

Amendment 84

- Vessels participating in Voluntary Rolling Hot Spot (VRHS) closure system (as part of the AFA IC bycatch agreement) are exempt from savings area closures if triggered
- Chum Salmon Savings Area redefined to apply only to directed pollock trawl fishery
- Annual performance review report to Council including:
 - Number of salmon taken by species and season
 - Estimate number of salmon avoided as demonstrated by the movement of fishing effort away from salmon hot-spots
- Implementation by August 1, 2006 (prior to annual closure of Chum Salmon Savings Area)

2006 A Season

A season Chinook bycatch pollock pelagic trawl fishery
(Chinook SSA closed February 15, 2006)

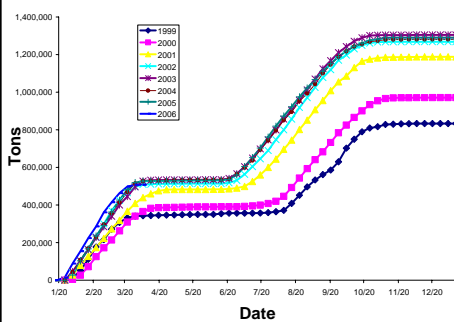
- March 25, 2006 = 58,650

For comparison:

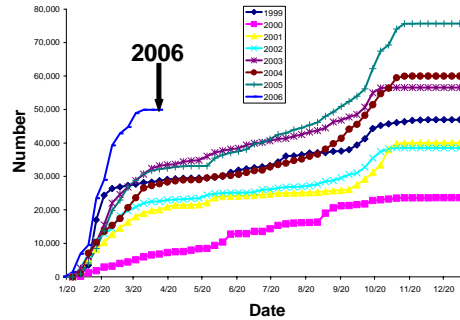
- March 26, 2005 = 25,400
- Total for 2005 = 76,269



2006 A Season



Cumulative pollock catch (obs.vessels)

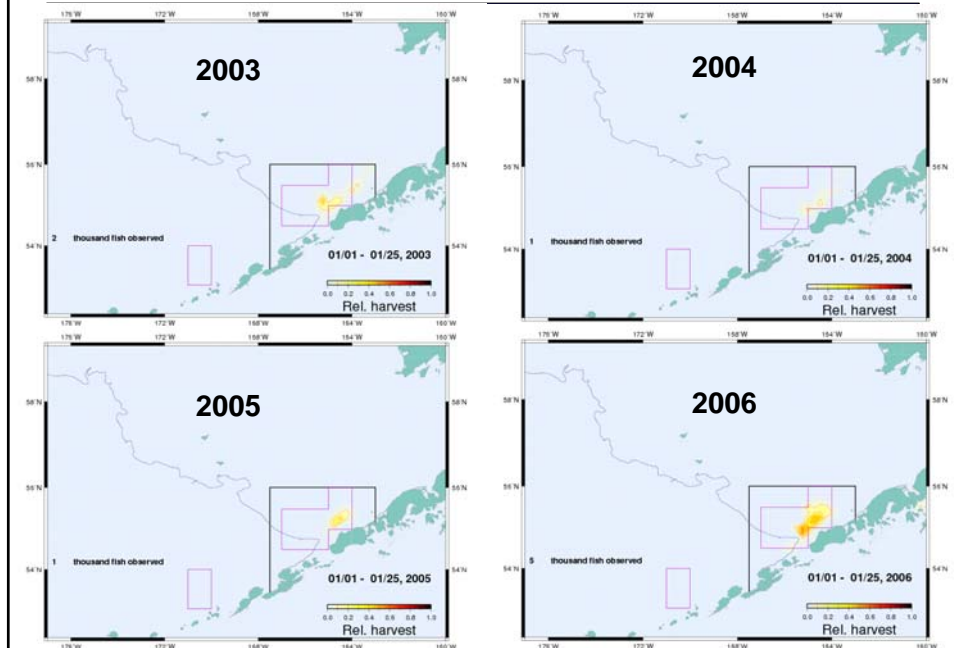


Cumulative Chinook catch (obs.vessels)

Preliminary data for 2006 through March 25, 2006



Chinook A season



Changes to IC agreement in A Season 2006

Measures included in revised agreement to provide better responsiveness to salmon bycatch:

- Removal of stand-down period
- In-season Base Rate adjustment
- Continuation of hot spot closures following a regulatory closure

These measures are intended to provide better management of salmon bycatch:

- Why are salmon bycatch numbers still increasing?
- Is this an indication of higher abundance of salmon in the BSAI?
- How can we assess the relative impact of trawl fisheries on salmon stocks?

