Jon Kurland, Mr. John Moller, and Mr. Bill Tweit (in-person)	Kate Haapala and Sarah Marrinan (virtual)
EIRAC	February 19, 2025 Fairbanks, Alaska	Ms. Angel Drobnica, Mr. Brian Ritchie, Mr. Rudy Tsukada, Mr. John Moller, and Mr. Bill Tweit (in-person)	Kate Haapala, Sarah Marrinan, Danielle Merculief (in-person), and Doug Shaftel (virtual)
WIRAC	February 25, 2025 Fairbanks, Alaska	Ms. Rachel Baker, Ms. Anne Vanderhoven, Mr. John Moller, and Mr. Steve Williams (in-person)	Kate Haapala and Sarah Marrinan (in-person); Danielle Merculief and Doug Shaftel (virtual)
YKDRAC	March 4, 2025 Bethel, Alaska	Ms. Rachel Baker, Ms. Nicole Kimball, Mr. Jon Kurland, Mr. John Moller, and Mr. Rudy Tsukada (in-person)	Sarah Marrinan, Danielle Merculief, Doug Shaftel (NMFS, in-person), and Kate Haapala (virtual)
KARAC	March 7, 2025 Kodiak, Alaska	N/A	Kate Haapala and Sarah Marrinan (virtual)
BBRAC	January 12, 2026 Anchorage, Alaska	Ms. Rachel Baker and Mr. John Moller	Kate Haapala and Sarah Marrinan

Pursuant to EO 13175, the National Marine Fisheries Service (NMFS) is the Federal agency responsible for carrying out Tribal Consultations. NMFS Tribal Consultation and Engagement is ongoing.

Outline for the remainder of the presentation

- Purpose and need statement (Section 1.1)
- Description of the alternatives (Chapter 2)
- Impact analysis (Chapters 3 and 4)
  - Alternative 1
  - Alternative 2
  - Alternative 3
  - Alternative 4
  - Alternative 5

  Side-by-side discussion of the potential costs and benefits focused on chum/WAK chum salmon; WAK chum salmon users; directed pollock fishery participants, communities, and processors; Chinook salmon and herring
- Impacts from a combination of alternatives
- Comparison of alternatives (Section 2.8)
- Management, monitoring and enforcement (Chapter 5)
- Final points and next steps

The Council recommended the following Purpose and Need statement on April 8th, 2023.

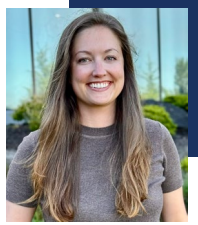
Salmon are an important fishery resource throughout Alaska, and chum salmon that rear in the Bering Sea support subsistence, commercial, sport, and recreational fisheries throughout Western and Interior Alaska. Western and Interior Alaska salmon stocks are undergoing extreme crises and collapses, with 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.

Purpose and Need Statement (Section 1.1)



Recent declines in Western Alaska chum salmon abundance

Section 3.3.3
Section 3.3.3.1

"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."*

Chum salmon abundance since 2020 (see also Figure 3-11)			
Yukon River (summer)	Yukon River (fall)	Kuskokwim Area	Norton Sound Area
63% to 94% below average	74% to 90% below average	16% to 94% below average	44% to 83% below average

Western Alaska chum salmon declines *(continued)*

"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."***

- Management priority for conservation, then subsistence uses, and next all other consumptive uses
  - Yukon, Kuskokwim and other areas have faced total closures and/or very limited fishing opportunities
  - **Chum salmon are critically important for** cultural identity, food security, food sovereignty, and the holistic health and wellbeing of ecosystems and communities

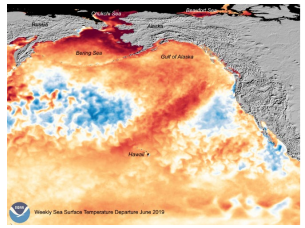
Section 3.3.3
Section 4.5.1

The role of ecosystem and climate changes

Section 3.3.3.1.4

"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."*

- Research presented to the Council in June 2022 indicated:
  - WAK chum salmon migrate between the Bering Sea and Gulf of Alaska
  - Subject to marine heatwaves in both habitats in 2016 and 2019
  - Juvenile chum salmon consumed less diverse and nutritious foods and exhibited significantly lower stored energy
  - WAK chum salmon had not acquired enough energy stores (fat) prior to their over-wintering in the Gulf of Alaska in recent warm year (*Farley et al., 2024*)

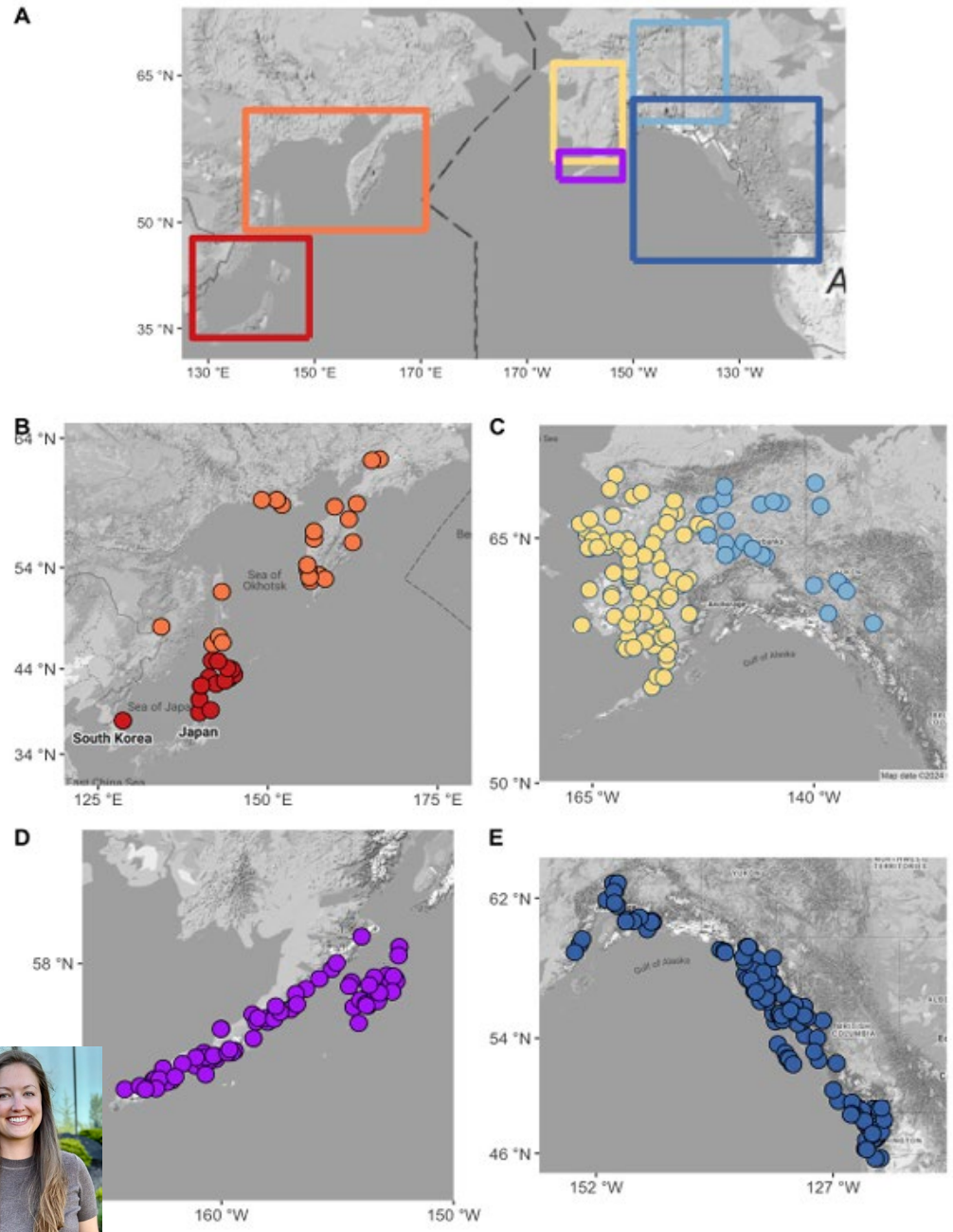


Chum salmon bycatch in the Bering Sea pollock fishery

"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."*

Section 3.4.1

- The pollock fishery accounts for approximately 99% of the chum salmon taken as bycatch in all BSAI groundfish fisheries
- 99% of the chum salmon bycatch is taken during the pollock B season (June 10 – November 1)
- Table 3-24 contains more detail



Where are the chum salmon caught as bycatch from?

"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."*

Section 3.3.4.1.2

6 genetic reporting groups for baseline populations

- Panel A = Range wide distribution of the six reporting groups
- Panel B = SE Asia (red) and NE Asia (orange)
- Panel C = Coastal Western Alaska (Yellow) and Upper/Middle Yukon (blue)
- Panel D = SW Alaska (purple)
- Panel E = EGOA/PNW (dark blue)

Summary of Western Alaska chum salmon bycatch from 2020–2024

- "Western Alaska" (WAK) chum salmon are those fish that return to river systems from Kotzebue Sound in the north, down through Bristol Bay

Section 3.3.4.1.2

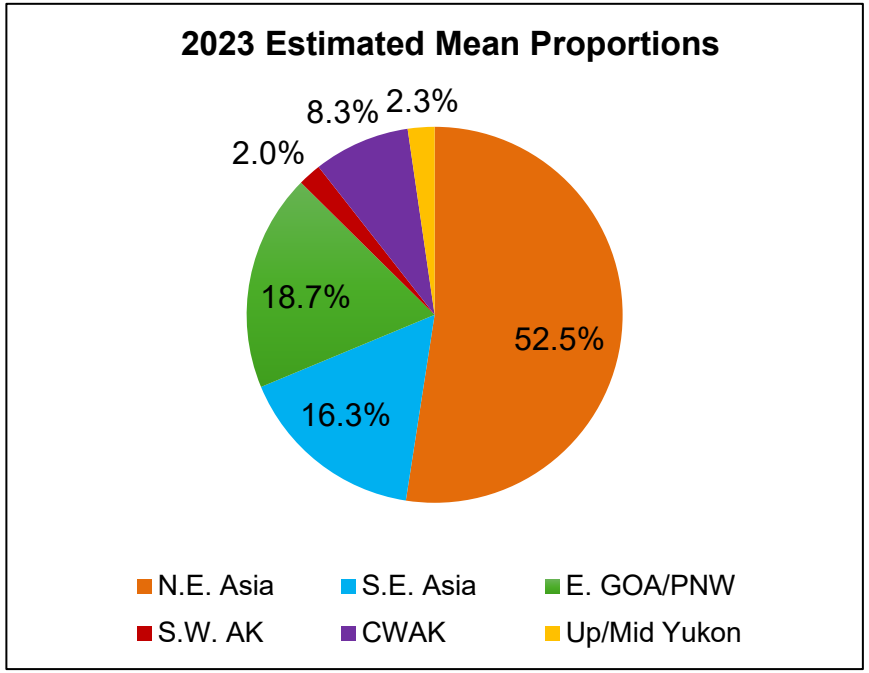


Figure 1-2 Genetic stock composition estimates (left) from each reporting group for the 2023 pollock B season

Year	Total Chum Salmon Bycatch (Number of Fish)	Percentage of Total Chum Salmon Bycatch of Western Alaska Origin	Western Alaska Chum Salmon Bycatch (Number of Fish)
2020	343,094	9.1%	31,222
2021	545,901	9.4%	51,512
2022	242,309	23.0%	55,724
2023	111,852	10.6%	11,491
2024	32,081	8.3%	2,658

Overview of the Bering Sea pollock fishery's chum salmon bycatch and Western Alaska chum salmon bycatch in each year from 2020 through 2024

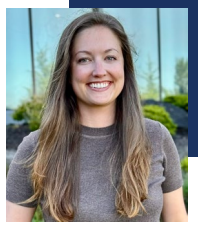
Other objectives in the purpose and need statement

Section 1.1

"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****."*

- ~~PURPOSE AND NEED STATEMENT (SECTION 1.1)~~
- DESCRIPTION OF THE ALTERNATIVES (CHAPTER 2)
- IMPACT ANALYSIS (CHAPTERS 3 AND 4)
  - Alternative 1
  - Alternative 2
  - Alternative 3
  - Alternative 4
  - Alternative 5
- IMPACTS FROM A COMBINATION OF ALTERNATIVES
- COMPARISON OF ALTERNATIVES (SECTION 2.8)
- MANAGEMENT, MONITORING AND ENFORCEMENT (CHAPTER 5)
- FINAL POINTS AND NEXT STEPS

WHERE ARE WE AT?



Overview of the alternatives

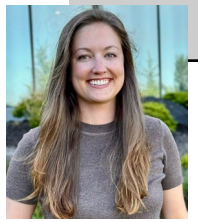
Section 2.2

- Alternative 1: No Action
- Alternative 2: Overall chum salmon hard cap
- Alternative 3: Overall chum salmon hard cap with abundance indices
- Alternative 4: Changes to IPA regulations
- Alternative 5: Inseason corridor triggered by area-specific chum cap

  Apply to the B season fishery (June 10 – November 1) when >99% of the pollock fishery's chum salmon bycatch occurs

History of this action and the alternatives under consideration

Alternative	Origin of Concept	Summary of Council Actions
1	Required by Federal law	
2	WAK representatives on the Salmon Bycatch Committee (April 2023)	Adopted for preliminary analysis (April 2023); blended bycatch rate for apportionments (October 2023); CDQ reserve pool apportionment suboption (February 2025)
3	Concept from WAK representatives on Salmon Bycatch Committee; Recommended Three-area index to trigger hard cap and Amounts Reasonably Necessary for Subsistence be considered to determine abundance (April 2023)	Adopted for preliminary analysis (April 2023); thresholds for abundance and step-down provisions selected (October 2023); second index for abundance added for consideration (April 2024); hard cap range modified for Option 1 (April 2024); data source for the Kuskokwim area modified (February 2025)
4	Concept from pollock industry representatives on Salmon Bycatch Committee (April 2023)	Requested proposals from IPAs (October 2023); adopted provisions in IPA proposals for analysis (April 2024)
5	Concept from AP and public testimony (April 2024)	Adopted for analysis (April 2024); modified corridor options, cap amounts, and added Options 3 and 4 (February 2025)



Section 2.1

Reducing WAK chum salmon bycatch in the Bering Sea pollock fishery

Key considerations informing development of management alternatives

Why this action is being considered

- **Need:** Crises and collapses in chum salmon abundance affecting culture, food security, and access to traditional and commercial fisheries
- **Purpose**: Reduce WAK chum salmon bycatch in the Bering Sea pollock fishery

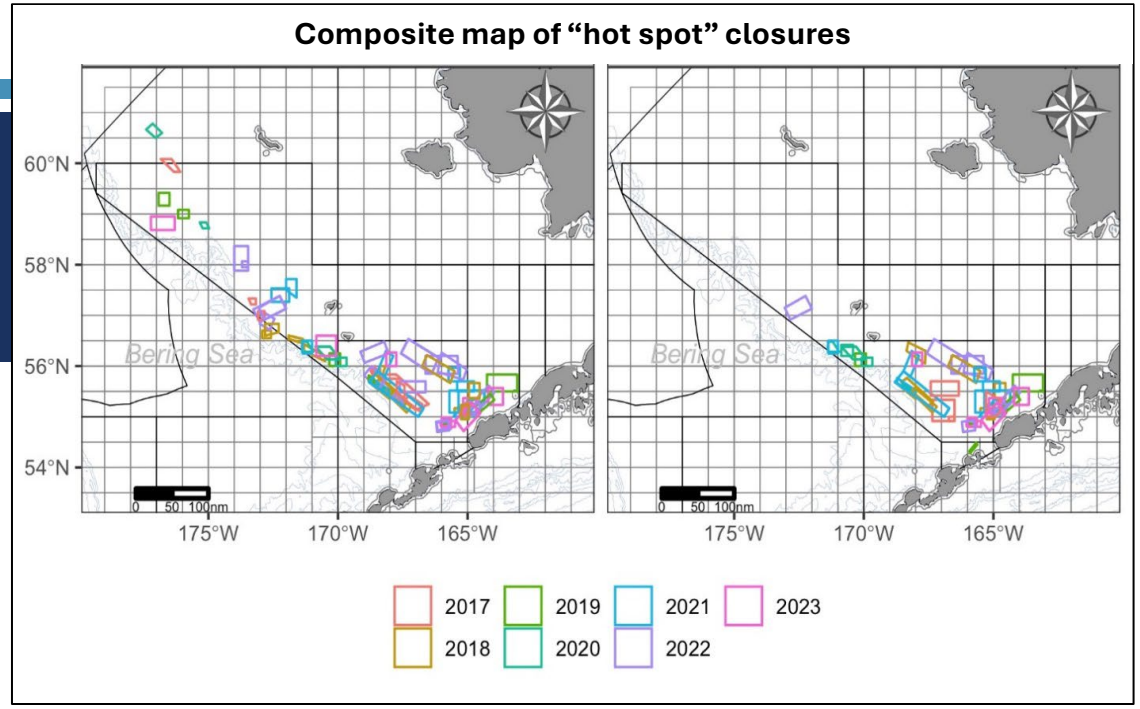
Some factors affecting the alternatives

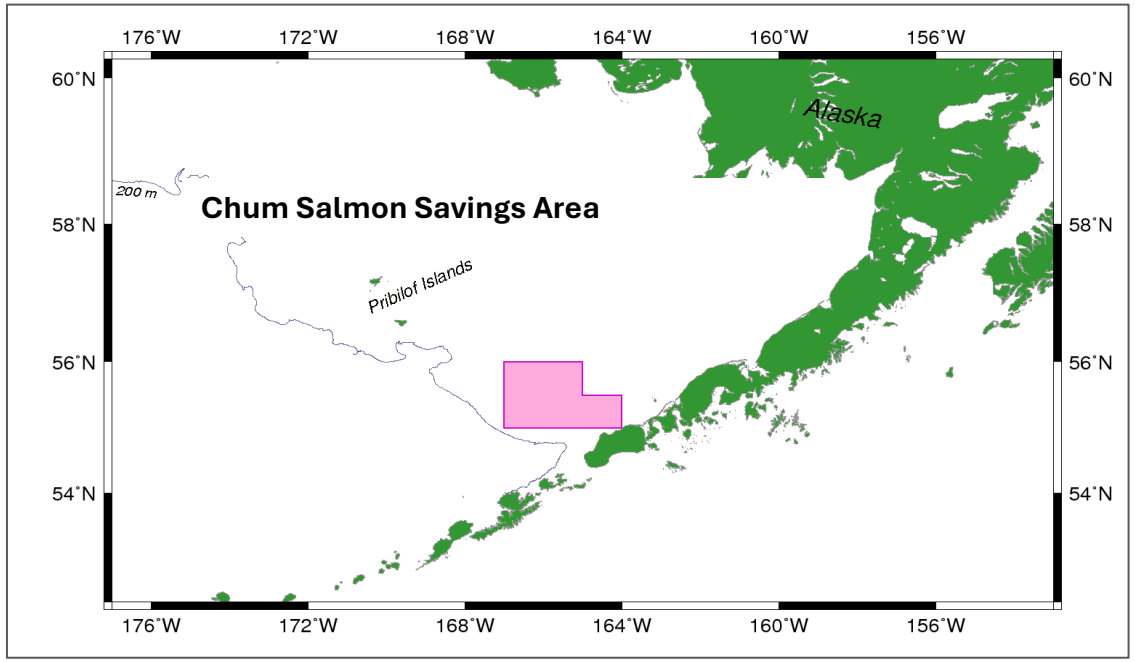
- **Stock composition**: Northeast Asia chum salmon account for 30–50%, and Southeast Asia chum salmon 9–20%, of the total bycatch
- **Scale of impact**: On average, 1.0% of the Yukon fall chum salmon run
- **Potential benefits**: WAK chum salmon bycatch reductions may promote benefits to communities, Tribes, and directed fisheries that rely on chum salmon
- **Costs**: Balancing the costs to the Bering Sea pollock fishery which could extend to the families, communities, businesses, and other fisheries that depend on it
- **Unintended consequences**: Minimizing the risk of increasing Chinook bycatch

Alternative 1, no action

Section 2.3

- If Alternative 1 is selected, the following management measures remain in place
- "Hot spot" system of short-term and moving area closures based on real-time bycatch data *(top panel)*
- If vessels participate in the hot spot system, they are exempt from the Chum Salmon Savings Area *(bottom panel)*
  - Fixed time/area closure





Alternative 2, overall hard cap on chum salmon bycatch

Section 2.4

- An overall hard cap would be in effect each pollock B season (June 10 – Nov 1)
  - Range being considered: 100,000 to 550,000 chum salmon
    - Council can recommend any number inside this range (see also Table 2-3)
  - All non-Chinook salmon caught as bycatch count towards the hard cap
  - The hard cap would close the B season early to the sector or cooperative that met it

Alternative 2 and 3, apportionment options

Section 2.4.1

- Four options and one suboption to apportion the hard cap are being considered
  - Option 1: percentage based on the sector's 3-year average level of bycatch (2020–2022)
  - Option 2: percentage based on the sector's 5-year average level of bycatch (2018–2022)
  - Option 3: pro rata percentage based on the sector's 3-year average (75%) and pollock allocation (25%)
  - Option 4: percentage based on the sector's pollock allocation
  - Suboption: CDQ reserve pool

Alternative 2 and 3, apportionment percentages

Section 2.4.1

- Blended bycatch rate used in Options 1-3 for CDQ and CP sectors
  - Combines these sectors' chum salmon bycatch and groundfish harvest in each year from 2011–2022 to create a new blended bycatch rate

Table 2-5 Sector apportionment percentages by option under Alternatives 2 and 3

Apportionment Option	CDQ	CP	Mothership	Inshore
Option 1: 3-Year Avg.	6.1%	21.9%	9.1%	62.9%
Option 2: 5-Year Avg.	7.1%	25.2%	9.5%	58.2%
Option 3: Pro Rata	7.1%	25.4%	9.1%	58.4%
Option 4: AFA	10.0%	36.0%	9.0%	45.0%

Alternative 2 and 3, inshore cooperative and CDQ group apportionments

Section 2.4.1

- CDQ apportionment divided among the 6 CDQ groups using their pollock allocation
- Inshore apportionment divided among active cooperatives using their pollock allocation in that year

CDQ group	Pollock allocation	Inshore cooperative	2022 pollock allocation
APICDA	14%	Akutan Catcher Vessel Assoc.	33.788%
BBEDC	21%	Arctic Enterprise Assoc.	0.000%
CBSFA	5%	Northern Victor Fleet Coop.	10.773%
CVRF	24%	Peter Pan fleet Coop.	2.512%
NSEDC	22%	Unalaska Fleet Coop.	11.454%
YDFDA	14%	UniSea Fleet Coop.	22.094%
		Westward Fleet Coop.	19.380%
		Inshore Open Access	0.00%

Alternative 2 and 3, transferability provisions

Apply to Alternative 5 as well

Section 5.2

- The Council has previously provided direction that PSC would be transferable under Alternatives 2, 3, and 5
  - Intended to provide vessels, cooperatives, and fishing sectors with more flexibility to utilize their B season pollock allocation
- Regulations at 50 CFR 679.21 would allow chum salmon (non-Chinook) PSC to be transferred between sectors, between inshore cooperatives, between CDQ groups, and among vessels within a cooperative
- See also Table 5-3 (p. 450) for a comparison of the existing salmon bycatch management tools adopted under amendments 91 and 110 to the BSAI Groundfish FMP to the tools proposed in the alternatives being considered in this action

Alternative 2 and 3, CDQ reserve pool suboption

Why:

- CDQ pollock can be harvested with any sector, but has primarily been harvested on CPs
- Therefore, chum salmon PSC from CDQ fishing has been based on CP encounter rates
- Concerns were highlighted that a PSC limit based on historical catch might constrain opportunities for CDQ groups to fish with other sectors

How:

- The CDQ reserve pool would provide a 'PSC limit adjustment' to a group that notified NMFS of an intent to harvest **all** of their CDQ pollock with a different sector (i.e., inshore or mothership) in **the subsequent B season.**
- Notification to NMFS prior to Nov 15 (*Recommendation by NMFS to change to Oct 15)
  - Would be an amount above the PSC limit and therefore not affect any other sector or group
  - All CDQ pollock for that group must be associated with a **single sector** for the B season and **changes could not be made inseason**.

