



Elizabeth Andrews PhD
USA

Co-Chairs

Frank Quim
Canada

Yukon River Panel 100-419 Range Road Whitehorse, Yukon Y1A 3V1

February 20, 2009

Robert D. Mecum, Acting Administrator
National Marine Fisheries Service, Alaska Region
PO Box 21668
Juneau, AK. 99802

RE: Salmon Bycatch EIS

Dear Mr. Mecum:

This letter conveys comments and recommendations of the Yukon River Panel regarding the Bering Sea Chinook Salmon Bycatch Management Draft Environmental Impact Statement/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (DEIS/RIR/IRFA) which was filed in November 2008 (*Federal Register*, Vol. 73, No. 235, 12-05-08) for public review.

The Yukon River Panel is an international advisory body established under the Yukon River Salmon Agreement for the conservation, management, restoration, and harvest sharing of Canadian-origin salmon between the United States and Canada. This Agreement constitutes Chapter 8 of the Pacific Salmon Treaty¹, which means it has the full power and force of an international treaty between our two nations.

In December 2008, Dr. Diana Stram of the North Pacific Fishery Management Council (NPFMC) presented to Panel members an overview of the management alternatives. Members much appreciated this presentation and the opportunity to ask questions of Council members and staff about the alternatives and information presented. Since then, some Panel members have attended one or more presentations of draft reports on industry incentive-based programs, as the concept of an incentive program is a key element of the preliminary preferred alternative (PPA) described in the DEIS. These presentations were in Anchorage in December 2008 and January 2009; and in Seattle in February 2009.

¹ <http://www.psc.org/pubs/treaty.pdf> accessed February 2009

The Yukon River Panel recommends immediate action by the National Marine Fisheries Service (NMFS) to reduce salmon prohibited species bycatch in the Bering Sea pollock fishery. The Panel recommends that NMFS have emergency regulations ready to adopt until such time as the preferred alternative adopted by the North Pacific Fishery Management Council (NPFMC or Council) and associated regulations go into effect in 2011, the current estimated year for implementation. Reducing salmon bycatch is a key element in the international Yukon River Salmon Agreement and further delay is unacceptable.

The Yukon River Panel recommends immediate action to adequately fund and conduct a long-term, scientific genetic sampling program designed to fully represent, annually, the genetic contributions of the salmon bycatch. These samples need to be analyzed to provide information on the salmon stock composition in the pollock fishery prior to and after implementation of management changes for the Bering Sea fishery. It is grossly inadequate to evaluate impacts of the Pollock fishery on the salmon genetic stock using an unsatisfactory number of opportunistically collected samples during recent years. The EIS analysis indicated a moderate percentage of Pacific Northwest Chinook salmon stocks in samples collected to date. If those stocks are present at the identified levels, one would expect observers would be collecting fin-clipped (marked) hatchery fish from the Pacific Northwest. However, the analysis only identified the fin-clipped/coded-wire-tagged fish recovered for two Pacific Northwest ESA Chinook salmon stocks (p. 244). The actual or estimated coded-wire-tag recoveries for all Pacific Northwest stocks caught as bycatch should be evaluated against the estimated Pacific Northwest genetic estimates to assess concordance. Long-term genetics data collection and analysis is essential for designing a program to avoid catches of western Alaska and Canadian-origin Chinook salmon stocks and should be checked against other data sources to evaluate agreement. Techniques for in-season stock identification are now possible and should be used.

The Yukon River Panel supports final action by the Council in April 2009 to meet the goal as stated in the EIS of controlling and reducing salmon bycatch regardless of annual abundance. Any further delay would be detrimental to the salmon resource, meeting escapement objectives, and the communities and people who depend on the salmon resource, both in the US and Canada. The Panel recognizes there are deficiencies in the EIS. The public has been commenting on these and these will be included as part of the process.

The Yukon River Panel supports regulations and programs that may close areas where high Chinook bycatch rates occur; or time periods when bycatch rates are high and a hard cap is projected to be exceeded. The EIS clearly showed a trend of increased Chinook bycatch during the month of October. The Panel recognizes that some areas may change from season to season, whereas others may be closed indefinitely based on consistently high bycatch rates. Regulations and programs must be flexible enough to address existing hot spots and new hot spots during the fishing season.

The Panel supports continued efforts by the pollock industry to develop and implement programs and fishing techniques to reduce salmon bycatch. Both regulatory and non-regulatory measures are necessary in reducing salmon bycatch. We encourage incentive programs that are likely to work from the outset of implementation, recommending they be evaluated against meaningful performance measures.

The Panel supports 100% observer coverage for all sectors and vessels. It is essential to improve the salmon bycatch estimate through better accounting, location of harvest, genetic stock identification, and bycatch rate information. Full observer coverage will improve scientific genetic sampling of the salmon bycatch for all parameters and assessment of the impact of the pollock fishery on the salmon resource.

The Yukon River Panel does not support a regulatory cap of 68,392 in any scenario. Since 1991, this cap would only have effectively reduced bycatch in 2006 and 2007. Because the EIS analysis is focused on bycatch in years 2003-2007, it appears such a cap would have affected two out of five years (2003-2007). However, these are the highest years of bycatch on record. Having a hard cap based on the highest bycatch years would not serve to reduce marine catches and is contrary to the Yukon River Salmon Agreement to reduce bycatch. A cap of 68,392 has the effect of maximizing bycatch rather than minimizing bycatch as required under National Standard 9 and under the Yukon River Salmon Agreement signed in 2002. Precautionary measures are necessary to conserve Yukon River Chinook salmon.

The Yukon River Panel recommends an interim hard cap of 37,000, under Alternative 4 (PPA2). Consistent with the Panel's previous communications with the NPFMC (letters of February 5, 2008, June 3, 2008, and January 26, 2009, among others), the primary concern is when Bering Sea salmon bycatch exceeds 37,000 Chinook salmon, some portion of the Yukon River Alaskan and/or Canadian escapements or harvests have been less than expected, reduced, or restricted. The Panel is opposed to a hard cap of 47,591 as this appears to jeopardize meeting salmon escapement goals in both the US and Canada. Establishing a hard cap of 47,591, even in conjunction with triggered closures or incentive programs, essentially continues to place the burden of conservation solely on in-river managers and fishermen while the marine fishery continues unchecked. Our responsibility is to endeavor to increase in-river runs by reducing marine catches of Yukon River salmon. We recommend an immediate interim cap level of 37,000, with a subsequent reduction within five years to a hard cap of 32,482 or less. A hard cap of 32,482 is based on the 1992-2001 average prior to when the Agreement was signed in 2002.

The Yukon River Panel does not support Alternative 1: Status Quo. The annually increasing salmon bycatch amount that has been harvested since 2001, shows that the current Chinook Salmon Savings Area closures and the inter-cooperative agreement, under the BSAI Fishery Management Plan (FMP) Amendment 84, have not effectively reduced or minimized bycatch of Yukon Chinook salmon stocks. If changes in the American Fisheries Act (AFA) and associated regulations resulted in increased bycatch during the 2000s, it should not be construed as a justification to allow a higher take of prohibited species above those taken on average from 1992-2001.

The Yukon River Panel does not support the preliminary preferred Alternative 4 (PPA1), which is based on an industry incentive program to reduce Chinook bycatch. The industry incentive program cannot be analyzed historically to determine its effectiveness, nor can an analysis be done to determine its effectiveness in the future. Currently, this incentive program is tied to high bycatch levels such as 68,392. As noted above, the Yukon River Panel cannot support these high bycatch caps. If the incentive program works well then a lower cap should suffice. There is no

greater incentive to reduce bycatch than a cap that reduces bycatch to the historical average (1992-2001) prior to 2002.

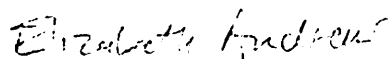
The Yukon River Panel does not support a rollover of bycatch from A season to B season if the cap is 47,591 or higher, because these caps do not effectively minimize bycatch. It appears that a rollover could result in higher bycatch in the following B season. However, if the hard cap is 37,000 or lower, then a rollover provision would be more acceptable, because a lower cap will result in minimizing the overall bycatch.

The Panel makes these recommendations because the Yukon River Salmon Agreement when signed in 2002 included the provision in the Pacific Salmon Treaty, Chapter 8, paragraph 12: *“the Parties shall maintain efforts to increase the in-river run of Yukon River salmon by reducing marine catches and by-catches of Yukon River salmon. They shall further identify, quantify, and undertake efforts to reduce these catches and by-catches.”* At that time, Chinook salmon bycatch was roughly one-half the 2003-2007 bycatch used in the analysis. Furthermore, approximately 50 percent of Yukon River Chinook salmon are of Canadian-origin, making the international impact of marine bycatch an important element to include as a supplement to the analysis. In spite of very conservative in-river management actions since 2000, these conservative management actions, the Canadian escapement objective for Canadian-origin Chinook in 2007 and 2008 was not achieved.

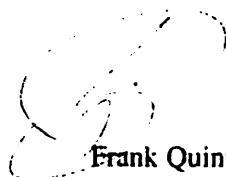
We support responsibly managed and monitored, sustainable fisheries and recognize that nearly every fishery has some level of bycatch. We urge the continuation and expansion of scientifically collected and analyzed genetics data as this is essential for designing a program to avoid catches of Western Alaska and Canadian-origin Chinook salmon stocks. We support continued studies on bycatch reduction efforts, such as salmon excluder devices and studies on the effect of fishing tow speed and depth on salmon bycatch.

We urge an immediate cap of the Chinook salmon bycatch at 37,000 using emergency regulatory authority, until the preferred Council final action goes into effect. We also strongly support final action by the Council in April 2009 on an alternative that achieves protection of Chinook salmon stocks of US and Canadian-origin and provides a sustainable resource for the many people whose livelihoods and traditions depend upon them, including the people of the Yukon River drainage. We will continue our work to conserve and manage Chinook salmon in-river to meet agreed upon escapement objectives of Canadian-origin stocks. Appropriate regulatory and non-regulatory measures for reducing Chinook salmon bycatch in the marine fisheries; complete monitoring by observers; full accounting of the bycatch, and identifying stocks of origin are essential to this work.

Sincerely,



Elizabeth Andrews
Co-Chair



Frank Quinn
Co-Chair

8.0 YUKON RIVER SALMON RUN OUTLOOKS 2009

8.1 CHINOOK SALMON

8.1.1 Canadian-Origin Upper Yukon Chinook Salmon

The Canadian spawning escapements in 2003 and 2004, the brood years producing age-6 and age-5 fish returning in 2009, were well above and near the 1999–2008 average, respectively. However, the run of Canadian-origin Upper Yukon River Chinook salmon in 2009 is expected to be below average to poor with a run outlook of 60,700–71,600 fish based on anticipated low production. For comparison, the average run size from 2000 to 2008 is 97,000 Chinook salmon.

The preseason outlook for 2009 based on sibling and stock-recruitment (S/R) models suggest that the total run size of Canadian-origin fish may range from 89,500 to 99,800. However, this range does not include the uncertainty associated with anticipated low production based on recent experience where runs have been at much lower levels than the preseason outlooks. For example, the 2007 run was approximately 30% lower than the preseason outlook while the 2008 run was approximately 29% below the lower end of the outlook range of 80,000–111,000. Despite U.S. and Canadian conservation measures, the escapement targets for Canadian-origin Chinook salmon were not achieved in 2007 and 2008. Hence, the 2009 outlook has been adjusted to reflect the likelihood that low productivity will influence the 2009 run based on the relative performance of the preseason run outlooks to actual run sizes over the past 2 years. The 2009 sibling outlook has been adjusted to an outlook range of 71,600 to 89,500, while the stock-recruitment (S/R) based outlook has been adjusted to a range of 60,700 to 99,800 Chinook salmon.

Environmental factors, poor marine survival, and an increased Chinook salmon bycatch in the Bering Sea trawl fishery targeting Alaskan Pollock could be associated with the low returns observed in 2007 and 2008. If similar effects influence the 2009 return, a run of Canadian-origin Upper Yukon River Chinook salmon as low as 60,700 to 71,600, the lower end of the sibling and stock-recruitment (S/R) outlook ranges, may occur. Based on the severity of the adjusted outlooks it is advisable to enter the 2009 season with the expectation that conservation measures will likely be required to meet the agreed minimum Interim Management Escapement Goal (IMEG) of 45,000 Canadian-origin Upper Yukon Chinook salmon.

8.1.1.1 Development of Revised Canadian-origin Chinook Salmon Database

Information from a number of sources suggested that the border and spawning escapement estimates derived from the DFO Chinook salmon mark-recapture program were biased low. In 2008, various stock-recruitment datasets were examined, including those developed from spawning escapements estimated from mark-recapture data and combinations of estimates derived from sonar, radio telemetry and aerial survey data. Border passage estimates were developed from a combination of Eagle Sonar estimates (2005–2007) and radio-telemetry data (2002–2004). Total spawning escapements for 2002 to 2007 were then calculated by subtracting the Canadian catch from these estimates. Linear regression of the estimated total spawning escapements for these years versus a 3-area aerial survey index of Big Salmon, Little Salmon, and Nisutlin rivers was

used to estimate historical Canadian spawning escapement estimates back to 1982. Age-specific returns were then calculated based on age, harvest and escapement data in the return years. The resulting database forms the basis for the current stock-recruitment model.

8.1.1.2 Performance of Stock-Recruitment Models for the Years 2000–2008

The performance of run outlooks developed using S/R models for 2000–2008 are presented in Table 14. The revised historical Canadian run size estimates were used to reconstruct the 2000 and 2001 runs; border passage estimates for the years 2002–2004 were based on telemetry data while border escapement estimates for the years 2005–2008 were based on Eagle sonar data. A review of preseason outlook performance provides an opportunity to document the recent decline in the Upper Yukon River Chinook salmon return per spawner values. Despite good brood year escapements, the observed run sizes were relatively low from 2000 to 2002 and 2007 to 2008. The causes of low returns are unknown but likely involve a number of factors in the marine and/or freshwater environments. It will be interesting and important to determine if the low returns observed in 2007 and 2008 develop into a long-term trend.

Table 1.—Preseason Upper Yukon River Chinook salmon outlooks and observed run sizes for the years 2000–2008 period. Run sizes incorporated: radio-telemetry data (2002–2004); Eagle Sonar estimates (2005–2008); and the relationship between telemetry/sonar to aerial surveys for 2000 and 2001. Run sizes are rounded to nearest one thousand.

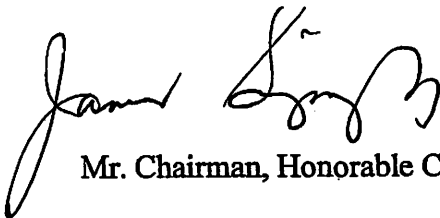
Year	Expected Run Size (Preseason)	Estimated Run Size (Postseason)	Proportion of Expected Run
2000	128,000	53,000	0.41
2001	127,000	86,000	0.68
2002	114,000	82,000	0.72
2003	117,000	150,000	1.28
2004	123,000	120,000	0.98
2005	122,000	124,000	1.02
2006	116,000	120,000	1.03
2007	118,000	83,000	0.70
2008	111,000	57,000	0.51
Average	120,000	97,000	0.82

8.1.2 Drainage-Wide Chinook Salmon

The total Yukon River Chinook salmon run can be estimated by applying historical average proportions of Canadian-origin fish in the total run to the outlook estimated for the Canadian component of the run. The 2007 and 2008 proportions of Canadian origin fish in the total run were below average (approximately 50%) at 37% and 36%, respectively. Since recent run sizes are the best indicators of upcoming run size, it would be sensible to estimate the 2009 outlook based on the 2007 and 2008 proportions. Using this method, the expected total Yukon River run size is 166,000 based on sibling and the

Ricker models, but could be as low as 149,000. Note that there is a lot of uncertainty associated with this methodology.

Thus, the 2009 Yukon River Chinook salmon run will likely be below average to poor. It is therefore prudent to enter the 2009 season with the expectation that subsistence conservation measures, beyond those used in 2008, will likely be required in an effort to share the available subsistence harvest amount and meet escapement goals. It is unlikely that there will be a directed Chinook salmon commercial fishery in 2009 on the mainstem river, but there may be opportunity to commercially harvest less than 1,000 Chinook salmon on the Tanana River, as the Tanana River is managed independently as a terminal fishery. Currently, the Yukon River Drainage Fisheries Association (YRDFA) is facilitating a series of regional teleconferences to provide managers, fishers, tribal council representatives, and other stakeholders the opportunity to share information, provide input, and discuss management options. The purpose of these calls is to work cooperatively to identify options and practical management strategies for 2009 that will assist in getting adequate numbers of fish to the spawning grounds should the 2009 Chinook salmon run be similar to the unexpected low runs of 2007 and 2008.



Mr. Chairman, Honorable Council members

I am James Sipary, Sr. I am from Toksook Bay and I have been a provider, subsistence fisherman and subsistence hunter all my life. And I am the member of the Coastal Villages Region Fund. (CVRF)

I am here to speak on behalf of the people in subsistence, commercial and recreational users of the resources of our great land – from the sea, air and the land, the survival practices that have continued from time memorial. Not only the people from Norton Sound, Yukon River, Kuskokwim River and Bristol Bay, but the people of the 10 Tribes of Alaska who heavily depend upon the resources of our great land, Yupik, Inupiak, Aleut, Alutuq, Siberian Yupik, Athabascan, Tlingit, Tsimshian, Haida, Eyak, and to our agreement with the Canadians. All depend upon the salmon resources, most of them heavily depend salmon resources for their survival for without it we are doomed.

As we look back to the history of our tribes- Even we have heavy use in subsistence fishing, commercial fishing in some areas for little income, and recreational use of the people. We have had good returns of salmon into our rivers for spawning. And when spawning eggs, there are predators when they hatch, when they travel mile and mile back to the sea, and in the sea predators.

And today with the high seas bycatch, we think we are over harvesting the resources of our major rivers here at home for the fish return where they were born.

As we look back to the history of our people in Coastal Villages, there use to be lingcod abundant for subsistence use. Sometime in 1943-1944, Japan over harvest the lingcod in our coast and today we still never see or catch lingcod only to tell stories of that specie once abundant in our coast. In 1970 again, Japan almost over harvest the herring in Nelson Island and it took 3 years to recover to the level they were in the past. And today, they don't spawn in our beaches where they use to spawn before.

In 1996-1997, salmon resources crashed, The State of Alaska declared disaster fisheries in Norton Sound, Yukon, Kuskokwim, and Bristol Bay. The restrictions were applied to subsistence users our only income in commercial fisheries was closed, and discussions about our major areas of rivers took place to determine how we might work for the recovery of the resources. And our subsistence users sacrificed their needs by limiting their subsistence fishing only for the recovery of the resources.

1998 11 years ago I testified before the NPFMC for the reduction of the bycatch, Only 13 resolutions were submitted by Villages and won the request for the reduction of the bycatch, the last two statements were. If the action is not made for the reduction of the bycatch we are heading for disaster of the species of salmon. And if the action are made for the reduction of bycatch then we are making one step forward for the recovery of salmon resources. Our people were very happy with the NPFMC action.

Our people have made sacrificed their subsistence needs with restrictions. They make those sacrifices of their need for the recovery of the salmon resources in their major rivers. It took seven long years for recovery. During seven year. Restrictions were lifted for both subsistence and Commercial fisheries in our major rivers. I was very happy with the recovery efforts our people have made.

2007, again the by catch skyrocketed worse than the 1996-1997's with the total of 122,000 Chinook being taken. Again the Chinooks were effected everywhere in our major rivers. Summer of 2008 expectation of return of Chinook were below expectation

We the 10 tribes of Alaska Natives and the users of these resources once again request the NPFMC to take action for the recovery of the resources. By cutting bycatch or setting the bycatch cap where it will not go over 30,000 limit. We are the true users of these important species, especially those who live in the interior Villages those who depend heavily upon salmon resources for their survival and nutrition for without it they will suffer.

Let us all learn from the past mistakes and let us not repeat those mistakes for the future to come and let us work together for the good conservation, management and protection of plants and habitat, and put in place a good Environmental Impact Statement as we continue the future of our peoples needs- subsistence, commercial and recreational. For the riches of our land is for all the people to enjoy for the future to come regardless of race.

Let us look back to the past and see what have worked for the recovery of salmon resources and repeat the action that were taken the only tool that worked was by cutting the bycatch

Therefore, as I have mentioned there are 10 different Tribes of Alaska, most of them on interior major rivers. Heavily depend upon the salmon resources.

We therefore want allowable bycatch no larger then 30,000 fish per year or less. Set the cap low for the recovery of these important resources. If NPFMC set the limit higher, there will be more people suffering- both for subsistence and commercial- especially for the Villages that heavily depend upon these resources. In 2008 some restrictions were applied for subsistence due to poor return.

This contributes to economic hardship, mostly in the areas that heavily depend upon these salmon resources. Without a reduction in bycatch, it means hardship and suffering to our people again especially those who only depend on these resources. We hereby ask the NPFMC to reduce the bycatch to the lowest level possible.

On behalf of our people in our great land we thank you.

April 4, 2009

Mr. Eric Olson, Chair
North Pacific Fishery Management Council
605 W. Fourth Avenue, Suite 306
Anchorage, AK 99501-2252

Mr. Doug Mecum, Regional Administrator
NOAA Fisheries, Alaska Region
709 West Ninth Street
Juneau, AK 99802-1668

RE: Agenda item C-2, Chinook salmon bycatch in the Bering Sea pollock fishery

Dear Chairman Olson, Mr. Mecum, and Council Members:

This week, you must take action to curb the bycatch of Chinook salmon in the Bering Sea pollock fishery. This issue has faced the North Pacific Fishery Management Council since its inception, but each passing year, and each subsequent Council, has failed to address the problem. The Council is not faced with a choice between Chinook salmon and pollock or between Western Alaska and Seattle. You must, however, choose how to best fulfill the legal and moral responsibilities to reduce Chinook salmon bycatch in the pollock fisheries that you manage.

Collectively, the Council must bear in mind the many obligations to protect salmon, including:

- The State of Alaska's obligation to responsibly manage resources, including salmon;
- The federal government's duty to meet treaty obligations with Canada;
- The Fish and Wildlife Service's trust resource management responsibilities under ANILCA;
- The obligation under the Magnuson-Stevens Act to minimize bycatch to the extent practicable; and
- The responsibility to ensure compliance with the Endangered Species Act.

You have received numerous letters and extensive testimony from Alaska native entities, communities, villages, conservation groups, Alaska state legislators, and others who have written you letters, testified in person, and depend on and care about Chinook salmon. These letters and testimony are testament to the importance of Chinook salmon and the urgency with which you must address this issue. Nonetheless, the Council has thus far failed to take any meaningful action to reduce salmon bycatch.

As we have explained in our previous letters on this issue, the National Marine Fisheries Service's (NMFS) obligations under the law are clear. The Magnuson-Stevens Act explicitly requires that NMFS "to the extent practicable and in the following priority—(A) minimize bycatch; and (B) minimize the mortality of bycatch which cannot be avoided." 16 U.S.C. § 1853(a)(11). This requirement is reinforced in National Standard 9, with which all Fishery Management Plans must be consistent, and which restates the requirement to minimize bycatch to the extent practicable. *See id.* § 1851(a)(9). When it added these provisions to the Act, Congress was very clear that its intent was to halt the "shameful waste" occurring in the nation's fisheries. 142 Cong. Rec. S10,794, at 10,820 (1996).

You have also heard that you must balance National Standard 1 and the obligation to minimize bycatch to the extent practicable. As you do so, though, it is important to bear in mind that National Standard 1 does not guarantee any specific catch for the pollock fishery. The goal of achieving Optimum Yield is applied to the groundfish fishery as a whole:

Whether salmon bycatch measure preclude the pollock fishery from harvesting its entire TAC for any given year is not determinative of whether the BSAI groundfish fishery achieves optimum yield. If the total catch for the BSAI groundfish fishery is within 1.4 and 2.0 million mt over the long-term, optimum yield will have been met.¹

NMFS goes on to note, that even under the lowest salmon bycatch scenarios, the BSAI groundfish fisheries would have met optimum yield in the long term. If a hard cap of 29,300 Chinook salmon had been in place since 2003, the groundfish fishery would still have achieved optimum yield over the long term.² This analysis assumes the maximum foregone pollock catch and no changes in behavior to avoid salmon. According to NMFS's own analysis, therefore, a 29,300 hard cap would meet any obligations imposed by National Standard 1.

This fact highlights a more fundamental problem with the process undertaken by the Council. The draft EIS identifies the purpose and need for this action as, in part, "to minimize Chinook salmon bycatch to the extent practicable, while achieving optimum yield from the pollock fishery."³ As NMFS's statements make clear, optimum yield is applied to the groundfish fishery as a whole, and "a lower TAC for the pollock fishery does not necessarily correlate to a failure to achieve OY."⁴

Nonetheless, over the past months, the Council appears to have focused on providing 'flexibility' to the pollock fleet rather than reducing bycatch of Chinook salmon. Nowhere is this more evident than the considerable time and effort collectively spent at the last several Council meetings, including this one, discussing the minutiae of industry self-incentive programs and intercooperative agreements that are being justified for meriting a higher salmon bycatch cap.

It is not at all clear that these agreements will help alleviate the bycatch problem:

The PPA, however, does not provide any guarantee or contain any requirement that the actual level of bycatch be below 68,392. It is therefore permissible, and arguably foreseeable, that this level of bycatch will occur each year that PPA (annual scenario 1) is in effect. Of course, if the Council adopts this approach, it will have to explain how it achieves the objectives of Chinook salmon bycatch management and complies with the national standards in the Magnuson-Stevens Act and other applicable law.⁵

¹ NMFS & NPFMC, Preliminary Comment Analysis Report for the Bering Sea Chinook Salmon Bycatch Management EIS/RIR/IRFA (2009) 11 [hereinafter "Preliminary Comment Analysis"].

² Preliminary Comment Analysis at 12

³ NMFS & NPFMC, Bering Sea Chinook Salmon Bycatch Management EIS/RIR/IRFA (2008) 2.

⁴ Preliminary Comment Analysis at 12

⁵ Preliminary Comment Analysis at 38.

Thus, to comply with its obligations under the MSA, NMFS and the Council must take action at this time to put in place a hard cap of not more than 30,000 salmon.

