

D-1(a) BSAI Salmon Bycatch Motion [As amended and approved on April 5, 2008]

The Council forwards the problem statement and alternatives and options for analysis as provided in the March 2008 D-1(a) staff discussion paper *Review of Draft Alternatives* with the following revisions. Additions are underlined and deletions are shown in strikethrough.

Problem Statement

An effective approach to salmon prohibited species bycatch reduction in the Bering Sea pollock trawl fishery is needed. Current information suggests these harvests include stocks from Asia, Alaska, Yukon, British Columbia, and lower-48 origin. Chinook salmon are a high-value species extremely important to Western Alaskan village commercial and subsistence fishermen and also provide remote trophy sport fishing opportunities. Other salmon (primarily made up of chum salmon) harvested as bycatch in the Bering Sea pollock trawl fishery also serve an important role in Alaska subsistence fisheries. However, in response to low salmon runs, the State of Alaska has been forced to close or greatly reduce some commercial, subsistence and sport fisheries in Western Alaska. Reasons for reductions in the number of Chinook salmon returning to spawn in Western Alaska rivers and the Canadian portion of the Yukon River drainage are uncertain, but recent increases in Bering Sea bycatch may be a contributing factor.

Conservation concerns acknowledged by the Council during the development of the Salmon Savings Areas have not been resolved. Continually increasing Chinook salmon bycatch indicates the VRHS under the salmon bycatch intercooperative agreement approach is not yet sufficient on its own to stabilize, much less, reduce the total bycatch. Hard caps, area closures, and/or other measures may be needed to reduce salmon bycatch to the extent practicable under National Standard 9 of the MSA. We recognize the MSA requires use of the best scientific information available. The Council intends to develop an adaptive management approach which incorporates new and better information as it becomes available. Salmon bycatch must be reduced to address the Council's concerns for those living in rural areas who depend on local fisheries for their sustenance and livelihood and to contribute towards efforts to reduce bycatch of Yukon River salmon under the U.S./Canada Yukon River Agreement obligations. The Council is also aware of the contribution that the Pollock fishery makes in the way of food production and economic activity for the country as well as for the State of Alaska and the coastal communities that participate in the CDQ program; and the need to balance tension between National Standard 1 to achieve optimum yield from the fishery and National Standard 9 to reduce bycatch.

**D-1(a) BSAI Salmon Bycatch
Alternatives and options**

This action shall be bifurcated such that the analysis outlined under Action 1 for Chinook comes back to the Council for Initial Review in June and Action 2 (non-Chinook) comes back in October.

Option B (applies to Alternatives 3 and 4 only):

Exempt those vessels participating in a VRHS system from area closures

ACTION 1: CHINOOK SALMON

Option A (applies to Alternatives 2 and 3-4):

~~Modify the PSC accounting period to begin at the start of the B season in one calendar year and continue through the A season of the following calendar year. If this option is not selected, the accounting period is the calendar year.~~

Hard caps and trigger caps will be divided by season. Use the following A/B season distribution:

- 1) 70/30
- 2) 58/42 (based on 2000-2007 average distributional ratio between A and B seasons)
- 3) 55/45
- 4) 50/50

Suboption: Rollover the available salmon from the A to B season within each management year.

Alternative 1: Status Quo (Chinook)

Alternative 2: Hard Cap (Chinook)

Component 1: Hard Cap Formulation

Option 1: Range of numbers for hard cap formulation

Range of suboptions for hard cap with breakout for CDQ allocation (7.5%) and remainder for non-CDQ fleet

Sub Option	Overall Fishery cap #s Chinook	CDQ allocation	Non-CDQ cap (all sectors combined)
i)	87,500	6,563	80,938
ii)	68,392	5,129	63,263
iii)	57,333	4,300	53,033
iv)	47,591	3,569	44,022
v)	43,328	3,250	40,078
vi)	38,891	2,917	35,974
vii)	32,482	2,436	30,046
viii)	29,323	2,199	27,124