Section 2.4.1.1; page 87- 91

Alternative 2 and 3, CDQ reserve pool suboption

Each sector's chum salmon PSC limit apportionment, pollock allocation, and ratio of chum to pollock % under Alternative 2 or 3.

CDQ			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	6.10%	10.00%	0.61
Option 2: 5-yr avg.	7.10%	10.00%	0.71
Option 3: Pro rata	7.10%	10.00%	0.71
Option 4: AFA	10.00%	10.00%	1.00

CP			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	21.90%	36.00%	0.61
Option 2: 5-yr avg.	25.20%	36.00%	0.70
Option 3: Pro rata	25.40%	36.00%	0.71
Option 4: AFA	36.00%	36.00%	1.00

Mothership			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	9.10%	9.00%	1.01
Option 2: 5-yr avg.	9.50%	9.00%	1.06
Option 3: Pro rata	9.10%	9.00%	1.01
Option 4: AFA	9.00%	9.00%	1.00

Inshore			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	62.90%	45.00%	1.40
Option 2: 5-yr avg.	58.20%	45.00%	1.29
Option 3: Pro rata	58.40%	45.00%	1.30
Option 4: AFA	45.00%	45.00%	1.00

Table 2-9; page 88

Alternative 2 or 3, CDQ reserve pool – an example

Mothership adjustment to PSC limit

CDQ Group - 14% CDQ pollock

Overall PSC limit	Option	Original limit	Limit with inshore adjustment	Difference
100,000	Opt 1: 3-yr avg.	854	1,416	562
	Opt 2: 5-yr avg.	994	1,478	484
	Opt 3: Pro-rata	994	1,416	422
	Opt 4: AFA	1,400	1,400	0
325,000	Opt 1: 3-yr avg.	2,776	4,601	1,825
	Opt 2: 5-yr avg.	3,231	4,803	1,572
	Opt 3: Pro-rata	3,231	4,601	1,370
	Opt 4: AFA	4,550	4,550	0
550,000	Opt 1: 3-yr avg.	4,697	7,786	3,089
	Opt 2: 5-yr avg.	5,467	8,128	2,661
	Opt 3: Pro-rata	5,467	7,786	2,319
	Opt 4: AFA	7,700	7,700	0

Table 2-13; page 90

Inshore adjustment to PSC limit

CDQ Group - 14% CDQ pollock

Overall PSC limit	Option	Original limit	Limit with inshore adjustment	Difference
100,000	Opt 1: 3-yr avg.	854	1,957	1,103
	Opt 2: 5-yr avg.	994	1,811	817
	Opt 3: Pro-rata	994	1,817	823
	Opt 4: AFA	1,400	1,400	0
325,000	Opt 1: 3-yr avg.	2,776	6,360	3,584
	Opt 2: 5-yr avg.	3,231	5,885	2,654
	Opt 3: Pro-rata	3,231	5,905	2,674
	Opt 4: AFA	4,550	4,550	0
550,000	Opt 1: 3-yr avg.	4,697	10,763	6,066
	Opt 2: 5-yr avg.	5,467	9,959	4,492
	Opt 3: Pro-rata	5,467	9,993	4,526
	Opt 4: AFA	7,700	7,700	0

Table 2-14; page 91

Alternative 2, 3, and 5, CDQ reserve pool - challenges

- **Notification timeline may not align with the identified intent.**
- CDQ representatives highlighted an interest in continuing to fish with CP partners. This option was included based on concerns around emergency or unforeseen situations.
- To take advantage of the flexibility would require early planning and commitment because PSC limits are set during harvest specifications.
  - Deadline of November 15
    - *NMFS recommends Oct 15 to align with publication of final specifications (Section 5.1.2, page 443)
  - Commitment of group's full quota, with no mid-season changes
- Based on the concerns highlighted, this suboption is unlikely to be used much, if at all.

Section 3.3.4.4.1; page 199-200

Alternative 2, 3, and 5, CDQ reserve pool – internalized

- **CDQ reserve pool concept could be internalized among CDQ groups through contractual agreements.**
- **IF** the Council wanted to select a specific amount of a PSC limit to designate/ encourage as this buffer, it **could** choose an additional amount above the PSC limit
  - Example: 200,000-chum salmon PSC limit, with 5,000 chum salmon 'CV buffer' added to the CDQ apportionment (essentially a 205,000-chum salmon PSC limit)
- NMFS would apportion any additional amount among CDQ groups in proportion to their pollock allocation through the annual specifications and not manage this buffer in season.
- However, CDQ contracts could develop restrictions around the specific conditions under which this additional limit could be accessed (e.g., if a CDQ group harvested with a CV sector).
- To access this buffer, a CDQ group that meet the specific conditions, would receive a transfer of the limit from the other CDQ groups.
- Council **could** consider additional regulatory reporting elements to provide transparency around the restrictions on this buffer.
  - Example: Regulation could require CDQ groups submit a framework agreement signed by all groups stipulating the conditions under which a CDQ group could access this additional limit.
  - If the CDQ buffer is used, regulations could require CDQ groups annually report on the level of the buffer that was used and the conditions for its use.

This is not a specific option from the Feb 2025 motion, but could fit within the scope of Alt 2, 3, or 5 as long as the total amount of the PSC limit falls within the range of chum salmon PSC limits considered.

Section 5.1.2; page 443

Alternative 3, overall chum salmon hard cap with abundance indices

Section 2.5

- Hard cap triggered by low WAK chum salmon abundance in the Yukon, Kuskokwim, and Norton Sound areas
  - Apportionment options are the same as Alternative 2
- Option 1: Three-area index for the Yukon, Kuskokwim, and Norton Sound areas
  - Hard cap range: 75,000 to 550,000 chum salmon and divided among sectors
- Option 2: Yukon Area index
  - Hard cap range: 100,000 to 550,000 chum salmon and divided among sectors

Option 1, Three-area index assessment by area

Section 2.5.1

1. Yukon Area
   - Yukon summer and fall chum salmon run reconstructions
     - Provide a reliable assessment of drainagewide abundance
2. Kuskokwim Area
   - Kuskokwim sonar (previously Cumulative CPUE Bethel Test Fishery)
     - Funding concerns for the test fishery; sonar has a strong relationship with the test fishery, reliable funding, well aligned with LK and TK in the region
3. Norton Sound Area
   - Standardized index of escapements for the Snake, Nome, Eldorado, Kwiniuk and North Rivers + total harvest for Norton Sound
     - Represents chum salmon returns across several management subdistricts

Option 1, Three-area index abundance thresholds

Section 2.5.1

- Suboption 1 = 25th percentile
- Suboption 2 = 50th percentile

Represent historically poor years of chum abundance using data from 1992–2022 (Table 2-15)

  - Yukon *(run reconstruction)*
    - Suboption 1: 1,713,000 summer + fall chum salmon
    - Suboption 2: 2,781,400 summer + fall chum salmon
  - Kuskokwim *(sonar)*
    - Suboption 1: 151,636 chum salmon
    - Suboption 2: 306,017 chum salmon
  - Norton Sound *(standardized index + total harvest)*
    - Suboption 1: 57,300 chum salmon
    - Suboption 2: 91,500 chum salmon

Option 1, Three-area index step-down provisions

Section 2.5.2

- If 3/3 areas are above index threshold, a chum salmon hard cap would not be in effect the following B season
- If 2/3 areas are above index threshold, a chum salmon hard cap would be in effect the following B season
  - Hard cap set at an amount between 100,000 to 550,000 chum salmon
- If 1 or no areas are above index threshold, a chum salmon hard cap would be in effect the following B season
  - Hard cap set at 75% of the cap selected if 2/3 areas are above index thresholds

Option 2, Yukon area index thresholds and step-down provisions

Section 2.5.3

- Option 2 would implement an index based on the Yukon River summer and fall chum salmon based on the run reconstruction for each stock
- Suboptions are the same as Option 1 (25th and 50th percentile)

Thresholds

- Yukon summer chum salmon
  - Suboption 1: 1,268,700 chum salmon
  - Suboption 2: 1,978,400 chum salmon
- Yukon fall chum salmon
  - Suboption 1: 444,600 chum salmon
  - Suboption 2: 803,000 chum salmon

Runs are not summed

Step-down provisions

- If 2/2 stocks have returns above thresholds, a hard cap would not be in effect during the following B season
- If 1 or 0 stocks have returns below thresholds, a hard cap would be in effect the following B season
  - Set at an amount between 100,000 to 550,000 chum salmon

Alternative 4, additional regulatory requirements for the IPAs

Section 2.6

- 6 provisions would be added to IPA regulations at 50 CFR 679.21(f)(12)(iii)(E)
- Further prioritize avoidance of areas and times of highest proportion of coastal Western Alaska and Upper/Middle Yukon chum salmon stocks
- Provisions would apply equally across the IPAs, but each IPA can choose how to meet them
- Each IPA has recently been voluntarily amended with new measures that closely align with the six provisions under Alternative 4
  - CP IPA was amended in 2022 and the Inshore SSIP and MSSIP were amended in 2024
- Annual reporting requirements would not change, and revisions to the IPAs would continue to undergo approval by NMFS

Alternative 4 provisions

Section 2.6

1. Require the pollock sectors to describe in their IPA how genetic stock composition data are included in chum salmon avoidance measures
2. Require the pollock sectors to describe in their IPAs how they monitor for potential chum salmon avoidance closures more than once per week
3. Require the use of salmon excluders for the duration of A and B season
4. Require the pollock sectors to develop chum salmon vessel outlier provisions and implement within their IPA
5. Require IPAs to provide weekly salmon bycatch reports to Western and Interior Alaska salmon users to allow for more transparency in reporting
6. Require IPAs to prohibit fishing in bycatch avoidance areas for all vessels regardless of performance when ADF&G weekly stat area bycatch rates exceed 5 chum per ton of pollock (CP) and 3 times base rate (CV and MS)

Alternative 5, Inseason corridor cap

Section 2.7.1

- Alternative 5 would implement a time/area closure triggered by a bycatch cap
- Three inseason corridor options under consideration
- Corridor bycatch cap range: 50,000 to 350,000 chum salmon
  - Only chum salmon caught inside the corridor between June 10 – August 31 accrue towards the cap
  - Closure would take effect if the corridor cap is met prior to August 31 and remain in effect until September 1
- Four apportionment options and CDQ reserve pool suboption *(same as Alternative 2 and 3)*

Alternative 5, inseason corridor boundary

Section 2.7.1

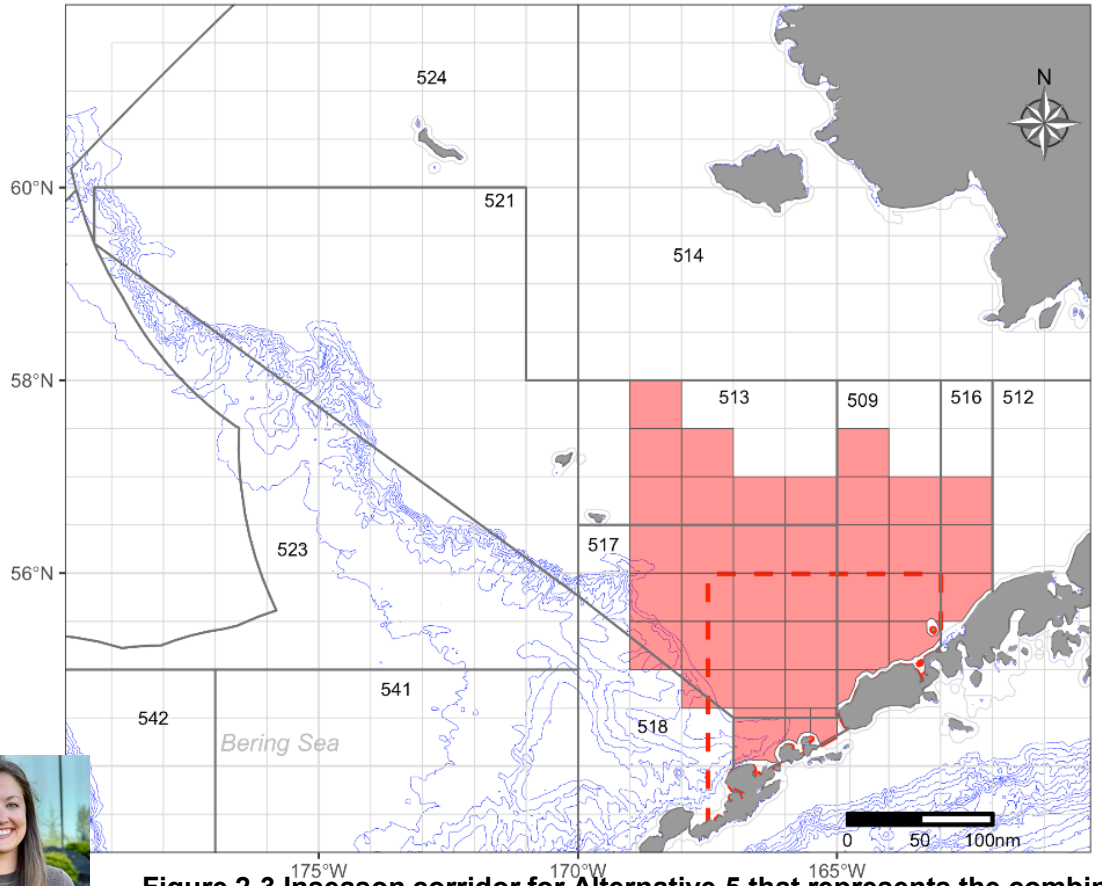


Figure 2-3 Inseason corridor for Alternative 5 that represents the combined area of genetic clusters 1 and 2
Notes: The CVOA is shown by the dashed line.

- Boundary is the same for all 3 inseason corridor options
  - All chum salmon taken inside the corridor count towards the bycatch cap
- Inseason corridor is the combined area of genetic cluster areas 1 and 2
  - 40 stat areas
  - ~84% of the WAK chum salmon caught as bycatch from 2011–2023

Alternative 5, Option 1 for an inseason corridor

Section 2.7.1

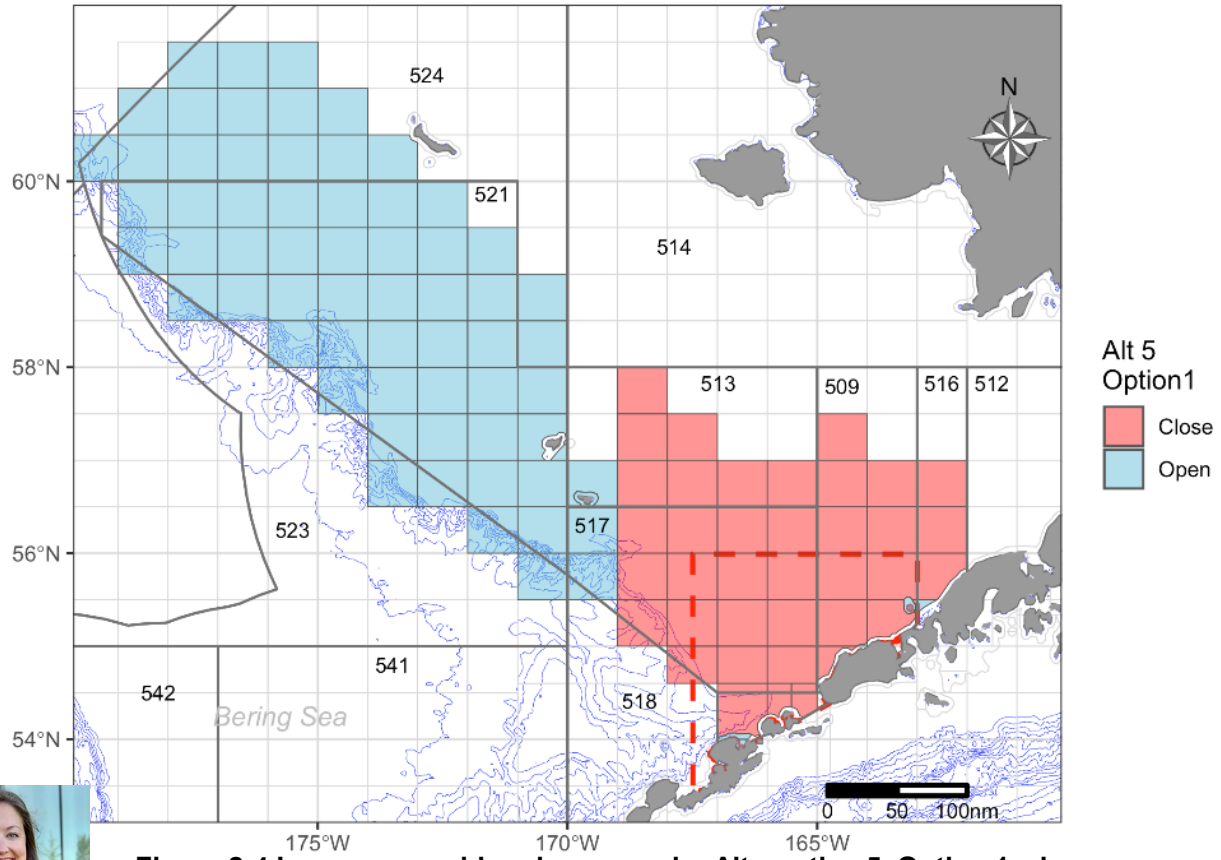


Figure 2-4 Inseason corridor closure under Alternative 5, Option 1 where ADF&G groundfish stat areas to close are shown in red and historic fishing areas exempt from closure are shown in blue

- **40 corridor stat areas** (red) would close to a sector or cooperative that met the corridor bycatch cap
- Vessels impacted by the corridor closure could continue fishing outside through August 31
- Impacted vessels could return to fish inside the corridor on September 1

Alternative 5, Suboption 1 for an inseason corridor

Section 2.7.2

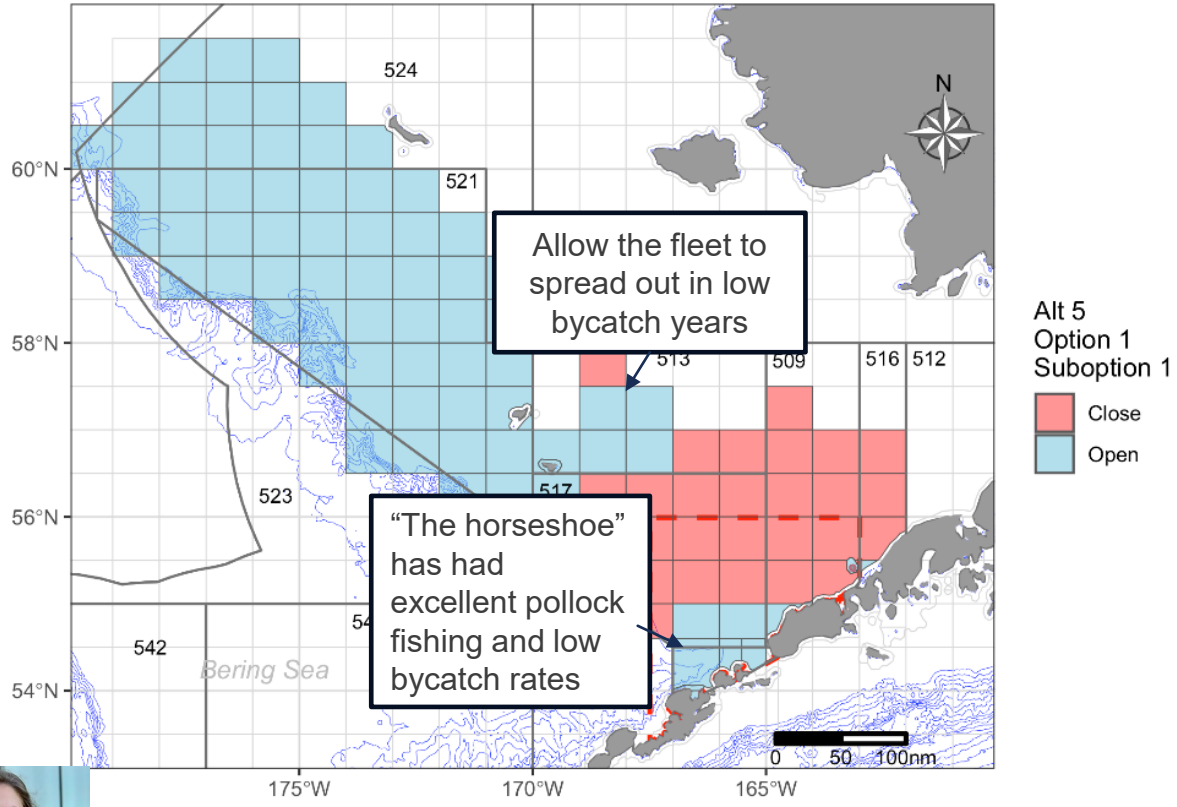


Figure 2-5 Inseason corridor closure under Alternative 5, Suption 1 where ADF&G groundfish stat areas to close are shown in red and areas exempted from closure are shown in blue