In addition to the MSA, NMFS also must ensure compliance with other provisions of law. As explained at length in our earlier letters on this issue, NMFS's ongoing failure to take effective action to reduce salmon bycatch calls into question its compliance with the ESA, Pacific Salmon Treaty, and Yukon River Salmon Agreement. In addition, the States of Alaska must ensure that resources, such as Chinook salmon, are managed for the benefit of its residents.

Throughout NMFS's response to Oceana's comments on the DEIS, the agency states that there is not enough information to address some of the key questions relating to salmon abundance in the ocean, the status of individual salmon stocks, and the proportion of individual salmon stocks being killed as bycatch. This lack of information counsels strongly in favor of conservative action by the Council as it sets the amount of Chinook salmon allowed to be taken by the pollock fishery.

These statements about the lack of information highlight the need to develop and fund a comprehensive research program to adaptively manage salmon at all life-stages. This gravel-to-gravel research plan, which would emphasize hiring and development of local expertise, would include community-based salmon research such as habitat assessments, integration of traditional knowledge, in-river and ocean sampling for genetic stock identification, and the temporal and spatial use of ocean habitat.

Funding is needed for this type of research program. The Council could begin the process of acquiring the necessary funds with a motion at this meeting. Pursuant to MSA §313(g), the Council has the authority to levy fines up to \$25,000 on a fishery as an incentive to reduce bycatch and to make these funds available to offset costs including conservation and management measures and research.⁶ The Council could use this authority to provide an incentive for the fleet, albeit a small one, to reduce bycatch and also provide for much-needed research funds to address the salmon bycatch problem.

In summary, the Council should take action to:

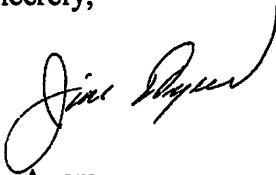
⁶ That section provides:

(g) BYCATCH REDUCTION INCENTIVES.—

(1) Notwithstanding section 304(d), the North Pacific Council may submit, and the Secretary may approve, consistent with the provisions of this Act, a system of fines in a fishery to provide incentives to reduce bycatch and bycatch rates; except that such fines shall not exceed \$25,000 per vessel per season. Any fines collected shall be deposited in the North Pacific Fishery Observer Fund, and may be made available by the Secretary to offset costs related to the reduction of bycatch in the fishery from which such fines were derived, including conservation and management measures and research, and to the State of Alaska to offset costs incurred by the State in the fishery from which such penalties were derived or in fisheries in which the State is directly involved in management or enforcement and which are directly affected by the fishery from which such penalties were derived.

- 1. Immediately establish a hard bycatch cap no greater than 32,500 Chinook salmon, and preferably as low as the Alaska Federation of Natives (AFN) Resolution 08-17 to establish an annual hard bycatch cap of no more than 30,000 Chinook salmon for the Bering Sea pollock fishery.**
- 2. Ensure that such cap does not confer to the pollock fleet ownership of, nor the right to take, salmon.**
- 3. Develop and secure funding for a comprehensive salmon gravel-to-gravel research plan to support management needs. This plan must include community-based research initiatives as well as identification of the stock-of-origin and age of all Chinook salmon caught as bycatch.**
- 4. Secure adequate funds to ensure rebuilding and sustainable Chinook escapement through comprehensive management and co-management of salmon by managing for all life-stages of salmon from in-river to estuary to ocean and return.**
- 5. Mandate appropriate consultation with Alaskan tribal governments and organizations on resource issues affecting Alaska Natives.**

Sincerely,



Jim Ayers,
Vice President, Oceana

D. Mahoney
April 2009

- VGG adopts and incorporates the position advanced by the Yukon River Panel in its letter to Council of April 4, 2009;
- I would like to point out to the Council that the description of the conditions of subsistence provided in the CAR document applies more or less completely to practices on the Canadian portions of the Yukon River. There are significant quantitative and other differences, but the principles inherent to Native subsistence are the same in Canada.
- That the ***Yukon River Salmon Agreement*** exists at all points to the fact that Canadian subsistence and other users of Yukon River Chinook have been experiencing a diminishing resource for a long time, and in recent years the situation has worsened considerably;
- Around the turn of the last century the population of Chinook in the Porcupine River

was considerably larger than it is now. Traditional knowledge coming from Elders of great age still living in Old Crow recount stories of their parents and grandparents who told of there being at one time many more Chinook;

- No one living today has direct experience of this. For generations, runs have been small, and in some years non-existent. This is attributed to the inception of commercial fishing and the establishment of canneries on the lower Yukon early in the 20th C.;
- As Ms Lorraine Peter of Old Crow described to you on Thursday, seeing significant declines in ***both salmon and Porcupine caribou***, the Vuntut Gwitchin people of Old Crow are alarmed.
- That the VGG have sent two people a very great distance at considerable expense to themselves is a measure of the degree of their concern over the matter of salmon bycatch; additionally, Council will have received by fax

68 letters signed by individual fishers from Old Crow;

- The people of Old Crow ^{Recognize} ~~understand~~ very well that many things are happening in the climate and in the marine environment which cannot be affected by human intervention, but that there are other things which can, for example a reduction in the bycatch;
- Salmon no longer fill the bellies of the people of Old Crow to the extent that they may once have, but as Ms Peter described to you they still serve to fill their lives with meaning: Chinook salmon in Old Crow have now the role of a sacrament, a seasonal communion with their place and the meaning it has to their lives and culture.

- the upper Porcupine basin is the extreme northern^{EAST} limit of the range of Chinook salmon;
- in terms of biodiversity this population should be regarded as significant to the extent of its specialization for the Arctic environment it occupies; it is an environment that is not friendly to Chinook salmon;
- with declining overall numbers in the Yukon system, Porcupine river Chinook are increasingly vulnerable to being fished to unsustainable levels by in-river harvest with other, much more productive stocks;
- the pressure of bycatch is additive, another card in the deck stacked against Porcupine River fish; under present circumstances, it could become one of the first Yukon tributaries unable to support a fishery;
- The cultural viability of the Vuntut Gwitchin hangs in the balance;

- National Standard 8 of the **MSA** states that, "...impacts should be considered both for individual communities and for the group of all communities identified in the FMP;"
- The **EPA** states that, "**Environmental Justice** is the fair treatment and meaningful involvement of all people..."
- It is obvious that this legislation carries no statutory obligation with regard to Canada, but I submit to the Council that by their comprehensiveness of phrasing, as well as through the agency of the **YRSA**, they convey a moral force with regard to the consideration of 10 Yukon First Nations and other users in the Canadian portions of the Yukon River drainage who are now being impacted by Chinook bycatch and will be directly affected by the Council's decision on this matter.



Emmonak Tribal Council

P.O. BOX 126
EMMONAK, ALASKA 99581
(907) 949-1720
FAX (907) 949-1384

April 3, 2009

We, Emmonak Tribal Council, authorize Nick Tucker Sr. to testify on behalf of Native Village of Emmonak to the North Pacific Management Council to reduce Chinook salmon bycatch in the Bering Sea Aleutian Island Pollock Fishery to 32,500.

Sincerely,

A handwritten signature in black ink, appearing to read "Ted Hamilton", with a large, sweeping flourish extending to the right.

Ted Hamilton
Natural Resource Specialist

Nicholas C. Tucker, Sr.
P.O. Box 178
Emmonak, AK 99581
(907) 949-1011 nctucker@hughes.net

March 19, 2009

North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

RE: Comment in Support of Hard Cap on Salmon Bycatch in the Pollock Fishery

Chairman and Members of the Council:

My name is Nicholas C. Tucker, Sr., of Emmonak on the Lower Yukon Delta.

I urge the Council to implement a hard cap of 32,500 on bycatch of our Chinook salmon in the Pollock fishery.

For 10,000 years, as great empires rise and fell throughout the history, we survived in our region, keeping our land, rivers and sea pristine. Our salmon resources remain our primary source of nutrients in our diet for our health and strength. Our culture thrives from them. Only within the last century has our way of life been forced to adapt. Our subsistence way of life became intertwined with our salmon commercial fishing, our sole base economy. Although a small-scale, meager fishery, our Chinook salmon fishery during the month of June provides sustainable life and self-sufficiency in all the aspects and levels of our community. In short, our commercial fishing has become the vital component within the fiber of our Native spirit, culture, dances, traditions, values, heritage, teachings and rituals. Our fishery income is inseparable from our subsistence way of life. Our culture is rich and unique. It is rich in its teachings and values that are contributable to our Country, yet barely recognized. We are competing with our western society. It has got to be preserved. Our Chinook salmon upholds our culture. It needs to be protected. Our salmon income, though derived from a few days during the month of June, enables us to whale hunt, seal hunt, fish for many other species of fish, moose and caribou hunt, and benefit from the fresh meat of our spring geese and other birds. Plant gathering and berry picking are no less important, especially the berries that we use during ceremonial farewell dances after the funeral of our loved ones, special gatherings and dances and our annual potlatches. Outdoor travel, activities, and recreation coupled with our natural, nutritious diet remain the major link to our health. We have the need of income from our base economy that provides us boats and skiffs, outboards, supplies, repair parts, and equipment to continue our way of life which, today, are combination western influences and traditional Yup'ik life. Today, one supports the other.

Ladies and Gentlemen, I'd like you to read the attached copy of my letter that I wrote early in January 2009. My village, Emmonak, and 10 other villages in our region should never have to decide between buying heating fuel or food or have to cry out for assistance. We were denied access to and participation in our Chinook salmon fishery last June, 2008. We've always survived regardless of conditions. We've survived famine and wide-spread disease. But with our

NPFMC

Comment, Salmon Bycatch

March 19, 2009

declining Chinook salmon resource , our once-thriving communities are threatened. Our fishermen and local retailers have lost as much as 75% to 90% of their income in recent years, and notably, 100% of our Chinook salmon income in 2008.

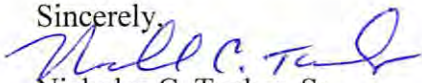
You are probably aware the 53 communities on the Alaskan side of the Yukon drainage have cooperated with our Canadian counterparts in a successful rebuilt and restoration of our Chinook salmon. This collapsed in 2008. Consequences were dire for our families during this winter. It is evident that we cannot alone, Alaska and Canada, protect this vital resource. We've got to have help from you along its migratory pathway where bycatch occurs in the Pollock fishery.

We can continue to live self-sufficient lives in our remote region. But, without a 32,500 hard cap of Chinook salmon in the Pollock fishery, it is most unlikely. Our 10,000-year resource is at stake.

Is this hard cap practical? Yes. The Pollock fishery has averaged about 32,500 Chinook bycatch from 1991 through 2004. Did it survive? Yes.

Thank you.

Sincerely,



Nicholas C. Tucker, Sr.,
Native Village of Emmonak

Attachment

Nicholas C. Tucker, Sr.
P.O. Box 178
Emmonak, AK 99581
(907) 949-1011 nctucker@hughes.net

January 9, 2009

Fuel Summit Participants
Emmonak, AK 99581

RE: Fuel Crisis Devastating Families & Households

Ladies and Gentlemen:

From several years ago, our heating fuel and gasoline costs have doubled in Emmonak. Current retail prices are \$7.83 per gallon for heating fuel and \$7.25 per gallon for gasoline, including the city sales tax. Our village has run out of heating fuel and the first airlift shipment has arrived at the airport. As early as today, the retail for our winter shipments is expected to be anywhere from \$9 - \$11 per gallon or higher.

Last summer, we experienced a king salmon fisheries disaster. We did not have any king salmon commercial openings. We had a chum salmon commercial harvest which is nothing compared to the king fishery. Chum harvest traditionally covered our king salmon fishing start-up costs, most of the purchase of new equipment, repair and maintenance, supplies, and operating expenses. Our commercial fishermen did not make any money. Our income from this meager, small-scale commercial harvest is basic to and vital to our seasonal subsistence fishing and hunting, berry picking, plant gathering, motor oil and gas, supplies, equipment, and cash for repairs of our outboard motors and our snowmachines used for winter wood gathering. This income pays for our many household bills.

Last fall, we weren't delivered our usual fall fuel orders due to early freeze up. Following this, we got hit by a rare weather anomaly: It has been very, very cold since last part of September. This cold snap still persists as of this day. Households have tell me that there is more snow covering the driftwood out in the tundra and the coastlines, making it difficult finding the logs for firewood. A lot more gasoline and motor oil is being used in search of the driftwood. This winter-long, extreme cold snap is causing the furnaces and boilers to run constantly and to their maximum.

My family of ten, with a household of six adults and four minors, is one of the casualties of our current high costs of heating fuel and gasoline that are devastating families and households here in Emmonak of 847 residents. I am 63 and my wife is 54. For the first time, beginning December 2008, I am forced to decide buying between heating fuel or groceries. I had been forced to dig into our January income to stay warm during December. Again, for this month, same thing happens. I am taking away my February income this month to survive. Couple of weeks ago, our 8-year old son had to go to bed hungry. My wife and I provide for our family with disability, Veterans' benefits, social security, and unemployment incomes. We are several months behind on our city water and sewer bills. We had originally used up all our \$1,200 energy subsidy to prepay electricity for the winter and other bills in hope of surviving for this winter due to these high fuel costs. We

Lower Yukon Fuel Summit
Fuel/Households Crises
January 10, 2009

didn't anticipate the early freeze-up that prevented our native corporation getting its winter supplies of fuel. We didn't anticipate an unexpected winter-long bitter cold. I don't recall anything having occurred as cold as it has been and its length that we have to endure. The following are the costs of heating fuel and a 100-lb bottle of propane between December 12, 2008 and yesterday, a period of 29 days:

December 12, 2008, Stove oil, 55 gals:	\$ 440.54
December 14, 2008, 100# propane:	173.04
December 31, 2008, Stove oil, 55 gals:	440.54
January 9, 2009, Stove oil, 59 gallons:	<u>471.85</u>
Total:	<u>\$1,525.97</u>

On December 29, 2008, we had to get 16.1 gallons of stove oil delivered at the cost of \$136.03 before we ran out. Luckily, we were awarded \$135.59 energy assistance from our Association of Village Councils Presidents during the 3rd week of December 2008. It would have cost us that much more to heat our home. Then, ironically, yesterday, due to a leak, we were forced to buy another 100-pound bottle of propane – an additional, unexpected expenditure of \$173.04 to the above. With 21 days left this month, we have just \$440 in our account to feed all the nine people in my house (one daughter is in Fairbanks temporarily).

Our family situation dawned on me: "what about my neighbors?" Just two days ago, I made a VHF radio announcement asking families to call me about what is really going on in their households due to the high costs of fuel. Within few hours, 21 households responded and several more yesterday. Many may have had their radios turned off, not at home, or just cannot afford one.

Here is what they related:

P. & K. A.: Middle aged couple, family of five. They are forced to buy heating fuel over food.

M. & M. G.: Middle aged, family of six: No wood at all; hard time buying stove oil.

L. M.: Young single parent, mother of one. On her last energy assistance, 10.2 gallons left, Dad in Anchorage for medical check up; his snowmachine and a 4-wheeler are frozen.

E. & A. U.: Elders, ages 68 and 65, family of eight and helping daughter in another house with food; gets no food stamps and both have no work. They have to buy heating fuel and gasoline for snowmachine over food.

A. & L. M.: Middle aged couple, family of eight. Family is buying heating fuel over food all this winter. They have no choice. Wife has a part time job. Husband's health, including a bad back, is preventing work – had lost his last job due to health.

Lower Yukon Fuel Summit
Fuel/Households Crises
January 10, 2009

J. & W. M.: Family of seven. Husband, 57, provides family with his disability checks. Unable to work due to his health. Needs all the help in keeping house warm and to have enough food for the young children.

C. & J. A.: Middle aged couple, family of 5. Needs heating fuel and had his unemployment benefits denied. No more energy assistance. Having to buy heating fuel over food and sacrificing payments of electric and city water sewer to get food.

T. U., boyfriend and children: Having hard time getting food and pampers and is on-call work. Getting food from elderly parents. Buying heating fuel over food. No food once in a while and having to cook whatever is on hand like rice. Sometimes, having to cook only moose for a whole week because there is nothing else to eat. There are days when there is nothing for breakfast and lunch and have to eat only one dinner meal a day.

T. & J. L.: Young couple, family of four. Hard time getting heating fuel; have no gasoline for their snowmachine to get wood and credit line at the local fuel tank farm is over limit. Family gets some food stamps but goes fast due to high cost of groceries in the village. Sometimes, having just little bit of food in the house because whatever money they have is used primarily for buying heating fuel.

R. & T. A.: Young couple, family of seven. Family is having difficult time getting heating fuel. They are having hard time getting any jobs in the village. They are forced to get heating fuel and have little bit of food. Wife has to get heating fuel from her father to keep their house warm and keep the hot water heater turned. Both are having very hard time keeping up with electricity and water/sewer bills.

P. J.: Widower and provider of five children. As of December 31, 2008, his food stamps have been cut off. He debates between buying heating fuel or food. His kids have to eat. He has to keep his kids warm at night during these very cold winter days. He is having hard time getting heating fuel and is piled up on bills, rent, water/sewer. He is behind in payments.

A.K. Jr: single, unemployed. Has no stove oil, gasoline and motor oil for getting logs. He depends on neighbors for a snowmachine to get logs. People get tired of him asking. Each trip to get sled load of logs is \$50 to \$70 to high cost of gasoline at \$7.25 a gallon. He is using any kinds of wood including cotton wood just to keep warm. His woodstove is kept off all day during these cold days just to save what little wood he has so he could sleep warm at night. His monthly food stamps last only couple of weeks due to very high cost of groceries in the stores in our village. He has to get some food from his elderly father and uncles to survive. He has not been able to get any heating fuel since last fall. It is a choice between heating fuel or gasoline to get wood. Wood lasts longer. The first part of this winter, he was able to get logs from the coastline, 12 miles out, but they are now covered with snow and extremely hard to find. He is getting whatever he is able get his hand on within a mile away from the village, like willows. On occasion, he pulls a sled by and to get the willows and little wood.

Lower Yukon Fuel Summit
Fuel/Households Crises
January 10, 2009

M. & M. A (Sr): Elderly couple, 80 and 75. Four adults live in the household. He is forced to buy heating fuel over food. He gets some help with energy assistance. It is very cold this winter and cannot go without heat. It is hard to get wood. Heating fuel used to be less than the price of gasoline. These days, it is higher. His daughter helps with groceries, water/sewer and electricity bills.

G. & K. F.: Young couple with family of five. Wife is unable to sleep and stressed out not knowing when they will be able get their next heating fuel. A 100-lb. bottle of propane gas that usually lasts four months is now lasting only two months because they use it to heat water. This costs them \$200 every two weeks. They do not have hot water heater. Wife has very little income and uses \$375, the one-half of her gross income every two weeks, to get heating fuel. She has no food for her family sometimes, because, she has to split the rest of what little is left for water/sewer and electricity. Gasoline for her 4-wheeler is very expensive. Her parents help her with food and firewood. They cannot afford a snowmachine or a boat to get logs. Heating fuel and propane is taking her food money away. Her added worry is that the village native corporation is running out of heating fuel and is being airlifted in. New cost is expected to be near \$9 - \$11 per gallon or higher.

R. & M. W: Near middle aged couple, family of 5. Husband not working, use wood for heating and a monitor at night. At times, have to decide between getting heating fuel or food. Their food stamps and other public assistance applications have been denied citing over income. Wife knows the customers are being refused charges at the local tank farm. The company is hurt having to say no to customers with over-limit balances and it gets very difficult at times.

J. & M. B: Young couple, family of 9. They used to have energy assistance. They have run out of heating fuel many times. Most of the time, they are getting their heating fuel at \$28 - \$30 at a time. This comes to less than five gallons at a time. They use their woodstove during the day and the monitor at night. Although they had gotten more subsistence food to fill their freezer, they are already running out of moose. They do have lots of fish on hand, but on other stables, they barely have enough most of the time – barely enough to eat. They want get more their groceries from the store, but can't. Most of the time they would have just rice and maybe spam – as long as their kids did not go to bed hungry(could sense choking over the phone from trying not to cry).

C. & L. R: Near middle aged couple, with six children. Another family moved in with them. They are having difficult time. They did had gotten some energy assistance. They are in need of pampers and formula milk. Sometimes, the entire household has one meat a day – at supper time. They are struggling to get heating fuel. They are behind in their electricity, water and sewer bills. The last time, they we able to get 17 gallons of heating fuel. (Could tell the wife was crying as she related these to me.)

Y. & A. K(Sr): Husband is 70 and wife. Three in the household. Husband is sick with Parkinson's disease. He gets dizzy. He is forced to quit his job. He is unable to get other work. He is real hurt that he cannot do what he had been able to do. At 68, he was still working. They are going through real hardship. He would not be getting some heating fuel and firewood if it were not for his boys.

Lower Yukon Fuel Summit
Fuel/Households Crises
January 10, 2009

They would be in very bad shape. They are having snowmachine problems. He counts on his boys to get firewood. He is unable to do that. Gasoline for the snowmachine is too high at \$7.04 a gallon. He is exempt from city sales tax. He has no way to feed his family. His boys did set net under ice, but due to the very long cold snap, it is frozen to the ice. Sometimes they go hungry. He cries when he is alone – have to let it out. He does not feel old – his health is stopping him from providing for his family. He is not used to it. He is used to getting a paycheck every two weeks. The electricity and city water/sewer bills are higher – hopes they will not be cut off.

M. & P. Y: Husband is 58, family of four. Although he started work last August, most of the time, little at a time, he is getting heating fuel. He has a monitor stove. His energy assistance is depleted. His house is cold half of the time. He does not get food stamps. His Permanent Fund Dividend is all gone. His rent is \$250 per month. He is struggling to make ends meet

G. & F. H: Near middle aged couple, family of six. The husband cried as he was talking to me. He says he is not doing good. He receives a very small unemployment income and is out of fuel a lot. He is able to get his heating fuel five gallons at a time. His family has been out of food for quite some time now. Their one-year old child is out of milk, can't get it and he has no idea when he will be able to get the next can. He has been borrowing milk from anyone he can. His moose meat supply is running out. He has been out of work since October 2008. There are no jobs available. Because of this very high cost of heating fuel, he is in this situation. The electricity has sky-rocketed and he can't pay all the bills. What little money he gets goes into food and it is getting very, very hard. He hopes to find food somewhere. He is mainly concerned about his one-year old child, his wife and thinks that his wife may be pregnant. They do have some pilot bread, There are days without food in his house. He is not concerned about himself, but about his wife and children. He calls other family members for a can of milk. Whatever little bit of meat they have left, they are trying to make it last. They have little bit of it at a time and out of that, eat as much they can so that they would not be too hungry during the night. They almost lost their child last year with RS. She is sickly. Their house is not well insulated. The five gallons of heating fuel they are able get last four days. They use their electric stove for heat. Without any work, it is very hard. It is hard for me to imagine what my family has to go further on with – my kids and my wife. This winter is hardest for us with high price of everything. My brother and his son, we give them some food, whatever little we have. We let them eat as long as I have something to share. Our freezers are going empty. Have to use heaters to help keep the house warm. Just to think about all this is very hard – it hurts.

P. R: Single, separated, with five children. (He chokes occasionally, holding back crying.) He and his children are staying in the same household with his brother's family. Cost of fuel is so high and everything else and we're able to get just a few things at a time. We have no other subsistence food left. Only thing we're surviving on moose meat alone and it is almost gone. Everything is so high – only able to get little bit. We can't catch up on our bills. We're really hurting even we are given some from other people. Right now, we can't eat during the day, only at supper time. And, it is still not enough. If there had been no school lunch, our kids would be starving. It is going to get worse in two weeks when our new heating fuel supply is airlifted in. Price of fuel will go way up again. I am lucky that the Women's Shelter is able to give me some coffee.

Lower Yukon Fuel Summit
Fuel/Households Crises
January 10, 2009

M. M. & A.R: Middle aged, couple with a child, family of three. Don't know how they are going to survive. They are getting heating fuel five gallons at a time or \$20 at a time. When the new supply of fuel is air shipped in, it is going to get even harder. We are improvising our woodstove. This is the hardest year – other years were okay. This is the worst year.

S.K & Girlfriend: Both young, 37 and 34. He says his mom has cried from these hardships they are going through (his mom is 73 and dad is 68). He and his girlfriend have no heating fuel. Whatever money he gets goes to getting gasoline for his snowmachine to get logs. They have barely any money left for food. Sometimes, he has to borrow little bit of money to get some food from his 73-year old mom. There are some days he and his girlfriend are without any food. Today, they had nothing for breakfast. Most of the time, they have some dry fish for lunch or Cup of Noodles with Pilot Bread. There are times they go without dinner or if they eat, they have little bit and that would set them up for the night. His electricity bill use to be \$60 for the little house they're in and now it is over \$100 a month. They're living without city water/sewer and use honey buckets and have to dump them. They pack water. They have no money for city water and sewer. Their snowmachine is finally out of commission. They had to keep using it to get whatever firewood they could even the bearings had been broken because they can't afford to do repair work on the machine. They were packing water with in that condition.

O. & A. M: Young couple, 34 and 37, five in the family. They are in need of heating fuel and food. They are buying so much heating fuel – burning so much. They are having hard time getting food. They have not paid for their city water/sewer since October 2008. They go without dinner sometimes. Their kids are able to have lunch – at school. They have no woodstove. Their house is very small and if they did get a woodstove, they wouldn't know where to put it.

T. & A. P: Middle aged couple, 47 and 41. Eight in the family. Very, very cold winter. Their 55-gallon heating fuel lasts only two weeks: this is about \$441 every two weeks. They are able to burn wood, but the gas for the snowmachine is very expensive and the logs are very hard to find in this early snow. Logs are covered under the snow. The husband has to use more gasoline and motor oil in search of the logs for firewood. Rent and rent payments are okay. Husband has a part time work and some unemployment income. The family receives some food stamps but runs out around the third week of each month. Subsistence hunting is not easy because it takes time, having to use lot more gas at \$7.25 a gallon. He and his wife can't even get hygiene stuff like toilet paper and bath soap to keep clean. His part time income isn't enough – he works only four hours a day. His wife is limited on what jobs she can get. She has a bad back problem – she use to have a job. Husband is doing what he can by himself.

As you can see, I had only a day and a half to gather and compile this information. I am reaching out for these families. Help is needed and cannot be delayed. I cannot imagine so many in this village are in hunger, without fuel, and other essentials and uncertain about their future. What is mind boggling about the whole situation is that they have remained silent, anonymous, suffered, and cried. The four villages in this region are in close proximity to each other and the demography is the same. Is this going on in your village?