Range of Chinook salmon caps for use in the analysis of impacts

Sub Option	Chinook	CDQ	Non-CDQ
i)	87,500	6,563	80,938
ii)	68,100	5,108	62,993
iii)	48,700	3,653	45,048
iv)	29,300	2,198	27,103

Option 2: Framework Cap (cap set relative to salmon returns)

Component 2: Sector Allocation

Divide the final cap by sectors based on:

Option 1) 10% of the cap to the CDQ sector, and the remaining allocated as follows: 50% inshore CV fleet; 10% for the mothership fleet; and 40% for the offshore CP fleet

Option 2) Historical average of percent bycatch by sector based on:

a) 3 year (2004-2006) average: CDQ 3%; inshore CV fleet 70%; mothership fleet 6%; offshore CP fleet 21%.

b) 5 year (2002-2006) average: CDQ 4%; inshore CV fleet 65%; mothership fleet 7%; offshore CP fleet 24%.

c) 10 year (1997-2006) average: CDQ 4%; inshore CV fleet 62%; mothership fleet 9%; offshore CP fleet 25%.

d) Mid-point of range of % allocations between option 1 and option 2(a-c)

Component 3: Sector Transfer

Option 1) Transfer salmon bycatch among sectors (industry initiated)

Suboption: Limit transfers to the following percentage of salmon that is available to the transferring entity at the time of transfer:

a) 50%

b) 70%

c) 90%

Option 2) NMFS would rollover unused salmon bycatch to other sectors still fishing based on the proportion of pollock remaining for harvest.

The above options are mutually exclusive.

Component 4: Cooperative provisions

Cooperative transfer options

When a salmon coop cap is reached, the coop must stop fishing for pollock and may:

Option 1) Lease their remaining pollock to another coop (inter-cooperative transfer) within their sector for that year (or similar method to allow pollock harvest with individual coop accountability).

Option 2) Transfer salmon bycatch from other inshore cooperatives.

Suboption: Limit transfers to the following percentage of salmon that is available to the transferring entity at the time of transfer:

a) 50%

b) 70%

c) 90%

~~**Rollover suboption:** NMFS will rollover unused salmon bycatch to other sectors and inshore cooperatives still fishing.~~

~~**Alternative 3: Fixed closures (Chinook)**~~

~~**Alternative 3-4: Triggered closures (Chinook)**~~

Component 1: Management

Option 1) Triggered area closures are managed by NMFS.

Option 2) Triggered area closures are managed by intercooperative agreement.

Component 2 4: Trigger Cap Formulation

~~Cap formulation for trigger caps is equivalent to those under consideration for hard caps.~~

The trigger cap amount will be within the range of hard caps established under Alternative 2.

Suboption: Distribution to the A and B season closures shall be as specified under Action 1, Option A (on page 1 of the Alternatives).

Component 3 2: Sector Allocation

Sector allocations are equivalent to those under consideration for hard caps.

Component 4 3: Sector Transfer

Option 1) Transfer salmon bycatch among sectors (industry initiated)

Suboption: Limit transfers to the following percentage of salmon that is available to the transferring entity at the time of transfer:

a) 50%

b) 70%

c) 90%

Option 2) NMFS will rollover unused salmon bycatch to other sectors and other cooperatives still fishing based on the proportion of pollock remaining for harvest.

The above options are mutually exclusive.

Component 5 4: Area options

Triggered Chinook closure areas for the A season (as specified in Figure 2 of the ICA proposal) and B season (as specified in Figure 3 of the ICA proposal). These areas are designed to cover where 90% of Chinook bycatch has occurred from the years 2000-2007. The B season closure area shall be implemented August 15th.

[Strike all Chinook area closure options described in the analysis.]

Suboption: Periodic adjustments to areas based on updated bycatch information.