- **29 corridor stat areas** (red) would close to a sector or cooperative that met the corridor bycatch cap
- 11 corridor stat areas (blue) exempt from closure are historically important fishing grounds
- Impacted vessels could continue fishing inside any open stat area (blue) through August 31
- Impacted vessels could return to fish inside the 29 closed stat areas on September 1

Alternative 5, Option 2 for an inseason corridor

Section 2.7.3

- Between 19 and 29 stat areas would close to a sector or cooperative that met the corridor bycatch cap
- IPAs would select the stat areas to close, and could change selections year-to-year but not inseason
  - Based on historical chum salmon bycatch, pollock CPUE, and relevant salmon bycatch genetics data
- Impacted vessels could continue fishing inside any open stat area through August 31, and return to fish inside all corridor stat areas on September 1
- Intended to be more responsive to on-water conditions and environmental changes

Alternative 5, comparison of the corridor options

- The three inseason corridor options differ from one another based on the number and location of stat areas inside that would close and the entity that would implement the closure

Table 3-53 Summary of primary differences among the inseason corridor options under Alternative 5

Option	Number of Stat Areas Closed	Entity Managing the Closure
Option 1	40	NMFS
Suboption 1	29	NMFS
Option 2	19 to 29	IPAs

Alternative 5, apportionment options

- Four options and one suboption to apportion the hard cap are being considered
  - Same as Alternative 2 and 3
    - Implications are different
      - A blended bycatch rate for the CP and CDQ sectors was not used
      - Percentages are based on a sector's PSC inside the corridor from June 10 – August 31

Section 2.7.4

Table 2-20 Sector apportionment percentages by option under Alternatives 5

Apportionment Options	CDQ	CP	Mothership	Inshore
Option 1: 3-Year Average	7.2%	11.7%	10.3%	70.8%
Option 2: 5-Year Average	6.4%	13.9%	8.7%	71.0%
Option 3: Pro Rata	7.9%	17.7%	10.0%	64.4%
Option 4: AFA	10%	36%	9%	45%

Alternative 5, CDQ reserve pool suboption

Each sector's chum salmon PSC limit apportionment, pollock allocation, and ratio of chum to pollock % under Alternative 5

CDQ			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	7.20%	10.00%	0.72
Option 2: 5-yr avg.	6.40%	10.00%	0.64
Option 3: Pro rata	7.90%	10.00%	0.79
Option 4: AFA	10.00%	10.00%	1.00

CP			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	11.70%	36.00%	0.33
Option 2: 5-yr avg.	13.90%	36.00%	0.39
Option 3: Pro rata	17.70%	36.00%	0.49
Option 4: AFA	36.00%	36.00%	1.00

Mothership			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	10.30%	9.00%	1.14
Option 2: 5-yr avg.	8.70%	9.00%	0.97
Option 3: Pro rata	10.00%	9.00%	1.11
Option 4: AFA	9.00%	9.00%	1.00

Inshore			
Apportionment	**Chum %**	**Pollock %**	**Ratio**
Option 1: 3-yr avg.	70.80%	45.00%	1.57
Option 2: 5-yr avg.	71.00%	45.00%	1.58
Option 3: Pro rata	64.40%	45.00%	1.43
Option 4: AFA	45.00%	45.00%	1.00

Table 2-24; page 107

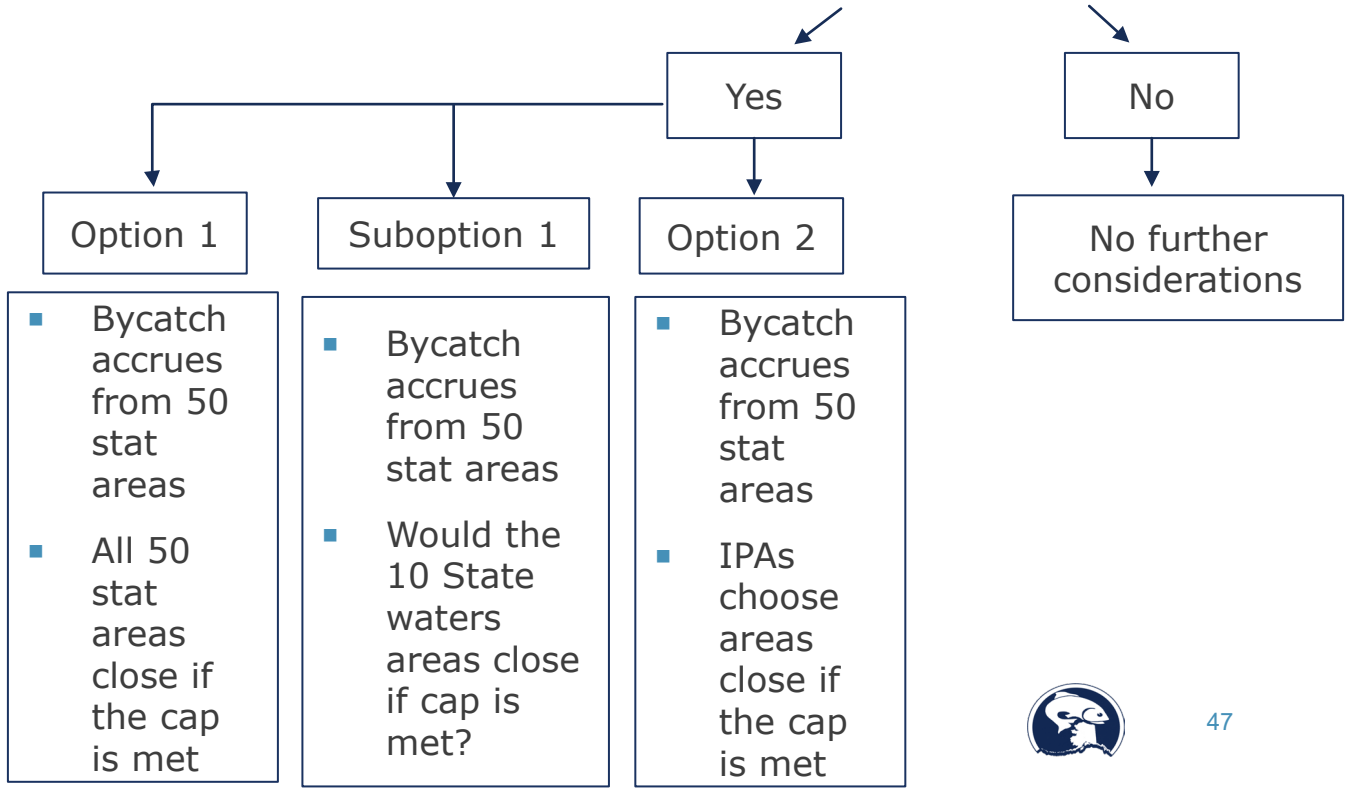
Alternative 5, proximate stat areas in state waters

- 10 stat areas proximate to the inseason corridor but not included within it
- **Issue being raised:** as written, fishing could continue inside these stat areas if the corridor cap is met
- **Main consideration:** whether allowing directed fishing to continue inside these stat areas is consistent with the Council's intent for Alt. 5

The Council is not required to take action on this issue

Section 2.7.5
Appendix 2

Does the Council want to modify the inseason corridor?



Alternative 5, Option 3 abundance-based threshold

Section 2.7.6

- Abundance-based threshold that would ***suspend*** the inseason corridor and closure provisions, if the Yukon River summer and fall chum salmon run reconstructions are at or above index values
- Suboption 1 – thresholds set at 75th percentile of historical abundance (1992–2022)
  - Yukon summer chum salmon: 2,671,450 chum salmon
  - Yukon fall chum salmon 1,150,758 chum salmon
- Suboption 2 – thresholds set at 90th percentile of historical abundance (1992–2022)
  - Yukon summer chum salmon: 3,871,700 chum salmon
  - Yukon fall chum salmon 1,390,329 chum salmon

Can only be selected as a component of Alternative 5

Alternative 5, Option 4 adjust the Winter Hering Savings Area start date

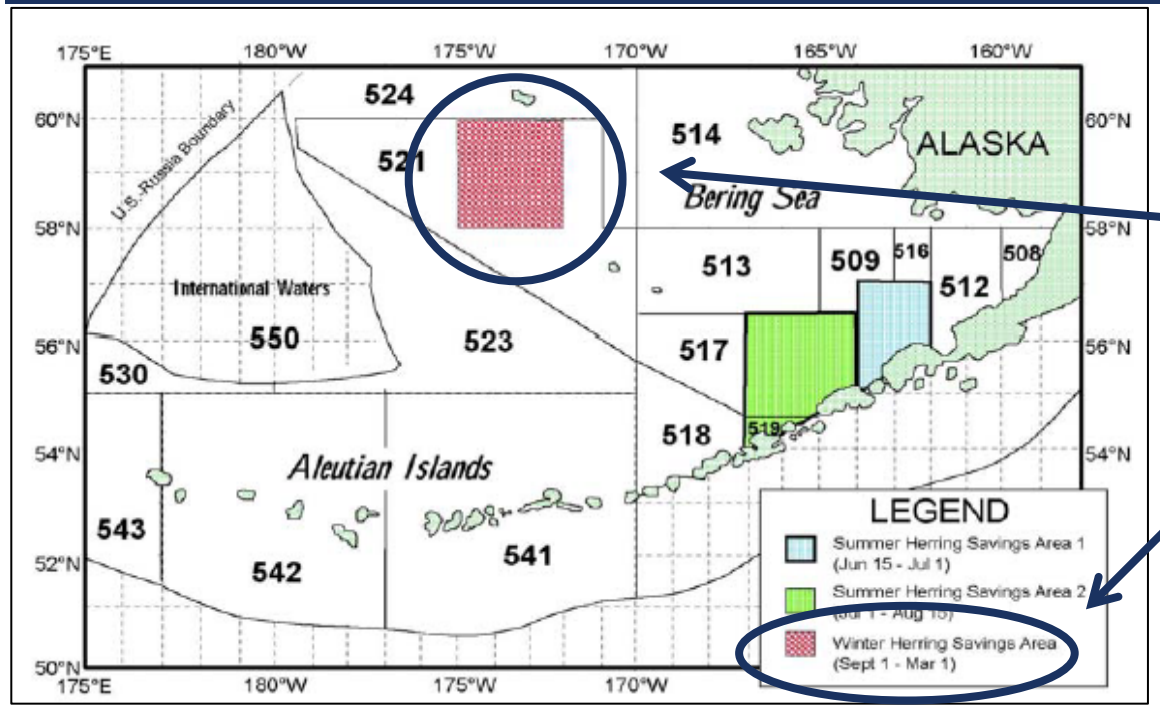


Figure 3-52 Herring Savings Areas

Section 2.7.7

- Adjust the start date for the Winter HSA from September 1 to September 30
  - No other changes to herring PSC management
- Provide additional flexibility late in the B season to avoid multiple PSC species

Can only be selected as a component of Alternative 5

Herring PSC managed in the BSAI groundfish trawl fisheries with a PSC limit set at 1% of the spawning stock biomass and triggered time/area closures

Alternatives considered but not moved forward

Overall chum salmon PSC limits (hard caps) below 100,000 chum salmon

- Recommendation from the Salmon Bycatch Committee (Apr. 2023) and NMFS supplement (Apr. 2024)
- Not considering hard caps below 100,000 chum salmon in light of the National Standards

WAK chum salmon performance threshold

- Not feasible because it intended to use each sector's actual WAK bycatch
- Real-time genetic data for the pollock fleet are not available
- Neither vessels nor sectors would know if they had exceeded the threshold in-year

Cluster 1, Unimak, and Cluster 2 inseason corridors

- Feb. 2025 analysis indicated a Cluster 1 or Unimak corridor closure had a high risk of increasing chum/WAK chum salmon bycatch

Alternatives that may or may not be combined in a PA

Section 2.8

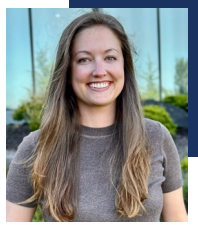
- Alternative 1 cannot be combined with any other alternative
- Alternative 2 can be combined with Alternative 4 and/or Alternative 5
  - Cannot be combined with Alternative 3
- Alternative 3 can be combined with Alternative 4
  - Cannot be combined with Alternative 2
  - Can be combined with Alternative 5 IF Option 3 of Alternative 5 is not included
- Alternative 5 can be combined with Alternative 2 and 4
  - Can be combined with Alternative 3 IF Option 3 is not included

Table 2-32 contains more detail

Decision points covered at the end of the presentation

- ~~PURPOSE AND NEED STATEMENT (SECTION 1.1)~~
- ~~DESCRIPTION OF THE ALTERNATIVES (CHAPTER 2)~~
- IMPACT ANALYSIS (CHAPTERS 3 AND 4)
  - Alternative 1
  - Alternative 2
  - Alternative 3
  - Alternative 4
  - Alternative 5
- IMPACTS FROM A COMBINATION OF ALTERNATIVES
- COMPARISON OF ALTERNATIVES (SECTION 2.8)
- MANAGEMENT, MONITORING AND ENFORCEMENT (CHAPTER 5)
- FINAL POINTS AND NEXT STEPS

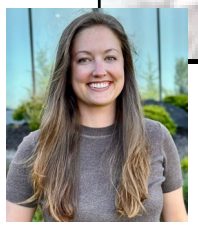
WHERE ARE WE AT?



ALTERNATIVE 1

Alternative 1, overview of the information available for salmon bycatch

Category	Data or methods used	Where can I find more information?
Total salmon bycatch	• NMFS certified observer census data	• Section 3.1.1 and 5.1.1
Genetic stock identification (i.e., Western Alaska salmon)	• NMFS certified observer census data • Observer collected biological samples (1 in 10 Chinook or 1 in 30 chum salmon) • Analyses by Auke Bay Labs geneticists	• Section 3.1.2
Estimates of adult equivalent salmon	• NMFS certified observer census data • Observer collected biological samples + genetic analyses • Age of fish, maturation, and natural mortality • May be used to help evaluate bycatch impact if run size data is available	• Section 3.1.2 and Appendix 3



Alternative 1, summary of historical chum salmon bycatch trends

Annual variability

- Total B season bycatch varies each year (Table 3-25), with peaks typically observed in August (Table 3-26)

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WAK chum salmon

- Make up 9.1% to 25.1% of the total bycatch, ranging from ~4,700 to ~93,000 chum salmon (Table 3-28)

Hotspots

- Chum salmon were encountered across the fishing grounds, with higher levels typically observed near the Alaska Peninsula (Table 3-27)

Timing and location of WAK bycatch

- Make up more of the total bycatch from June – August and closer to the Alaska Peninsula (Table 3-20)

Sections 3.3.4.1.1 and Section 3.3.4.1.2

Alternative 1, summary of adult equivalent (AEQ) chum salmon bycatch

An AEQ analysis provides a means of answering, "*how many, and in what year, may the salmon have returned had they not been taken as bycatch?*"

AEQ estimates

- **Account for** genetics, age, maturation, and natural mortality (Table 3-32)

- **Do not account for** other in-river or marine mortalities

Table 3-32 from the DEIS, *abbreviated*
Estimated number of AEQ chum salmon

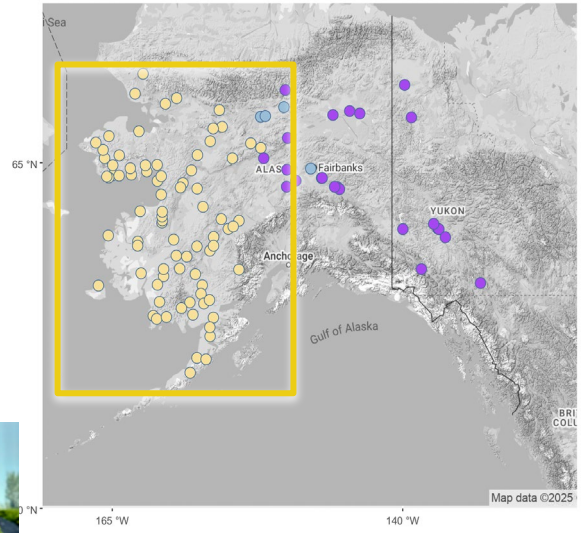
Year	Reporting Group	Mean AEQ
2011	CWAK	21,815
2012	CWAK	11,539
2013	CWAK	20,812
2014	CWAK	31,754
2015	CWAK	30,896
2016	CWAK	51,841
2017	CWAK	69,403
2018	CWAK	55,845
2019	CWAK	53,554
2020	CWAK	25,702
2021	CWAK	32,675
2022	CWAK	50,885
2011	Upper/Mid Yukon	10,585
2012	Upper/Mid Yukon	3,088
2013	Upper/Mid Yukon	2,641
2014	Upper/Mid Yukon	3,134
2015	Upper/Mid Yukon	5,247
2016	Upper/Mid Yukon	11,834
2017	Upper/Mid Yukon	16,415
2018	Upper/Mid Yukon	7,946
2019	Upper/Mid Yukon	2,452
2020	Upper/Mid Yukon	2,175
2021	Upper/Mid Yukon	5,007
2022	Upper/Mid Yukon	2,615

Sections 3.13 and 3.3.4.1.3

Limitations of the available information to determine an impact rate for the CWAK reporting group

- An AEQ analysis is not a complete assessment of the potential impact bycatch may have on WAK chum salmon populations
  - Impact rate = AEQ/(AEQ + run size)
  - Methods used are the same as February 2025

Section 3.1.2



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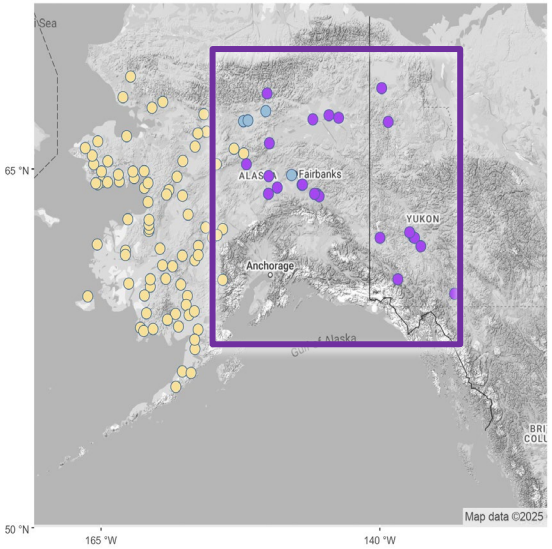
An impact rate is not available for the CWAK reporting group



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An impact rate is available for the Upper/Mid Yukon reporting group

Alternative 1, summary of impacts on WAK chum salmon bycatch

Proposed alternatives aim to reduce bycatch and its subsequent impact from these levels:

Section 3.3.4.1.3

CWAK

- Bycatch averaged 1.75% of all CWAK chum salmon removals
  - Commercial harvests averaged 89.44% and subsistence averaged 8.81% of total removals
  - See Table 3-33 and Figure 3-19

Upper/Mid Yukon

- Average impact of bycatch was 1.0% of the Yukon fall chum run (Figure 3-20)
  - Ranged between 0.22% (2013) and 4.94% (2021)

Neither method accounts for other marine mortalities/ harvests, and the effect would be to decrease the pollock fishery's impact

Alternative 1, current bycatch avoidance and mitigation strategies

Current bycatch avoidance/mitigation strategies

(Can differ by sector due to operational differences)

- Cooperative fishing
- IPA incentives
- RHS program
- Fishing location/fleet movement
- Fleet communication
- Test fishing/tows
- Excluder use
- Live feed camera systems (all CPs and 6 CVs)

Section 3.3.4.4.3

Alternative 1, impacts to Western and Interior Alaska chum salmon users and regions

Section 4.5.1, pg. 413-415

"The act of going to fish camp, preparing camp, fishing, and processing fish is hard, physical activity. From dusk to dawn, families are working. [This] helps families stay busy and maintain focus in the present moment, which is ideal for mental health" (TCC to U.S. Senate 2023:18).

Section 4.4 - Western Alaska chum salmon subsistence and commercial fisheries trends

- Section 4.3.3.2 (primarily co-authored by TCC and KRITFC) describes the importance of chum salmon for Indigenous Peoples in the Yukon and Kuskokwim Regions.

Appendix 8 (authored by KRITFC) and Appendix 9 (authored by TCC) provides additional context on the role of chum salmon and the widespread impacts of the chum salmon declines.

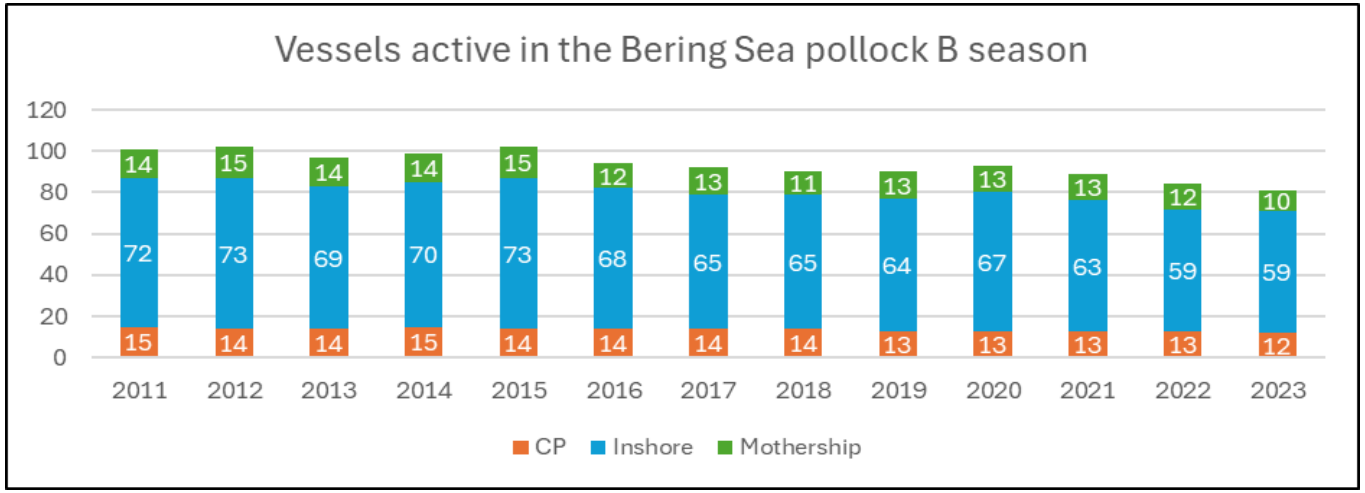
Selection of Alternative 1 would retain existing chum salmon bycatch regulations. Existing conditions – chum salmon abundance or pollock fishing behavior – could change in the future, but the choice of Alternative 1 would not inherently drive these changes.