Lower Yukon Fuel Summit
Fuel/Households Crises
January 10, 2009

This is not the time for any debates or questions. The winter-long anomaly in the weather, conditions, and the situation are beyond our control.

There are approximately 200 households of the 847 residents here. In just a day and half, I was able to reach only 25 households. Are as many as 175 more remaining silent? In appearance, the heads of these 25 households look normal. I am devastated from the revelation of these few houses contacted. Additionally, how many of those who are able to work are without jobs? Easily, staggering 400 plus! Some other households are still calling, but I have few hours to print this report for my testimony during today's fuel summit.

Though it may sound absurd, a massive airlift of food in the months of January, February, March and April will help our people. Any peoples, churches, organizations, associations, and government agencies ought to sent money to our native corporations to offset both the current fuel prices and the airlift presently underway. For over thirty years, we have witnessed in our region that our native corporations are just like people. They have limited income and their expenses have always been high. Why? Our Wade Hampton district has always been the most economically depressed than that of our both nation and state. We are in the most remote area of our state.

To help, please call:

City of Emmonak, (907) 949-1227/1249
Emmonak Tribal Council, (907) 949-1720
Emmonak Corporation, (907) 949-1129/1315/1411
Emmonak Sacred Heart Catholic Church Pastoral Parish Council Chairman, (907) 949-1011.

To assist with offsetting heating fuel costs, call Emmonak Corporation.

For distribution of food, I would suggest Emmonak Tribal Council handle this.

Lastly, for some who do not know me, I have been advocate for this region the past thirty years in its commercial and subsistence fisheries, social issues, and socio-economic issues and our church. One of my credentials include having been an appointed by two governors as advisor to the Yukon River Salmon Treaty negotiations. The families contacted are reaching out in desperation through me and now, you.

Copy of this letter is available to anyone. We have work to do.

Sincerely,



Nicholas C. Tucker, Sr.

Cc: file

Age Chinook salmon mortality in BSAI pollock directed fisheries

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Chinnok Salmon Mortality in BSAI Pollock Fisheries*					Lower Yukon Districts 1,2,3					District Y-1				Emmonak	
2	Total		Western	Yukon		Guideline	Comm				Comm					
3	Year	Annual*	Alaska			Range**	Harvest**	Permits**	Value**	Subsistence***	Harvest**	Permits**	Value	Subsistence***	Subsistence***	
4	1	1992	35,950													
5	2	1993	38,516													
6	3	1994	33,136													
7	4	1995	14,984							20,416				5,960	1,711	
8	5	1996	55,623							18,208				3,646	702	
9	6	1997	44,909			60,000-120,000	105,747	639	5,450,433	23,211	66,384	457	3,898,041	7,550	3,080	
10	7	1998	51,322			60,000-120,000	42,219	643	1,911,370	21,211	25,413	434	1,290,100	7,242	2,396	
11	8	1999	11,978			60,000-120,000	64,294	631	4,950,522	25,002	37,161	412	3,232,354	6,848	3,337	
12	9	2000	4,961			60,000-120,000	8,518	562	725,606	19,740	4,735	350	451,890	5,891	2,205	
13	10	2001	33,444			60,000-120,000	0	0	0	26,892		0		7,089	2,473	
14	11	2002	34,495			60,000-120,000	22,593	540	1,691,105	18,696	11,159	323	1,011,531	5,603	1,751	
15	12	2003	45,794			60,000-120,000	36,928	556	1,871,202	21,002	22,750	352	1,184,646	6,332	2,763	
16	13	2004	51,696			60,000-120,000	52,565	550	3,063,667	20,352	28,401	396	2,205,840	5,880	2,768	
17	Avg 1992-2004		35,139			60,000-120,000										
18	14	2005	67,396			60,000-120,000	30,107	578	1,952,109	19,345	16,694	370	1,249,620	5,058	1,730	
19	15	2006	82,694	56%	40%	60,000-120,000	43,591	569	3,290,367		23,748	379	2,191,650			
20	16	2007	121,638	68,117	27,247	60,000-120,000	31,917	564	1,939,114		18,615	359	1,234,294			
21	17	2008	19,928			60,000-120,000	4,641	444	325,470		2,530	266	194,989			
22	10-yr avg (1998-2007 excluding 2001)						36,970		2,377,229		19,121		1,424,691			
23	2008 to 10-yr avg						-87%		-86%		-87%		-86%			
24																
25																
26	*source: NOAA Fisheries website; National Fisheries Service, Alaska Regional Office, <u>BSAI Chinook Salmon Mortality Estimates, 1991-2008 (3/19/09)</u>															
27	**source: ADFG 2008 Preliminary Yukon River Summer Season Summary															
28	***source: ADF&G Subsistence and Personal Use Salmon harvests in the Alaska portion of the Yukon River Drainage, 2005, Fishery Data Series No. 07-52															

Table 1. Chinook salmon mortality in BSAI groundfish fisheries.

Year	Annual	Annual	Annual	A season	B season	A season	B season	A season	B season
	with CDQ	without CDQ	CDQ only	With CDQ	Without CDQ	With CDQ	Without CDQ	With CDQ	Without CDQ
1991	na	48,880	na	na	na	46,392	2,488	na	na
1992	41,955	na	na	31,419	10,536	na	na	na	na
1993	46,014	na	na	24,688	21,326	na	na	na	na
1994	43,821	40,635	3,186	38,921	4,900	36,699	3,936	2,223	963
1995	23,436	21,430	2,006	18,939	4,497	18,284	3,146	655	1,351
1996	63,205	60,802	2,402	43,316	19,888	42,028	18,774	1,289	1,114
1997	50,530	48,050	2,481	16,401	34,129	14,905	33,144	1,496	985
1998	55,431	50,313	5,118	18,930	36,501	17,991	32,322	939	4,179
1999	14,599	12,937	1,662	8,794	5,805	8,205	4,732	589	1,073
2000	8,223	7,474	749	6,568	1,655	6,138	1,336	430	319
2001	40,547	37,986	2,561	24,871	15,676	23,093	14,893	1,778	783
2002	39,684	37,581	2,103	26,277	13,407	24,859	12,722	1,418	685
2003	53,571	50,858	2,713	40,044	13,527	38,249	12,609	1,795	918
2004	60,442	57,435	3,007	31,025	29,417	29,896	27,539	1,129	1,878
2005	74,281	72,239	2,042	33,651	40,630	32,346	39,893	1,305	737
2006	87,084	85,290	1,794	62,582	24,502	60,974	24,316	1,608	186
2007	129,534	123,881	5,653	77,108	52,426	74,004	49,877	3,104	2,549
2008	22,571	21,854	717	17,538	5,033	16,934	4,920	604	113
2009	10,630	10,260	370	10,630		10,260		370	

Notes: Retrieval done on 3/19/2009

Non-CDQ data from 1991-2002 found in bsahalx.dbf

Non-CDQ data from 2003-2009 found in AKFISH_V_GG_PSCNQ_ESTIMATE

CDQ data from 1999-2009 found in AKFISH_V_CDQ_CATCH_REPORT_TOTAL_CATCH

CDQ data for 1998 from boarate.dbf

CDQ data from 1992-1997 found in bsahalx.dbf

A season - January 1 to June 10

B season - June 11 to December 31

Table 2. Chinook salmon mortality in BSAI pollock directed fisheries.

Year	Annual	Annual	Annual	A season	B season	A season	B season	A season	B season
	with CDQ	without CDQ	CDQ only	With CDQ	Without CDQ	With CDQ	Without CDQ	With CDQ	Without CDQ
1991	na	40,906	na	na	na	38,791	2,114	na	na
1992	35,950	na	na	25,691	10,259	na	na	na	na
1993	38,516	na	na	17,264	21,252	na	na	na	na
1994	33,136	30,593	2,543	28,451	4,686	26,871	3,722	1,580	963
1995	14,984	12,978	2,006	10,579	4,405	9,924	3,053	655	1,351
1996	55,623	53,220	2,402	36,068	19,554	34,780	18,441	1,289	1,114
1997	44,909	42,437	2,472	10,935	33,973	9,449	32,989	1,487	985
1998	51,322	46,205	5,118	15,193	36,130	14,253	31,951	939	4,179
1999	11,978	10,381	1,597	6,352	5,627	5,768	4,614	584	1,013
2000	4,961	4,242	719	3,422	1,539	2,992	1,250	430	289
2001	33,444	30,937	2,507	18,484	14,961	16,711	14,227	1,773	734
2002	34,495	32,402	2,093	21,794	12,701	20,378	12,024	1,416	677
2003	45,794	43,021	2,565	32,609	13,185	30,916	12,313	1,693	872
2004	51,696	48,733	2,963	23,093	28,603	21,964	26,769	1,129	1,834
2005	67,396	65,461	1,916	27,379	40,017	26,080	39,400	1,299	617
2006	82,694	80,953	1,741	58,438	24,256	56,853	24,100	1,585	156
2007	121,638	116,094	5,629	69,408	52,230	66,307	49,702	3,101	2,528
2008	19,928	19,288	640	15,162	4,766	14,558	4,730	604	36
2009	9,527	9,213	314	9,527		9,213		314	

Notes: Retrieval done on 3/19/2009

Non-CDQ data from 1991-2002 found in bsahalx.dbf

Non-CDQ data from 2003-2009 found in AKFISH_V_GG_PSCNQ_ESTIMATE

CDQ data from 1999-2009 found in AKFISH_V_CDQ_CATCH_REPORT_TOTAL_CATCH

CDQ data for 1998 from boarate.dbf

CDQ data from 1992-1997 found in bsahalx.dbf

A season - January 1 to June 10

B season - June 11 to December 31

City of Mountain Village
P.O. Box 32085
Mtn. Village, Alaska 99632
PH: (907) 591-2929
FAX: (907) 591-2920

Asa'carsarmiut Tribal Council
P.O. Box 32249
Mtn. Village, Alaska 99632
PH: (907) 591-2814
FAX: (907) 591-2811

Azachorok, Inc.
P.O. Box 32213
Mtn. Village, Alaska
PH: (907) 591-2527
FAX: (907) 591-2127

JOINT RESOLUTION 09-03

A RESOLUTION REQUESTING THE NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL PLACE A SEVEN YEAR MORITORIUM ON THE ALASKAN POLLOCK FISHERY

WHEREAS, the community of Mountain Village is situated on the North bank of the Yukon River seventy miles inland from the Bering Sea; and

WHEREAS, The population of Mountain Village is approximately 800 people, majority of whom participate in traditional subsistence salmon harvesting such as drying, freezing, salting, and canning various salmon species such as Chinook, summer and fall chum to help sustain them through the long cold winters; and

WHEREAS, during the past few years, 1998 and 2000 included, there has been an alarming decline of our Chinook salmon that enter the Yukon River to spawn; and

WHEREAS, during the 2008 Salmon Season- Lower Yukon Salmon Fishing Permit Holders did not participate in a Chinook salmon directed Commercial Fishery; and

WHEREAS, a limit was also placed on Subsistence harvesting for Chinook salmon, further restricting our subsistence activity, which, if continued from year to year, will only continue to hurt the people that live along the Yukon River unnecessarily; and

WHEREAS, by-catch of Chinook salmon during the Alaskan Pollock Fishery has increased in recent years, while escapement goals have not been met in the spawning streams, tributaries and headwaters of the Yukon River; and

WHEREAS, the Alaskan Pollock Fishery is open out in the Bering Sea at least six months out of the fishing year, and the by-catch of Chinook salmon caught by the Pollock fleet can not be saved, transported or sold by the fleet and so is thrown overboard, dead and wasted; and

WHEREAS, the Chinook salmon that are thrown overboard by the Pollock fleet should have been able to return to the Yukon River unharmed to be used by the people that live along the Yukon River; and

WHEREAS, there are a number of possible factors as to why Chinook salmon are diminishing in recent years including: global warming, predation by animals out in the ocean, harsh winters at the spawning grounds, and by-catch, all of which occur naturally, except by-catch, making Chinook salmon by-catch one of the known factors that must be controlled immediately; and

WHEREAS, by-catch of Chinook salmon must be stopped altogether, more specifically, a moratorium must be placed on the Pollock fishery and/ or, at the very minimum, a hard-cap of Chinook salmon by-catch must be set at 29,300, as soon as possible, to save our valuable salmon from further depletion.

To: The Honorable North Pacific Fisheries Management Council
Eric Olsen, Chair

- My Name is Alexie Walters, Sr. I was born and raised in Mountain Village, Alaska on the Lower Yukon River. I have hunted and fished all my life and that has been my livelihood. I am 69 years old.
- Today, I stand before you to testify against the Alaskan Pollock Fishery and the amount of damage, I, and many of us believe the fishery has been doing to our way of life.
- We have heard and know that the Pollock Fishery is a multi-billion dollar industry, which is a lot of revenue for many, many people, including the State.
- What I want to know is how do you weigh those benefits, when they have such a big impact on Alaskan Native Families who have relied on the Salmon this fishery is hurting? And we know the Industry is having an effect on our Salmon; based on the amount of by-catch in recent years, how can it not?
- Mr. Chairman, questions have been asked to many of us such as “how important is Chinook salmon to you, your family and community?” For many, many of us who live along the river, it is everything. The anticipation of salmon returning, in it-self, is something all of our families look forward to, every one...
- Mr. Chairman, we as people, have no control over other factors that have been reducing our Salmon. Global Warming, predation by other species of animals, perhaps natural changes or extreme conditions at their spawning grounds. There is one factor that we can control now, and that is by-catch.
- Altogether, there are many who would rather see a moratorium placed on the Pollock Fishery, but if that cannot be done, a hard-cap on by-catch is definitely in order.
- Mr. Chairman, our community of Mountain Village has asked for such a moratorium or hard-cap by way of resolution, Resolution 09-03, which you may have seen. If a moratorium on the Pollock Fishery cannot be done, we would like to ask that a hard-cap on by-catch be set at 29,300 Chinook...

David Blanket
Azachorak inc/ Mt. Village Alaska

Hello - North Pacific Fishery Management Council. Thanks for the opportunity to testify on salmon by catch Reduction or closure in the Bering sea Pollock Fishery. My name is David Blanket, born a subsistence user and Commercial fisherman since 1967. The return of Chinook Salmon plays a major role in our way of life and Economy through out western Alaska. I've seen a boom of Chinook Salmon to today of no commercial openings and Restrictions on subsistence.

Failure of management crosses my mind and over harvest of the species

Protection of the life cycle of the Chinook Salmon has to reach out to the Bering Sea in order to help rebuild salmon stocks

Over the years we fisherman/fisherwoman on the river system have abided all restrictions in hope of rebuilding the salmon stocks and yet they are still declining. Should Pollock Fisheries do the same, I say shut down Bering Sea side of Pollock Fisheries to avoid by catch of Chinook Salmon until salmon stocks have rebounded. Then you can install hard caps. I would like to comment on 5 year moose moratorium that happened below Mt. Village unit 18. Management and people working together made it a success. Now there is enough moose for future generations. I believe Salmon rebuilding can be achieved doing similar actions by management, and people working together to ensure the survival of our fishing activities.

On behalf of Future
Commercial & Subsistence users
Thank You,

David Blanket



Chairman Olson, members NPFM Council,
Thank you in advance for allowing me to
speak on a subject near and dear to
my peoples heart and soul - our
sustenance we depend on for our
physical and spiritual survival. The
Chinook Salmon being one of the food
we depend on.

My Name is Melvin Otton, better
known as Dumma. I live in Koyuk
Alaska, located on the Norton
Sound, more specifically located in
the Norton Bay.

I come here representing the
people of the Native Village of Koyuk.

Norton Bay has three salmon
bearing Rivers flowing into it.
The Koyuk River, Igloodalik River,
and the Ungalik River. All three
rivers produce Chinook Salmon
spawning areas.

The Igloodalik River produce the largest run of Chinook Salmon. The salmon arrive after the middle of June and run for approximately two and one half to three weeks in the Igloodalik River. The majority of Koyuk people harvest Chinook Salmon in the Igloodalik. The Chinook is an important addition to our diet of other salmon and different species of fish in our area.

My family harvest Chinook in the Igloodalik River at the same set net site my father utilized since I was a child. When my father was unable to fish Chinook for subsistence any longer, he gave me the site to fish at to this day. Traditionally my family harvest from 75 to 100 Chinook Salmon annually. We freeze up to 10 Chinook, give approximately 15 salmon to

relatives, elders, and people unable to go fish for Chinook. The remainder is made into smoked strips. My family, from my wife, children (both adult and minor) as well as grandchildren help - from setting, tending, repairing, and cleaning the net, cutting the fish, brining, glazing, stripping and smoking. We also have other children from the village come to our fish camp to help and learn to care for fish.

The Kayuk and Ungalik Rivers also has Chinook runs. Some local people harvest Chinook Salmon in both rivers.

The Norton Bay and the three rivers located in the Norton Bay has been insulated from effects of Salmon crashes, more specifically the Chum salmon shortage to the west and south of the Norton Bay. The summer of 2008 was the first time the Chinook Salmon run was ~~abnormal~~ abnormal from previous runs.

The Chmook run started slow, diminished, picked up, diminished, and dwindled to sporadic. This was the first time my family did not make any smoked strips. We froze 5 for our use and gave away approximately 25 to relatives, elders, and other people. Whatever food we put up is used not just for everyday use, but also plays an important part during special occasions such as birthdays, funeral potlucks (celebration of life), church gatherings, community meals such as Thanksgiving, Elder meals.

By doing our part of utilizing food gathered for subsistence we insure that whom we are continue on in our future generation. Teaching our children (both our own and other children in the community) to respect the food given to us by our Creator ensures that our culture and the food we depend on continues.

When there is mention of By Catch, it really saddens my heart that there are people willing to give up respect for humans and food given for our use, by practicing "Legalized Wanton Waste" for the sake of the bottom dollar.

Our people in Kayuk therefore for the sake of getting along with other people support a By Catch Limit of 32,482.

~~I~~ Thank you again for hearing our plea.

I remain,

Melvin "Dumma" Otton

Mel 

Kayuk, Alaska

Chris Oliver, Executive Director
North Pacific Fishery Management Council
605 West 4th, Suite 306
Anchorage, AK 99501-2252

April 4, 2009

Re: Comments regarding Final Action on the Chinook Bycatch Management EIS

Mr. Oliver,

My name is Julie Raymond-Yakoubian, I am an Anthropologist with Kawerak, Inc. in Nome, AK. Kawerak is an Alaska Native non-profit serving 20 tribes in the Bering Strait region. I have some comments regarding bycatch, and while I give them, I would like to show you some photos of individuals from the Bering Strait region. These are the people that are being impacted by your decisions. They couldn't be here to testify to you about the importance of chinook salmon in their lives and the lives of their families and communities. But I assure you, this issue is of utmost importance to them.

Kawerak would like to reiterate, again, our position on chinook bycatch. Kawerak supports a hard cap of 30,000 chinook, decreasing over time. We are extremely concerned about the state of chinook stocks in Western Alaska. While we recognize that the pollock industry is not the sole cause of chinook declines, bycatch is a human induced caused and is something that we can take action on. As such, we urge you to be as conservative as possible and to adopt the lowest available hard cap option.

As you have heard from many who have testified previously, "pollock provides." That may be true to a certain degree in certain communities, but salmon *sustains*, and it always has. CDQ groups are under no real threat here, they will adapt like the rest of the industry will to new market conditions. As others have pointed out, the industry has survived and thrived with average chinook bycatch rates around 32,000, without complaint.

The complaints and fears and plans you are hearing now from the industry are motivated by money, and nothing else. The fears and concerns you are hearing from individuals and tribes in Western Alaska are motivated by a desire to maintain continuity in subsistence practices and traditions, a desire to have the ability to make personal decisions about food choices and health, and a desire to maintain communities they way they see fit.

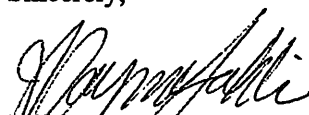
Neither Kawerak nor our communities is willing to be satisfied with a decision that provides the pollock industry with the means to further degrade chinook runs in Western Alaska. Our culture and our traditions are not disposable or replaceable, they are no less important than the pollock fishery, they are in fact irreplaceable and invaluable.

Kawerak would also like you to recognize that you are not just making fisheries policy, you're making social policy. You may not be comfortable with that assertion, but it is true and the repercussions of your decisions will be wide ranging, far reaching and long lasting.

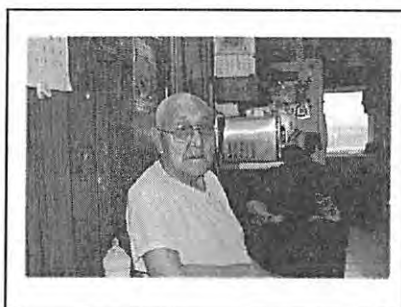
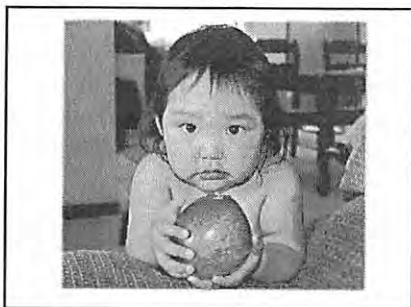
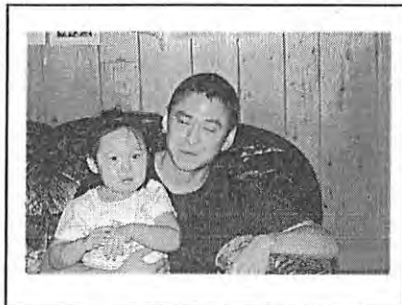
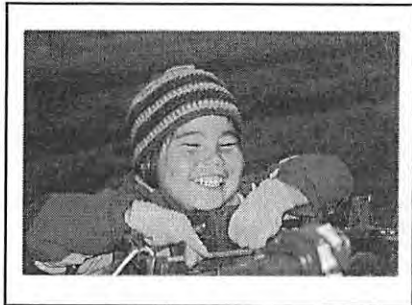
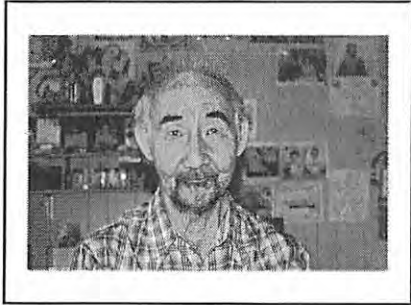
There is no point for me to attempt to summarize the significance of Chinook salmon to the indigenous peoples of Western Alaska – you've been hearing this from individuals along with the personal experiences of people and communities related to salmon. So I think I'd like to conclude my spoken testimony here and to use the remaining 2 minutes or so to let you continue to look at the faces of those Western Alaska residents that your decisions impact. For them, every fish counts. Please look at their faces, please remember them during your deliberations and decision making, and please give them as much consideration as you have and will give the pollock industry.

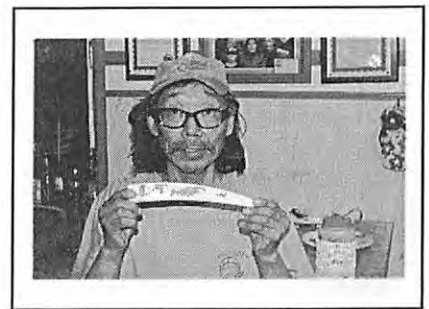
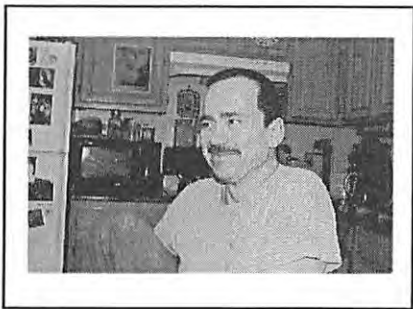
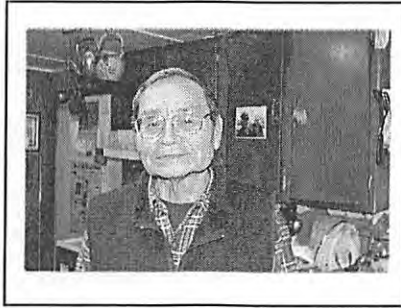
Thank you for your time.

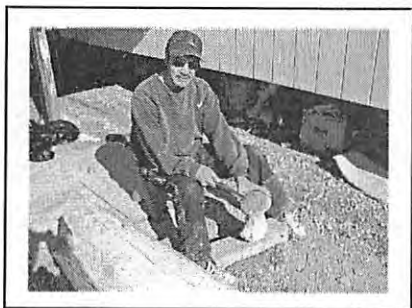
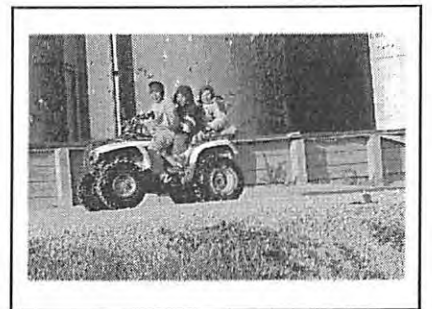
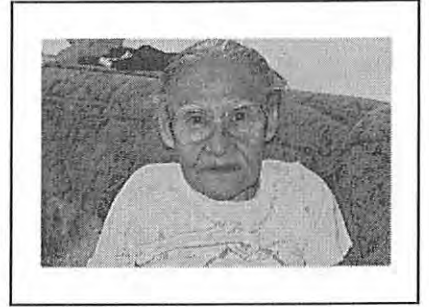
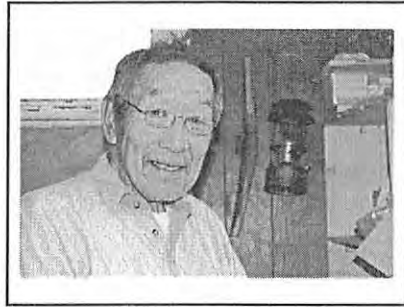
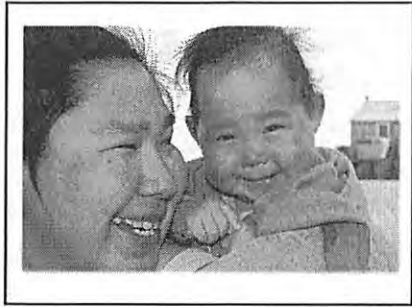
Sincerely,



Julie Raymond-Yakoubian
Social Scientist, Kawerak Inc.