ACTION 2: NON-CHINOOK SALMON (CHUM)

Alternative 1: Status Quo (non-Chinook)

Alternative 2: Hard Cap (non-Chinook)

Component 1: Hard Cap Formulation

Option 1: Range of numbers for hard cap formulation

Range of suboptions for hard cap for non-Chinook with breakout for CDQ allocation (10.7%) and remainder for non-CDQ fleet

Sub Option	Non-Chinook	CDQ	Non-CDQ
i)	58,176	6,225	51,951
ii)	76,252	8,159	68,093
iii)	147,204	15,751	131,453
iv)	203,080	21,730	181,350
v)	220,614	23,606	197,008
vi)	347,984	37,234	310,750
vii)	488,045	52,221	435,824

Option 2: Framework Cap (cap set relative to salmon returns)

Component 2: Sector Allocation

Divide the final cap by sectors based on:

Option 1) 10% of the cap to the CDQ sector, and the remaining allocated as follows:
50% inshore CV fleet; 10% for the mothership fleet; and 40% for the offshore CP fleet.

Option 2) Historical average of percent bycatch by sector based on:
a) 3 year (2004-2006) average CDQ 1%; inshore CV fleet 86%; mothership fleet 2%; offshore CP fleet 11%.
b) 5 year (2002-2006) average: CDQ 2%; inshore CV fleet 84%; mothership fleet 3%; offshore CP fleet 11%.
c) 10 year (1997-2006) average: CDQ 2%; inshore CV fleet 82%; mothership fleet 4%; offshore CP fleet 12%.

Component 3: Sector Transfer

Option 1) Transfer salmon bycatch among sectors (industry initiated)

Suboption: Limit transfers to the following percentage of salmon that is available to the transferring entity at the time of transfer:

- a) 50%
- b) 70%
- c) 90%

Option 2) NMFS will rollover unused salmon bycatch to other sectors still fishing based on the proportion of pollock remaining for harvest.

The above options are mutually exclusive.

Component 4: Cooperative provisions

Cooperative transfer options

When a salmon coop cap is reached, the coop must stop fishing for pollock and may:

Option 1) Lease their remaining pollock to another coop (inter-cooperative transfer) within their sector for that year (or similar method to allow pollock harvest with individual coop accountability.

Option 2) Transfer salmon bycatch from other inshore cooperatives.

Suboption: Limit transfers to the following percentage of salmon that is available to the transferring entity at the time of transfer:

- a) 50%
- b) 70%
- c) 90%

~~Rollover suboption: NMFS will rollover unused salmon bycatch to other sectors and inshore cooperatives still fishing.~~

~~Alternative 3: Fixed closures (non-Chinook)~~

Alternative 3 -4: Triggered closures (non-Chinook)

Component 1: Trigger Cap Formulation

~~Cap formulation for trigger caps is equivalent to those under consideration for hard caps.~~

The trigger cap amount will be within the range of hard caps established under Alternative 2.

Component 2: Sector Allocation

Sector allocations are equivalent to those under consideration for hard caps.

Component 3: Sector Transfer

Option 1) Transfer salmon bycatch among sectors (industry initiated)

Suboption: Limit transfers to the following percentage of salmon that is available to the transferring entity at the time of transfer:

- a) 50%
- b) 70%
- c) 90%

Option 2) NMFS will rollover unused salmon bycatch to other sectors and other cooperatives still fishing based on the proportion of pollock remaining for harvest.

The above options are mutually exclusive.

Component 4: Area options

Option 1: Areas (note all B season closures for non-Chinook)

- ~~i. Adjust area according to the number of salmon caught~~
- ~~ii. Single area closure~~
- ~~iii. Multiple area closures~~

~~Candidate areas (need to fold into above)~~

- ~~i. August B season candidate closure~~

Option 1a) Small closure

Option 1b) Medium closure

Option 1c) Large closure

Option 2) Expanding area closure

Suboption: Periodic adjustments to areas based on updated bycatch information.

Comparison of NMFS survey estimates of pollock biomass in the CVOA with pollock catch within the same region (1998-2007) suggests that expected CPUE in this region may be lower. This should be explicitly considered for the potential effect on salmon bycatch patterns in the EIS.