Alternative 1, impacts to pollock fishery and communities

Section 4.3.1, pg.329

Section 4.2 – Current pollock fishery participation and conditions

- Section 4.2.1 AFA vessels, harvests, diversification, associated processors communities, and market conditions
- Section 4.2.2 CDQ groups and communities, AFA investments, and community benefit programs



Challenging market dynamics, changing operational costs, and other external factors may affect the pollock fishery and communities in the future, but the choice of Alternative 1 (maintaining current regulations) would not inherently drive these changes.

Alternative 1, Chinook salmon bycatch

- On average, 47% of the Chinook bycatch were coastal WAK fish
  - Encountered in both the A and B season
- More prevalent on the fishing grounds in September and October (Figure 3-40)
- Upper Yukon reporting group impact rate was less than 1.0% (except 2022), and averaged 2.02% for combined WAK stocks
- Proposed alternatives could have a wide range of subsequent impacts to Chinook salmon from these levels

Section 3.4.1.1

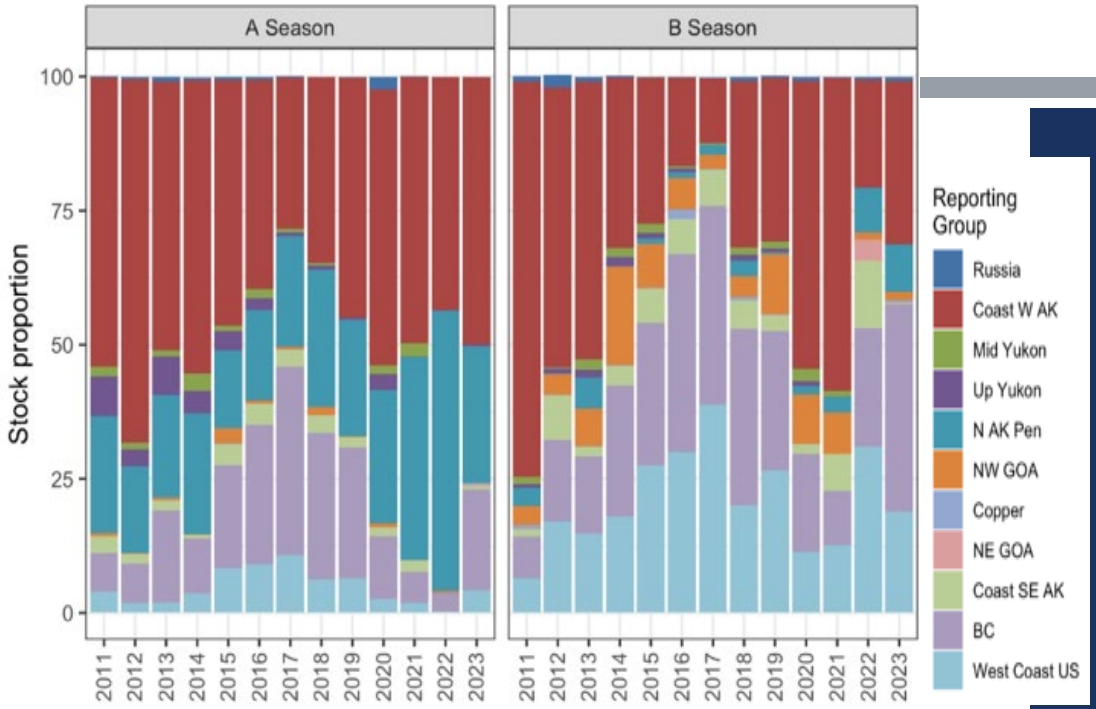


Figure 3-43 Regional stock composition estimates of Chinook salmon bycatch in the Bering Sea pollock fishery during the A (left) and B (right) seasons, 2011–2023

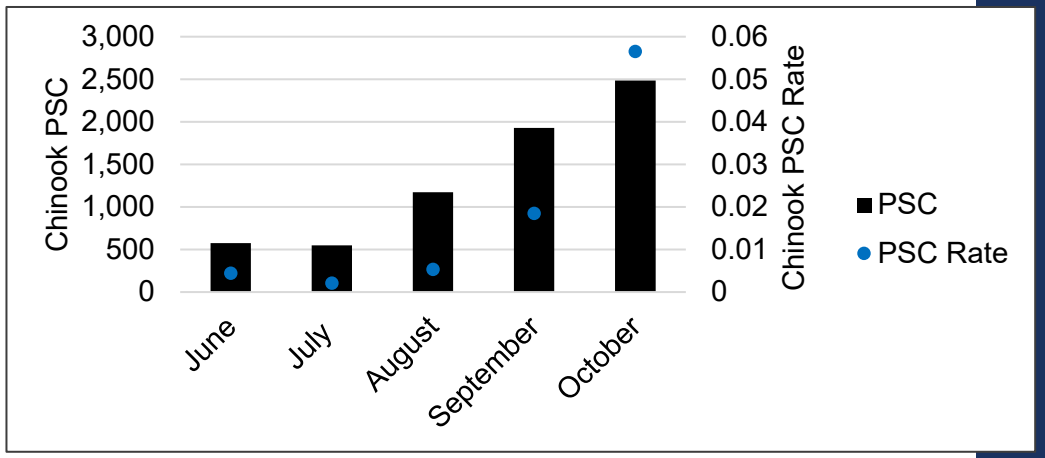


Figure 3-40 Average monthly Chinook salmon PSC (black) and PSC rate (blue) for each month of the pollock B season, 2011–2023

ALTERNATIVE 2 AND 3

Section 3.3.4.2.1

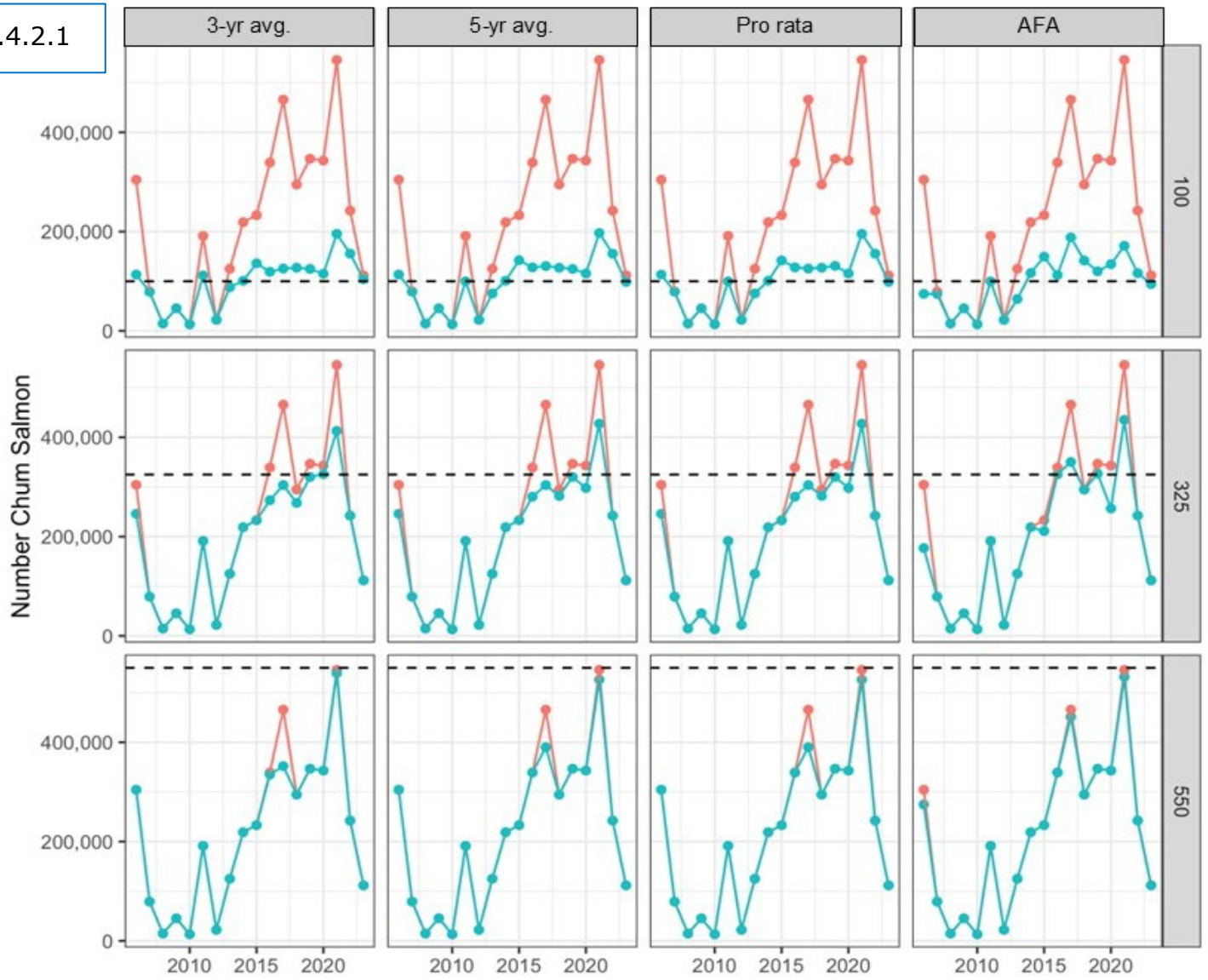


Figure 1-4 Historical B season chum salmon bycatch (red line) compared to the estimated chum salmon bycatch (blue line) as if an overall chum salmon PSC limit amount of 100,000-, 325,000-, and 550,000-chum salmon (black dotted line) and apportionments were in place from 2011–2023

Alternative 2 and 3, total chum salmon savings

Not accounting for genetics, age, maturation, and natural mortality

Alternative 2 and 3, comparison of chum salmon bycatch reductions

Table 2-33 Comparison of the average mean AEQ reductions for the CWAK and Upper/Middle Yukon reporting groups, average chum salmon PSC reductions, and potentially forgone pollock (mt) under the analyzed chum salmon PSC limits and apportionment options.
A stochastic model was used for AEQ estimation.

PSC Limit	Apportionment	AEQ CWAK (# of fish)	AEQ Up/Mid Yukon (# of fish)	Chum PSC (# of fish)	Forgone Pollock (mt)
100,000	Option 1: 3-Year Avg.	21,519	3,391	150,355	272,620
	Option 2: 5-year Avg.	21,612	3,437	150,937	271,872
	Option 3: Pro Rata	21,652	3,448	151,009	271,777
	Option 4: AFA	21,303	3,308	149,945	266,531
325,000	Option 1: 3-Year Avg.	4,780	821	33,223	79,252
	Option 2: 5-year Avg.	4,504	798	32,614	61,735
	Option 3: Pro Rata	4,529	807	60,568	114,651
	Option 4: AFA	3,341	568	28,348	54,811
550,000	Option 1: 3-Year Avg.	1,700	357	9,564	21,116
	Option 2: 5-year Avg.	1,172	233	7,315	27,663
	Option 3: Pro Rata	1,154	235	7,330	28,503
	Option 4: AFA	292	48	2,210	15,741

Sections 2.8.3 and 3.3.4.2.2

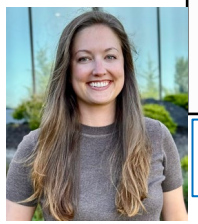
- Apportionment option did not drive bycatch reductions
  - Marginal effect on the estimates for AEQ bycatch reductions
- Tables 3-34, 3-36, 3-37, 3-45, 3-46, and 3-47 provide reductions for each analyzed year

Alternative 2 and 3, greatest reduction in the impact of bycatch from status quo – *2021*

- Hard cap of 100,000 chum salmon using AFA apportionment (Table 3-41)

The greatest reduction in the impact of bycatch was shown in 2021		
Reporting group	**CWAK**	**Upper/Mid Yukon**
Status quo	▪ 32,675 AEQ chum ▪ 7.70% of total removals	▪ 5,007 AEQ chum ▪ Impact rate was 4.94%
100,000 hard cap, AFA option	▪ Reduced AEQ bycatch by 21,538 chum salmon ▪ If the 2021 bycatch had been 11,145 AEQ chum salmon, that would have accounted for 2.63% of total removals	▪ Reduced AEQ bycatch by 3,298 chum salmon ▪ If the 2021 bycatch had been 1,709 AEQ chum salmon, the impact rate would have been 3.27% ▪ The 2021 impact rate would have been 1.73%

- Table 3-36 and 3-37 provide annual estimates for AEQ reductions



Sections 3.3.4.2.2.1 and 3.3.4.2.2.2

Alternative 2 and 3, potential reductions in the impact rate relative to status quo

Section 3.3.4.2.2.2

	Upper/Mid Yukon		Upper/Mid Yukon		
Year	AEQ (Status Quo)	Impact Rate (Status Quo)	AEQ Reduction	Impact Rate Reduction	New Impact Rate
2011	10,585	0.84%	4,938	0.39%	0.45%
2012	3,088	0.28%	1,116	0.10%	0.18%
2013	2,641	0.22%	1,124	0.09%	0.13%
2014	3,134	0.33%	1,443	0.15%	0.18%
2015	5,247	0.63%	2,042	0.25%	0.39%
2016	11,834	0.84%	7,152	0.51%	0.34%
2017	16,415	0.71%	9,927	0.42%	0.28%
2018	7,946	0.71%	4,422	0.39%	0.32%
2019	2,452	0.28%	1,346	0.16%	0.13%
2020	2,175	1.11%	1,321	0.69%	0.45%
2021	5,007	4.94%	3,298	3.27%	1.78%
2022	2,615	1.48%	1,569	0.88%	0.60%
Average	**6,095**	**1.03%**	**3,308**	**0.61%**	**0.44%**

- Table shows the AEQ and impact rate reductions under a hard cap of 100,000 chum salmon using the AFA option (Table 3-41)

- Average impact rate reduction under a 325,000 hard cap using AFA option was 0.21%
- Average impact rate reduction under a 550,000 hard cap using AFA option was 0.02%

Alternative 2 and 3, behavior changes that may increase chum salmon savings

Future bycatch avoidance/mitigation strategies

- Status quo avoidance measures used more aggressively
- IPAs could create PSC limit buffers
- Vessel-level apportionments
- Consolidation
- Voluntary stand-downs

Factors likely to influence future behavior

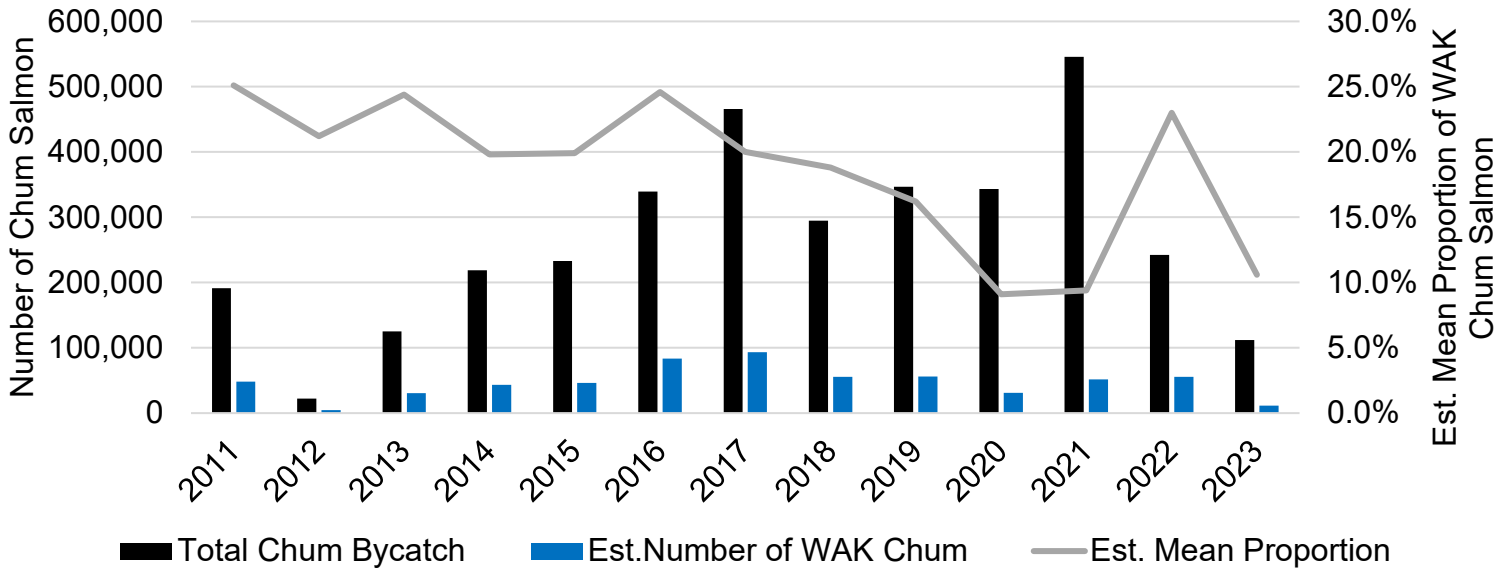
- Vessel/cooperative decisions driven by perceived risk of consequence
- Chum salmon encounters are dynamic
- A larger CV could catch between 0 and 8,000 chum salmon in one trip
- Strategies used to avoid salmon increase total costs associated with fishing (*i.e.*, avoidance costs)

Section 3.3.4.4.3

Alternative 2 and 3, uncertainty in WAK chum salmon savings

Section 3.3.4.2.2

Figure 3-21 Comparison of the total B season chum salmon bycatch, estimated number of WAK chum salmon, and estimated mean proportion of WAK chum salmon in the overall bycatch from 2011–2023



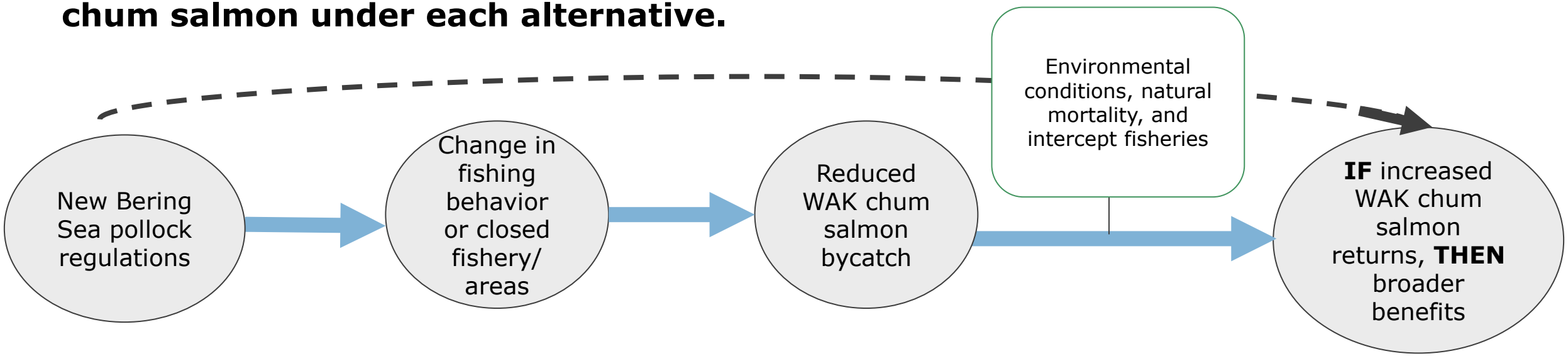
- An overall hard cap may not reduce WAK chum salmon bycatch compared to status quo
- Does not create a specific incentive for WAK chum salmon avoidance
- Proportion varies each year, variation in the spatial and temporal distributions, future changes in fishing behavior
- See also Table 3-49 and Figure 1-5 in the DEIS

Alternative 2 and 3, policy-level comparison

- Both expected to reduce the total bycatch compared to status quo
- **A hard cap would be in effect each year under Alternative 2 but not under Alternative 3**
- Hard cap would not have been in effect in consecutive years under Alternative 3 until there was a consistent decline (e.g., 2020)
- Alternative 3 would have a neutral impact on chum/WAK chum salmon bycatch in years the hard cap would not apply
- Impacts to chum/WAK chum salmon PSC in years the hard cap does not apply would be neutral
  - Option 1: hard cap applied in 3 or 6 years
  - Option 2: hard cap applied in 3 or 5 years

Alternative 2 and 3, impacts to Western and Interior Alaska chum salmon users

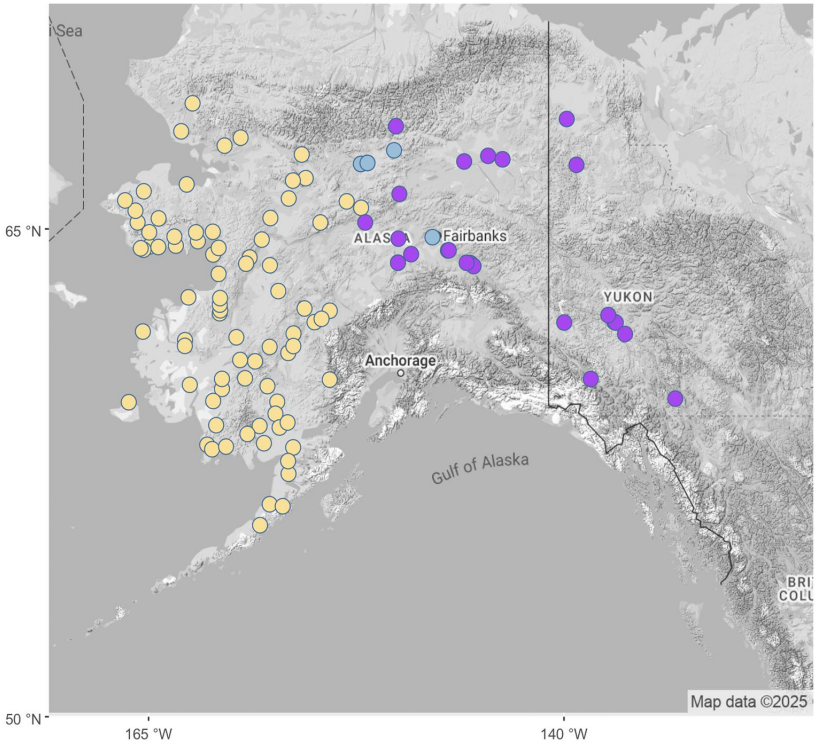
The potential impacts to communities, Tribes, and participants in directed chum salmon fisheries across Western and Interior Alaska are **an extension of the impacts to WAK chum salmon under each alternative.**



- **Any broader benefits to communities, Tribes and directed fisheries from reduced WAK chum salmon bycatch would depend on other factors affecting chum salmon returns, adding uncertainty to outcomes.**

Alternative 2 and 3, scale of potential benefits to Western and Interior Alaska chum salmon users

- Subsistence opportunities may be provided for Yukon fall chum salmon if run size **> 300,000 fish**
- Subsistence opportunities may be provided for Yukon summer chum salmon if run size **> 500,000 fish**



- Reductions in the AEQ bycatch for the CWAK group could be widely diffused across river systems
- Comparison of AEQ reductions in chum salmon relative to escapement goals demonstrate that potential benefits would largely manifest as incremental improvements of abundance, rather than increased subsistence or commercial fishing opportunities
- ***Reminders:*** the analysis cannot quantify the impact of expected changes in fishing behavior (which could increase AEQ savings), and chum salmon not caught in the pollock fishery could still face other at sea mortalities (which could diminish AEQ savings)

Section 4.5.2.1; page 415-422

Alternative 2 and 3, broader implications of potential WAK chum salmon savings to Western and Interior Alaska chum salmon users

Ecosystem and passive use benefits
Could be realized with any amount of additional chum salmon returns

If bycatch reduction efforts **aid in meeting escapement goals,** this could promote subsistence or commercial fishing opportunities

- Community benefits
- Indigenous values and culture
- Knowledge transfer
- Mixed economies
- Cumulative impacts throughout inriver ecosystem
- Food security and food sovereignty
- Mental, physical and emotional health

Section 4.5.5; page 425- 430

Alternative 2 and 3, impacts to the pollock fishery

Selection of chum salmon PSC limits (Alternative 2 or 3) would result in either neutral or adverse economic impacts to this fishery.