Good morning Mr. Chairman and Council members. Thank you for hearing my testimony today.

I am Michael Sloan, Fisheries Biologist for Kawerak. I have been a fisheries observer in Alaska and New England, and a NMFS Fisheries Resource Manager in Alaska. I have been on many of the pollock boats and have seen the waste for myself. I now work with subsistence users in Norton Sound and the Bering Strait region of Western Alaska.

I now see these bycatch numbers differently, and see that they represent a real problem for the people in my region. The BSAI trawl fishery has removed nearly a million Chinook from the ecosystem during the past 19 years, and over a half million Chinook bound for Western Alaska rivers. Thousands of families in Western Alaska depend upon healthy salmon runs to feed their families, and the trawl fishery has resulted in over 8 million missed meals for Western Alaskan families. Right here in Alaska, not in Japan, not in China, not in Nigeria, and not Seattle.

Many very intelligent people have shown this council statistics on how the bycatch will affect the salmon returns from Western Alaska. However, they have not shown the cumulative affect of removing these salmon from our rivers over the past 20 years. If you loan your car to a friend, and they bring it back dented, you may consider this an inconvenience. They next time they borrow it, it is returned with a crack in the windshield. Still an inconvenience. The next time they take it, it comes back with the engine light on and a flat tire. Now, you are a little miffed. They ask again, and say they will be extra careful, so you let them take it. It comes back all smashed up, out of gas and with smoke pouring out of it. The next day, your friend comes back for the car, even though the car is now undriveable. Everyone tells you to stop loaning your car to this irresponsible friend, but they say they really need it – even if it has to be pushed all the way. This where we are now. Scientists have shown you the current state of Chinook salmon in Western Alaska – the wrecked car. The industry has asked the council to let them to borrow the car again and now the title.

The pollock industry has taken nearly a million king salmon during its brief history, and during this period, the Chinook have been disappearing from our rivers and streams. The industry has stated that they can keep Chinook bycatch under 30,000 fish per year, but only if they have a hard cap of 68,000 fish as an insurance policy, so will use that analogy.

You wouldn't drive your car without insurance...or buy a home...or operate a pollock fleet. The pollock fleet wants their insurance in the form of Chinook salmon. However, Chinook salmon is overutilized and is not an option for supplying insurance to the Seattle-based fishermen. Western Alaska cannot even get minimum coverage, so maybe the pollock fleet should get their high-risk coverage from Lloyd's of London. Western Alaska is offering minimum coverage to the pollock fishermen, at a time when we cannot get the same coverage ourselves.

Thank you for your time and consideration today.

Year	Chinook (p)	Chinook (trw)
1991	40,906	48,880
1992	35,950	41,955
1993	38,516	46,014
1994	33,136	43,821
1995	14,984	23,436
1996	55,623	63,205
1997	44,909	50,530
1998	51,322	55,431
1999	11,978	14,599
2000	4,961	8,223
2001	33,444	40,547
2002	34,495	39,684
2003	45,794	53,571
2004	51,696	60,442
2005	67,396	74,281
2006	82,694	87,084
2007	121,638	129,534
2008	19,928	22,571
2009	9,527	10,630
Totals	798,897	914,438

56% **447,382** **512,085**

19 Yr Avg **42,047** **48,128**

Average Chinook Weight 22
PRR (29%) 0.29
Meat recovered per fish 6.235
Number of 6oz portions 16.62666667

All Missed Meals 15,204,056
Western Ak Miissed meals 8,514,271

Stebbins Community Association
P.O. Box 71002
Stebbins, Alaska 99671

March 25, 2009

Eric Olson, Chair
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, Alaska 99501

I am Morris Coffey from the Native Village of Stebbins, Alaska in the Norton Sound. I am a subsistence and commercial user of the Chinook salmon. I have fished in the Lower Yukon commercially for Chinook most of my life. Stebbins is a member of Southern Norton Sound Fish and Game Advisory Committee (SNSAC) representing the coastal villages of Stebbins, St. Michael, Unalakleet, Shaktoolik, and Koyuk and a member in the Norton Sound Economic Development Corporation CDQ program.

While Southern Norton Sound Fish and Game Advisory Committee supports a Chinook by catch of 30,000 in the Bering Sea/Aleutian Islands Pollock fishery the Tribal Council of Stebbins moved for a zero tolerance meaning no by catch of Chinook salmon during the harvests of Pollock although this is very unlikely. Reason for this position is because the Chinook salmon is a vital subsistence and commercial resource to all the villages in Norton Sound and the Lower Yukon including the villages in Interior Alaska and into Canada.

The North Pacific Management Council has been very supportive of the CDQ groups in Alaska since incorporation by providing large harvest quotes despite the tremendous increase in the Chinook by catch. Since 1999 to 2007 the by catch has increased from 10,000 to 120,000 Chinook. This wanton waste equals what uses to be the Chinook Fisheries Quota in the Lower Yukon which now in recent years has come down to 20,000 to no commercial harvest of the Chinook salmon.

The Pollock Fisheries have been able to maximize their harvest of Pollock the last eight years at the expense of Chinook fisheries in the Lower Yukon including Unalakleet, Shaktoolik River in Norton Sound that were shut down for commercial fishing of Chinook last year. The impact of this growing waste of the Chinook salmon has affected the livelihood of all coastal villages, including the Lower Yukon and the interior all the way into Canada.

From my personal experience as a commercial fisherman in the Lower Yukon the Department of Fish and Game makes a good effort in trying to meet the demands of different users of the Chinook salmon from the Lower Yukon to the villages in the interior and Canada but the continued high Chinook by catch in the Pollock Fishery makes it near impossible to meet escapement requirements in some areas at the same time virtually wiping out the Lower Yukon Chinook fishery including the Unalakleet and Shaktoolik River in the Norton Sound.

Moratoriums have been placed on the Commercial harvest of the Chinook salmon in the Lower Yukon these past years in an effort to increase the Chinook population. These sacrifices and cooperation by these villages must not go unnoticed by the North Pacific Management Council. With high cost of heat and electricity in rural communities, the affects of no commercial fishing is devastating to families that depends of this resource to meet their daily needs.

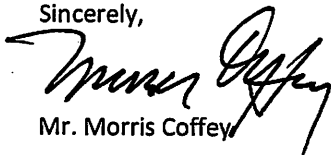
In many of the village's commercial harvest of Chinook and chum salmon are the only means to bring cash into the village economic other then seasonal fire fighting.

This past winter village of Emmonnak including many other villages felt the harsh reality of not being able to meet the high cost of heat and electricity without any aide from the State of Alaska. More of this situation will be realized in the coming years if the North Pacific Management Council fails to act in favor of a 30,000 Chinook hard Cap or in line with the Bering Sea Fishermen's Associations proposal of 32,482. The importance and the dependence of the Chinook resource by many families in Alaska both for subsistence and commercial must be realized and considered by the North Pacific Management Council for the benefit of those who depend on this resource for their livelihood.

It is not surprising to see the CDQ's of Alaska asking for a higher cap then 30,000 Chinook. As a former Director of Norton Sound Economic Development Corporation, I personally support the existences of these programs but regulations have limited their ability to effectively address the economic problems of their membership. Although some CDQ groups have provided a onetime assistance with heat and electricity it is insufficient to address the social problems that arise when a way of life is taken away.

In closing I strongly urge the members of the North Pacific Management Council to look fairly on our request for a 30,000 hard Cap on the Chinook by catch on behalf of the many families that look upon the Chinook fishery as a means to make a living and supporting ones family. Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Morris Coffey". The signature is written in a cursive style with a large initial "M".

Mr. Morris Coffey

**Lower Yukon Fish & Game Advisory Committee
Teleconference Meeting Minutes of April 1, 2009**

Members Present and the villages they represent:

Bibianna Sage – Representing Mountain Village	Absent excused
Marvin Okitkum – Representing Kotlik	Present
Ray Oney – Representing Alakanuk	Present
Ted Hamilton – Representing Emmonak	Present
Joseph Bell – Representing Hooper Bay	Present
Nick Andrew – Representing Marshall	Present
Edward Adams & Amelia Adams – Representing Nunam Iqua	Present (x2)
John Riley – Representing Pitka's Point	Present
Evan Polty – Pilot Station	Absent excused
Andrew Stephanoff – Representing Russian Mission	Absent excused
Ole Hunter – Representing Scammon Bay	Absent excused
Charles Paukan, Sr – Representing St. Mary's	Absent excused

ADF&G – Steve Hayes, Sherry Wright
Public Present: Jack Schultheis of Kwik Pak Fisheries

The meeting began at 10 am with roll call. John Riley moved to approve the agenda. Marvin Okitkun 2nd. No objections to the agenda.

The purpose of the meeting was to determine if there were any Board of Fisheries proposals to be submitted for the Yukon River fisheries. The proposal deadline is April 10th. The committee also prepared comment for the North Pacific Fisheries Management Council meeting on the Salmon By-catch issue. These minutes only contain the discussion that pertained to the salmon by-catch issue.

QUESTIONS FOR STAFF:

Q> Is there a way for ADF&G to comment on the way trawlers fish?

A - ADF&G has the opportunity to comment and have made comments on the by-catch issue. They are meeting April 7th in Fairbanks to discuss what needs to be done to get more fish to the spawning grounds. They understand it is a problem, but the in-river fishery is the only control Steve has as a manager.

Q> What is the state stance on regulating subsistence caught fish?

A - It is illegal to sell subsistence caught fish. In all actuality, the state wants to help us commercial fish and we need to utilize the process we have.

Comments for North Pacific Fishery Management Council

Ray Oney – That is part of why we must let the outside resources know about our concerns. We have not seen anything in writing from ADF&G letting the North Pacific Fisheries Management Council know about our concerns. We must reach outside to let

**Lower Yukon Fish & Game Advisory Committee
Teleconference Meeting Minutes of April 1, 2009**

them know the low returns are only part of the problem. The whole life cycle of the salmon must be taken into consideration.

Yukon Panel plans to give comments to the NPFMC about concerns. The Commissioner of ADF&G also has a seat on the council.

John Riley, Sr has been with the AC for quite a while. Concern is that it's about "my" fish. Even though the salmon by-catch issue is not on the agenda at the AVCP meeting (which was occurring in Bethel), the by-catch issue in the Bering Sea is coming up in discussions. Live kings are thrown overboard, or kept onboard and donated to food banks in Seattle. John testified that he is already hearing how the Yukon will be affected this summer – no commercial fishing, and limited subsistence fishing. In the middle of winter, ADF&G is already announcing what they are going to do with Y1, 2, and 3 fisheries. The by-catch is hurting all around. It's not through the fault of the Lower Yukon, yet they bear the brunt of the burden. If John throws one fish away, he is fined \$3000. Why are others allowed to throw so many fish away and hurt so many people? Someone needs to stop this. If the king salmon are headed toward the Yukon in May, a suggestion was made to implement windows to allow some fish to pass on through to the Yukon River. If the council is looking for scientific proof, we are the scientific proof, who are suffering in that river. The suffering will not end as long as they are throwing our fish away.

Bering Sea Chinook Mgmt Plan draft – Ted spoke about a range from various years of over 46,000 chinook caught as by-catch and on up to 67,363 chinook. 40% of those fish would have come back to the Yukon. This totals more than is harvested over the entire Yukon River taken by subsistence. All these tons of by-catch are ground to little pieces and shot out into the water to become seafood for seagulls. Then as it sinks, the other fish are eating it – both Pollock and salmon. Fish head, guts, skin are found during the winter. Just from watching a small salmon processor, this has been observed. The amount of tons of by-catch thrown overboard are creating an artificial ecosystem – feeding the fish, which follow the processing boat, and increases the ability of commercial harvest by the trawl fleet. If the ecosystem wide study is being done, why is no one talking about this feeding of the fish? Ecosystem starts with air, water, moving on to the plants, then to the mammals. Just because they claim it's an ecosystem study, doesn't mean it is. There is hope this issue gathers some steam and is properly addressed.

Another problem is the disposal of garbage on the seas and fish eating plastic, which does not digest. Then the fish stop eating their natural foods.

John Riley, Sr – Human error is causing a disaster in our area by throwing the fish away that are bound for this region.

Ted Hamilton – Recalls 20 years ago when Norton Sound area fisheries were healthy. When the Pollock fishery began, mostly done by outsiders (not from the US) Norton Sound was immediately impacted.

**Lower Yukon Fish & Game Advisory Committee
Teleconference Meeting Minutes of April 1, 2009**

People are claiming the fish are moving north, yet claim there is no global warming. Hinting at any activity of the fish to move north, may encourage these fleets to begin harvesting directly out in the Norton Sound, having even greater impact on the local fishermen's ability to harvest. Even in the Bering Sea they are still too close.

John Riley, Sr spoke about the problem when people were throwing their chums away. There is no such thing as "can't stop something". There is always a way.

Ray Oney – It is appropriate to send these comments to the NPFMC meeting. Trying to rebuild the Chinook stocks on the lower Yukon is an important endeavor.

Ted Hamilton – We are interested in the hard cap and believe that with different gear, the number could be reduced further. If there is an incentive not to catch salmon, then people won't. Last year, the by-catch was significantly reduced. The problem is an increased fishing time, which creates additional by-catch, not just Chinook, but also chums and other species of fish. Why is one user group allowed to harvest so much and toss it, yet we can do nothing? To speak about it, is doing something and there is a need to speak out. Prefers a hard cap of 30,000 because there is gear available that can be encouraged to be used that allows healthy salmon to escape. Also the use of sonar and sounders can be used and big businesses can afford to pay that, rather than limit the fishermen of the Lower Yukon, who are existing in a depressed economy.

Nick Andrew, Sr – Our people are living over 1,000 years on the river and have been taking care of the river. The elders used to tell them not to throw fresh fish back into the river, because if you throw fresh fish in the water before the spawning occurs, the other fish won't stick around. That is what the Pollock fishery is doing right now with dumping fish into the ocean.

Edward Adams – Senators Inouye (from Hawaii) told them to contact him, if they need any help, like Senator Stevens used to help Alaska. Perhaps they need to seek help from those in Washington, DC.

Ted Hamilton – Looking at the names of the people who are serving on the NPFMC makes him nervous, because they appear not to be from his area and seem more supportive of the trawlers. It is important to have Western Alaska representation serving on this regulatory body, so they will know how we're being affected.

Ray Oney – Doesn't prefer the hard caps. If they decide to use those, he would prefer it be ZERO so the stocks can be rebuilt. Otherwise, they have to go back to NPFMC and advise them of their concerns year after year. Stocks of concern on the Yukon River, affects not only the lower river, but all the way to Canada. Another option, is to penalize trawlers that are catching Chinook and perhaps allow the penalty to assist rural villages that are struggling with high cost of living.

John Riley – He was also thinking about zero hard cap earlier, because if they have another number of hard cap, that is like giving permission to throw away kings again.

**Lower Yukon Fish & Game Advisory Committee
Teleconference Meeting Minutes of April 1, 2009**

By-catch may have gone down because there were fewer to catch. That is also scientific proof that the fishery is hurting.

Ted Hamilton – Seems like what we should be doing is requesting a change of gear type. Trawl gear kills indiscriminately. There is a need to find a way to create a cleaner fishery. Automatic jiggers are very clean and release of most fish can be done (rockfish being the exception). We are getting squeezed out. Businesses like McDonald's and Van de Kamps want to keep their prices low, but there needs to be consideration of the high price being paid by our people. Allowing others to catch fish for the people of the Lower Yukon, rather than harvesting for their own seems like communism. That is not the way we were raised.

Ray Oney – Alternative methods of harvest should be looked at and recommended to the NPFMC, particularly for the Pollock fishery. The technology that we have today warrants a good look at this.

John Riley – Commented on Edward Adams suggestion to go beyond the local government. Pollock fishermen won't want to jeopardize their million dollar industry because of the concerns of some people on the Lower Yukon River. We need help beyond State of Alaska. If we give them a 60,000 cap, that is like telling them to go ahead and take 60,000. I want to tell them ZERO for a hard cap.

The committee requested that their comments be submitted to the North Pacific Management Council. Sherry Wright agreed to deliver them.

The meeting adjourned at 11:27 am.

ADDENDUM TO:

**Analysis of Alternative Incentive Plans
for Reducing Salmon Bycatch
in the Pollock Fishery**

By

James E. Wilen

Dept. of Ag. and Resource Economics
University of California, Davis

Comments prepared for submission to the
North Pacific Fisheries Management Council
At request of APICDA and NSEDC
March 2009

My original report entitled "Analysis of Alternative Incentive Plans for Reducing Salmon Bycatch in the Pollock Fishery" was written for submission by the March 13 deadline as a background document for the Council and Council committees and staff. During the period I prepared my report, industry groups were simultaneously fine-tuning the final plan, a process that continued up until the March 13 deadline also. Because the object of my analysis was a moving target, I made some assumptions about what the final plan would look like, knowing that the actual proposal would likely be different from what I had assumed. This addendum elaborates on features of the final plan that were different from what I assumed, and it discusses the implications of various final plan features in terms of their impact on bycatch reduction incentives.

The Financial Incentive Plan (FIP)

The documents I had at my disposal that outlined the FIP were Kochin et. al. 2008, and Kochin and Barzel, 2009. The original FIP developed a scheme that identified a vessel or vessels that would be identified as "Dirty Harry" vessels and a mechanism for converting an ante into payments for salmon avoided. My literature review concluded that this scheme was similar to "tournaments" that have been examined by economists. An important feature of the FIP is that it provides strong incentives to avoid salmon even when salmon abundance is low. Since tournament prizes are distributed based on vessels' relative bycatch (rather than absolute bycatch), skippers are compelled to avoid salmon under all circumstances.

The original FIP assumed that a single vessel was chosen as the Dirty Harry reference vessel, namely the vessel with the highest bycatch rate. The scheme computed the salmon saved by each vessel in relation to what would have been caught had everyone fished as dirty as the Dirty Harry vessel. The ante would then be distributed in proportion to each vessel's contribution to salmon saved. The final FIP deviates from the original scheme in three ways. First, instead of identifying a single Dirty Harry reference vessel and its bycatch rate, the new FIP computes a performance reference *standard* equal to 2.5 times the median bycatch ratio.¹ Second, the final FIP adds an overcatch penalty for exceeding the performance reference of 2.5 times the median bycatch ratio to the original plan penalty of forfeiting the ante. This overcatch penalty means that vessels that know they will be above the performance reference still have incentives to reduce the degree by which they are above the standard. Third, the overcatch penalty that is collected is distributed to vessels with performance above the standard, enhancing the marginal incentive for those in the "winning" group.

- The overall effect of three refinements to the original FIP, namely---changing from a reference vessel to a reference bycatch rate, adding a per salmon bycatch penalty for overcatch, and distributing overcatch penalties to clean vessels---is to

¹ A potential problem with identifying a single Dirty Harry vessel might be that a skipper who knew he was destined to be the Dirty Harry would simply give up attempting to avoid salmon. The new plan gives everyone a continuous incentive to avoid being above the reference standard, even if they are among the group of relatively dirty vessels.

enhance the incentives to avoid salmon bycatch compared with the original design.

The FIP as outlined in the original written document focused on the incentive effects provided by the tournament mechanism, a scheme for which the major benefit is that it provide incentives even in periods when salmon abundance and bycatch rates are low. My review pointed out that this scheme by itself provides incentive effects that are fairly easy to quantify, since they depend mainly on the design of the tournament. I also suggested that the actual quantitative impact on overall bycatch of a stand-alone FIP is more difficult to predict, since bycatch outcomes should reflect both incentive effects and the costs of compliance. My expectation was that the FIP might need additional complementary provisions that would provide a backstop to ensure a sector-level bycatch target was met. I also concluded that by allocating bycatch targets to the sectors, the fundamental incentives would be put in force for sector-level stakeholders to design additional features to guarantee sector level bycatch targets.

The final FIP does, in fact, incorporate several features that ensure that sector level bycatch is kept within or below limits designated by sector level caps.² The first mechanism is provided by the allocation of the sector cap to individual vessels. Unallocated sector level caps are ineffective because they become common pool rather than individual constraints, and this can induce a “race for bycatch.” In contrast, sector level constraints that are allocated to individual vessels ensure that each individual vessel adheres to its proportion of the sector cap, so that the fleet as a whole satisfies the cap constraint. This fundamental constraint on individual bycatch is strengthened by a second mechanism that enhances incentives to avoid salmon bycatch, namely allowing individual bycatch allocations to be tradable. Together, these design choices make the scheme a tradable bycatch allocation (TBA) scheme that will work in a manner similar to ITQs in targeted fisheries. Finally, the joint TBA/FIP scheme is augmented by a “Sector Performance Standard” coupled with penalties for failing to adhere to the performance standard. The Sector Performance Standard (SPS) measures a company’s average bycatch level (measured by a rolling three-year average) relative to the company’s share of the 47K cap. Companies that exceed their share must pay an additional half-cent per pound levy to the incentive plan for every year that their average exceeds their share. Companies that persistently harvest more bycatch than their share of the cap will find themselves paying escalating penalties into the incentive fund.

- The final FIP proposes allocating sector level caps to individual vessels, thus guaranteeing that the sector cap will not be exceeded. The plan also incorporates additional features that should enhance incentives to reduce bycatch below the sector cap. The TBA scheme allows flexibility and trades among vessels, and it penalizes those who exceed allocations and rewards those that reduce bycatch

² These features are apparently not all recent refinements of the FIP, but fundamental features that were always part of the plan. As the ICA document states, “the economic incentives created by the FIP are *in addition*, and intended to compliment, those provided by establishing a salmon bycatch limit allocated to the vessel level.” (pg. 2, emphasis in original document). This point was not obvious to me. I relied on draft documents from which I (mistakenly) assumed that the FIP was a stand alone scheme rather than being, in fact, designed to augment a Transferable Bycatch Allocation scheme.

below allocations. The Sector Performance Standard levies an additional penalty on firms that exceed their allocation on a rolling average basis. The SPS thus provides an increasingly onerous penalty for exceeding allocations, which operates in addition to the TBA cost of having to acquire bycatch quota to cover overages. The penalty funds that are added to the FIP also enhance the basic tournament prize, giving both dirty and clean vessels additional incentives to avoid salmon.³

The Salmon Savings Incentive Plan (SSIP)

The Salmon Savings Incentive Plan (SSIP) is a simplified version of the original Legacy Plan (Sugihara et. al. 2008). It differs by replacing the original tournament among participants with a performance standard associated with the stringent cap of 47K. It functions as a tradable bycatch allocation (TBA) scheme, much like the TBA part of the FIP/TBA scheme. Unlike the FIP scheme, however, the SSIP allows “banking,” or the carryover and saving of annual bycatch allocations for use in a future year. Stringent trading and savings rules are used to ensure that the 47K bycatch cap is met on average.

The final version of the SSIP retains most of the features discussed in the leadup draft document circulated the week before March 13 (Anonymous, 2009). My assessment pointed out that this program is one for which we can be quite certain about the quantity of bycatch, but less certain about the quantitative magnitude of the actual financial incentives that will emerge. This program caps maximum bycatch quantities with individual base caps, and then allows the marginal values of salmon saved to be determined by the market for traded salmon credits. Marginal values of salmon saved will thus be determined by both demand factors (most importantly, the abundance of salmon) and supply factors (the cost of avoiding salmon, salmon savings and trading decisions).

My discussion of the SSIP focused on how we might expect the market for salmon savings credits to evolve. I devoted some attention to how TBA credit prices would vary as salmon abundance was either high or low, and I also discussed how various trading rules would be expected to influence prices. My main focus was on processes by which high bycatch vessels would need to either save during low abundance years, or trade with low bycatch vessels for deficient holdings of credits saved during high abundance years. The mental model that I used to work through the implications of this (hypothetical) market utilized the simplifying assumption that vessels would need to match variable allowable bycatch credits to fixed pollock quota holdings.

In hindsight, I should have paid attention to the other avenue by which the bycatch allocation market can come into equilibrium, namely via the trading of pollock quota. For each vessel, salmon bycatch holdings must be matched to bycatch needs, which depend upon relative salmon abundance and salmon bycatch avoidance behavior, but also on pollock landings. Vessels that find their bycatch allowance holdings mismatched with needs can always adjust pollock landings as well as bycatch.

³ Depending upon the sequence of high and low salmon abundance years, the SPS has the potential to work in the most desirable manner. For example, if companies are more likely to exceed their company allocation in high abundance years, and if low abundance years follow high abundance years, then the FIP fund will be enhanced during low abundance years, precisely when additional incentives are most needed.

Thinking through the implications of two interrelated markets makes the problem much more complicated. As a starting point, we should note first that the demand for bycatch is a derived demand dependent upon the net value of pollock. First imagine a situation in which pollock is allocated to individual vessels and it cannot be traded. In this situation, the net value of pollock would be lower than the alternative situation in which pollock can be freely traded among vessels. An active trading market for pollock thus increases the derived demand for bycatch quota other things equal. We should expect, then, that bycatch quota prices would be higher, on average, when we assume that pollock allocations are not tradable. Higher bycatch prices provide stronger incentives to avoid salmon bycatch.

What can we say about the relative effects of trade in pollock quota between low and high abundance salmon years? This is not answered easily. One way to predict what should happen is to work through the same logic for the pollock market that we used to discuss the bycatch market. For example, suppose (hypothetically) that individual salmon bycatch caps are fixed to each vessel and cannot be traded or banked, whereas pollock can be traded. Then we would expect the pollock market to absorb all of the adjustments, and pollock lease prices would rise and fall as salmon abundance changed. For example, when salmon abundance was low, individual vessels would find their bycatch holdings sufficient to match their pollock quota, and if pollock was traded, it would be for prices approximating lease values. With high salmon abundance, dirty vessels would find their bycatch allocations deficient and they would have to either forgo landing the excess pollock or trade it. But many skippers would find themselves with relatively too much pollock quota compared with bycatch holdings, on average. Hence pollock quota would likely trade below ordinary market lease values. The conclusion of this hypothetical thought experiment is that if bycatch quota cannot be traded, pollock trades and prices should reflect the relative scarcity of the bycatch constraint. With abundant salmon bycatch quota (in low abundance years), pollock would trade at lease prices reflecting the actual net profits. With scarce bycatch quota (in high abundance years), many vessels would have too much pollock and many would find it necessary to lease out their extra allocations, at discounted prices.