Amendment 84B

- Split out from Amd 84 (February 2005) to facilitate expedited analysis
- Bifurcated by Council in December 2005 into 2 amendment packages (B-1, B-2).
- Problem statement applies to both amendment packages:

The Council and NMFS have initiated action to exempt AFA qualified and CDQ vessels participating in the intercooperative voluntary rolling hotspot system (VRHS) from regulatory Bering Sea salmon bycatch savings areas. Analysis and refinement of the current salmon savings areas may be necessary in the event pollock vessels either surrender or lose their exemption and return to fishing under the regulatory salmon bycatch program.

Further, alternatives to the VRHS system and/or the regulatory salmon bycatch program should be developed to assess whether they would be more effective in reducing salmon bycatch. The following amendment packages are not intended to preclude the intercooperative annual review as required under Amendment 84.



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Amendment Package B-1

- Establish new regulatory salmon savings systems taking into account the most recent available salmon bycatch data. In developing alternatives include an analysis of the need and implementation strategy for appropriate caps as bycatch control measures. This package should be completed first and implemented when ready so that salmon savings regulations are based on the best available information.
 - Option: Adjust the Chinook and non-Chinook regulatory closure areas periodically based on the most current bycatch data available, such as the 2-3 year rolling average of bycatch rates by species and area.



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Amendment Package B-2

Develop a regulatory individual vessel salmon bycatch accountability program.

- Option A: managed at the individual level
- Option B: managed at the co-op level
- Option C: Either Option A or Option B for each AFA pollock sector.
- Suboption 1: Implement the individual vessel salmon bycatch accountability program.
 - i) Immediately, if it was determined to be more effective in reducing salmon bycatch than the VRHS system.
 - ii) After 3 years if it is determined the VRHS system has failed to achieve the desired level of bycatch reduction.
- Suboption 2: Analyze the need and implementation strategy for appropriate caps as bycatch control measures.
(note Suboptions 1 and 2 apply to Options A, B and C)



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Workshop Objectives

- Overview of availability of information
 - salmon bycatch patterns
 - Salmon abundance patterns across Pacific Rim
 - Genetic origin of salmon incidentally-caught in BSAI trawl fisheries
- Information needs for B-1 analysis
 - Biomass-based caps
 - Updated salmon savings areas
 - Analysis of current system under VRHS
 - How to evaluate efficacy of VRHS system, measure for evaluating alternative system?



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Workshop Summary

- No obvious changes to pollock fishery patterns in recent years
- BASIS data on abundance patterns since 2002
 - Oceanographic features (e.g. eddies) may play role in observed distribution patterns
- 3 types of genetic markers available: allozymes, microsatellites, single nucleotide polymorphisms (SNPs)
 - DNA-based methods preferred (microsatellites and SNPs).
- Genetic baseline data for stock origin identification progressing, some analyses completed, most pending
 - Samples taken on 2005 B season (chum and Chinook), 2006 A season Chinook. Genetic analyses not yet completed



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Workshop Summary continued

- Stock Status information for AYK stocks presented
 - Yukon Chinook (yield concern) recent escapement improved since 1999, continued strong production anticipated.
 - Kuskokwim Chinook (yield concern) improved recent runs since 2000
 - Norton Sound Chinook (yield concern), no escapement information available
- Overview of vessel incentive for bycatch avoidance and ideas for bycatch accountability programs
 - Fleet response to VRHS closures (eligible vessels do not re-enter closed areas)
 - Questionable incentives for changing fishing practices
 - Tradable IBQs should be considered



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SSC Discussion and Recommendations

- Biomass-based caps
 - Scientific basis for developing biomass-based caps may be years away
 - Need to consider region of origin by age and spatially across the Bering Sea shelf and slope.
 - Some data through 2002, more recent samples anticipated.
 - Time trends of average run sizes necessary
 - ADF&G progress here
 - BASIS information useful for forecasting future returns
 - Need to standardize survey
 - Research recommendations
 - Influence of oceanographic factors (use satellite imagery?)
 - Research methods used by vessels with history of low bycatch



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SSC Discussion and Recommendations

- Comments on VRHS system
 - Concerns with ability of Base Rate to change
- Innovative ideas for salmon savings areas
 - Consider incentives to encourage eligible vessels to later fish within VRHS closures (for data collection)
 - Analysis of historical patterns in bycatch; are there coherent shifts in patterns (to allow for periodic adjustment)
 - Consider shifts in A/B seasonal apportionments to reduce bycatch (chum bycatch is high in the B season; Chinook both A and B)
- Individual vessel bycatch accountability program
 - IBQs, fees and taxes as incentives for bycatch reduction
 - Other innovative approaches may include establishing a competition for low bycatch among fleet via redistribution of bond posted before season



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