Types of adverse impacts that could result include:

- **Prior to a closure:** Change in the inherent risk associated with fishing. This could affect the decision to fish and process and increase operational costs from increased avoidance behavior and loss of efficiency, and
- **If/when a closure occurs:** Forgone revenue and broader implications across processors, communities, CDQ groups and support sectors.

Economic impacts from Alternative 3 would be similar in nature, but only in years when the cap is in place. Depending on the limit selected, it also presents the possibility of a 75,000-chum salmon PSC limit.

Alternative 2 and 3, vessel-level impacts to the pollock fishery

- While much of the analysis is conducted at the sector-level given operational similarities, impacts would also be experienced at the vessel, company and cooperative-level.
- The industry may choose to rely on vessel-level apportionments of the PSC limit
- At the lowest PSC limit and apportionment for the inshore sector, vessel-level limits could range from 15 to 2,285 chum salmon per vessel (see Appendix 6 for methods).
  - The 7 vessels with the lowest apportionment (<100 chum salmon limit), caught between 0 and ~2,300 chum salmon/ trip (2021-2023).
  - The 4 vessels with the highest apportionment (1,500- 2,285 chum salmon limit) caught between 0 and ~8,000 chum salmon/ trip (2021-2023).
- This risk (present for all sectors) would carry different implications for viability and sustained participation across the fleet.

Section 4.5.5; page 425- 430

Alternative 2 and 3, impacts of avoidance costs on the pollock fishery

Potential impacts may occur prior to and regardless of an early B season closure because of the risk of a closure.

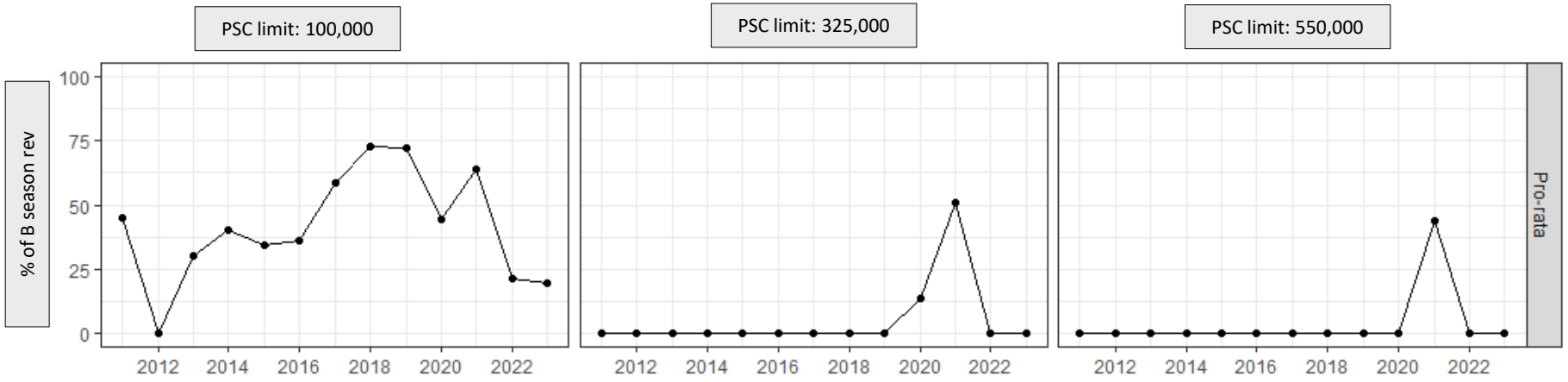
- Operational changes would likely result in **avoidance costs**. For example,
  - decreased operational efficiency from increased travel and/or moving out of areas of good fishing,
  - increased travel costs,
  - extended season and associated costs,
  - adverse effects on crew and crew compensation,
  - slower or interrupted deliveries to processing shoreplants,
  - potentially lower quality products from having to travel further and if so,
  - lower tax revenue for communities

Table 4-13, page 332 and Table 4-18, page 343

Alternative 2 and 3, impacts of forgone revenue for the pollock fishery

Inshore sector upper bound of forgone revenue under chum salmon PSC limit, Alt 2, Option 3: Pro rata

Figure 4-12; page 346



- **The lower the chum salmon PSC limit, the greater the likelihood and expected magnitude of adverse economic impacts.**

Offshore sectors upper bound of forgone revenue under chum salmon PSC limit, Alt 2, Option 3: Pro rata

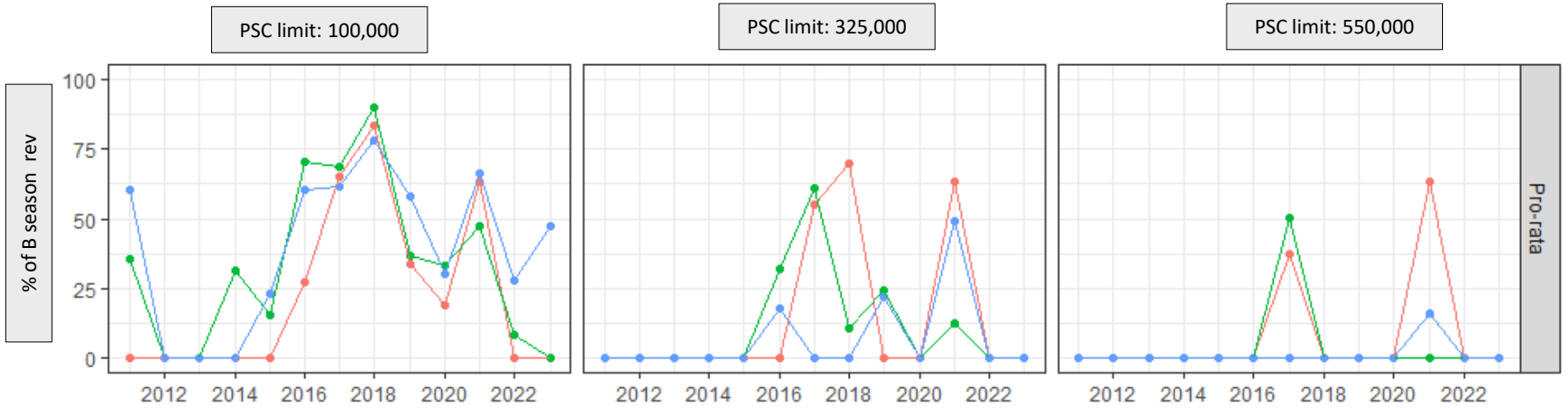


Figure 4-11; page 337

Alternatives 2 and 3, comparison of potentially forgone revenue across the sectors

Table 1-8 Comparison of annual average gross first wholesale revenue forgone (millions of 2022 $) based on hypothetical B season closures, 2011-2023

PSC Limit	Apportionment	CDQ	CP	Inshore	Mothership
100,000	Option 1: 3-Year Avg.	$21.61	$121.40	$153.45	$33.57
	Option 2: 5-year Avg.	$21.28	$116.99	$158.64	$32.17
	Option 3: Pro Rata	$21.28	$115.26	$158.64	$33.57
	Option 4: AFA	$18.32	$85.69	$181.81	$33.57
325,000	Option 1: 3-Year Avg.	$13.95	$60.49	$15.92	$5.79
	Option 2: 5-year Avg.	$13.53	$38.09	$17.10	$5.79
	Option 3: Pro Rata	$13.53	$38.09	$17.10	$5.79
	Option 4: AFA	$13.53	$17.31	$31.51	$5.79
550,000	Option 1: 3-Year Avg.	$8.56	$17.31	$0.00	$0.99
	Option 2: 5-year Avg.	$7.24	$13.39	$11.83	$0.00
	Option 3: Pro Rata	$7.24	$13.39	$11.83	$0.99
	Option 4: AFA	$3.02	$0.22	$11.83	$2.09

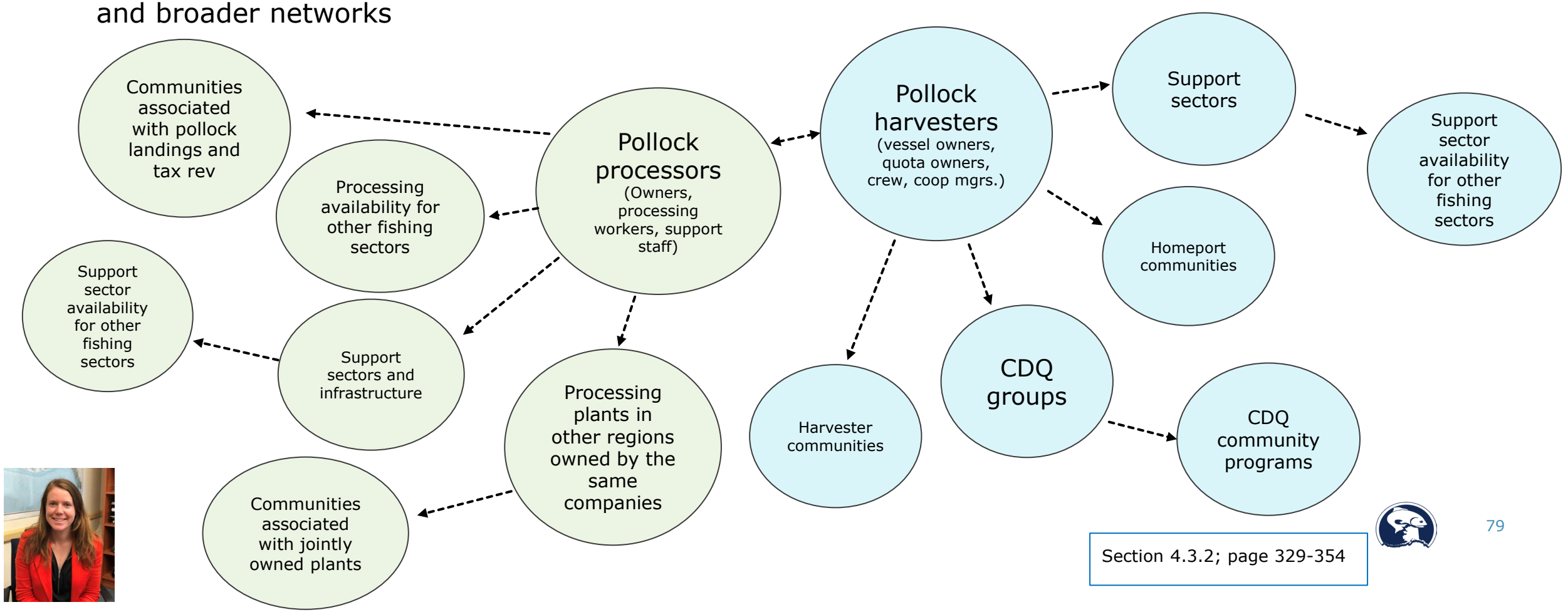
Source: NMFS catch accounting system, data compiled by AKFIN.

- **The apportionment impacts between inshore and CPs the most pronounced, and there is a direct tradeoff for the two sectors.**

Table 1-8; page 52

Alternative 2 and 3, impacts to the pollock fishery and broader implications of a closure

- **IF** early closures of the pollock B season occur, there would be impacts across communities, processors, and broader networks



Section 4.3.2; page 329-354

Alternative 2 and 3, impacts to Chinook salmon

- No alternative creates incentives for Chinook salmon avoidance
- Chinook bycatch may be reduced if the B season is closed early, but the analysis expects fishing behavior will change in the future
- Impacts would be driven by when the bycatch occurs, with higher bycatch in September and October
  - Hard caps at the lower end of the range are more likely to increase Chinook PSC
- Alternative 3 is less likely to have negative impacts on Chinook compared to Alternative 2

Section 3.4.1.2

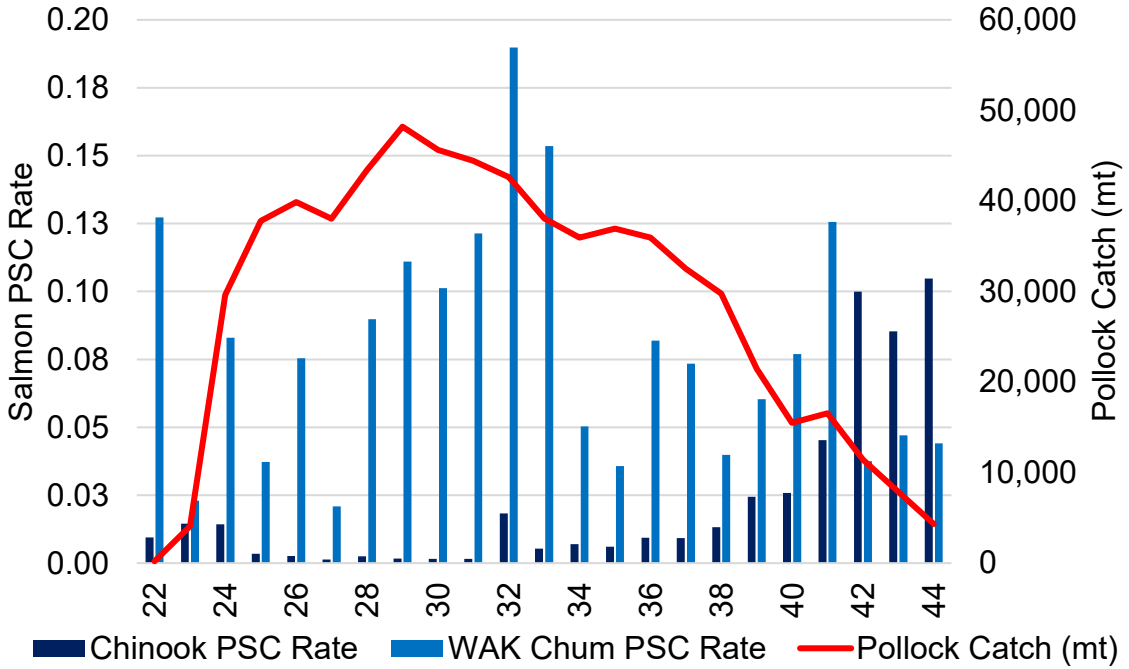


Figure 2-6 Average weekly WAK chum salmon and Chinook salmon PSC rate compared to the average pollock catch (mt) across statistical weeks during the B season, 2019–2023

Alternative 2 and 3, impacts to herring

Table 2-38 Comparison of herring PSC and chum salmon PSC rates inside Summer HSA1, Summer HSA2, Winter HSA, and all outside areas during June, July, and August 2019–2023

		Herring PSC Rate				Chum Salmon PSC Rate			
		Summer HSA1	Summer HSA2	Winter HSA	Other Areas	Summer HSA1	Summer HSA2	Winter HSA	Other Areas
June	2019	0.001843	0.009364	0.000016	0.000684	0.843	0.885	0.007	0.143
	2020	0.00448	0.003169	-	0.000185	0.022	0.036	-	0.015
	2021	0.015027	0.003165	0.000092	0.000122	0.097	0.295	0.001	0.065
	2022		0.002581	-	0.000001		0.007	0.014	0.052
	2023	-	0.005596	0.000009	0.000026	-	0.006	0.001	0.004
July	2019	0.000001	0.002021	-	0.000154	2.511	0.267	0.008	0.402
	2020	0.000122	0.015396	0.000734	0.000493	0.219	0.162	0.048	0.134
	2021		0.004691	0.000002	0.000021		1.505	0.008	3.292
	2022		0.003508	0.000028	0.001619		0.417	0.015	0.076
	2023	0.000449	0.009621	0.00018	0.000934	0.256	0.225	0.07	0.114
August	2019		0.000608	0.000001	0.000007		0.14	0.055	0.787
	2020	0.004445	0.00532	0.000047	0.000326	0.124	0.252	0.33	0.99
	2021		0.002608	0.000012	0.000041		0.068	0.105	1.479
	2022	0.000019	0.003976	0.000013	0.000009	1.747	1.294	0.857	0.759
	2023		0.025547	0.000821	0.00266		0.841	0.06	0.345

Source: NMFS Alaska Region CAS, data compiled by AKFIN.
Notes: Cells without a value indicate pollock catch was not observed inside that area, month, and year. Hyphens denote pollock catch was observed in that area, month, and year but the relevant PSC species was not observed. Greater PSC rates are in darker red shading. Lower PSC rates are indicated in lighter red shading or lack any color.

- Similar dynamics to Chinook salmon
- Fleet movement would be a driving factor for herring
  - Chum/WAK chum salmon and herring are encountered at relatively similar times during the B season
  - Sub-optimal choices in fishing location—the areas with the lowest chum salmon PSC rates had greater herring PSC rates and vice versa (Table 2-38)
- Lower hard caps more likely to drive greater changes in fishing behavior (*i.e.*, increase the risk to herring)

Section 3.5.1.2

Alternative 2, 3, and 5, CDQ reserve pool suboption

Impacts of the CDQ reserve pool are incorporated throughout the DEIS.

Impacts of the CDQ reserve pool for:	
Chum salmon (under Alternative 2 or 3)	Section 3.3.4.4.1; page 199-201
Chum salmon (under Alternative 5)	Section 3.3.4.6.9; page 237
Pollock fishery (under Alternative 2 or 3)	Section 4.3.3.1; page 357
Pollock fishery (under Alternative 5)	Section 4.3.5.6; page 378
Chum salmon fisheries and communities (under Alternative 2, 3, or 5)	Section 4.5.2.2; page 423
Fishery Management (under Alternative 2, 3, or 5)	Section 5.1.2; page 443

Alternative 2, 3, and 5, CDQ reserve pool suboption impacts

- A CDQ reserve pool would increase the amount of the hard cap compared to not adopting this suboption.
- The higher the PSC limit, the larger the CDQ reserve pool equates to. However, the contribution from a CDQ reserve pool is more likely to be "used" at a lower PSC limit.
- It is difficult to predict how much this may change chum salmon savings under the alternatives. Harvest patterns and chum salmon encounter rates would likely mirror the inshore and mothership sector's trends (see Table 3-8).
- CDQ groups can currently (and would continue to be able to with or without this suboption) have their CDQ pollock harvested on inshore or mothership vessels, which have had higher chum salmon encounter rates.
- Thus, the incremental impact of this suboption would occur if/when an additional amount is apportioned to a CDQ group's PSC limit and this allows them to catch more chum salmon PSC and remain fishing longer.
- Under Alternative 5, the effect of the apportionment is even more pronounced between sectors, and this alternative may present comparatively larger impacts for in the inshore sector.

- Thus, the **costs** of this suboption are the potential for an additional amount of chum salmon and possibly WAK chum salmon to be caught under specific circumstances.
- The **benefits** are that it may provide lower risk and operational flexibility, if used by any CDQ groups.

ALTERNATIVE 4

Alternative 4, summary of impacts to chum salmon

Provision	Assessment
1. Describe the use of historical genetic information	**Yes –** Explicit consideration of likelihood that WAK chum could be avoided, but may not always need to prioritize closures
2. Evaluate closures more than once per week	**Yes –** Reduces the chance that PSC rates would increase without a response
3. Require excluder devices be used throughout B season	**No –** CP and MSSIP currently require and common practice for Inshore SSIP to use, but it would *update regs to align with current practices*
4. Require outlier provisions	**Yes –** Incentive to perform equal or better than peers to not lose operational flexibility in future years.
5. Weekly reports to WAK chum salmon users	**No –** Focused on information sharing.
6. Prohibit fishing in areas with very high bycatch rates	**Yes –** Prohibits fishing in areas with "very high" PSC rates in addition to regular RHS closures. WAK chum savings depends on where the very high rate area is located and where vessels move to

Section 3.3.4.5

- Expected to reduce bycatch from status quo
- Measures implemented for most provisions since 2022 and 2024 B seasons
- Since 2021 B season bycatch of 545,901 chum:
  - 2022 B season was a 55% reduction
  - 2023 B season was an 80% reduction
  - 2024 B season was a 95% reduction

Alternative 4, key takeaways related to chum and WAK chum salmon

Section 3.3.4.5

- Creates tailored incentives and penalties for chum/WAK chum salmon avoidance
- Low risk for unintended consequences to chum/WAK chum salmon
- May not provide additional benefits beyond what has occurred since 2022
- No cap on the number of chum/WAK chum salmon taken as bycatch
  - Does provide the fleet flexibility to continue to adapt fishing strategies inseason

Potential impacts to communities, Tribes, and participants in directed chum salmon fisheries would be an extension of the fleet's performance under Alternative 4

Alternative 4, impacts to the pollock fisheries and associated communities

Section 4.3.4; page 356

- The sectors have already adopted many of the provisions described through recently amended IPAs.
- Avoidance costs may have incurred as a result of their initial adoption.
- This alternative essentially codifies recent operational changes under the RHS program and other provisions in the IPAs.