Under the SSIP, both salmon bycatch quota and pollock quota will be tradable, subject to some restrictions and rules. Allowing salmon bycatch to be traded should smooth out the swings in pollock prices that we hypothesized would occur without bycatch trading. In particular, in high salmon abundance years, trade in bycatch would prop up pollock trading prices that would otherwise be discounted as too many people found themselves with pollock that could not be matched with bycatch. Higher trading prices for pollock would enhance the willingness to pay for bycatch, relative to the situation where pollock allocations are assumed fixed. In low salmon abundance years, pollock allocations would not be constrained by bycatch allocations, and trades in pollock would settle at ordinary lease prices reflecting net profits.

The overarching point is that trade in pollock enhances pollock values and hence potential willingness to pay for bycatch quota. The first order effect of this should be to raise bycatch quotas in high salmon abundance years, without depressing it in low abundance years. But the savings feature that allows carryover should transmit the higher prices in high abundance periods into increased incentives to save salmon bycatch during

low abundance periods. This in turn should provide stronger incentives during years when salmon is low, as desirable.

- Constraining markets and trade of any commodity reduces value because there are gains to be shared from trade. My initial analysis of the effects of the SSIP made a simplifying assumption that pollock allocations on each vessel would remain fixed and that the salmon bycatch market would absorb most of the impacts of swings in salmon and pollock abundance. In fact, the pollock will also be traded among vessels and hence we should expect the salmon bycatch market to be influenced by pollock trades. My expectation is that pollock trading should increase the price of bycatch trades during high salmon abundance years, and that these higher prices should in turn induce more savings during low salmon abundance years. Hence incentive effects to avoid salmon should be stronger than under my initial more restrictive assumptions.

References

Anonymous. 2009. "SSIP-Salmon Savings Incentive Plan: Description and Rules-DRAFT," March 3. 6 pages.

Kochin, Levis A. and Yoram Barzel. 2009. "Additional comments on Kochin et. al. incentive plan." January 30, 5 pages.

Kochin, Levis A., Christopher C. Riley, Ana Kujundzic, and Joseph T. Plesha. 2008. "Analysis of an Incentive-Based Chinook Salmon Bycatch Avoidance Proposal for the Being Sea Pollock Fishery", draft manuscript, November 20, 88 pages.

Sugihara, George, John Gruver, Karl Haeflinger, and Hao Ye. 2008. Reducing Chinook Salmon Bycatch with Market-Based Incentives: Individual Tradable Encounter Credits" draft manuscript, 36 pages.

NPFMC
Eric Olsen - chairman

3/27/09

Good day chairman Olsen and council members. My name is Sylvia Etefagh and I manage the Unalaska Fleet Cooperative. My background is in fisheries and I hold a degree in both fisheries and marine biology. I've been involved in numerous fisheries in the State of Alaska, initially as an observer during the TALFF days, and then as a vessel representative during the joint venture fisheries followed by time aboard factory trawlers and now in the AFA fishery. I am an Alaska resident and live in Wrangell where I own and operate a salmon gillnetter. The advent of AFA has brought along many challenges along with the benefits. Changes in the ecosystem and ocean conditions bring about changes in the distribution of feed and therefore other species that rely on that feed, including both salmon and Pollock. The AFA has allowed us to be more efficient in our use of quota but has also allowed us to choose where and when we fish. Unfortunately recent changes in the Bering Sea have resulted in changes in the distribution of quality Pollock. Both commercially useful Pollock and King Salmon are best found in the same feeding grounds. This situation is not unique to the past 7 years.

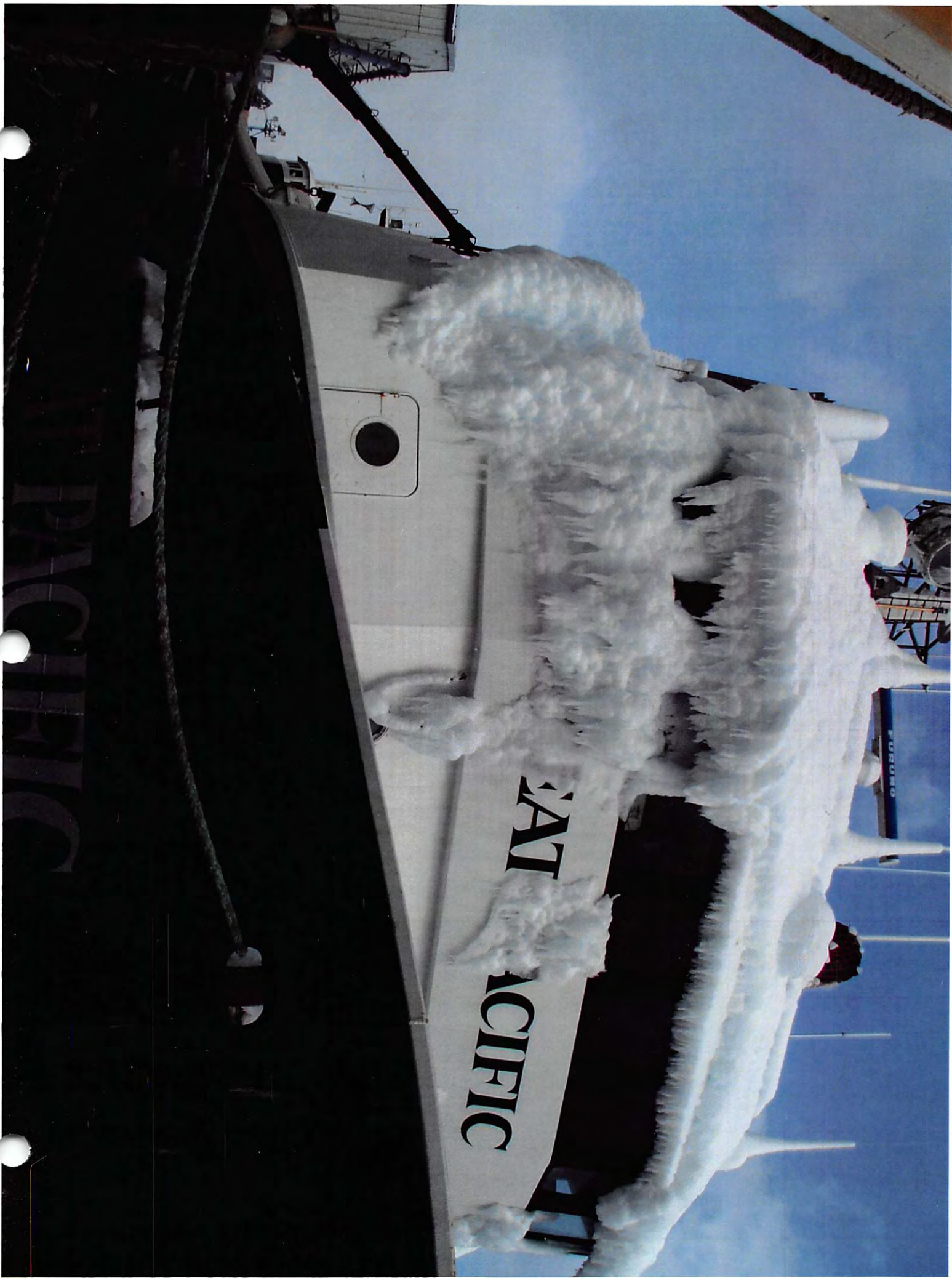
In managing the Unalaska Coop, we have recognized the importance of reducing bycatch while maximizing efficiency. We have tried to balance these factors and use a fishing plan that works as a compromise between the needs of all parties, the plant, the vessels, and other users of the Bering Sea fisheries resources. Unfortunately, we have not always succeeded. Choices are often hard to make in businesses that are market driven. Let alone in markets dealing with the extraction of wild renewable resources. Statistical information is always based on hindsight whereas the execution of a fishery is based in both real time and by looking forward. In our coop we have spent much money and time identifying problems and looking for solutions. Our fleet was the first to test the salmon excluder. We are the only fleet that requires boats to have excluders. We have also learned that excluders alone are not the answer. We must examine our decisions at each tow and be diligent in looking at each haul and comparing data with other boats. After 2007, the peak of the King Salmon bycatch years, we recognized that we could and would improve. We made choices that resulted in less revenue and higher costs, but reduced our bycatch significantly. This winter, we waited in town until Pollock moved away from the areas we suspected would have salmon. This came at a cost. Two of our vessels made one test tow each that unfortunately had approximately 50% of our entire season's King bycatch. They returned to town and did not risk adding anymore to their injury.

I am an Alaskan salmon fisherman both commercially and for my freezer. My fleet has had the additional pressure of having me as their manager. Bycatch in the Pollock fishery is unacceptable, but unfortunately sometimes unavoidable. I agree that accountability at the Individual vessel level is necessary to keep skippers, vessel

owners and managers on task, and will push us to make those harder decisions. It is however necessary to design programs that are attainable and don't punish one user more severely than another. I believe that to be successful in managing any fishery, it is important to concentrate on the resource itself and how best to expand that resource through a comprehensive plan rather than a political fight. Although I am not in favor of hard caps, they are based on looking backwards rather than forwards, given the numbers under consideration currently, I recommend the caps as represented by the SSIP, a hard cap of 68,392 and a performance standard of 47,591.

Respectfully,

Sylvia Ettefagh
P.O. box 2281
Wrangell, AK 99929



PACIFIC
PACIFIC

FUSUMO



March 31, 2009

Eric A. Olson, Chairman
North Pacific Fishery Management Council
605 W 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Re: NPFMC, April 1 -7, 2009, Meeting in Anchorage, Item C-2 Salmon Bycatch

Dear Mr. Olson:

American President Lines, Ltd. is an international export carrier that has provided export service to the Alaskan fishing community out of Dutch Harbor, Alaska to Asia and Europe since 1980. APL has invested significant capital into its Terminals in Kodiak and Dutch Harbor, it has paid substantial taxes that have benefited both communities; and as a result, APL has provided steady jobs for local Alaskans both directly and indirectly for over 29 years.

APL has considerable respect for the NPFMC management of the various fisheries that occur in the BSAI and GOA. We could not agree more with the consensus that these fisheries are the best managed in the world and commend the Council for its overall guidance. However, as it relates to the upcoming meeting in Anchorage over the salmon bycatch issues and its potential impact on the Pollock fisheries, APL is concerned that the Council is deviating from its strong reliance on science to help guide its decisions. In particular is NPFMC's response to Comment 3, 50 CFR Part 679:

“Admittedly, NMFS has limited information on salmon biomass and genetic river of origin for salmon bycatch species. Research is underway to address these informational deficiencies. However, without this information, NMFS is unable to determine if high bycatch amounts in the Pollock fishery are due to high salmon abundances in the Bering Sea, or how these high bycatch amounts affect Western Alaska salmon runs.”¹

The above admittance is of great concern to APL. Because of the significant investments made by the Pollock industry, the service sector, the affected communities, etc., we urge the Council to take the necessary time to determine what the salmon bycatch truly

¹ DEC, NOAA, 50 CFR Part 679, "Fisheries of the Exclusive Economic Zone Off Alaska; Prohibited Species Bycatch Management," page 61071

represents and to not implement any of the proposed alternatives 2, 3, or 4 until such scientific data is compiled, evaluated and discussed with all interested parties.

Sincerely,

AMERICAN PRESIDENT LINES, LTD.

A handwritten signature in black ink, appearing to read "E.R. Makarin". The signature is stylized with a large initial "E" and a long horizontal stroke at the end.

E.R. (Gene) Makarin
Alaska Manager

Oral Testimony

04/09

Mr. Chairman and members of the Council:

Waqaa! My name is Francis Thompson, I am a Subsistence/Commercial Fisherman from St. Mary's which is located on the Lower Yukon River, a Panel member of the U.S./Canada Yukon River Panel since 2001 to present and was an Advisory Member from 1996 to 2000.

While zero bycatch should be our ultimate goal, understanding that the Council must allow the Pollock fishery to operate while at the same time reducing salmon bycatch,

Letter the Yukon River Panel Attached

- 1. Precautionary measures are necessary to conserve Yukon River Chinook salmon and meet Yukon River Agreement obligations. Hence, the Yukon River Panel supports a fleet-wide cap of 37,000, with a performance standard of 32,500. ICA agreements and incentive plans will help to accomplish this.**
- 2. regulations and programs that may close areas where high Chinook bycatch rates occur or times when bycatch rates are high and a hardcap is projected to be exceeded. Regulations and programs must be flexible enough to address existing hotspots and new hotspots during the fishing season**
- 3. recommend further development of salmon excluder devices, which have already been promoted by industry and other potentially important technologies for reducing future Chinook bycatches**
- 4. The continuation and expansion of scientifically collected and analyzed genetics data as part of a rigorous program designed to avoid catches of Western Alaska and Canadian-origin salmon stocks. It is essential to understand which stocks are being caught through genetic stock identification.**
- 5. The Yukon River Panel does not support a regulatory cap of 68,392 in any scenario. Since 1991, this cap would only have effectively reduced bycatch in 2006 and 2007. Having a hard cap based on the highest bycatch years would not serve to reduce marine catches and is contrary to the Yukon River Salmon Agreement to reduce Marine bycatches.**

Fishing families throughout the Yukon River drainage have made and will continue to sacrifice and limit their harvests to allow the run to recover, recognizing all fisheries must share in the burden of conservation we respectfully request your assistance in this difficult task.

Personal testimony

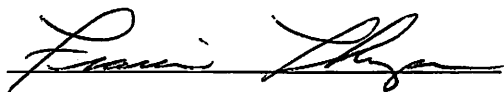
Common Sense –you start from a low to conserve, Trust – we have trusted the council, Council have trusted industry to keep bycatches of all species low, Hope–for our fisheries to rebound to historic level and not manage just for escapement and never ask your children what they want to eat for supper – don't ask industry what they want and how they want their fishery to operate and be managed.

The cost of industry to operate should not be waged for the council to consider a high bycatch # but should be waged on rebuilding the Chinook stocks and rebuilding the salmon and communities of the AYK region.

I am recommending to the Council

- 1. That the Advisory Panel composition is reviewed and more non industry members be seated so that the Advisory Panel will provide you with meaningful and unbiased recommendation.**
- 2. Learn and understand how failed returns are affecting the people and communities in the in-river systems of the AYK Region by visiting our communities and talking to the people.**
- 3. 100% observer monitoring of the Pollock Fishery**
- 4. help us have the opportunity to feed the world with our rich nutritious salmon. In doing so you will help rebuild our economies providing jobs, revenue and uplift the people and giving them hope, this was what we had and we are only asking the Council to help us get it back by participating in the conservation and rebuilding efforts of the in-river subsistence and commercial fishermen and women of the AYK Region.**

Quyana:



Written Comment and Testimony

04/03/09

Francis Thompson
P.O. Box 111
St. Mary's, Alaska 99658
Phone (907) 436-2023
E-Mail amaar_culi@yahoo.com

Mr. Chairman and members of the Council:

Waqaa! My name is Francis Thompson, I am a Subsistence/Commercial Fisherman from St. Mary's which is located on the Lower Yukon River, a Panel member of the U.S/Canada Yukon River Panel since 2001 to present and was an Advisory Member from 1996 to 2000.

This testimony addresses my concern with the Bering Sea Salmon Bycatch by the Bering Sea Trawl Fishery The Board of Fisheries in 2001 implemented fisheries management strategies for ADF&G to implement because the Chinook salmon was classified as a Yield Concern

I would also like to mention that the U.S/Canada Panel agreement was signed in 2001 after 16 years of hard negotiations by both countries. Since the agreement, both countries have worked very hard to rebuild the Yukon River Chinook salmon stocks and both the Department of Fisheries and Oceans - Canada and ADF&G have managed the fisheries very conservatively in providing the recommended BEG and SEG's into salmon tributaries in both countries.

The U.S. Yukon River Salmon Panel is composed of six Panel Members, six Alternate Panel Members and 8-12 Advisors

"The Yukon River Salmon Agreement outlines steps to ensure the future for the Yukon River salmon fishery through harvest sharing, research and habitat protection. Ultimately, the Agreement was the work of the people who depend upon salmon for subsistence, cultural, commercial or recreational purposes. There would have been no forward movements in the negotiations for the Agreement without the people's dedication and hard work to preserve the Yukon River way of life. The people of the Yukon River should take great pride in the Yukon River Salmon Agreement set in place to protect their salmon resources." Quote taken from the Yukon River Salmon Agreement Handbook.

Mr. Chairman and members of the Council

My father John Thompson Sr., who is now 86 years old and others many whom have passed on or have aged, expressed their concern of salmon bycatch (Chinook, chum) by first the Foreign high seas drift net fishermen, foreign trawl fleets and just recently with the domestic trawl fleet (since the inception of the Magnusson/Stevens Act). They battled for 30 plus years to reduce bycatch to protect their subsistence and commercial fishery but most importantly the salmon so it would continue to return to spawn. What has been done? The State of Alaska and the Federal Subsistence Board have managed the people within the river systems by reducing subsistence harvest opportunity by placing windows fishing, creating tier systems and reducing/eliminating commercial fisheries within the AYK river systems.

All this has created economic and social hardship, reduced opportunity for subsistence and commercial fishing for approximately 18,000 People within the Alaska side of the Yukon River and about 12,000 people in the Yukon Territory of Canada. A lot of people on the Yukon River both in Alaska and the Yukon Territory have not or have had a difficult time harvesting their AMOUNT NEEDED for SUBSISTENCE for Chinook Salmon and have not had a commercial fisheries for to long, your emergency action and attention on this issue of bycatch need to be immediate. For every year you delay that is 5 to 7 years that we may see if your action is positive for the rebuilding of the salmon resources within our river system. (2 year delay 10 to 14 years and so on)

Commercial Fishing of our Salmon resource for families in the Lower Yukon River and for many families throughout the Yukon River Drainage is our only source of income and what little we earn **supplements our subsistence lifestyle and activities, there is no alternative to subsistence.**

We once harvested 80 to 120,000 Chinook (valued at approx 5-12million dollars) and now it is 0 – 35,000 (Approx. 2 million Dollars). **In 2008 we did not have a directed Chinook Commercial Fishery, none likely in 2009.** Subsistence use to be 7 days a week now it is two 36 hour periods. **In 2008 Subsistence harvest opportunity was reduced to two 12hr openers and another for two 24 hr openers and mesh size restriction were implemented for 1 week so that we will not catch Chinook.**

In 2009 in-river users are currently meeting to determine means and methods for reducing their own harvest. In 2008 Canadian aboriginal fishers voluntarily reduced their harvest to half of their historical catch. Despite these sacrifices, the interim Canadian escapement goal was not met. As in-river fishers make sacrifices to limit even their subsistence harvest to allow the runs to recover, the Pollock fisheries must bear their burden of sacrifices and reduce salmon bycatch as well.

Communities in western Alaska are struggling to survive. This cannot be compared to the level of tax benefits and income received by Pollock communities. Those communities can probably survive without pools and new infrastructure. Without the salmon which sustain our communities, our culture cannot exist.

While bycatch may be a small portion of each individual western Alaska run, the same can be said about every individuals catch in-river- to protect the runs reductions are required at every level of impact.

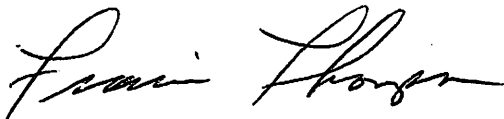
Any additional fish which can contribute to escapement or subsistence or commercial fisheries help in this current environment.

The genetics study which is used as a basis for the impact analysis is limited by the inadequate sampling underlying it. While it seems to predict general trends, which agree with earlier work, specific stock impacts, such as the Upper Yukon, do not comport with what we know about Western Alaska run sizes are likely inaccurate. Therefore the impact numbers in the DEIS for specific runs cannot be used to say that bycatch has little impact on these runs.

47,000 to 68,000 is simply too high: the 68,000 number has only been exceeded twice in the last 25 years, and therefore represents status quo, not a bycatch reduction measure. Bycatch at this high level does not meet our obligations under the Yukon River Salmon Agreement to reduce bycatch, nor does it meet this Council's stated intention of reducing bycatch. Selection of a higher cap should not be based on the selection of an industry incentive plan over which neither the council nor NMFS has any control after the council takes final action. Reliance on a voluntary incentive plan in this context violates NEPA and the Council's stated mandate to reduce bycatch

While zero bycatch should be our ultimate goal, understanding that the Council must allow the Pollock fishery to operate while at the same time reducing salmon bycatch, I support a fleet-wide cap of 37,000, with a performance standard of 32,500. ICA agreements and incentive plans will help to accomplish this. Vessels not in an ICA or incentive plans would be subject to the backstop cap of 29,323.

Quyana



Francis Thompson



Elizabeth Andrews PhD
USA

Co-Chairs

Frank Quinn
Canada

Yukon River Panel 100-419 Range Road Whitehorse, Yukon Y1A 3V1

April 4, 2009

Eric Olson, Chair
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Doug Mecum, Acting Regional Administrator
NOAA Fisheries, Alaska Region
PO Box 21668
Juneau, Alaska 99802-1668

RE: C-2 Salmon Bycatch

Dear Chairman Olson and Mr. Mecum:

This letter conveys recommendations of the Yukon River Panel regarding final action by the Council on Bering Sea Chinook salmon bycatch management (DEIS/RIR/IRFA *Federal Register*, Vol. 73, No. 235, 12-05-08).

The Yukon River Panel is an international advisory body established under the Yukon River Salmon Agreement for the conservation, management, restoration, and harvest sharing of Canadian-origin salmon between the United States and Canada. This Agreement constitutes Chapter 8 of the Pacific Salmon Treaty¹, and paragraph 12 of the Agreement states the Parties, “shall maintain efforts to increase the in-river run of Yukon River origin salmon by reducing marine catches and by-catches of Yukon River salmon. They shall further identify, quantify and undertake efforts to reduce these catches and by-catches.”

The 2008 run of Yukon River Chinook salmon stocks of Canadian origin Yukon Territory was late and weaker than anticipated. The Panel review of the Chinook salmon run and fisheries found that conservation of these salmon stocks required the very conservative management measures that were implemented in 2008. Fisheries managers closed commercial fishing in US and Canada; reduced fishing time in the subsistence fisheries in the US and in lower river districts allowed only smaller mesh gillnets; reduced the sport fishing bag limit in the US; closed sport fishing in Canada; and Canadian First Nations voluntarily reduced aboriginal fishing by

¹ <http://www.psc.org/pubs/treaty.pdf> accessed February 2009

more than 50 percent. Even with these severe reductions, spawning escapement of Canadian-origin Chinook was 24 percent below the interim management escapement goal of 45,000.

The 2009 Chinook salmon run outlook is poor to below average and will require continued and extremely conservative management measures to ensure adequate returns of Canadian-origin Chinook salmon. Commercial and recreational fisheries are very unlikely; and subsistence and aboriginal fisheries face severe restrictions with up to 50 percent or more reduction in allowable catch to ensure the minimum escapement target of 45,000 Canadian-origin Chinook.

Despite high escapements in parent years, there were significant reductions in the return of the 4- and 5-year- old components of the Chinook salmon return in 2007 and 2008; following the years of very high bycatch in 2006 and 2007 in the Bering Sea pollock fishery. Recognizing factors beyond our control, such as ocean and in-river productivity, we must address those factors we can influence—harvests and bycatch. We believe our collaborative efforts can achieve conservation measures necessary within the drainage; however, more must be done to reduce bycatch to conserve salmon and to meet our treaty obligations.

Fisheries management within the Yukon River drainage is prepared for the most restrictive measures, including closures, as described above. The Panel has initiated an outreach effort to promote in-river conservation of Chinook salmon, including voluntary reductions and management measures to ensure adequate escapement. This is a challenging endeavor which is extremely important for sustaining future runs. Bycatch must also be reduced, with a management regime that embodies a policy of “reducing bycatches” further over time rather than a simple “capping” of bycatch over twice the level of 32,500, the 10-year average at the signing of the 2002 Yukon Agreement.

The Yukon River Panel recognizes there is variability in ocean conditions and salmon productivity and annual variability in salmon bycatch in the Bering Sea pollock fishery. The Yukon River Panel continues to recommend a bycatch cap of 37,000, the 10-year average (1992-2001) with high and low bycatch years excepted; coupled with other key elements, including incentive programs that meet the Council’s stated goals of bycatch reduction, national standards, and other measures necessary and appropriate to implement a policy of reducing bycatch further over time.

By reducing bycatch to 37,000 and lower, both National Standard 1 to optimize yield from each fishery and National Standard 9 to reduce bycatch may be achieved. The additional savings of more than 30,000 Chinook salmon compared to the preliminary preferred alternative with 68,392 provides:

- (a) the potential for customary subsistence uses, sport fisheries, and some commercial fishing to sustain participation of fishing communities in western Alaska, including the Yukon drainage;
- (b) additional Chinook salmon returning to spawning escapement to sustain the resource and provide for adult production equivalent of 2.78 times the number of spawners, the

average return per spawner as determined by the Yukon Panel's Joint Technical Committee²; and

- (c) approximately 6,800 Chinook bound for the Yukon River, based on Myers (1997-1999) work.

Precautionary measures are necessary to both conserve Yukon River Chinook salmon and meet Yukon River Agreement obligations. Hence, the Yukon River Panel supports a fleet-wide hard cap of 37,000 with an annual performance standard of 32,500. We encourage the use of rolling hot spot closures and incentives programs to avoid salmon that take into account biological conservation needs and are likely to work from the outset of implementation. We also recommend further development of salmon excluder devices, which have already been promoted by industry, as potentially important technologies for reducing future Chinook bycatch.

The Yukon River Panel supports the continuation and expansion of scientifically collected and analyzed genetics data as part of a rigorous program designed to avoid catches of Western Alaska and Canadian-origin Chinook salmon stocks. It is essential to understand which stocks are being caught through genetic stock identification.

The Yukon River Panel does not support a regulatory cap of 68,392 in any scenario. Since 1991, this cap would only have effectively reduced bycatch in 2006 and 2007. Having a hard cap based on the highest bycatch years would not serve to reduce marine catches and is contrary to the Yukon River Salmon Agreement to reduce marine bycatch.

Fishing families throughout the Yukon River drainage have made and will continue to sacrifice their customary subsistence uses of Chinook salmon and limit their harvests to allow the run to recover and meet escapement goals. The Yukon River Panel takes seriously our responsibility to endeavor to increase in-river runs, recognizing all fisheries must share the burden of conservation. We respectfully request your assistance in this difficult task.

Sincerely,



Elizabeth Andrews
Co-Chair



Frank Quinn
Co-Chair

² Joint Technical Committee of the Yukon River US/Canada Panel). 2009. Yukon River salmon 2008 season summary and 2009 season outlook. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 3A09-01, Anchorage.