Minimal additional costs as a result of Alternative 4, relative to status quo.

Alternative 4, potential impacts to Chinook salmon and herring

Sections 3.4.1.3 and 3.5.1.3

- Alternative 4 is expected to have a relatively neutral impact on Chinook salmon and herring bycatch
- IPAs have been in effect since 2010
- IPAs have operated under most Alternative 4 provisions in recent years
- Specific to Chinook:
  - *"The restrictions or performance criteria used to ensure that Chinook salmon PSC rates in October are not significantly higher than those achieved in the preceding months."* - 50 CFR 679.21(f)(12)(iii)(E)(*13*)

ALTERNATIVE 5

Alternative 5, Key context for the impact analysis

- Methods for impact analysis are generally the same as what was presented in February 2025, *except*
  - New inseason corridor genetic stock composition estimates
  - Limited results from the Fleet Movement Model are presented for Suboption 1
- Dissimilar from Alternative 2 and 3
  - Fishing effort would move/be displaced if the corridor bycatch cap is met
  - Bycatch could be reduced under Alternative 5 as
    a) Vessels change their fishing behavior to avoid reaching the corridor cap and/or
    b) Vessels are displaced from some or all the corridor through August 31

Alternative 5, Description of the Fleet Movement Model

Section 3.1.5

- Fishing could continue outside the closed area if the corridor bycatch cap was met
  - Figure 3-3 shows the process used to estimate the new PSC
    - For each week a closure occurred, pollock catch that occurred inside the corridor was redistributed to open stat areas where fishing occurred
    - Displaced catch is distributed across open stat areas in proportion to the catch that occurred in those areas in the same week
    - The average weekly bycatch rate was applied to the new pollock catch to determine new chum salmon bycatch estimates
    - The amount of bycatch that occurred in that week inside the corridor was subtracted from the sum of the new PSC estimate to calculate the net change in PSC

Alternative 5, Suboption 1, use of the model and its limitations

Section 3.1.5

- Model was run for Option 1 (all 40 stat areas close) and Suboption 1 (29 stat areas close)
- Several weeks when fishing did not occur outside the closed stat areas (Table 3-4 and 3-5)
- New PSC estimates cannot be calculated in these weeks
  - This issue was more prevalent for Option 1 and was the determining factor to use different methods
  - Because Suboption 1 would exempt 11 stat areas, it substantially decreased the number of weeks the model could not redistribute catch to outside areas
- Model results should be interpreted cautiously—there are associated uncertainties and if the model could account for these weeks, the estimates of net changes in PSC would be different from what is reported

Alternative 5, new inseason corridor genetic stock composition analysis

Section 3.3.4.6.1

- New genetic stock identification analysis for the bycatch inside the inseason corridor
- Aggregates observer samples from the bycatch in genetic clusters 1 and 2
  - Reflects the spatial area of the proposed management measure

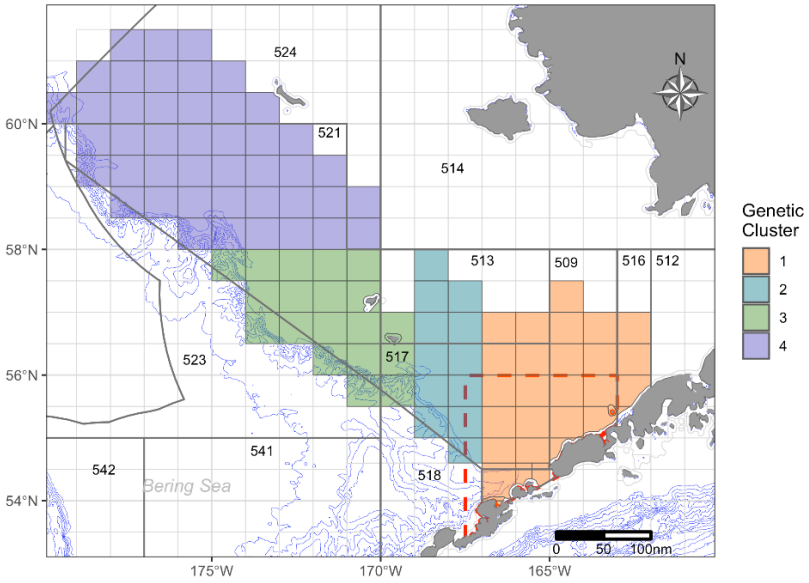


Figure 3-16Map the genetic cluster areas as well as the CVOA (red) and Chum Salmon Savings Area (blue dotted line)

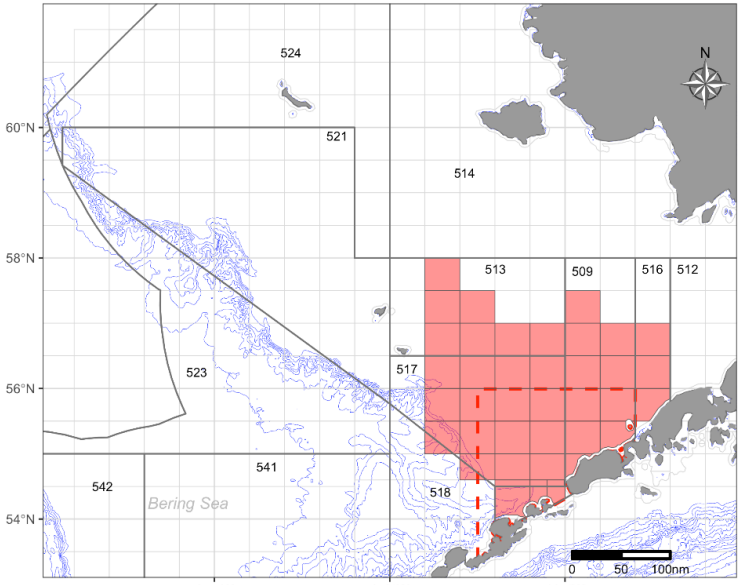


Figure 2-3 Inseason corridor under consideration for Alternative 5 that represents the combined area of genetic clusters 1 and 2 and encompasses 40 ADF&G groundfish stat areas

Alternative 5, inseason corridor genetic stock composition estimates

Corridor closure window

Year	Early		Middle		Late	
	Est. Number	Est. Proportion	Est. Number	Est. Proportion	Est. Number	Est. Proportion
2011	15,793	30.3%	10,980	29.8%	8,542	16.3%
2012	908	20.6%	1,399	34.7%	1,870	19.5%
2013	8,211	23.8%	13,817	28.2%	2,177	18.1%
2014	6,328	26.6%	17,128	21.5%	5,795	20.8%
2015	4,384	44.8%	19,077	20.1%	13,231	21.4%
2016	13,917	31.4%	36,715	28.7%	20,897	18.4%
2017	64,095	23.1%	20,452	18.1%	4,012	25.0%
2018	36,411	26.0%	3,194	9.2%	6,754	17.5%
2019	24,707	34.2%	8,100	26.1%	15,191	14.7%
2020	-	-	5,131	9.9%	15,135	11.9%
2021	12,291	9.1%	32,276	9.3%	2,402	18.8%
2022	4,304	18.1%	39,698	28.9%	2,796	14.0%
2023	2,462	13.3%	5,853	15.1%	1,235	14.9%

Section 3.3.4.6.1

- Shading indicates the period with greatest estimated proportion and number in that year

Table 3-54 Estimated number and proportion of WAK chum salmon caught as bycatch inside the inseason corridor during the Early, Middle, and Late periods of the B season, 2011–2023

Alternative 5, historical chum salmon bycatch trends inside the inseason corridor

Concentration of total chum bycatch

- ~73% of the total B season bycatch was caught inside the corridor (Table 3-56)
- ~58% of the B season bycatch was caught inside the corridor, June 10 – August 31 (Table 3-56)

Concentration of WAK chum bycatch

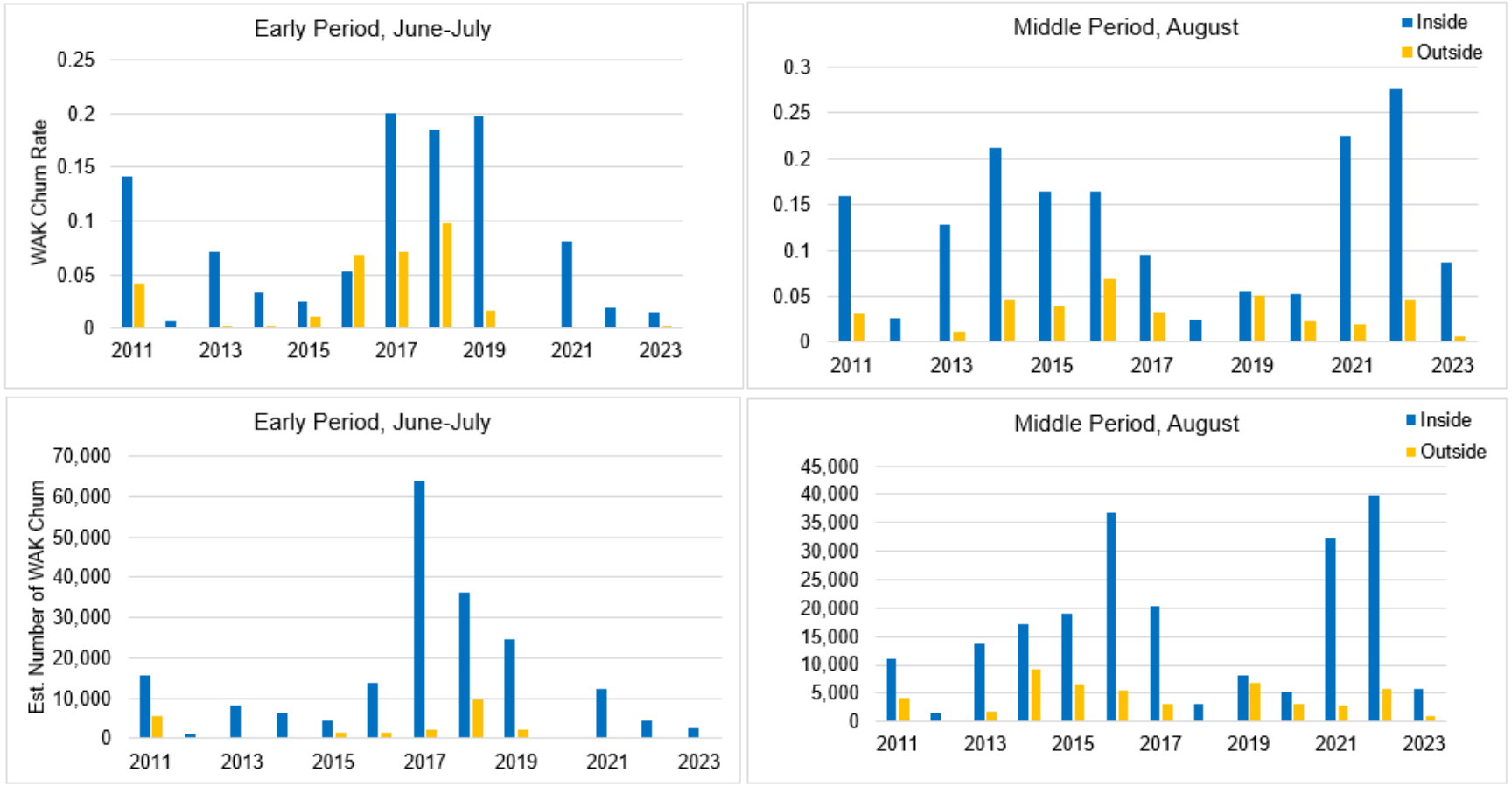
- ~84% of the WAK chum salmon bycatch during the B season was caught inside the corridor (Table 3-57)
- ~64% of the WAK was caught inside the corridor, June 10 – August 31 (Table 3-57)

WAK chum salmon as a percentage of total corridor bycatch, June 10 –August 31

- ~21% of the bycatch inside the corridor during the closure were WAK chum salmon (Table 3-56 and 3-57, see also Figure 3-27)

Section 3.3.4.6.2

Alternative 5, Option 1, WAK chum salmon bycatch rates inside and outside the inseason corridor



Section 3.3.4.6.3

- The bycatch rates inside the corridor were greater than what occurred outside the corridor in most years (Figure 3-28 and 3-29)

Figure 3-30 Estimated WAK chum salmon bycatch rate inside the inseason corridor (blue) and outside the corridor (orange) during the Early and Middle period (top panel) and the estimated number of WAK chum salmon caught as bycatch inside the inseason corridor (blue) and outside the inseason corridor (orange) during the Early and Late period (bottom panel), 2011–2023

Alternative 5, Option 1 summary of impacts to chum and WAK chum salmon

Section 3.3.4.6.3

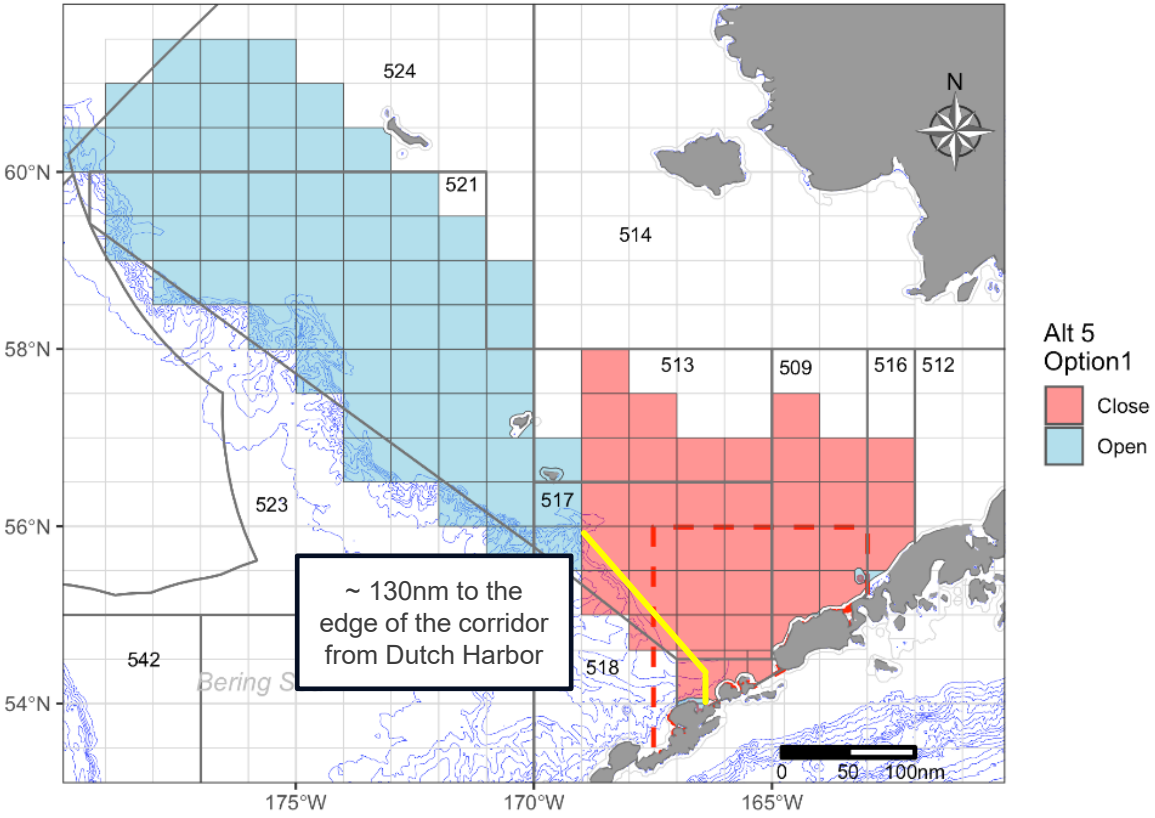
- **Bycatch reductions <u>before</u> a corridor closure**
  - Strong incentive for vessels to change their fishing behavior inside the corridor, and/or some vessels may preemptively fish outside the corridor
  - On average, sectors harvested between ~17%(CDQ) and ~68%(inshore) of their B season pollock inside the corridor from June 10 – August 31 (Table 3-12)

- **Bycatch reductions <u>after</u> a corridor closure**
  - Impacted vessels would move northwest outside the corridor as able, or stand down
  - Unintended consequences if vessels move to areas outside with higher bycatch rates
    - A scenario shown in a limited number of cases (2011–2023; Table 3-5)

Alternative 5, Option 1, impacts to the pollock fishery pre-corridor closure

A corridor cap, with the potential to fully close through Aug 31 could have adverse economic impacts for the pollock fishery.

- The inshore sector is highly dependent on this area and has limited flexibility, relative to other sectors. Smaller capacity CVs may be more adversely impacted.
- CP/ CDQ and mothership sectors benefit from the flexibility of this area.
- These consequences may motivate strategic decisions and chum salmon avoidance that increase operational costs and lower efficiencies.
- These decisions could have broader economic impacts for shoreside processors and communities.



Section 4.3.5.1; page 358-370

Alternative 5, Option 1, impacts to the pollock fishery post-corridor closure

Summary of the number of corridor closures and gross first wholesale revenue at risk under Option 1

Sector	Apportionment		Number of years fished in corridor (out of 13)	50,000 corridor PSC limit		350,000 corridor PSC limit	
				Number of years closure is triggered	Average annual revenue at risk (millions of 2022$)	Number of years closure is triggered	Average annual revenue at risk (millions of 2022$)
CDQ	Least adverse:	Option 4, AFA	12	4	$8.7	2	$2.9
	Most adverse:	Option 2, 5-yr avg		4	$9.7	2	$2.9
CP	Least adverse:	Option 4, AFA	13	4	$16.4	1	$3.4
	Most adverse:	Option 1, 3-yr avg		6	$26.2	3	$8.4
Inshore	Least adverse:	Option 2, 5-yr avg	13	12	$108.5	1	$6.2
	Most adverse:	Option 4, AFA		12	$127.3	1	$7.7
Mothership	Least adverse:	Option 1, 3-yr avg	13	6	$10.6	1	$2.1
	Most adverse:	Option 2, 5-yr avg		6	$11.8	1	$2.1

- **The likelihood and expected magnitude of adverse economic impacts is greater under lower corridor caps.**
- **Again, apportionment impacts between inshore and CPs the most pronounced.**

Adapted from Table 1-5; page 47

Alternative 5, Suboption 1, reminder of stat areas that would close

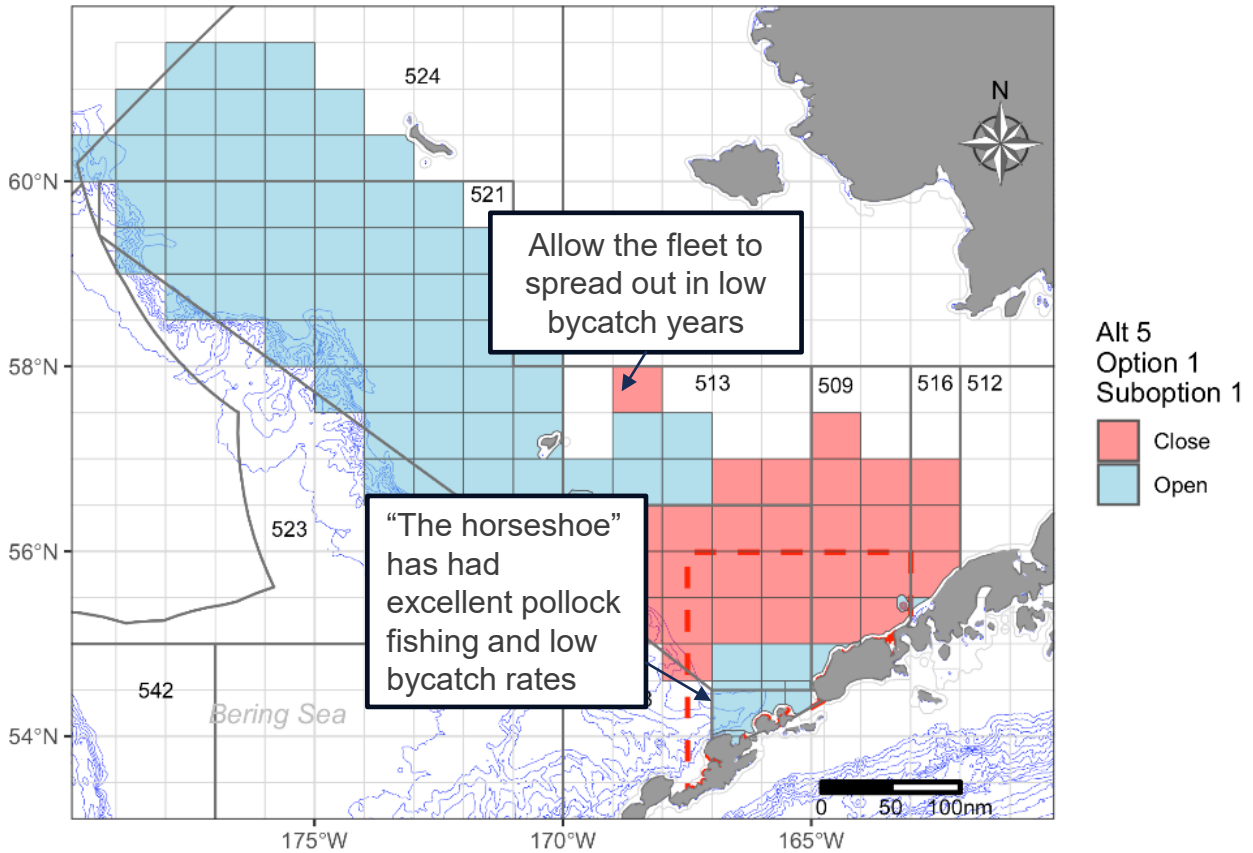


Figure 2-5 Inseason corridor closure under Alternative 5, Suption 1 where ADF&G groundfish stat areas to close are shown in red and areas exempted from closure are shown in blue