John Jewewout

K.E.G. Fishery

I was involved with the CDQ program at its very beginning as the CEO/Exec Dir of NSEDC. Back then, the Chinook salmon bycatch was much lower than it has been recently, but even back then we put serious pressure on our harvesting partners to do everything they could to avoid salmon bycatch. We were in a unique role to be able to participate in and benefit from the pollock fishery, which had previously only taken place beyond our view out in the Bering Sea. We were also in a position to ensure that the pollock fishery was conducted in a sustainable manner...not just for the pollock itself, but also for the salmon and other species that are taken as bycatch while fishing for pollock. This gave us a stewardship role in the Bering Sea fisheries, and it's a role that shouldn't be forgotten.

A lot of this bycatch is fish that would otherwise return to our rivers to spawn and also for the subsistence and commercial fishers to harvest. Some people have told you that the pollock fishery is too important to be impacted with bycatch reduction measures. I ask you: is this stewardship?

While it's unlikely that the pollock fishery bycatch is the sole cause of our poor salmon returns, you know that the bycatch is a significant part of the reason our fish aren't coming back to the rivers. The Council can't just sit by and watch these stocks sink even lower because the pollock fishery is worth millions and millions of dollars. That's not stewardship, that's greed.

Obviously things have changed since I was involved with the CDQ program, and a lot of this change has been good. The CDQ groups have continued to increase their investments into the pollock and other fisheries. The American Fisheries Act dramatically changed the way the pollock fishery takes place and it allowed us to realize much greater financial benefits from the fishery. All of these financial benefits from the Bering Sea fisheries have allowed the CDQ groups to do a lot to help the people in our regions. But, unfortunately, salmon bycatch levels have increased to alarming levels in recent years.

Before statehood a federal fishery manager took the steps to develop a subsistence report for the Nome area rivers and as a result of that report there

*Restrictive
Action*

were strong restrictions put on subsistence fishers, On 3-4 river systems in the Nome area and then spread eastward to include the eastern Norton sound rivers around the Elim area. Now there is no directed commercial fishery on the chum salmon. While we are here today to focus on Chinook salmon it seems reasonable to expect a correlation between these two. If the pattern of high bycatch continues we anticipate near elimination of some specific Norton Sound Chinook salmon stocks.

The Unalakleet River once was the largest Chinook salmon run in the region. In 2008 this river system recorded the lowest return on record. There was no commercial fishery for Chinook salmon and our constitutional right to subsistence fish was dramatically reduced.

In Norton Sound, we have had a tremendous burden put on us to conserve Chinook salmon for escapement, but still our returns and escapements sink even lower. The thought of having the Endangered Species Act dictate our fishery management makes me shudder, and from the Council's experience, it should make you shudder, too. Maybe we're not at that point yet, but if these trends for our Chinook salmon stocks continue the way they have been going, that may be the only hope to rebuild our runs. We shouldn't have to go there.

There is another thing that makes me shudder; and that is Tier II subsistence management under State fishery regulations. When there isn't enough fish for all subsistence users, Tier II decides who can fish and who can't. Tier II also requires that all non-subsistence harvests of those fish stocks be stopped. It's funny how that wouldn't directly apply to the bycatch in the federal fisheries of the Bering Sea, but we in western Alaska still have to pay the price. Even though I live in Elim, I saw the impacts of Tier II on the subsistence fishermen in the Nome area because of low chum salmon runs. It has the potential to tear communities apart; telling neighbors that one can fish for subsistence and another cannot. Now, some people are talking about Tier II again for Chinook salmon in other areas because we haven't had enough for subsistence and the commercial and sport fishing was closed. We need to do everything we can to avoid that. We should

never have to be in the position of telling my people who can and can't fish for subsistence.

I know that some of what I have said has been and will be said by others, but I wonder if the Council is hearing us, or just listening. There is a difference. Our situation is just too dire to be ignored altogether, or just to have token regulations implemented that still allow for excessive bycatch. We need the Council to not only provide immediate relief on Chinook salmon bycatch, but also provide for continued reductions of salmon bycatch. Clearly you can't set a hard cap at zero but you can choose to make the very best choice in the interest of the resource. We know there are ways for the industry to avoid catching salmon. We need the industry to focus on ways to reduce bycatch and not spend all this all this time and all this money worrying and fighting for ways to allow yourself the most salmon you think you can get out of this process.

Pollock is important. I certainly understand this, but we can't continue to pursue pollock at all costs to our salmon runs. The pollock fishery will survive, it may have to undergo some changes, but it will survive. Right now, the future of Chinook salmon isn't so certain.

CITY OF UNALASKA
UNALASKA, ALASKA

RESOLUTION NO. 2009-20

A RESOLUTION OF THE UNALASKA CITY COUNCIL ADDRESSING FUTURE NEGATIVE
IMPACTS TO UNALASKA, REGARDING FINAL ACTION ON THE PROPOSED CHINOOK
SALMON BYCATCH AMENDMENT

WHEREAS, the City of Unalaska is respectful of and sensitive to the Chinook salmon needs of western Alaskan communities for subsistence, cultural, and commercial fishing, and supports the responsible development of a Chinook salmon bycatch policy; and

WHEREAS, the North Pacific Fisheries Management Council is reviewing alternatives to reduce Chinook bycatch and is scheduled to take final action at this meeting; and

WHEREAS, the Draft Environmental Impact Statement (DEIS) the NPFMC is using for its review of the alternatives and final action is lacking major components of the direct and indirect economic consequences that a restrictive hard cap could create, causing substantial revenue loss for Pollock-dependent communities in Southwest Alaska, the sixty three CDQ villages in western Alaska and local support service businesses throughout the State, as well as the State of Alaska; and

WHEREAS, the DEIS is lacking critical research data on overall Chinook abundance figures, rivers of origin and the impacts of climate change and the ecosystem on the Chinook salmon resource in the Bering Sea; and

WHEREAS, Unalaska supports the further development of inter-cooperative agreements that help reduce bycatch in that many of the measures Industry has put in place the last two years have shown a marked reduction in Chinook bycatch; and

WHEREAS, Unalaska's economy is wholly dependent on the sustainable, reasonable and prudent management of the Bering Sea resource, with Pollock our economic foundation, and the impacts of a restrictive, low hard cap amount could devastate our healthy, vibrant community of 4,000, and other fishery dependent communities by threatening our ability to provide and maintain infrastructure and full school funding as well as employment and tax revenues that contribute to the Region and the State.

NOW THEREFORE BE IT RESOLVED THAT, the Unalaska City Council strongly urges the NPFMC to require that NMFS expand and improve their analysis of the preliminary preferred alternative (PPA) in the DRAFT EIS to include a full cost benefit analysis of the impacts to *all* fisheries-dependent communities and CDQ groups *before* they take final action on the proposed Chinook salmon bycatch amendment.

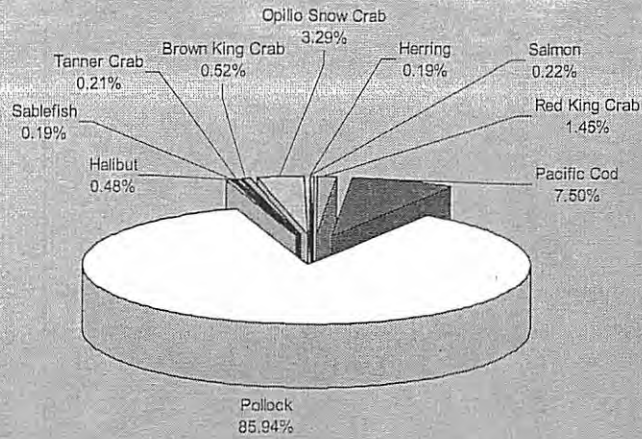
PASSED AND ADOPTED BY A DULY CONSTITUTED QUORUM OF THE UNALASKA CITY
COUNCIL THIS 31 DAY OF March, 2009.


MAYOR

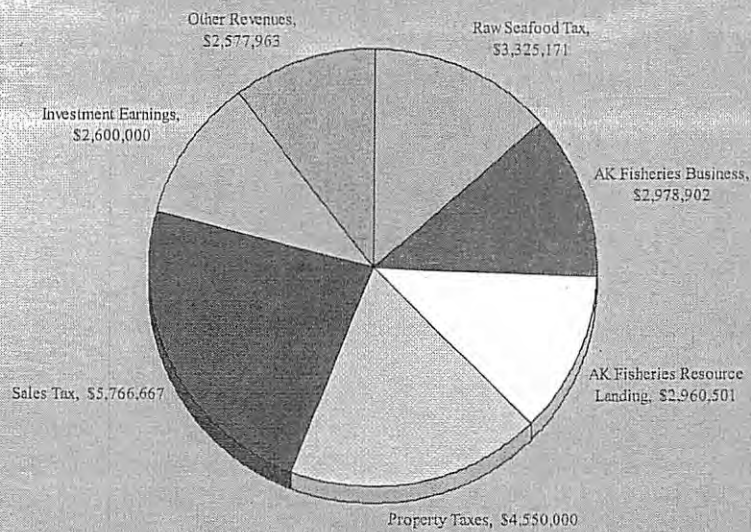
ATTEST:


CITY CLERK

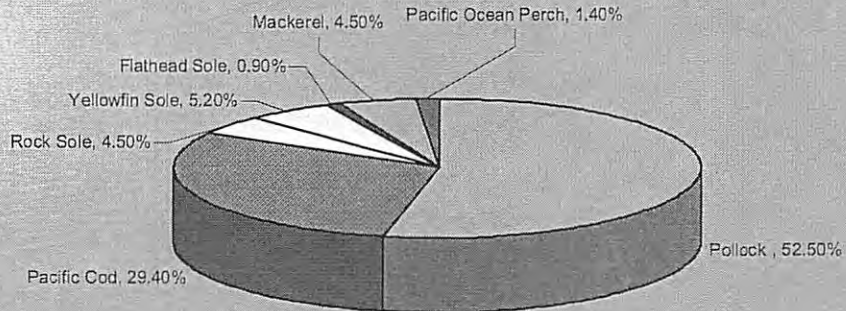
**2008 Seafood Species from Onshore Processors
(% of pounds delivered to Unalaska)**



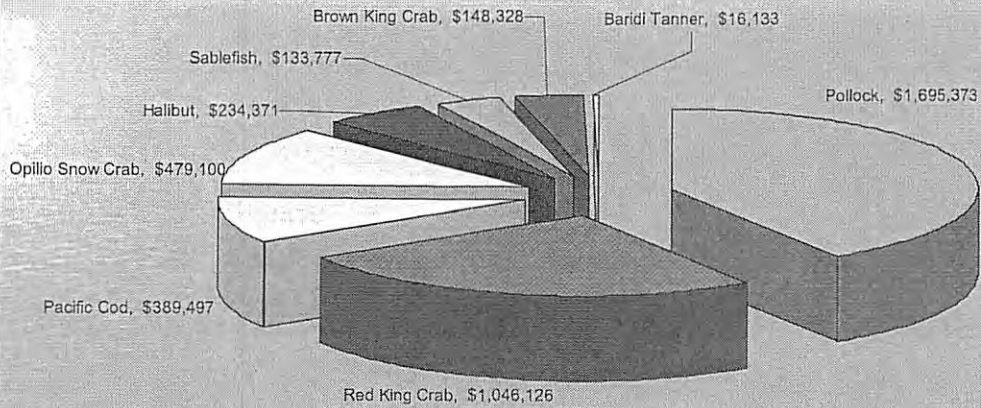
Major Revenues for General Fund - FY09 Budget



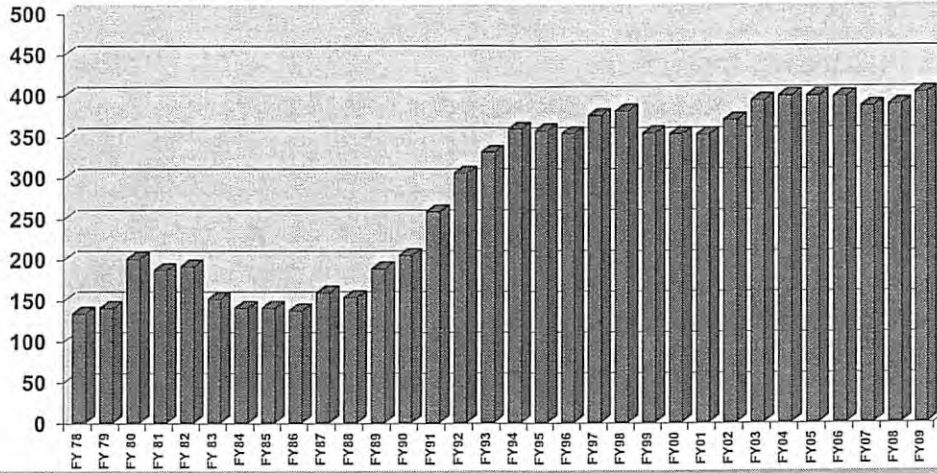
2007 Seafood Species from Offshore Processors
 (State Shared Fisheries Resource Landing Tax)



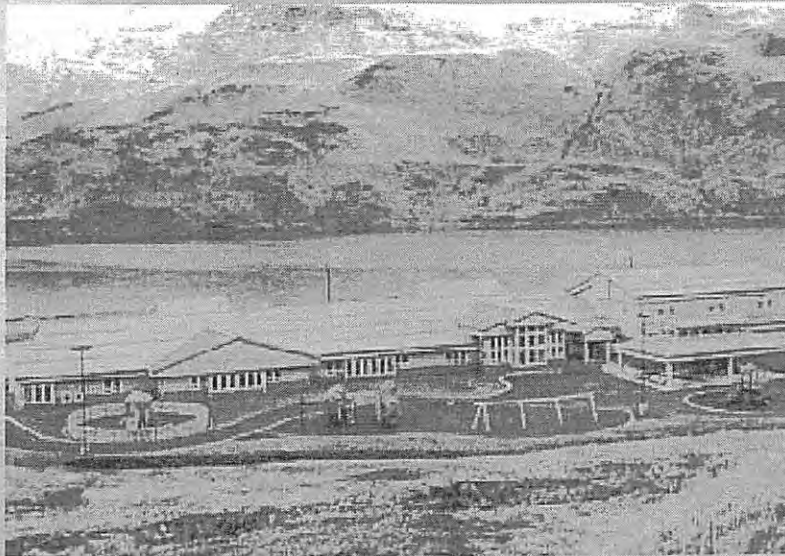
Local 2% Raw Fish Tax by Species
 2007



UNALASKA SCHOOL ENROLLMENT 1978 - 2008



EAGLE'S VIEW ELEMENTARY SCHOOL



Resolution 2009-7

CVRF Position on Chinook Bycatch in the Bering Sea Pollock Fishery

A resolution regarding the Bering Sea Pollock Fishery and Chinook Salmon Bycatch.

Inadequate EIS

Whereas, the December 2008 Draft Environmental Impact Statement (EIS) for Bering Sea Chinook bycatch management is inadequate because it grossly underestimates the negative economic and social impact of the potential alternatives/restrictions on western Alaska;

Whereas, the EIS misrepresents the average CDQ Pollock royalty value by using outdated 2007 data from only two of the six CDQ groups, and by not recognizing the significant increase in CDQ Pollock royalty pricing that occurred in 2008 for the 2009 season;

Whereas, CVRF's actual 2009 CDQ Pollock royalty is more than 50 percent higher than the amount used in the EIS to estimate harm to western Alaska and CDQ groups from restrictions in the Pollock fishery;

Whereas, the EIS fails to provide ANY analysis of the negative impact on western Alaska as a result of decreased revenue from CDQ pollock investments (as opposed to pollock royalties), even though it is common knowledge and acknowledged in the EIS (on p. 261 of the March 2009 "Preliminary Comment Analysis Report" (CAR) to the EIS) that CDQ investment revenue -- primarily from Pollock -- has been greater than CDQ pollock royalty revenue since 2004;

Whereas, virtually all of the CDQ-related data in the EIS is outdated, some of it a decade old;

Whereas, the authors of the CAR describe having lost the specific authority to require CDQ data to be produced, but could simply have asked the CDQ groups or the CDQ Administrative Panel (the Western Alaska Community Development Association) for information that would have resulted in a more informative and complete EIS cost-benefit analysis;

Whereas, because of these and other glaring deficiencies in the evaluation of economic and social effects (particularly with respect to Alaska Native and low income populations) and in the evaluation of environmental effects described below, the EIS may be legally inadequate;

Chinook and Pollock Fisheries Have Co-Existed for Half a Century

Whereas, our western Alaska Chinook subsistence and commercial fisheries have successfully co-existed with the Bering Sea Pollock fishery for 45 years as shown by EIS Figure 10-1 on page 496 (consistent pollock fishing since 1964), Table 10-28 on p. 562 (consistent Kuskokwim chinook subsistence and commercial fishing since 1960), and Table 10-30 on p. 568 (consistent Yukon Chinook subsistence and commercial fishing since 1960);

Whereas, we can continue to benefit from both Chinook salmon and Pollock if the two are allowed to co-exist in perpetuity;

Whereas, Table 10-28 (Kuskokwim, p. 562) and Table 10-30 (Yukon, p. 568) of the EIS verify the perspective that Chinook subsistence harvests have been steady and strong, including by showing the actual harvest levels for the past 47 years on both river systems;

Whereas, EIS Table 10-30 shows the year 2007 as having had the second highest subsistence harvest of Chinook salmon on the Yukon River in the past 48 years, and EIS Table 10-28 shows a significant and steady increase in Chinook subsistence harvest levels on Kuskokwim over the past 20 years as compared to the 20 years prior to that;

Pollock Provides

Whereas, through the CDQ Program, CVRF earns millions of dollars each year from the Bering Sea Pollock fishery for our 9,000 residents, our 20 villages from Scammon Bay down to Platinum, and our region;

Whereas, the Bering Sea Pollock fishery began in 1964, but it was not until 1992 that Alaska communities along the Bering Sea coast began to participate in the fishery through the CDQ program;

Whereas, CVRF struggled during the initial years of the CDQ program, but has had tremendous success over the past decade;

Whereas, CVRF's 46 percent ownership in American Seafoods represents the largest ownership by Alaskans in the 40+ year history of the Bering Sea Pollock fishery;

Whereas, the U.S. management system for the Bering Sea Pollock fishery is highly respected around the world and is constantly being improved and adjusted based on the best available science;

Whereas, the United States has sustainably managed the Bering Sea Pollock fishery for over 30 years, and, among other precautions, continues to set annual harvest limits for Bering Sea Pollock that are more than 20 percent below the annual levels harvested by foreign fleets in the early 1970's and below that levels that occurred in the 1980's because of foreign fishing in the Central Bering Sea "Doughnut Hole" area;

Whereas, each year the Bering Sea pollock fishery provides tens of millions of dollars in opportunity for our residents, including through subsidized salmon and halibut markets for hundreds of our fishermen, seafood processing jobs at CVS plants for hundreds of our residents, scholarships and training for hundreds of our residents, the construction of processing plants and fishery support centers throughout our region, dozens of CVRF community liaison and mechanic/welder jobs in our villages, and through other important programs;

Whereas, in 2008 Pollock provided CVRF with \$15 million to subsidize the operation of our subsidiary, Coastal Villages Seafoods, thereby providing salmon and halibut markets to 629 fishermen in the region and jobs for more than 300 residents at our seven in-region CVS plants, as well as the cash needed to continue construction of the new \$35 million Goodnews Bay Regional Salmon Plant in Platinum, Alaska which will allow our salmon fishery to fish without limits in the 2009 fishing season;

Whereas, Pollock provides hope and opportunity for residents of our region who want to fish and work, and provides a new, sustainable economic engine for our region at a time when we have few other opportunities and continue to be among the financially poorest people in the Nation;

The "Costs" of the Restrictions Are Too High

Whereas, CVRF, our 20 communities and our 9,000 residents of western Alaska now own more than 10 percent of the entire Bering Sea Pollock fishery through our CDQ Pollock allocation (2.4 percent) and our pro-rata ownership of American Seafoods (approximately 7.8 percent);

Whereas, given the inadequacy of the cost-benefit analysis in the EIS and CAR with respect to CVRF, the CDQ program, and western Alaska, CVRF has done its own cost-benefit analysis using all relevant data from the EIS/CAR and filling in some missing data;

Whereas, the following chart conservatively estimates the potential "costs" to CVRF of the three Chinook bycatch cap levels under consideration, including costs from reductions in both our CDQ Pollock royalties and our Pollock investment revenue, with each scenario based on actual 2003-2007 averages and assuming a 70/30 A/B season split, a 9.3%/A and 5.5%/B CDQ allocation, and the 2002-2006 C/P sector Chinook/Pollock rate:

CVRF Costs	Chinook Cap 29,300	Chinook Cap 47,591 (PPA2)	Chinook Cap 68,392 (PPA1)
Lost CDQ Pollock Royalty (@\$325/mt) Annually	\$5,396,199	\$2,284,632	\$776,298
Lost Pollock Investment Distributions Annually	\$5,699,719	\$2,412,904	\$819,624
Total Average Annual Cost/Loss to CVRF	\$11,095,918	\$4,697,537	\$1,595,922
Cost as Percentage of Average Annual CVRF Revenue	35.10%	14.86%	5.05%

Whereas, even the Preliminary Preferred Alternative 1 (PPA1) with a cap of 68,392 Chinook would result in average annual reductions in CVRF gross revenue of \$1.6 million while producing very little benefit in terms of returning Chinook salmon (see below);

The "Benefits" from the Restrictions Are Too Low

Whereas, CVRF prepared the following chart to identify the extrapolated "benefits" that would come from the potential restrictions on CVRF (on our combined CDQ pollock and investment pollock) using data and rates from the EIS:

Chinook Returning to Rivers As Result of CVRF Cost	Chinook Cap 29,300 (Alt 2)	Chinook Cap 47,591 (PPA2)	Chinook Cap 68,392 (PPA1)
AEQ Chinook Returning to Kuskokwim (# of salmon)	187	55	37
AEQ Chinook Returning to Kusk/Yuk/BB (# of salmon)	579	210	144

The "Cost" Per "Benefit" Is Alarming

Whereas, CVRF's internal analysis shows the following cost per Chinook salmon saved (AEQ returning to the rivers) by the restrictions on CVRF under each of the three alternative Chinook salmon bycatch caps:

CVRF Cost/AEQ Chinook Saved	Chinook Cap 29,300 (Alt 2)	Chinook Cap 47,591 (PPA2)	Chinook Cap 68,392 (PPA1)
CVRF Cost Per Kuskokwim Chinook Salmon	\$59,336.46	\$85,409.76	\$43,133.03
CVRF Cost Per Kusk/Yuk/BB Chinook Salmon	\$19,163.93	\$22,369.22	\$11,082.79

Whereas, the most restrictive of the bycatch caps (29,300) would cost CVRF more than \$11 million annually while allowing only 579 Chinook to return to western Alaska at a cost to CVRF of over \$19,000 per Chinook;

Whereas, even the least restrictive of the bycatch caps (68,392) would cost CVRF more than \$1.5 million annually while allowing only 144 Chinook to return to western Alaska at a cost to CVRF of over \$11,000 per Chinook;

Whereas, the difference between the middle cap (47,591) and upper cap (68,392) results in CVRF losing an additional \$3 million per year in gross revenue while allowing only an additional 66 Chinook to return to western Alaska per year at an incremental cost to CVRF of \$47,000 per Chinook;

Whereas, it appears likely from the EIS that none of the alternatives -- nor even an entire shut-down of the Bering Sea Pollock fishery -- would result in a discernable improvement in Chinook salmon fishing for fishermen in western Alaska rivers;

The Council Should NOT Reward Dirty Fishing

Whereas, the "preferred alternatives" in the EIS would effectively reward the Bering Sea Pollock vessels that have caught the most Chinook salmon bycatch in recent years by allocating Chinook salmon bycatch based on "history" rather than based "pro-rata" on each vessel/sector's Pollock catch;

Whereas, CVRF has invested in the Bering Sea Pollock sector with the lowest Chinook bycatch rate -- the offshore catcher/processor sector -- and over the past 10 years has played an active role in helping this sector to become the cleanest sector;

Whereas, specifically, CVRF has pressed the catcher/processor sector: to participate in annual skippers meetings to educate the fleet about avoiding bycatch, to publicly identify the "dirtiest" boats in the fleet in terms of salmon bycatch, to pay significant cash bonuses to the skippers of the "cleanest" vessels in the fleet as an incentive, to participate in the inter-cooperative contract through which the fleet works together to avoid salmon bycatch hot spots, to contribute millions of dollars to salmon research, and to take other actions to help avoid salmon bycatch to the extent reasonably possible;

Whereas, the North Pacific Council would effectively punish these salmon bycatch avoidance efforts if it allocates Chinook salmon bycatch based on "history" and thereby rewards the vessels with the highest Chinook bycatch rates over the past decade while allocating less proportionally to the catcher/processor vessels that CVRF owns and to the other vessels that have successfully avoided bycatch over the past decade;

CVRF Position

Now Therefore Be It Resolved, that Coastal Villages Region Fund (CVRF) urges the North Pacific Council and Secretary of Commerce to take the following actions with respect to Chinook salmon bycatch in the Bering Sea Pollock fishery:

- (1) **Fix the EIS:** Postpone final action on Chinook salmon bycatch measures in the Bering Sea Pollock fishery until the deficiencies in the EIS can be corrected, including by gathering updated CDQ Pollock royalty information, preparing an analysis of the impact of the alternatives on CDQ pollock investments, and preparing a comprehensive analysis of the actual economic impact on western Alaska from the Pollock fishery and from the potential restrictions in the Pollock fishery;

The Chinook fisheries and Pollock fishery have co-existed for almost a half a century now, and we can afford a few extra months to understand the true consequences to western Alaska before deciding


whether or not to adopt a hard cap on Chinook bycatch for the first time in the history of the Bering Sea Pollock fishery;

- (2) **Improve CDQ Data Beyond Just EIS:** Regardless of the Council's decision on Chinook salmon bycatch, the Council should take steps to improve the information it has about CDQ impacts on western Alaska in future fishery management decisions -- the CDQ groups represent the most significant interest Alaska has ever had in the Bering Sea, yet the data that NMFS and the Council presently have is terribly inaccurate and outdated;
- (3) **If Hard Cap, Adopt 68,391 (PPA1):** If the Council moves forward with a Chinook bycatch hard cap, CVRF strongly supports the highest cap of 68,392 for the reasons stated in this resolution, including that a lower cap could have massive negative financial impacts on western Alaska without any noticeable gain in returning Chinook salmon to our fishermen;
- (4) **Pro-Rata Chinook Bycatch Allocation:** CVRF strongly opposes allocating Chinook salmon bycatch based on "history" and strongly supports allocating "pro-rata" based on Pollock volume so that those who successfully avoided Chinook bycatch over the past decade are not penalized by the Council's action and those who caught the most Chinook bycatch are not rewarded; and
- (5) **Incentive Program(s):** Give each sector the opportunity to develop its own incentive program, but in the absence of an adequate incentive program, simply charge \$200 per Chinook caught and use the funds (allocated based on the stream-of-origin estimates) for research, enhancement and community benefit.