Reminder

- Vessels impacted by a closure could continue fishing inside 11 stat areas inside the corridor as well as all outside areas through August 31

Alternative 5, Suboption 1, total chum salmon bycatch reductions

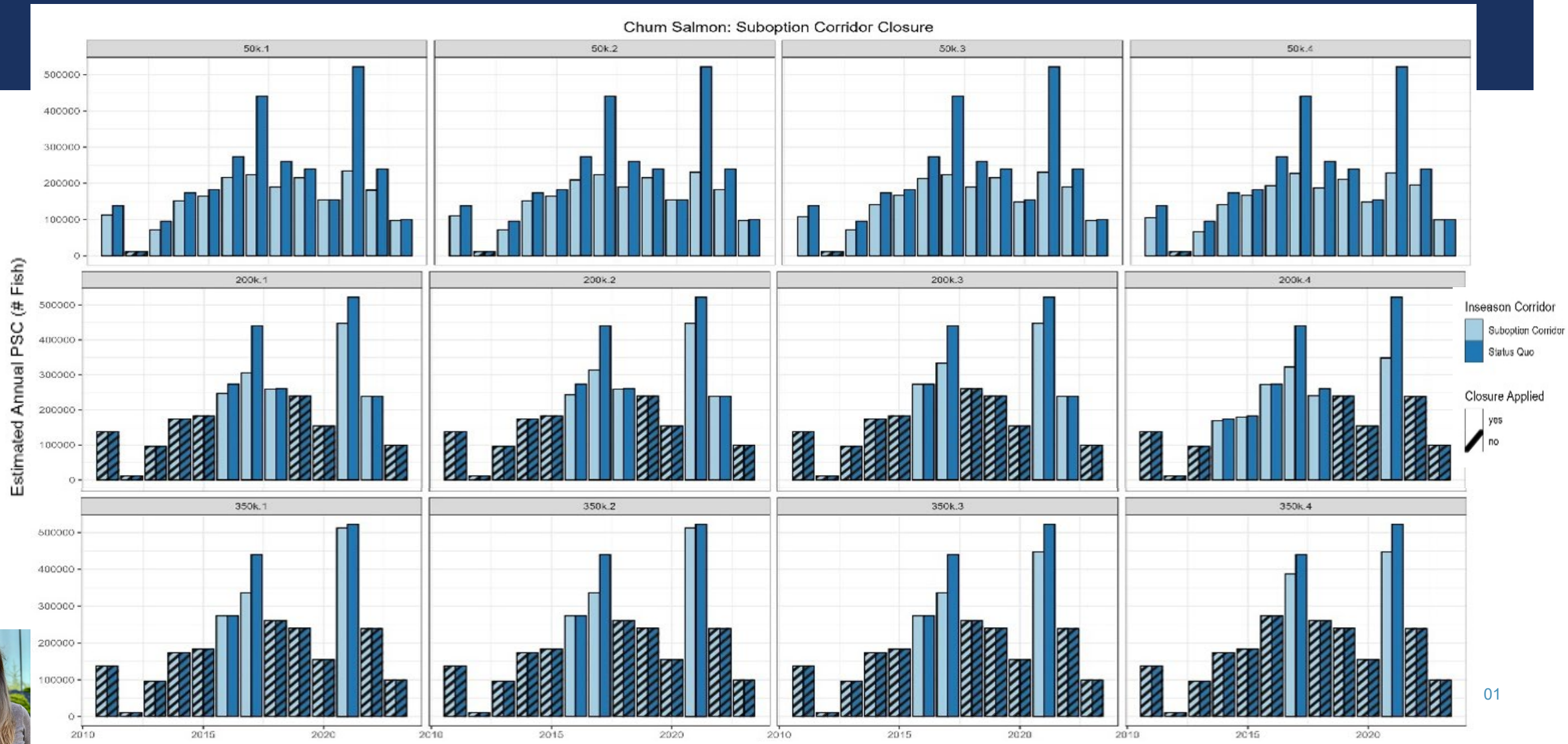
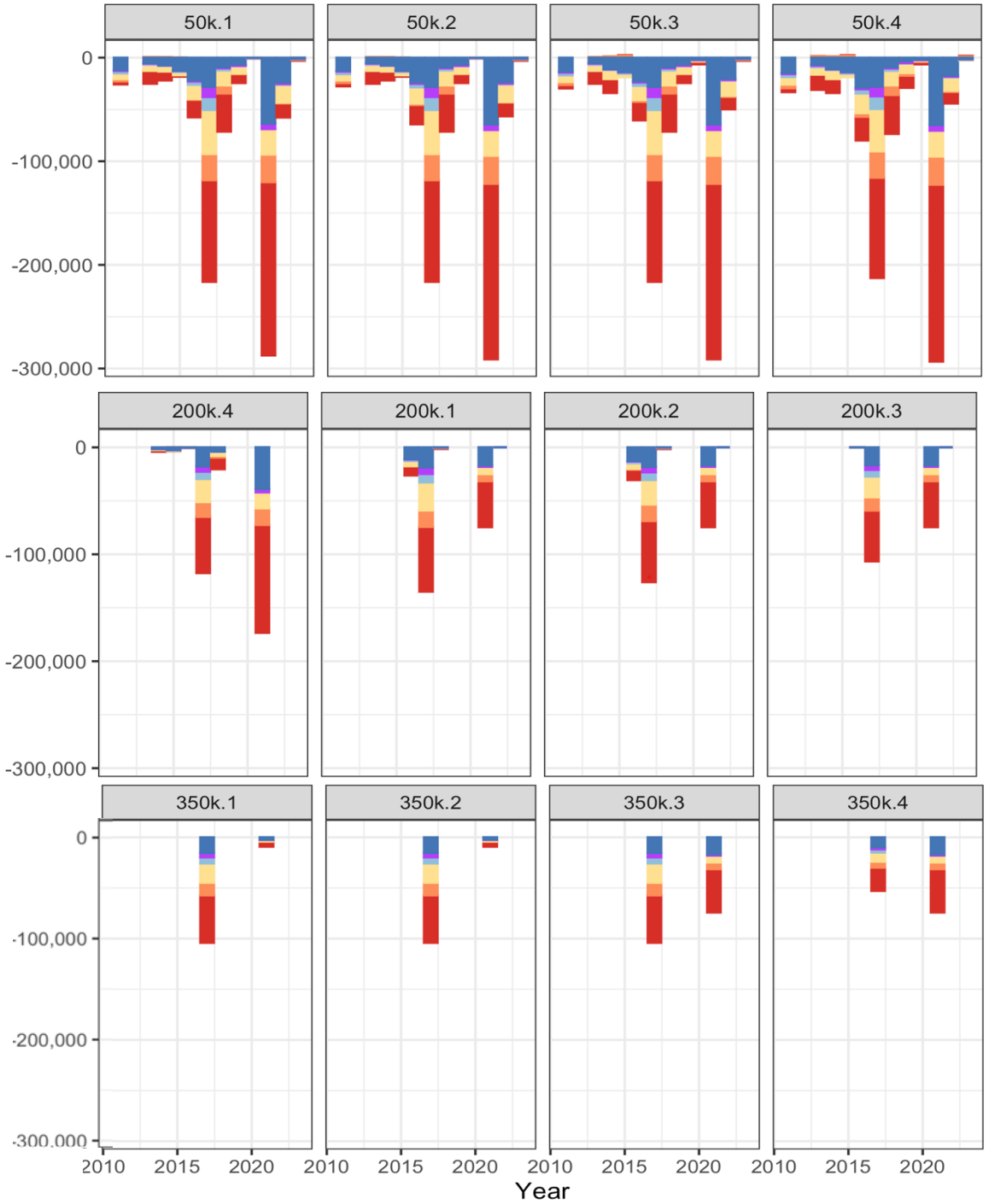


Figure 3-32 Comparison of the pollock fleet's historical chum salmon PSC (dark blue, status quo) to the fleet's estimated chum salmon PSC (light blue, suboption corridor) for each analyzed corridor chum salmon PSC limit and apportionment option under Suboption 1, Alternative 5, 2011–2023

Suboption 1, WAK chum salmon bycatch reductions



- Figure 3-34 shows annual net change estimates by genetic reporting group
- Model estimated WAK chum salmon bycatch savings in each year a cap was met
  - Greatest WAK reductions estimated in 2017
- NE Asia chum salmon account for the majority of reductions

Section 3.3.4.6.4.1

Alternative 5, Suboption 1, impacts to the pollock fishery

Relative to Alternative 1 no action, Option 1 could present adverse economic impacts.

- 'Revenue at risk' still shown due to displaced catch (Table A7-7 and A7-8 in Appendix 7), and
- Still likely to have the greatest impact on the inshore sector.

Relative to Alternative 5, Option 1, Suboption 1 would likely reduce negative economic impacts. **The risk of a closure is the same, but the consequences are lower**:

- Less pollock catch would be displaced in the event of a closure,
- more options for pollock fishing to be redistributed to,
- possible near-port fishing opportunities during a corridor closure, and
- the change the magnitude of the consequence of a closure, may influence the proactive measures taken and the avoidance costs willing to be incurred.

Section 4.3.5.1; page 357-370

Alternative 5, Option 1 and Suboption 1, comparison of pollock redistributed

Table 1-10 Comparison of the average pollock catch (mt) that would have been displaced from the inseason corridor under Alternative 5, Option 1 and Suboption 1, as well as the total pollock catch that would have been displaced under each option as a percentage of the total pollock harvested inside the corridor during the closure window of June 10 – August 31, 2011–2023

PSC Limit	Apportionment	Option 1		Suboption 1	
		Pollock Catch Displaced	As a % of Corridor Total	Pollock Catch Displaced	As a % of Corridor Total
50,000	Option 1: 3-Year Avg.	130,168	43.9%	54,138	18.2%
	Option 2: 5-year Avg.	130,904	44.1%	53,476	18.2%
	Option 3: Pro Rata	133,433	45.0%	54,131	18.2%
	Option 4: AFA	139,621	46.9%	55,868	18.7%
200,000	Option 1: 3-Year Avg.	26,306	9.0%	17,692	6.0%
	Option 2: 5-year Avg.	26,649	9.1%	18,914	6.0%
	Option 3: Pro Rata	25,547	8.7%	14,132	4.8%
	Option 4: AFA	48,513	16.5%	17,005	5.8%
350,000	Option 1: 3-Year Avg.	16,490	5.6%	11,095	4.1%
	Option 2: 5-year Avg.	16,490	5.6%	12,944	4.1%
	Option 3: Pro Rata	17,721	6.0%	12,661	4.3%
	Option 4: AFA	14,082	4.8%	9,022	3.1%

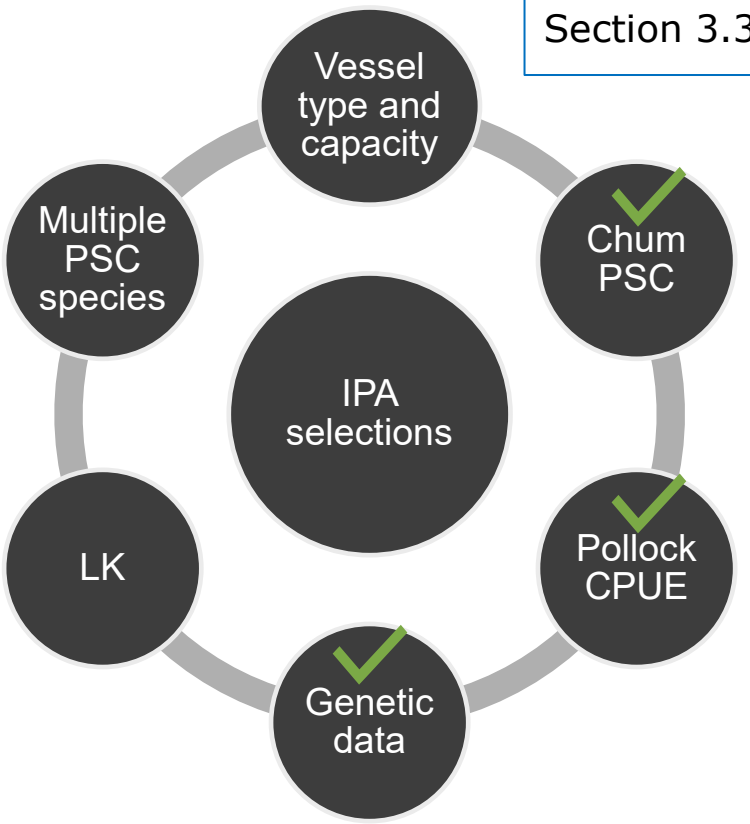
Source: NMFS catch accounting system, data compiled by AKFIN.

Table 1-10; page 54

Alternative 5, Option 2, overview

Section 3.3.4.6.5

- Federal regulations would require the IPAs to:
  - Identify 19–29 stat areas close using chum salmon PSC, pollock CPUE and genetics data
  - Submit selections for review and approval by NMFS
- Federal regulations would allow:
  - IPA selections to change year-to-year but not inseason
  - IPAs to manage the corridor closure



Factors considered by IPAs

Alternative 5, Option 2, impacts to chum and WAK chum salmon

Section 3.3.4.6.5

- Higher bycatch/rates inside the corridor drive the expectation that Option 2 could reduce chum/WAK chum salmon bycatch (*like Option 1 and Suboption 1*)
- Impacts to chum/WAK chum salmon would depend on the stat areas the IPAs select and the incentives they create, as well as the conditions in a given year
  - Expect the IPAs would need to consider nuanced tradeoffs among stat areas
  - Optimizing their selections in this way could prove challenging because each year of fishing is slightly different (Table 3-60, Figure 3-35, and Figure 3-36)

Alternative 5, Option 2, Impacts to the pollock fishery

Relative to Alternative 1 no action, Option 2 could present adverse economic impacts.

- Constrains operational flexibility and
- Still likely to have the greatest impact on the inshore sector.

Relative to Alternative 5, Suboption 1, Option 2 likely to further reduce negative economic impacts.

- Could include more open stat areas, and
- Open stat areas are able to change annually based on the 3 criteria.

Alternative 5, impacts to WAK chum salmon users

Specific impacts to WAK chum salmon users under Alternative 5 are an extension of the analysis on WAK chum salmon savings.

- To the extent that any of the corridor options are able to reduce WAK chum salmon bycatch, this could promote increased AEQ returns and contribute to broader benefits.
- This could occur through:
  - incentivizing increased chum salmon avoidance strategies **pre-corridor closure**,
  - increased fishing outside the corridor **pre-corridor closure**, or
  - increased fishing outside the corridor **post-corridor closure**.
- The analysis is not able to provide AEQ savings under the methods for analysis of these options but provides distinctions in how incentives may contribute to the likelihood and magnitude of expected impacts.

Alternative 5, unintended consequences for Chinook salmon

Option 1, Suboption 1, and Option 2

Section 3.4.1.4

- Neutral or adverse impacts to Chinook salmon
- Impacts would be driven by when the bycatch occurs, with higher bycatch in September and October
- **Option 1** presents the greatest risk to Chinook bycatch
- **Option 2** presents the greatest flexibility and lowest risk

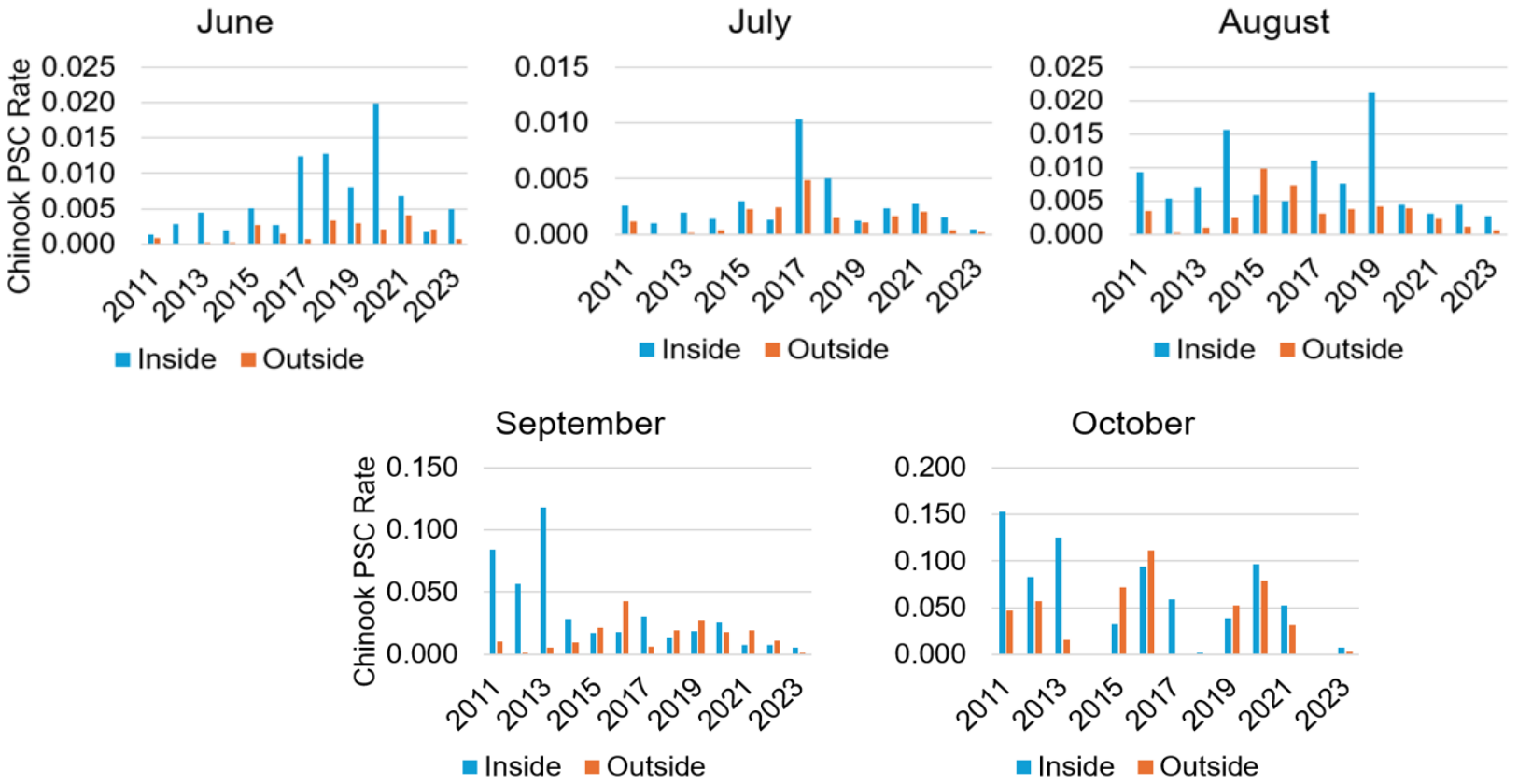


Figure 3-48 Chinook salmon PSC rate in each month of the pollock B season inside (blue) and outside (orange) the pollock B season, 2011–2023

Alternative 5, unintended consequences for herring

Option 1, Suboption 1, and Option 2

- Neutral or adverse impacts to herring
- Overlap in the Summer HSAs and corridor
- Herring PSC limit could be met and restrict access to the corridor (even prior to the start of the B season)
- And a sector/cooperative that met the corridor cap would be closed out of all or most of the Summer HSAs
- **Option 1** presents the greatest risk to herring bycatch
- **Option 2** presents the greatest flexibility and lowest risk

Section 3.5.1.4

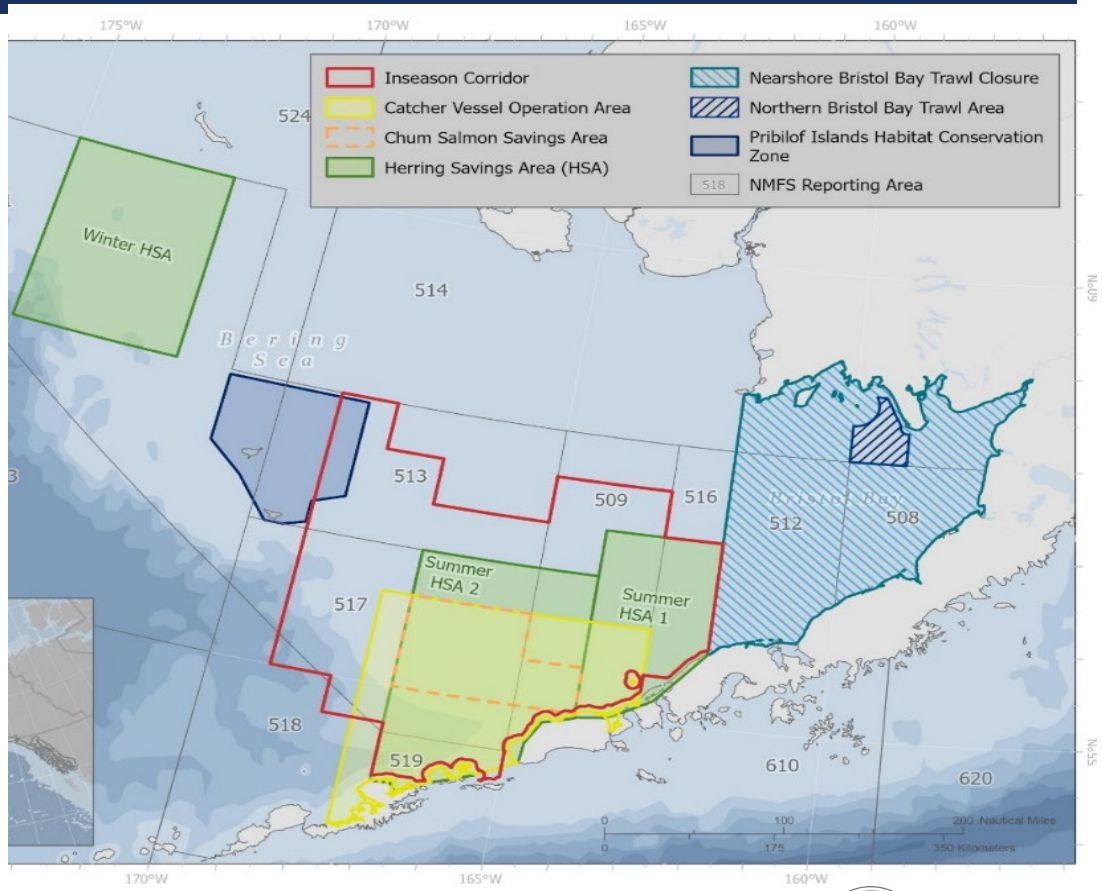


Figure 3-31 Inseason corridor under Alternative 5 and other relevant groundfish management boundaries in the Bering Sea

Alternative 5, tradeoffs among the inseason corridor options

Section 3.3.4.6.6

Category	Option 1	Suboption 1	Option 2
Incentive to avoid chum and WAK chum	• Strongest incentive pre-closure	• Moderate incentive pre-closure	• Moderate incentive pre-closure
Unintended Consequences	• Greatest risk to increased Chinook PSC	• Moderate risk to increased Chinook PSC	• Least likely to create unintended consequences for all PSC species
Flexibility	• Least operational flexibility post closure • No regulatory flexibility	• Moderate operational flexibility • No regulatory flexibility (same as Option 1)	• Greatest operational flexibility post closure • Greatest regulatory flexibility

Alternative 5, Option 3, impacts to chum and WAK chum salmon

Section 3.3.4.6.7

- Abundance threshold would suspend the inseason corridor when Yukon River summer and fall chum runs are at high abundance
  - **Opposite Alternative 3 indices**
- If future conditions are similar to status quo, the corridor would apply in most years
  - Suspended in 2 of 13 years under Suboption 1 (75th percentile)
  - Suspended in 0 of 13 years under Suboption 2 (90th percentile)
    - See Table 3-62 for this evaluation
- Option 3 is not expected to greatly reduce the potential positive impacts to chum/WAK chum salmon, compared to Alternative 5 alone

Alternative 5, Option 4, impacts to chum and WAK chum salmon

Section 3.3.4.6.8

- Option 4 would delay the Winter HSA closure from September 1 to September 30
- Concern evaluated: whether bycatch rates are higher inside the Winter HSA than outside
- Overall impact is expected to be largely neutral
  - September fishing was rarely prohibited (2020 during analyzed period)
  - September chum bycatch rates were typically lower inside the Winter HSA
- Provides the fleet flexibility if the herring PSC limit is met without increasing the risk to chum/WAK chum salmon, compared to Alternative 5 alone

Alternative 5, Options 3 and 4, impacts to the pollock fishery

Under Alternative 5, Option 3 no economic impacts from a corridor cap in years with a high returns of summer and fall chum salmon on the Yukon.