Certification


We, the undersigned board members of Coastal Villages Region Fund (CVRF) do hereby certify that CVRF is composed of 20 members, of whom 19 voted on the 2nd day of April, 2009, and that the foregoing resolution was adopted by a vote of 19 members, and further, that the resolution was modified by a 6-0 vote of the CVRF Executive Committee on the 3rd day of April, 2009 by striking the title to the third section of facts recited in the Resolution.

Attested to by:



Oscar Evon, President

Date: 4/3/09



Paul Tulik, Secretary

Date: 4/3/09

5 February, 2009

Good Afternoon Chairman Olsen and the Members of the NPFMC:

Thank you for the opportunity to testify for our village, myself, and the salmon of the Yukon River. My name is Timothy Gervais of Ruby, Alaska. Ruby is a community of 180 people located 500 miles upriver from the mouth of the Yukon River. It is 200 air miles west of Fairbanks. This region is considered the middle Yukon River. I am a member of the Ruby Advisory Council and a new member of the Western Interior Regional Advisory Council. I am disclosing that I am a Bristol Bay drift salmon fisherman (displaced from being a Yukon River fisherman since 1999) and a Bering Sea crab fisherman.

Mr. Mecum, one of your previous questions was on age class differentiation of harvest methods between the trawl fleet and in river. The trawlers tow at about 3.8 knots which is above the normal swimming velocity of a king salmon, particularly the older age classes. As the salmon get older and larger, their speed decreases. Middle and upper Yukon salmon harvest are about 1/2 from fish wheel which do not favor an age class. Set and drift gillnet gear are more size specific in their harvest. The healthy in river run numbers in 2001 and 2003 follow Bering Sea bycatch of less 10,000 fish in both 1999 and 2000.

There was also a question to Tanana Chiefs Conference Staff regarding how a salmon crash is defined on the Yukon River. This is how Ruby defines a salmon crash:

- 1) Every household in the village being out of salmon with winter only 2/3 over.
- 2) No commercial king salmon fishery in 6 years (including standing down in 2009).
- 3) Cross international border escapement of 17,326 in 2007 and 38,500 in 2008 while subsistence harvest levels at half or less than half the normal levels. These escapements are 43% and 72% of the goal.
- 4) Current average king salmon size approximately 65% by weight compared with mid 1990's harvests.
- 5) NPFMC Advisory Panel proposing a bycatch cap of 68,000 which is 2.32 times above the historic level.
- 6) Cumulative effective loss patterns of under escapement pushing the Yukon king stock towards listing as a threatened or endangered species.
- 7) 22.4% of the Bering Sea king bycatch being of Yukon River origin.

This year I spoke with 10 trawler crew members and 4 ground fish observers regarding the prevalence of non-reported bycatch. They stated that the average non-reporting level at 40%. The lowest figure given 20%. Some people stated the non-reporting level at well over 50%. Two people refused to say for fear of prosecution. Using the 40% number, a reported bycatch cap of 29,232 provides an actual bycatch cap of 41,052 king salmon.

NMFS staff said that their analysis ended at the mouth of the rivers. They missed the main aspect of the salmon issue by 2000 miles. It is mostly about how much king milt fertilizes how many king eggs on the spawning grounds. The Council and staff discussion has centered about the negative financial impact to the pollock industry. Escapement should dominate fishery policy.

If the NPFMC does not approve a bycatch cap of 29,323 along with incentive measures and mandatory salmon excluder use, the pollock industry will probably not be able to renew the Marine Stewardship Council sustainability certification. More importantly threatened or endangered species listing is possible within a few years. Please do not let the Yukon go the way of the Merrimack, Connecticut, Hudson, Sacramento, Colombia and Klamath Rivers as failed salmon rivers. Salmon enhancement has failed to bring any of these salmon populations back. The Yukon is one of the last great salmon runs on Earth. The Bering Sea is critical habitat to the Yukon King Salmon.

In other matters, I request the NPFMC to pass an ethics resolution to prevent members from gaining monetary benefit or employment from industry groups that are regulated by the Council. Regarding BSAI Crab Rationalization, we crew members pay lease fees of 50-80% of the gross revenue for the right to fish and our crew share % continue to decline. More crew members were on our vessel were injured this year than during any pre rationalization season I fished. We could not deliver all of our north shares because St. Paul was iced in. Rationalization is a bad program to everyone except quota recipients.

Association of Village
Council Presidents
PO Box 219
Bethel, AK 99559

Kawerak, Inc.
PO Box 948
Nome AK 99762

Karen Gillis
Tanana Chiefs
Conference
122 First Avenue
Fairbanks, AK 99701

Bering Sea Fishermen's
Association
110 W. 15th Avenue
Anchorage, AK 99501

Yukon River Drainage Fisheries
Association
725 Christensen Drive
Anchorage, AK 99501

April 5, 2009

Mr. Eric Olson, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99504

Dear Chairman Olson,

For several decades now, western Alaska organizations, communities and individuals have worked tirelessly with the Council to try to put meaningful limits on Chinook salmon bycatch. To date, all of these measures have failed to provide the necessary, long-term protections for Chinook salmon and the western Alaska communities that depend on them. While some of our recommendations on the proposed Chinook salmon bycatch measures may differ in regard to the details of the alternatives and options, **our positions all share several common themes:**

- The need for a bycatch limit, in the form of a hard cap, that will do more than just keep obscenely high bycatch years from occurring; a cap that is far lower than the 68,392 proposed in the Preliminary Preferred Alternative.
- Regulations that will, once and for all, provide the needed protections for Chinook salmon that we depend upon. We do not want to be back before the Council in 3, 5 or 10 years arguing once again that the previous measures have failed. This has gone on long enough.
- Regulations that will continue to minimize Chinook salmon bycatch beyond what is adopted now, with the ultimate goal of zero bycatch or as close to zero as is practicable, recognizing that the pollock industry would need some time to modify their harvesting practices and gear.

Within the various recommendations we see an opportunity for the Council to break from the perception of simply protecting status quo for the pollock fishery. As demonstrated by the Council's many previous attempts to address Chinook salmon bycatch over the years this is a crucial moment to put this issue to rest with some finality.

Respectfully,

Myron Naneng, Association of Village Council Presidents

Loretta Bullard, Kawerak, Incorporated

Jerry Isaac, Tanana Chiefs Conference

Karen Gillis, Bering Sea Fishermen's Association

Jill Klein, Yukon River Drainage Fisheries Association

Richard Metzger
PO Box 5043
Akiok, AK 99697

Willie Kasayulie
PO Box 29
Akiachak, AK 99551

Sammy Jackson
Box 52036
Akiak, AK 99552

Sheila Williams
P.O. Box 27
Akiak, AK 99552

Marcel Isadore
p.o. 51
Alakanuk, AK 99554

Michael James
P.O. Box 167
Alakanuk, AK 0

Mary Beth James
PO Box 67
Alakanuk, AK 99554

Sophie James
PO Box 67
Alakanuk, AK 99554

Irwin Oney
PO Box 8
Alakanuk, AK 99554

Ruth Oney
PO Box 8
Alakanuk, AK 99554

Raymond Oney
PO Box 149
Alakanuk, AK 99554

Stanley Ned
117 School Street
Allakaket, AK 99720

Roy Agloinga
2400 Barrow Street #104
Anchorage, AK 99503

Audrey Alstrom
5850 Jordan Circle
Anchorage, AK 99504

Lil Aukongak
P.O. Box 142631
Anchorage, AK 99514

Jesse Blurton
8700 El Paso Pl
Anchorage, AK 99515

Maria Cunningham
3916 Roundtop Circle
Anchorage, AK 99504

Richard Ellis
3985 Olympic Terrace Circle
Anchorage, AK 99507

Karen Ellis
3985 Olympic Terrace Circle
Anchorage, AK 99507

Kaare Erickson
1740 Thuja Ave
Anchorage, AK 99507

Annette Erickson
914 West 23rd Avenue
Anchorage, AK 99503

Gabriel Evan
827 E 11th Avenue, #4
Anchorage, AK 99501

christopher joe
713 west 45 #1
Anchorage, AK 99503

Michael Kimber
4530 Wright st
Anchorage, AK 99507

Paulette Kniseley
12221 Woodchase Circle
Anchorage, AK 99516

Chester Millett
6960 Viburnum Drive
Anchorage, AK 0

Fina Schlosser
2310 W Tudor Road Apt 2
Anchorage, AK 99517

Valerie Tony
400 Dailey #3
Anchorage, AK 99515

Angela Morgan
Box 243
Aniak, AK 99557

Ronald Bowerman
PO Box 847
Bethel, AK 0

Minnie Sallison Fritts
P.O. Box 293
Bethel, AK 99559

Jennifer Hooper
POBox 2662
Bethel, AK 99559

Rhoda Kohl
Box 1907
Bethel, AK 99559

Martin Leonard
P.O. Box 1802
Bethel, AK 99559

Norman Michaels, Jr.
P.O. Box 2085
Bethel, AK 99559

Nicholas Naneng
Po Box 2598
Bethel, AK 99559

Mary Woods
200 Kilbuck St.
Bethel, AK 99559

Joe Quinn
General Delivery
Brevig Mission, AK 99785

Lynn DeFilippo
PO Box 158
Cantwell, AK 99729

Dawn Foster
PO Box 30035
Central, AK 0

William F Salmon, Jr.
01 Lake View
Chalkyitsik, AK 99788

Richard Slats
P.O. Box 334 Ringseal Street
Chevak, AK 99563

Andrew Bassich
1 Berry st
Eagle, AK 99738

Joanne Beck
P. O. Box 109
Eagle, AK 99738

Scarlett Happ
#1 Last Chance Creek
Eagle, AK 99738

Barry Westphal
P.O. Box 60
Eagle, AK 99738

Amanda Westphal
PO Box 60
Eagle, AK 99738

Jan Woodruff
PO Box 117
Eagle, AK 99738

Emily Murray
PO Box 39007
Elim, AK 99739

Nick Schollmeier
23 Over Yonder In
Elim, AK 99739

flora simon
po box 94
Elim, AK 99739

Gregory Fratis Jr.
P.O. Box 218
Emmonak, AK 99581

Jennifer Kameroff
PO Box 44
Emmonak, AK 99581

Kandace Kameroff-Fratis
P.O. Box 218
Emmonak, AK 99581

Lambert Lukudak Sr.
PO Box 17
Emmonak, AK 99581

LaVerne Manumik
P.O. Box 73
Emmonak, AK 99581

Dora Christine Moore
10 Kwiguk Street
Emmonak, AK 99581

Douglas J. Redfox
PO Box 232
Emmonak, AK 99581

Rile D Redfox
PO Box 97
Emmonak, AK 99581

Thomas A Redfox
97 Kwiguk Street
Emmonak, AK 99581

Cecelia A Redfox
PO Box 97
Emmonak, AK 99581

James M. Kameroff
PO Box 87
Emmonak, AK 99581

Ryan L. Kameroff
PO Box 87
Emmonak, AK 99581

Priscilla S. Kameroff
PO Box 87
Emmonak, AK 99581

Robert S. Kameroff
PO Box 87
Emmonak, AK 99581

Nicole F. Kameroff
PO Box 87
Emmonak, AK 99581

Paige Drobny
122 1st Avenue Suite 600
Fairbanks, AK 99701

John Hege
3530 Mink Ln
Fairbanks, AK 99712

Lisa Kangas
4725 Villanova Drive, Apt 2
Fairbanks, AK 99709

Diana Stevens-Johnson
405 Berton Rd #6
Fairbanks, AK 99709

Travis Varney
4725 Villanova Dr
Fairbanks, AK 99709

Frederick Huntington Sr
POBox 101
Galena, AK 99741

Clint Shultz
po box 38
Gambell, AK 99742

Daborah Anungazuk
POB 01
Golovin, Ak 99762

Rachel Olson
P.O. Box 62023
Golovin, AK 0

Shirley Clark
PO Box 10
Grayling, AK 99590

Dan Farren
4970 tundra rose
Homer, AK 99603

George Smart
PO Box 167
Hooper Bay, AK 99604

Llana Nixon
10722 Brentway Drive
Houston, TX 0

Anne Esmailka
PO Box 13
Kaltag, AK 99748

Levi Hoover
P.O.Box 137
Kasigluk, AK 99609

Lucy Barton
434 Rogers Rd.
Kenai, AK 99611

Hal Neumann
PO BOX 441
King Salmon, AK 99613

Caleb Pungowiyi
P.O. Box 637
Kotzebue, AK 99752

Angela Washington
PO Box 103
Kotzebue, AK 99752

Benedict Jones
PO Box 47
Koyukuk, AK 99754

Cynthia Pilot
P.O. Box 33
Koyukuk, AK 99754

Raymond Guy
PO Box 123
Kwethluk, AK 99621

John Andrew
Po Box 88
Marshall, AK 99585

STEVEN WHITMAN
PO Box 66
Mekoryuk, AK 99630

Paul Rhodes
2435 Comstock Ln. N
Plymouth, MN 55447

Paul Beans
P.O. Box 173
Mountain Village, AK 99632

Brenda Brown
PO Box 32187
Mountain Village, AK 99632

Andrew Brown Jr
PO Box 187
Mountain Village, AK 99632

Gregory Joe
PO Box 32016
Mountain Village, AK 99632

David Peterson
po box 32194
Mountain Village, AK 99632

Margaret Peterson
po box 32194
Mountain Village, AK 99632

Gail Peterson
po box 32194
Mountain Village, AK 9

Laura Peterson
po box 32194
Mountain Village, AK 99632

Rhiannon Peterson
po box 32194
Mountain Village, AK 99632

Jimmy Queenie
PO Box 32302
Mountain Village, AK 99632

John Willie
PO Box 34068
Napakiak, AK 99634

Leland Alexander
P.O. Box # 112
Nenana, AK 99760

Norman BigJoe
box 236
Nenana, AK 99760

James Burk
Box 202
Nenana, AK 99760

Robin Campbell
box 491
Nenana, AK 99760

Cindy Charlie
box 632
Nenana, AK 99760

Renee Charlie
box 632
Nenana, AK 99760

Jeff Crookham
box 236
Nenana, AK 99760

George Jensen
Box 495
Nenana, AK 99760

Leonard Jensen
Box 149
Nenana, AK 99760

Judy Jensen
Box 495
Nenana, AK 99760

Darlene Jensen
box 235
Nenana, AK 99760

Karen Lord
P.O. Box # 183
Nenana, AK 99760

Theresa Lord
Box 183
Nenana, AK 99760

Stephon Lord
Box 183
Nenana, AK 99760

Stewart Lord
Box 183
Nenana, AK 99760

Willie Lord
Box 26
Nenana, AK 99760

Edmond R. Lord, JR.
Box 183
Nenana, AK 99760

Nita Marks
P.O. Box # 98
Nenana, AK 99760

Laurel McManus
box 53
Nenana, AK 99760

Timothy McManus
box 53
Nenana, AK 99760

Edgar Monroe
Box 503
Nenana, AK 99760

Johnny Peter, Jr
box 632
Nenana, AK 99760

Jerel Redfox
Box 183
Nenana, AK 99760

Kenneth Richards
box 236
Nenana, AK 99760

Henry Thomas
P.O. Box 3 274
Nenana, AK 99760

Victor Lord
P.O. Box # 374
Nenana, AK 99760

Donald Cannon
11 Riverside Drive
New York City, NY 10023

John Baker
PO Box 1437
Nome, AK 99762

Maria Dexter
609 East Fifth Avenue
Nome, AK 99762

Julia Elmore
P O Box 907
Nome, AK 99762

Robert Gilley
P.O. Box 879
Nome, AK 99762

Bonnie Hahn
PO
Nome, AK 99762

Hannah Katongan
P.O. Box 1272
Nome, AK 99762

Karen McLane
P.O. Box 1169
Nome, AK 99762

eva menadelook
po box 699
nome, AK 99732

Nancy Mendenhall
P.O. Box 1141
Nome, AK 99762

Margaret M. Olson
202 West 4th
Nome, AK 99762

Delia Ooozevaseuk
P.O. BOX 1245
Nome, AK 99762

Anthony Parsons
508 Bering Street
Nome, AK 99762

Kate Persons
Box 381
Nome, AK 99762

Julie Raymond-Yakoubian
PO Box 1628
Nome, AK 99762

Brenden Raymond-Yakoubian
PO Box 1628
Nome, AK 99762

Colleen Reynolds
PO Box 1814
Nome, AK 99762

Michael Sloan
P.O. Box 310
Nome, AK 99762

Marsha Sloan
P.O. Box 310
Nome, AK 99762

Rita Smith
511 Cranberry Way
Nome, AK 99762

Tim Smith
511 Cranberry Way
Nome, AK 99762

Susan Steinacher
PO Box 1609
Nome, AK 99762

Bering Straits Native Cor Tim Towarak,
President/CEO
P.O. Box 1008
Nome, AK 99762

Anna Whalin
PO Box 2022
Nome, AK 99762

Joseph Strongheart
P.O. Box 08
Nunam Iqua, AK 99666

Sandra Drake
Pitka's Point Native Corporation
Pitka's Point/ St. Mary's, AK 99658

Henry Wiehl, Sr.
Po Box 63
Rampart, AK 99767

Daryl Honea
p.o. box 17
Ruby, AK 99706

William F Alstrom
PO Box 62
Saint Marys, AK 99658

Dennis Petre
7234 Richardson Highway
Salcha, AK 99714

Eugene Asicksik
PO Box 24
Shaktoolik, AK 99771

Rhoda Asicksik
PO Box 24
Shaktoolik, AK 99771

Benjamin S. Sockpealuk
P.O.Box 08
Shaktoolik, AK 99771

Gina Sookiayak
PO Box 37
Shaktoolik, AK 99771

Gladys Fredericks
P.O. Box 41
Sleetmute, AK 99668

Tyler Johnson
112 W Marydale Ave
Soldotna, AK 99669

Randy Crawford
P.O. Box 89
St. Mary's, AK 99658

Edna Crawford
P.O. Box 89
St. Mary's, AK 99658

David Herbert
P.O. Box 287
St. Mary's, AK 99658

Anna Luke
P.O. Box 101
St. Mary's, AK 99658

Charles Prince
P.O. Box 216
St. Mary's, AK 99658

Ursula Prince
P.O. Box 216
St. Mary's, AK 99658

Francis Thompson
P.O. Box 111
St. Mary's, AK 99658

Fred Pete, Sr.
P.O. Box 71002
Stebbins, AK 99671

Thomas Hyslop
Box 101
Tanana, AK 99777

Helen Gregorio
PO Box 250
Togiak, AK 99678

Victor Kanrilak, Jr.
P.O. Box 85
Tununak, AK 99681

LaVerne Anagick
P.O. Box 87
Unalakleet, AK 99684

Willa Eckenweiler
PO Box 231
Unalakleet, AK 99684

Gary Eckenweiler
231 Main St
Unalakleet, AK 99684

Jeff Erickson
PO Box 301
Unalakleet, AK 99684

Karl Erickson
PO Box 154
Unalakleet, AK 99684

Karen Erickson
PO BOX 154
Unalakleet, AK 99684

Austen Erickson
301 Oceanview
Unalakleet, AK 99684

Max Fancher
PO BOX 301
Unalakleet, AK 99684

Randy Fleharty
PO Box 312
Unalakleet, AK 99684

Dorothy Ivanoff
PO Box 65
Unalakleet, AK 99684

Steve Ivanoff
P.O. Box 235
Unalakleet, AK 99684

Herbert & Heidi Ivanoff
PO BOX 221
Unalakleet, AK 99684

alenl ivanoff
p.o box 73
Unalakleet, AK 99684

Gussie Ivanoff
PO Box 113
Unalakleet, AK 99684

Fred Ivanoff
PO Box 306
Unalakleet, AK 99684

Renae Ivanoff
P.O. Box 178
Unalakleet, AK 99684

Chuck Lockwood
PO Box 84
Unalakleet, AK 99684

Henry Oyoumick
PO Box 237
Unalakleet, AK 99684

Melanie Sagoonick
P.O. Box 195
Unalakleet, AK 99684

Jacob Snyder
PO Box 322
Unalakleet, AK 99684

Conrad Woodhead
PO Box 197
Unalakleet, AK 99684

Tera Cunningham
P.O. Box 118
Unalakleet,, AK 99684

James Rose
7800 E Settlement Ave
Wasilla, AK 99654

Eric Morris
PO Box 169
White Mountain, AK 99784

Mr. Eric Olson, Chairman
 North Pacific Fishery Management Council
 605 West 4th Avenue, Suite 306
 Anchorage, AK 99504

Dear Chairman Olson,

For several decades now, western Alaska organizations, communities and individuals have worked tirelessly with the Council to try to put meaningful limits on Chinook salmon bycatch. To date, all of these measures have failed to provide the necessary, long-term protections for Chinook salmon and the western Alaska communities that depend on them. While some of our recommendations on the proposed Chinook salmon bycatch measures may differ in regard to the details of the alternatives and options, our positions all share several common themes:

- The need for a bycatch limit, in the form of a hard cap, that will do more than just keep obscenely high bycatch years from occurring; a cap that is far lower than the 68,392 proposed in the Preliminary Preferred Alternative.
- Regulations that will, *once and for all*, provide the needed protections for Chinook salmon that we depend upon. We do not want to be back before the Council in 3, 5 or 10 years arguing once again that the previous measures have failed. This has gone on long enough.
- Regulations that will continue to minimize Chinook salmon bycatch beyond what is adopted now, with the ultimate goal of zero bycatch or as close to zero as is practicable, recognizing that the pollock industry would need some time to modify their harvesting practices and gear.

Within the various recommendations we see an opportunity for the Council to break from the perception of simply protecting status quo for the pollock fishery. As demonstrated by the Council's many previous attempts to address Chinook salmon bycatch over the years this is a crucial moment to put this issue to rest with some finality.

Respectfully,

Name	Address	Phone	Email
Ken Wilken	PO Box 653 DLG	842-2521	william@hushkline.com
William A. Johnson	PO Box 1178 DLG	842-5035	EALE@hushkline.com
Dolph Koehl, Sr.	Box 104 DLG, AK	842-4084	N/A
April Meece	Box 823	842-1921	april@curyungtribe.com
Denise Meece	Box 823	842-1921	denise@curyungtribe.com
Bruce Meece	Box 297	842-2455	bruce@curyungtribe.com
Chris Tammara	Box 1162	842-4588	CHRIS@curyungtribe.com

Mr. Eric Olson, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99504

Dear Chairman Olson,

For several decades now, western Alaska organizations, communities and individuals have worked tirelessly with the Council to try to put meaningful limits on Chinook salmon bycatch. To date, all of these measures have failed to provide the necessary, long-term protections for Chinook salmon and the western Alaska communities that depend on them. While some of our recommendations on the proposed Chinook salmon bycatch measures may differ in regard to the details of the alternatives and options, our positions all share several common themes:

The need for a bycatch limit, in the form of a hard cap, that will do more than just keep obscenely high bycatch years from occurring; a cap that is far lower than the 68,392 proposed in the Preliminary Preferred Alternative.

Regulations that will, *once and for all*, provide the needed protections for Chinook salmon that we depend upon. We do not want to be back before the Council in 3, 5 or 10 years arguing once again that the previous measures have failed. This has gone on long enough.

Regulations that will continue to minimize Chinook salmon bycatch beyond what is adopted now, with the ultimate goal of zero bycatch or as close to zero as is practicable, recognizing that the pollock industry would need some time to modify their harvesting practices and gear.

Within the various recommendations we see an opportunity for the Council to break from the perception of simply protecting status quo for the pollock fishery. As demonstrated by the Council's many previous attempts to address Chinook salmon bycatch over the years this is a crucial moment to put this issue to rest with some finality.

Respectfully,

Name Walter Karulis Address Box 133 Togiak Phone 493-5510
Email

[Signature] Box 75 Togiak 493-5260

Phyllis Anagnostis Box 316 Togiak 493-5520

James Kamelie-Ajith Box 230 Togiak 493-5993

Mays Kamelie Box 284 Togiak 493-5648

James Forbes Sr Box 141 Togiak 493-5333

Kathay Compchiak Box 94 Togiak 493-5569

Jim Henshaw Box 184 Togiak 493-5007

Charles G Forbes

Darryl J. Thompson Box 263 Togiak 493-5065

Jellens Box 86 Togiak 493-5146

Aleknagik Traditional Council
 P.O. Box 115
 Aleknagik, AK 99555
 Phone: 907-842-2080 Fax: 907-842-2081
aleknagiktraditional@yahoo.com

Mr. Eric Olson, Chairman
 North Pacific Fishery Management Council
 605 West 4th Avenue, Suite 306
 Anchorage, AK 99504

Dear Chairman Olson,

For several decades now, western Alaska organizations, communities and individuals have worked tirelessly with the Council to try to put meaningful limits on Chinook salmon bycatch. To date, all of these measures have failed to provide the necessary, long-term protections for Chinook salmon and the western Alaska communities that depend on them. While some of our recommendations on the proposed Chinook salmon bycatch measures may differ in regard to the details of the alternatives and options, our positions all share several common themes:

- The need for a bycatch limit, in the form of a hard cap, that will do more than just keep obscenely high bycatch years from occurring; a cap that is far lower than the 68,392 proposed in the Preliminary Preferred Alternative.
- Regulations that will, *once and for all*, provide the needed protections for Chinook salmon that we depend upon. We do not want to be back before the Council in 3, 5 or 10 years arguing once again that the previous measures have failed. This has gone on long enough.
- Regulations that will continue to minimize Chinook salmon bycatch beyond what is adopted now, with the ultimate goal of zero bycatch or as close to zero as is practicable, recognizing that the pollock industry would need some time to modify their harvesting practices and gear.