- If future conditions are similar to what occurred under status quo, selecting Option 3 is not expected to greatly change the potential impacts.

Alternative 5, Option 4, may provide additional flexibility for the pollock fishery, if the herring PSC apportionment was met.

- Delay the start of the Winter HSA closure from Sept 1 to Sept 30 – **if a closure occurs**.
- Intention is to provide additional pollock fishing flexibility as increased prioritization of chum salmon may increase the likelihood of hitting the herring PSC limit.
- Vessels do not appear to have a high dependency on this area in Sept; however, the flexibility is most likely to benefit the CPs, followed by CDQ and mothership vessels.

Section 4.3.5.4 and Section 4.3.5.5; page 376-378

Proportion of Sept pollock harvest from inside the Winter HSA

Year	CDQ	CP	Mothership	Inshore
2011	18.70%	14.60%	2.80%	0.00%
2012	0.00%	0.00%	6.60%	0.50%
2013	12.10%	11.00%	47.20%	0.50%
2014	0.00%	1.30%	2.10%	0.00%
2015	0.00%	0.90%	6.40%	0.00%
2016	0.00%	0.00%	0.00%	0.00%
2017	0.00%	1.10%	0.00%	0.00%
2018	3.50%	11.50%	1.80%	0.00%
2019	0.30%	3.90%	0.00%	0.00%
2020	1.10%	4.10%	0.00%	0.00%
2021	0.00%	1.50%	0.00%	0.00%
2022	0.00%	0.00%	0.00%	0.00%
2023	0.00%	0.00%	0.00%	0.00%
Average	**2.70%**	**3.80%**	**5.20%**	**0.10%**
Median	**0.00%**	**1.30%**	**0.00%**	**0.00%**

Table 4-32; page 378

Alternative 5, Option 3 impacts to Chinook salmon and herring

- Abundance threshold would suspend the inseason corridor when Yukon River summer and fall chum runs are at high abundance
- If future conditions are similar to status quo, the corridor would apply in most years
  - Suspended in 2 of 13 years under Suboption 1 (75th percentile)
  - Suspended in 0 of 13 years under Suboption 2 (90th percentile)
- Suspending the corridor is expected to have neutral impacts on Chinook salmon and herring, compared to status quo
- Option 3 would provide the fleet greater flexibility in years when the corridor is suspended, compared to Alternative 5 alone

Section 3.4.1.4.4 for Chinook
Section 3.5.1.4.4 for herring

Alternative 5, Option 4, impacts to Chinook and herring

Chinook Salmon

- Impacts to Chinook bycatch are expected to be neutral relative to status quo
- September Chinook salmon bycatch rates were typically lower inside the Winter HSA (Table 3-67)
- Option 4 would provide additional operational flexibility in years the herring PSC limit is met, and could aid the fleet in Chinook avoidance compared to Alternative 5 alone

Section 3.4.1.4.5

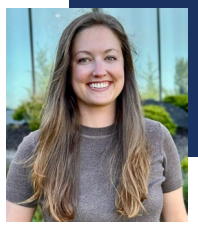
Herring

- Impacts to herring are expected to be neutral relative to status quo
- September herring bycatch rates were typically lower inside the Winter HSA
- Option 4 would provide additional flexibility in years the herring PSC limit is met, and could aid the fleet in herring avoidance compared to Alternative 5 alone

Section 3.5.1.4.5

- ~~PURPOSE AND NEED STATEMENT (SECTION 1.1)~~
- ~~DESCRIPTION OF THE ALTERNATIVES (CHAPTER 2)~~
- ~~IMPACT ANALYSIS (CHAPTERS 3 AND 4)~~
  - ~~Alternative 1~~
  - ~~Alternative 2~~
  - ~~Alternative 3~~
  - ~~Alternative 4~~
  - ~~Alternative 5~~
- IMPACTS FROM A COMBINATION OF ALTERNATIVES
- COMPARISON OF ALTERNATIVES (SECTION 2.8)
- MANAGEMENT, MONITORING AND ENFORCEMENT (CHAPTER 5)
- FINAL POINTS AND NEXT STEPS

WHERE ARE WE AT?



Effects of a combination of alternatives on chum/WAK chum salmon

Section 3.3.4.7

Alternatives 2 or 3 + 5

- Chum salmon caught inside the inseason corridor count towards the corridor cap (Alt 5), and all chum salmon caught *inside and outside the corridor* count towards the hard cap (Alt 2 or 3)
- A hard cap in combination with the inseason corridor would:
  - Likely reduce bycatch compared to status quo
  - Provide an incentive for vessels to avoid chum salmon, regardless of the strength of the incentive created by the corridor
  - Mitigate the risk of unknown total PSC if the corridor closed

Effects of a combination of alternatives on chum/WAK chum salmon *continued*

Section 3.3.4.7

Alternatives 2 or 3 and/or 5 + 4

- Adding Alt 4 to any other alternative is not expected to reduce the effectiveness of those alternatives (i.e., Alt 2, 3, and/or 5)
- Expect the IPA measures in response to Alternative 4 provisions would be used as tools to reduce bycatch under the other alternatives
  - *E.g.,* bi-weekly evaluation of RHS closures
  - *E.g.,* closing stat areas with very high bycatch rates
- Adding Alt 2, 3, and/or 5 may reduce the potential benefits of Alternative 4 as a standalone alternative
  - *E.g.,* risk of unintended consequences to Chinook and herring would be driven by Alt 2, 3, and/or 5
  - *E.g.,* reduce operational flexibility

Potential Costs Under a Combination of Alternatives

Section 4.3.6

Alternatives 2 or 3 + 5

- Greater cost to industry than stand alone alternatives **if** the corridor closure presents high consequences for the sector
  - If not, similar impacts to an overall PSC limit
  - If so, more avoidance techniques and more complex decision-making which could lead to increased PSC trade-offs

Alternatives 2 or 3 + 4 *and/or* 5

- Generally, these avoidance techniques may aid the industry attempts to remain under overall PSC limits or corridor-specific caps
- Adding on Alternative 4 unlikely to increase costs relative to the standalone alternative

- ~~PURPOSE AND NEED STATEMENT (SECTION 1.1)~~
- ~~DESCRIPTION OF THE ALTERNATIVES (CHAPTER 2)~~
- ~~IMPACT ANALYSIS (CHAPTERS 3 AND 4)~~
  - ~~Alternative 1~~
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  - ~~Alternative 3~~
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  - ~~Alternative 5~~
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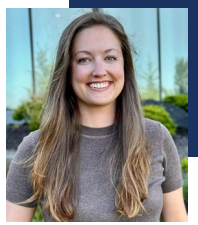

Consideration of the National Standards

Chapter 6

MSA Section 301(a)

National Standard Guidelines (50 CFR 600)

- The MSA requires every FMP, and the regulations implementing those plans, be consistent with the National Standards
- For any Council action, different alternatives may have tradeoffs among the National Standards
- The Council must consider how to balance the National Standards

Summary of the advantages and disadvantages of the alternatives

Alternative	Advantages to Chum/WAK Chum Salmon	Disadvantages to Chum/WAK Chum Salmon	Chinook PSC Considerations
1	Maintains existing avoidance tools and monitoring	No change from status quo; no bycatch cap for vessels in IPAs; voluntary provisions implemented in 2022 could be stopped	No change compared to status quo
2	Provides a hard cap (ceiling) on the total number of chum that could be caught; strong incentive for fishermen to stay below the cap set in regulations	Does not create a clear/specific incentive for WAK chum salmon avoidance.	Early closure could reduce Chinook PSC; neutral impact if vessels can avoid both species; increased Chinook bycatch if B season is extended
3	Provides protections and incentives to Alternative 2 when in effect	Protections and incentives are suspended in years with high abundance	Neutral when suspended, otherwise similar to Alternative 2
4	Allows tailored incentives and targeted closures using genetic and spatial data	No overall hard cap;	Generally neutral effect to Chinook salmon bycatch
5, Op. 1	Corridor captures time/area with greater WAK chum encounters; strong incentive for preemptive avoidance; moves effort outside corridor if closure occurs	No total PSC limit; effort may shift to unknown PSC areas	Neutral and/or potentially negative if displaced effort extends the B season
5, Subop. 1	Similar to Option 1; balances corridor protection with access to key fishing grounds	Similar to Option 1; exempt areas may weaken incentive for preemptive avoidance	Lower Chinook risk than Option 1.
5, Op. 2	Fast, adaptive IPA closures; flexible response to emerging PSC patterns.	Similar to Suboption 1	Alt 5 option with the lowest risk to Chinook

Table 2-30, p. 114

Consideration of Net Benefits to the Nation

- Net benefits to the Nation consider a particular scope (the U.S.) with a particular methodology (Benefit-Cost Analysis).
- Given the high degree of uncertainty around the marginal costs and benefits of action (both in magnitude, but also in likelihood), it is not possible to *quantify* the net benefits to the Nation.
- Benefit-Cost Analysis context is provided based on the quantitative characterizations in Table 4-49 on costs, and Table 4-50 on benefits:
  - Quantitative estimates in the analysis presents a stark tradeoff between possible costs (forgone revenue) and benefits (WAK chum salmon saved).
  - These methods are not able to account for future chum salmon savings from avoidance efforts, avoidance costs, or preserved revenue resulting from behavioral changes.
  - If measures are able to motivate fishing that yields the desired benefits (i.e. reductions in WAK chum salmon bycatch) without closing the fishery, more likely to have greater (or less negative) net benefits to the Nation.

If measures aid increased chum salmon returns such that it allows for increased harvest opportunities, although unquantified, there could be substantial and widespread benefits.

There could be either positive or negative benefits (i.e., unintended impacts) for Chinook salmon based on fleet response to new management measures.

Section 4.6, p. 432- 437

- ~~PURPOSE AND NEED STATEMENT (SECTION 1.1)~~
- ~~DESCRIPTION OF THE ALTERNATIVES (CHAPTER 2)~~
- ~~IMPACT ANALYSIS (CHAPTERS 3 AND 4)~~
  - ~~Alternative 1~~
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- ~~COMPARISON OF ALTERNATIVES (SECTION 2.8)~~
- MANAGEMENT, MONITORING AND ENFORCEMENT (CHAPTER 5)
- FINAL POINTS AND NEXT STEPS

WHERE ARE WE AT?

Monitoring, management, and enforcement

Existing monitoring

Fishery	Observer Monitoring	Salmon Discard Prohibition	Salmon Accounting	Salmon Biological
Catcher Processors (CPs)	✓ Two at-sea observers on every fishing trip (200%)	✓ All salmon discards are prohibited	✓ All salmon are counted and identified to species	✓ Biological information, including genetic samples, on Chinook and chum salmon
Motherships	✓ Two at-sea observers on every fishing trip (200%)			
Catcher vessels delivering to shoreside processors (non-EM)	✓ At-sea and shoreside observers (100%) and shoreside observers monitoring all offloads			
Catcher vessels delivering to shoreside processors (EM)	✓ At-sea video recording of all fishing activity and shoreside observers monitoring all offloads			

Management and enforcement changes

Task	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
Apportioning PSC limits	[for Chinook] -Sector -CDQ groups, cooperatives, open access fishery	**Same**	**Same**	**n/a**	**Same**
Monitoring PSC limits	[for Chinook] -At vessel level ->coop mgrs monitors -At CDQ group level -> NMFS monitors -At cooperative level -> NMFS monitors -At sector level -> NMFS monitors -Open access -> NMFS monitors and manages	**Same**	**Same**	n/a	**Same**
Applying abundance-based PSC limit	[for Chinook] -Review ADF&G letter -Apply appropriate PSC limit harvest specification process (starts in October)	n/a	**Same**	n/a	**Same (Option 3) -results in suspension of PSC limits**
Approving IPAs	-NMFS must review and approve all IPAs. -May only disapprove for reasons under 50 CFR 679.21(f)(12)(v)(D). -IPAs provide annual reports to Council.	n/a	n/a	**Same**	n/a

Management and enforcement

Task	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
Approving PSC transfers	[for Chinook] -Intra-coop transfers facilitated by coop mgrs -Inter-coop, inter CDQ group, inter-sector transfers approved by NMFS -post-delivery transfers conditionally permitted -all transfers reported	**Same**	**Same**	n/a	**Same**
Prohibition of exceedances of PSC limit	[for Chinook] – 50 C.F.R. 679.7(k)(8)(v) – Cooperatives	**Same**	**Same**	n/a	**Same**
PSC limit exceedances by CDQ group, cooperative, or sector	[for Chinook] NMFS monitors PSC limits and notifies NOAA Office of Law Enforcement of exceedances -NMFS does <u>not</u> issue a closure notice in Federal Register	**Same**	**Same**	n/a	**Same**

Alternative 5, Monitoring, management, and enforcement considerations

Closures under Alternative 5 (all options)

- How the most timely compliance could be achieved with the PSC limits and associated temporary area closures (Alternative 5)
- Chinook PSC limits
  - Exceedances of Chinook PSC apportionments are prohibited (e.g., 50 CFR 679.7(k)(8)(v))
  - IPAs monitor their vessels PSC to avoid exceedances of apportioned Chinook PSC limits.
  - Transfers of Chinook PSC are permitted, including post-delivery.
  - NMFS monitors all Chinook bycatch and reports exceedances to NOAA Office of Law Enforcement.
- *Recommendation*. As with Chinook, and Alternatives 2 and 3, NMFS would monitor and manage chum salmon PSC limits the same as Chinook PSC limits.
  - NMFS would not issue a notice of temporary closure in the Federal Register.

Alternative 5, Option 2, Monitoring, management, and enforcement considerations

IPA selection of statistical fishing areas for closure

- *How*. Each IPA submits an IPA amendment to NMFS.
- *When*. Before B season, with sufficient time for NMFS to review and approve.
- *Basis*. Chum bycatch, catch per unit effort, and relevant genetic data.
- *Approval.* IPAs provide sufficient information, including methods and supporting data, for NMFS to evaluate completeness. Options:
  - NMFS approves if IPAs select stat areas for closure using required criteria.
  - If IPA Amendment is incomplete, NMFS requests more information
- *Issue.* What happens if the closure area is not approved prior to the B season?
  - *NMFS recommends.*
    - In Year 1, failure to achieve a timely approval of the closure area results in no fishing by IPA members in corridor area.
    - After NMFS approval, no changes to closure area during B season.

Alternative 5, Option 2, Monitoring, management, and enforcement considerations

Vessels that opt-out of Incentive Plan Agreements

- *Issue.* If a CDQ group or vessel does not join IPA, it would not be subject to any closure area.
  - IPAs are voluntary – no requirement for CDQ groups or vessels to join (50 CFR 679.21(f)(12)(ii)(A)).
- *Recommendation.* CDQ groups or vessels that are not a member of an IPA prior to the B season would be prohibited from fishing within all or a portion of the corridor area during the B season.
  - For Chinook, vessels that opt-out of an IPA are apportioned a reduced amount of PSC, which is non-transferable and managed by NMFS

Alternative 3 and 4, Monitoring, management, and enforcement considerations

Alternative 3, Option 1 (Three-River Index)

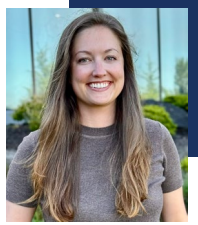
- *Issue*. How would ADF&G replace a data source for estimating in-river abundance?
- *Recommendation*. Explain the need and basis for the modification in annual letter to NMFS.

Alternative 4

- *Issue.* If Alternative 4 is selected, when must new IPA provisions be added?
- *Process*. After the final rule is adopted.
  - The IPAs would submit IPA Amendments to NMFS. The IPA Amendments must be received with sufficient time for NMFS to review and approve prior to the B season

- ~~PURPOSE AND NEED STATEMENT (SECTION 1.1)~~
- ~~DESCRIPTION OF THE ALTERNATIVES (CHAPTER 2)~~
- ~~IMPACT ANALYSIS (CHAPTERS 3 AND 4)~~
  - ~~Alternative 1~~
  - ~~Alternative 2~~
  - ~~Alternative 3~~
  - ~~Alternative 4~~
  - ~~Alternative 5~~
- ~~IMPACTS FROM A COMBINATION OF ALTERNATIVES~~
- ~~COMPARISON OF ALTERNATIVES (SECTION 2.8)~~
- ~~MANAGEMENT, MONITORING AND ENFORCEMENT (CHAPTER 5)~~
- FINAL POINTS AND NEXT STEPS

WHERE ARE WE AT?



Resources available to the Council as it considers a preferred alternative

- Council is scheduled to make a **final recommendation** regarding a **preferred alternative**
  - Table 2-30 compares advantages and disadvantages of the alternatives (p. 114)
  - Table 2-31 compares similarities and differences among the alternatives (p. 115)
  - Table 2-32 summarizes the alternatives and options that may or may not be combined (p. 116)
  - Table 1-11 has decision points for each alternative (p. 56)
    - No additional points for consideration related to Alternative 1

Milestones associated with selecting a preferred alternative

- If the Council recommends a preferred alternative, the next steps and anticipated milestones (tentative) are:
  - Response to comments received on DEIS and prepare Final EIS
  - Draft FMP amendment and Proposed Rule development
  - Final EIS, Proposed rule, and Notice of Availability published (*anticipated late 2026, early 2027*)
  - Decision on FMP Amendment (*Anticipated early 2027)*
  - Final Rule development, including response to public comment
  - Final Rule publication and implementation period
  - New rules apply (*Anticipated 2028*)

Questions?

- **Thank you!** Contributors and persons consulted, p. 463–464

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EXTRA SLIDES

Decision points for Alternative 2

Table 1-11, p. 56

- Does the Council want to include Alternative 2 in a PA? ***If yes,***
  - Alternative 3 cannot be selected
  - An amount must be selected for the overall chum salmon PSC limit, set at an amount between 100,000 and 550,000 chum salmon
  - An apportionment approach must be selected based on one of the four options under consideration
    - Does the Council want to include a CDQ Reserve Pool?

Decision points for Alternative 3

Table 1-11, p. 56

- Does the Council want to include Alternative 3 in a PA? ***If yes,***
  - Alternative 2 and Alternative 5, Option 3 cannot be selected
  - The Council must select one index for WAK chum salmon abundance, either Option 1 (Three-area Index) or Option 2 (Yukon Area Index)
  - The Council must select a value to use to set index thresholds, either Suboption 1 (25th percentile) or Suboption 2 (50th percentile)
  - An amount must be selected for the overall chum salmon PSC limit, set at an amount between 100,000 and 550,000 chum salmon
  - An apportionment approach must be selected based on one of the four options under consideration
    - Does the Council want to include a CDQ Reserve Pool?

Decision points for Alternative 4

Table 1-11, p. 56

- Does the Council want to include Alternative 4 in a PA? ***If yes,***
  - The Council may wish to consider whether to include all six provisions or individually select some provisions and not others
  - No provisions are mutually exclusive

Decision points for Alternative 5

- Does the Council want to Alternative 5 in a PA? ***If yes,***
  - The Council must select one inseason corridor option to apply, either Option 1, Suboption 1, or Option 2
  - An amount must be selected for the corridor chum salmon PSC limit, set at an amount between 50,000 and 350,000 chum salmon
  - An apportionment approach must be selected based on one of the four options under consideration
    - Does the Council want to include a CDQ Reserve Pool?
  - Does the Council wish to include Option 3 (abundance-based threshold)? ***If yes,***
    - Alternative 3 cannot be selected
    - The Council must select a value to use to set index thresholds, either Suboption 1 (75th percentile) or Suboption 2 (90th percentile).
  - Does the Council want to include Option 4 to adjust the Winter HSA start date for the pollock fishery?

Table 1-11, p. 56