Within the various recommendations we see an opportunity for the Council to break from the perception of simply protecting status quo for the pollock fishery. As demonstrated by the Council's many previous attempts to address Chinook salmon bycatch over the years this is a crucial moment to put this issue to rest with some finality.

Respectfully,

Name	Address	Phone	Email
Joseph Coolidge	PO Box 141	842-5632	JosephCoolidge@Aleknagik, AK.
FRED BAATMAN	Box 47	842-4872	
Jane Gottschalk	PO Box 2, Aleknagik, AK 99555	(907) 842-3487	Janegottschalk@gmail.com
Danny Togiak	Box 192 Aleknagik, AK 99555	842-2856	wkkl@aleknagik.ak.gov
Gareth Ilutskik	Box 74 Aleknagik AK 99555	842-3910	garethilutskik@aleknagik.ak.gov
Gusty N. Ilutskik Sr	Box 74 Aleknagik AK 99555	842-3910	
Margie Aloysius	Box 51 Aleknagik, AK 99555		N/A

I AM SPEAKING ON BEHALF OF ALASKA WHITEFISH TRAWLERS ASSOCIATION
WHOM WANT TO MAKE SURE THAT THE ^{INSHORE} SECTOR CAN CONTINUE TO
PROSECUTE THEIR POLLOCK FISHERY AFTER THIS ACTION.

NPFMC Testimony By: Michael Martin

For the record my name is Michael Martin, I am a third generation Alaskan here representing two family owned AFA/Gulf dependent less than 99' trawl vessels. Our crews and vessels live and are home ported in Kodiak.

In February you tasked industry to produce a meaningful plan to save Chinook salmon in the AFA trawl fisheries. You very clearly laid out parameters, and what the benefit to the industry would be in accomplishing your goals.

The industry has responded with two innovative incentive plans, the SSIP and FIP. Both the AP and the SSC believe these plans meet and exceed your goals.

Speaking to the SSIP/FIP and the ~~PPA~~ motion that the AP forwarded to you:

It was critical that balance and fairness be incorporated in this ~~PPA~~ for all communities and AFA sectors that these bycatch measures will affect.

Most, if not all AYK, Western Alaska folks believe the hard cap should be in the realm of 32,000 fish. It is my firm belief that the SSIP/FIP mathematically makes it impossible to exceed 47,000 over an average. What has been lost in this substantial accomplishment is the high likelihood that the overall average is going to be at or even lower than the 32,000 Chinook that many are hoping for. This is the direct result of the SSIP/FIP making each individual Captain/Vessel responsible for bycatch. The amount of salmon allocated to each vessel is so low that every trip and every tow for every year could send the vessel to port with major financial losses to the vessel, processor, and community.

The SSIP/FIP is more beneficial to the AYK/WA because it will maintain high pressure on the Captain for every tow, even on the low abundant Chinook salmon years where every salmon is more meaningful and important to avoid. With the addition of changing observer coverage from 30% to 100% for the comfort and confidence that numbers of Chinook are hard numbers.

In contrast, having a 32,000 cap guarantees a 32,000 take. This type of management continues the "race" with no individual responsibility. This is

a very poor management strategy if it is your desire to minimize bycatch and to also allow for an important Pollock fishery to have a chance of harvesting a yearly TAC.

Chinook salmon bycatch allocation under the SSIP/FIP:

At the June meeting the council chose to blend 75% historic use and 25% pro-rata for the allocation of Chinook salmon. This action reduced inshore allocation by ~~14.5%~~^{14.4%}, the council then took this allocation and split it between the A/B seasons to a 70/30. This gave the offshore sectors more than their historical need of Chinook in the A season, and gave the inshore sector much less than their historical use in the B season. Additionally because of the mathematical use of percentages it indirectly gave 1600 more Chinook to the offshore sectors.

The AP voted on changing the 75/25 to 25/75 and 50/50, the AP as the council in June, believed inshore/offshore balance 75/25 was correct, and that the perception of rewarding "dirty fishing" was balanced with the 14.5% and the 1600 hundred additional Chinooks given to the offshore sector by the 70/30 blend. They also removed the roll over penalty from the A season to B season for the same reasons the SSC stated in their minutes.

The AP recognized the intrinsic differences and advantages the offshore sector had over the inshore sector on avoiding bycatch. The AP realized the importance of allowing the inshore sector to continue supporting local processors and the communities surrounding them. Clearly the AP understood that the offshore sector had more than their historical needs of Chinook and giving them additional salmon would only be giving them a "high value" bycatch commodity that would be sold or used for control more Pollock harvest at the loss to the inshore sector.

I have provided information on my two vessels and the effects your decisions will have on them. If you look at any of the realistic scenarios it doesn't take much imagination to understand that even with the most Chinook available we will be living tow by tow since it is impossible to know how many salmon are in a fish hold until we fully deliver. What also compounds ~~are~~^{THE} stress of this management change is the fact that it will be

extremely difficult to receive any salmon from other coop members or other coops until they know that they have their harvest completed. The only other choice is to lease, but since we are Gulf exempt vessels we cannot lease without losing our exemption in the Gulf, which for our vessels is equally important as our AFA allocation.

In conclusion,

I ask you to use the AP's motion that has been forwarded to you, and I am hopeful that you will mitigate the politics that allow for deviation from the performance standard or over all Cap. I am also hopeful that you do not allow the offshore sector to further allocate away from inshores ability to support local processors and communities.

Respectfully,

Michael Martin

Martin Fleet					
2009 Peter Pan Pollock Allocation (mt)	Vessel's Coop Pollock %	Vessel's Pollock Share (in pounds)	Vessel's Chinook Allocation at 29,300 Hard Cap	Vessel's Chinook Allocation at 47,591 Hard Cap	Vessel's Chinook Allocation at 68,392 Hard Cap
10,127					
Elizabeth F	13.29%	2,966,285	62	101	145
Walter N	13.90%	3,101,373	65	106	152

127

207

298

Annual Average \$/lb.

\$0.20

6,067,657

\$1,213,531

48,541.26 FISH TAX KING COVE

Martin Fleet by Sector splits

2009 Peter Pan Pollock Allocation (mt)	Vessel's Coop Pollock %	Vessel's Pollock Share (in pounds)	Sector Allocation Methods	Vessel's Chinook Allocation at 29,300 Hard Cap	Vessel's Chinook Allocation at 47,591 Hard Cap	Vessel's Chinook Allocation at 68,392 Hard Cap
10,127						
Elizabeth F	13.29%	2,966,285	June PPA; 75/25 History to Pollock	62	101	145
Walter N	13.90%	3,101,373		65	106	152
Total				127	207	298
Elizabeth F			50/50 Histor to Pollock	58	95	136
Walter N				61	99	142
Total				119	194	278
Elizabeth F			25/75 Histor to Pollock	48	79	113
Walter N				51	82	118
Total				99	161	231

Peter Pan Coop

Inshore Sector Chinook Salmon Allocation Breakdown, By Number of Salmon Per Vessel								
Individual Inshore Vessel Allocations at 47,591								
Salmon Allocation Range	Coop A	Coop B	Coop C	Coop D	Coop E	Coop F	Total Salmon	Cumulative Total
0-50	4	3	5	1	1	0	14	14
51-100	11	0	0	1	0	2	14	28
101-200	5	5	5	2	0	1	18	46
201-300	4	1	0	1	2	2	10	56
301-400	6	4	0	1	4	1	16	72
400+	8	0	0	5	7	6	26	98
Individual Inshore Vessel Allocations at 29,300							Total	Cumulative Total
0-50	12	3	5	2	1	1	24	24
51-100	6	5	4	2	0	2	19	43
101-200	8	2	1	1	2	3	17	60
201-300	10	3	0	5	7	2	27	87
301-400	2	0	0	1	1	3	7	94
400+	0	0	0	0	3	1	4	98

Peter Pan Coop Vessel Specific Chinook Limits								
Peter Pan Inshore % 2.876%	Vessel's Coop Pollock %	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap P.S.			Vessel's Chinook Allocation at 68,392 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season
AJ	24.186%	0.696%	184	115	69	265	166	99
American Beauty	1.269%	0.036%	10	6	4	14	9	5
Elizabeth F	13.290%	0.382%	101	63	38	145	91	54
Morning Star	18.997%	0.546%	145	91	54	208	130	78
Ocean Leader	1.888%	0.054%	14	9	5	21	13	8
Oceanic	4.647%	0.134%	35	22	13	51	32	19
Pacific Challenger	5.802%	0.167%	44	28	17	64	40	24
Providian	13.172%	0.379%	100	63	37	144	90	54
Topaz	2.855%	0.082%	22	14	8	31	20	12
Walter N	13.895%	0.400%	106	66	40	152	95	57
Totals:			762	477	285	1,095	686	409

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

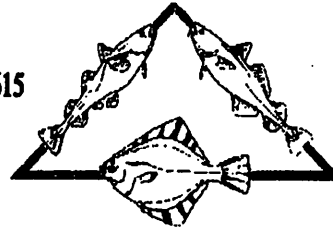
Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
	70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%	5.5%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785

Groundfish Data Bank

Alaska

PH: 907-486-3033 FAX: 907-486-3461 P.O. BOX 788 - KODIAK, AK. 99615

Julie Bonney, Executive Director jbonney@gci.net
 Katy McGauley, Fisheries Biologist agdb@gci.net



Agenda item C-2 – Final action on BS Chinook Salmon Bycatch EIS

Date: April 6, 2009

#	VESSEL NAME	ADFG	AFA PERMIT	COOP ID	COOP NAME	CP	MTH	INS	GOA GF
1	CAPE KIWANDA	61432	1235	101	AKUTAN	N	N	Y	Y
2	EXCALIBUR II	54653	410	101	AKUTAN	N	N	Y	Y
3	HAZEL LORRAINE	57117	523	101	AKUTAN	N	N	Y	Y
4	LESLIE LEE	56119	1234	101	AKUTAN	N	N	Y	Y
5	LISA MELINDA	41520	4506	101	AKUTAN	N	N	Y	Y
6	MARCY J	55	2142	101	AKUTAN	N	N	Y	Y
7	PACIFIC RAM	61792	4305	101	AKUTAN	N	N	Y	Y
8	PEGGY JO	9200	979	101	AKUTAN	N	N	Y	Y
9	COLLIER BROTHERS	54648	2791	103	NORTHERN	N	N	Y	Y
10	GOLD RUSH	40309	1868	103	NORTHERN	N	N	Y	Y
11	ELIZABETH F	14767	823	104	PETER PAN	N	N	Y	Y
12	TOPAZ	40250	405	104	PETER PAN	N	N	Y	Y
13	WALTER N	34919	825	104	PETER PAN	N	N	Y	Y
14	HICKORY WIND	47795	993	107	WESTWARD	N	N	Y	Y
15	OCEAN HOPE 3	48173	1623	107	WESTWARD	N	N	Y	Y
16	EXODUS EXPLORER	33112	1249	101	AKUTAN	N	N	Y	Y
17	MORNING STAR	70323	6204	104	PETER PAN	N	N	Y	Y

AGDB
4/6/2009
C-2 BS Chinook

Mr. Chairman and members of the Council,

My name is Julie Bonney and I represent the members of Alaska Groundfish Data Bank, both shore based trawlers that fish out of Kodiak and shore based processors. My members are very concerned about potential impacts to the Gulf fishing community based on the outcome of this action. If the balancing act of the overall Chinook salmon hard cap and the allocation of salmon to the different pollock sectors are not equitable there will be large economic impact to the Kodiak trawl and processing sectors.

The AFA CV fleet can fish in the GOA if they have a valid LLP with the appropriate area endorsement. The AFA CV fleet is divided into two groups: non-exempt from GOA sideboards and exempt from GOA sideboards. For the exempted fleet they are required to catch their own BS AFA pollock allocation and cannot lease the fish to other vessels to maintain their exempted status. This creates a tension that distributes these vessels between the GOA and BSAI fisheries. The table that I have distributed shows the AFA vessels that are exempt from GOA sideboards; all these vessels are members of inshore AFA cooperatives. The first fifteen vessels on the list fish out of the port of Kodiak for a significant portion of the year. Typically these vessels are in the BSAI for two to three months per year catching their AFA pollock. When these vessels are away from Kodiak the result is less competition for the GOA quotas resulting in more of the revenue pie flowing to the non-AFA CV in the Kodiak fleet during the AFA fleet's absence.

The exempted fleet has two choices if the BS pollock fishery becomes too restrictive due to Chinook salmon bycatch measures; let their pollock swim in the BS to maintain their GOA exempted status thus allowing them to catch as much as they can in the GOA or operate under a GOA sideboard cap and lease their BS pollock quota. I believe that after a careful cost benefit comparison of the two options most of the exempted vessels will choose to let their BS pollock quota swim thus maintaining their GOA sideboard exemption. No BS pollock harvests by these vessels, more competition for the limited GOA quotas will result in less revenue for all the Kodiak trawlers, potentially a financial disaster for the entire fleet.

The exempted vessels are mostly family owned operations, employ local Kodiak vessel operators and crews. These vessels spend millions of dollars within the Kodiak community. These vessels are the most vulnerable based on the AP preferred alternative. One average their Chinook salmon hard cap allocation will be around 100 fish or less. Their observer coverage costs will triple with the increase in coverage requirements from 30% to 100%. They are small vessels, most less than 100 ft, that are required to deliver to coastal communities. They typically pack around 300,000 pounds of pollock and operationally cannot travel long distances from port.

The members of AGDB encourage the Council to adopt the Advisory Panel's preferred alternative for the Chinook salmon bycatch amendment package. If the Council does not achieve the appropriate balance there will be not only economic impacts to the Kodiak trawlers and processors but to the entire community of Kodiak.

Brent Paine

Sector Allocation Issues: Why the 75%-25% Weighting Formula is Fair

- Shoreside Catcher Vessels Do Not Have Access to As Much Fishing Area as the Catcher Processor and Mothership Fleets.
 - A season – In the past, all sectors generally started fishing inside the CVOA. Once roe quality begins to decline, the Catcher/Processor (C/P) vessels move to the northwest. In recent years the CP vessels have started fishing more to the northwest instead of starting in the CVOA. Catcher Vessels also move to the northwest later in the season but cannot travel as far as the CPS and MS fleets.
 - B season – The catcher/processor vessels cannot fish in the CVOA and fish more to the northwest. The SS vessels fish in the CVOA and later move to the northwest, but cannot travel as far as the CPs.
- Shoreside Catcher Vessels Are Inherently Disadvantaged.
 - Catcher Processor vessels can land on a school of pollock with low salmon numbers and then follow that school day after day; comparatively, a shoreside vessel must leave the grounds to deliver in town, often not returning for several days and with no knowledge of where to find pollock with low salmon numbers when it returns to the grounds. In stark contrast to the fishing experience of CPs, the first tow made by a catcher vessel on each trip throughout the season is truly an exploratory tow.
 - Shoreside catcher vessels are limited to catching pollock within a certain proximity to the shoreside plants which are located in Akutan, King Cove, and Dutch Harbor/Unalaska. The distance to which a shoreside catcher vessel can travel from its plant is constrained by:
 - The speed and size of the vessel which are constrained by the AFA;
 - Prevailing weather conditions which greatly affect the vessel's ability to travel long distances to and from the fishing grounds;
 - The age (quality) of the fish that the processing plant is able to market.
 - The amount of time spent and fuel consumed by shoreside vessels traveling to and from their community based shoreside processing plants represents additional costs that the CPs and MS vessels do not bear.
- A Single Bad Tow Has a Greater Impact on a Shoreside Catcher Vessel than on a Catcher Processor.
 - The smaller quotas held by the shoreside catcher vessels (especially in comparison to the CP fleet) means that the magnitude of a single big hit of salmon is much worse to a catcher vessel than to a CP.
 - Further, since the first tow of each trip on the fishing grounds is an exploratory tow for a shoreside catcher vessel, there are more possibilities for it to experience a bad tow.

- The Shoreside Sector is the Backbone of the Communities of Akutan, King Cove, and Dutch Harbor/Unalaska.
 - Local governments derive substantial revenues from the shoreside sector.
 - State raw fish taxes paid by shoreside processing plants. For the period 2004-2008, the following raw fish tax amounts were refunded to local governments (from Page 15 and Appendix 6 to the Action Memo for AI Pacific Cod Processing Sideboards, February 2009, and A.S. 43.75.130).
 - \$3.5M to Akutan.
 - \$2.1M to King Cove.
 - \$5.6M to the Aleutian Islands East Borough for fish processed in Akutan and King Cove.
 - \$16.2M to Dutch Harbor/Unalaska.
 - **\$27.4M over 5 years**
 - **The majority of which is from pollock (over 80%).**
 - Property taxes paid by shoreside processing plants and their local employees.
 - Sales taxes paid by the shoreside catcher vessel fleet and shoreside processing plants and their employees.
 - Moorage and wharfage fees.
 - Local businesses provide numerous goods and support services to shoreside catcher vessels and processors. This provision of goods and services to the shoreside sector both sustains local area businesses and subsidizes the cost and availability of all goods and services enjoyed by all community residents.
 - Fuel
 - Groceries
 - Marine Repairs
 - Inbound/Outbound Freight and Fish Cargo
 - Medical Care
 - Restaurants, Hotels, and Car Rentals
 - Passenger Flights and Air Freight
 - Other
- Current PPA Sector Allocations
 - The current PPA, based 75% on bycatch history and 25% on pollock allocation does not reward bad actors. Rather, it recognizes:
 - The inherent operational disadvantages of the shoreside sector;
 - The significance of the shoreside sector to Alaska's coastal communities; and
 - Important logistical differences between the sectors.
 - Changing the PPA split to 50-50 or something less than 75-25 will unjustly reward the CP sector to the detriment of smaller independent catcher vessels and Alaska's coastal communities.

Table 1. Comparison Between Inshore and C/P Sector Chinook Allocations; Original PPA, Final PPA, and Final PPA with a Sector Weighting Shift From 75/25 to 50/50

	Original PPA Motion: Seasonal Splits at 58/42 and Sector Weightings at 75% History and 25% Pro Rata to Pollock	Final PPA Motion: Seasonal Splits at 70/30 and Sector Weightings at 75% History and 25% Pro Rata to Pollock	Gain/Loss From Original PPA		Final PPA Motion: Seasonal Splits at 70/30 and Sector Weightings at 50% History and 50% Pro Rata to Pollock	Gain/Loss From Final PPA		Gain/Loss From Original PPA	
	68,392	68,392	# of Salmon	% of Salmon	68,392	# of Salmon	% of Salmon	# of Salmon	% of Salmon
Inshore CV Sector	39,661	38,060	-1,601	-4.04%	35,632	-2,428	-6.38%	-4,029	-10.16%
C/P Sector	18,892	19,405	513	2.72%	21,143	1,738	8.96%	2,251	11.92%

Table 2. 100% History Based Inshore and C/P Allocations Compared to Final PPA Motion

	Historic Bycatch from PPA Years		Final PPA Motion: Seasonal Splits at 70/30 and Sector Weightings at 75% History and 25% Pro Rata to Pollock	Gain/Loss From Pure History		Final PPA Motion: Seasonal Splits at 70/30 and Sector Weightings at 50% History and 50% Pro Rata to Pollock	Gain/Loss From Pure History	
	Bycatch %	Applied to 69,392	68,392	# of Salmon	% of Salmon	68,392	# of Salmon	% of Salmon
Inshore CV Sector	59.2%	41,080	38,060	-3,020	-7.35%	35,632	-5,448	-13.26%
C/P Sector	25.8%	17,666	19,405	1,739	9.85%	21,143	3,477	19.68%

Bret Pine

TABLE 3

Inshore Sector Chinook Salmon Allocation Breakdown, By Number of Salmon Per Vessel									
Individual Inshore Vessel Allocations at 47,591									
Salmon Allocation Range	Coop A	Coop B	Coop C	Coop D	Coop E	Coop F	Total Salmon	Cumulative Total	
0-50	4	3	5	1	1	0	14	14	
51-100	11	0	0	1	0	2	14	28	
101-200	5	5	5	2	0	1	18	46	
201-300	4	1	0	1	2	2	10	56	
301-400	6	4	0	1	4	1	16	72	
400+	8	0	0	5	7	6	26	98	
Individual Inshore Vessel Allocations at 29,300									
0-50	12	3	5	2	1	1	24	24	
51-100	6	5	4	2	0	2	19	43	
101-200	8	2	1	1	2	3	17	60	
201-300	10	3	0	5	7	2	27	87	
301-400	2	0	0	1	1	3	7	94	
400+	0	0	0	0	3	1	4	98	
Total							Cumulative Total		

Peter Pan Coop Vessel Specific Chinook Limits Calculated Using the June 2008 PPA

Peter Pan Inshore % 2.876%	Vessel's Coop Pollock %	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap			Vessel's Chinook Allocation at 29,300 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season	Annual	A Season	B Season
AJ	24.186%	0.696%	184	115	69	265	166	99	113	71	42
American Beauty	1.269%	0.036%	10	6	4	14	9	5	6	4	2
Elizabeth F	13.290%	0.382%	101	63	38	145	91	54	62	39	23
Morning Star	18.997%	0.546%	145	91	54	208	130	78	89	56	33
Ocean Leader	1.888%	0.054%	14	9	5	21	13	8	9	6	3
Oceanic	4.647%	0.134%	35	22	13	51	32	19	22	14	8
Pacific Challenger	5.802%	0.167%	44	28	17	64	40	24	27	17	10
Providian	13.172%	0.379%	100	63	37	144	90	54	62	39	23
Topaz	2.855%	0.082%	22	14	8	31	20	12	13	8	5
Walter N	13.895%	0.400%	106	66	40	152	95	57	65	41	24
Totals:			762	477	285	1,095	686	409	469	294	175

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
	70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%	5.5%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785
29,300	20,510	8,790	10,214	6,091	1,641	642	6,748	1,573	1,907	483

Akutan Coop Vessel Specific Chinook Limits								
Akutan Inshore % 32.811%	Vessel's Coop Pollock %	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season
ALDEBARAN	4.40%	1.442%	235	147	88	549	344	205
ARCTIC EXPLORER	4.94%	1.619%	264	165	99	616	386	230
ARCTURUS	4.63%	1.520%	248	155	93	578	362	216
BLUE FOX	1.04%	0.342%	56	35	21	130	81	49
BRISTOL EXPLORER	4.62%	1.516%	247	155	92	577	362	216
CAPE KIWANDA	0.70%	0.229%	37	23	14	87	55	33
COLUMBIA	4.32%	1.418%	231	145	86	540	338	202
DOMINATOR	5.33%	1.750%	285	179	107	666	417	249
EXCALIBUR II	1.65%	0.541%	88	55	33	206	129	77
EXODUS EXPLORER	0.91%	0.299%	49	31	18	114	71	43
GLADIATOR	5.00%	1.640%	267	168	100	624	391	233
GOLDEN DAWN	5.50%	1.805%	294	184	110	687	430	257
GOLDEN PISCES	0.82%	0.271%	44	28	16	103	65	38
HAZEL LORRAINE	1.18%	0.389%	63	40	24	148	93	55
INTREPID EXPLORER	3.49%	1.145%	187	117	70	436	273	163
LESLIE LEE	1.65%	0.541%	88	55	33	206	129	77
LISA MELINDA	0.65%	0.214%	35	22	13	82	51	30
MAJESTY	3.03%	0.995%	162	102	61	379	237	142
MARCY J	0.55%	0.180%	29	18	11	68	43	26
MARGARET LYN	0.10%	0.034%	6	3	2	13	8	5
MARK I	0.14%	0.045%	7	5	3	17	11	6
NORDIC EXPLORER	3.29%	1.081%	176	110	66	411	258	154
NORTHERN PATRIOT	7.35%	2.411%	393	246	147	918	575	343
NW EXPLORER	0.72%	0.237%	39	24	14	90	56	34
OCEAN EXPLORER	4.22%	1.384%	226	141	84	527	330	197
PACIFIC EXPLORER	3.97%	1.303%	213	133	79	496	311	185
PACIFIC RAM	0.62%	0.203%	33	21	12	77	49	29
PACIFIC VIKING	3.34%	1.096%	179	112	67	417	261	156
PEGASUS	2.12%	0.695%	113	71	42	264	166	99
PEGGY JO	1.01%	0.332%	54	34	20	126	79	47
PERSEVERANCE	0.90%	0.295%	48	30	18	112	70	42
PREDATOR	0.66%	0.218%	35	22	13	83	52	31
RAVEN	2.13%	0.700%	114	71	43	266	167	99
ROYAL AMERICAN	2.96%	0.970%	158	99	59	369	231	138
SEEKER	1.13%	0.369%	60	38	23	141	88	53
SOVEREIGNTY	7.16%	2.351%	383	240	143	895	560	334
TRAVELER	0.13%	0.041%	7	4	3	16	10	6
VIKING EXPLORER	3.62%	1.189%	194	121	72	453	283	169
Totals:			5,350	3,351	1,999	12,488	7,823	4,665

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
	70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%	5.5%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
29,300	20,510	8,790	10,214	6,091	1,641	642	6,748	1,573	1,907	483

Northern Victor Coop Vessel Specific Chinook Limits								
N. Victor Inshore % 8.961%	Vessel's Coop Pollock %	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season
American Eagle	11.96%	1.07%	284	178	106	408	256	152
Anita J	6.09%	0.55%	145	91	54	208	130	78
Collier Brothers	1.37%	0.12%	33	20	12	47	29	17
Commodore	14.01%	1.26%	333	209	124	478	299	179
Gold Rush	4.76%	0.43%	113	71	42	162	102	61
Half Moon Bay	6.07%	0.54%	144	90	54	207	130	77
Miss Berdie	6.71%	0.60%	160	100	60	229	143	85
Nordic Fury	0.80%	0.07%	19	12	7	27	17	10
Pacific Fury	0.64%	0.06%	15	10	6	22	14	8
Poseidon	13.73%	1.23%	327	205	122	468	293	175
Royal Atlantic	14.59%	1.31%	347	217	130	498	312	186
Storm Petrel	13.65%	1.22%	325	203	121	466	292	174
Sunset Bay	5.62%	0.50%	134	84	50	192	120	72
Totals:			2,378	1,490	888	3,411	2,136	1,274

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
	70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%	5.5%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,691	33,384	14,307	16,625	9,915	2,671	1,044	10,983	2,561	3,105	787

Unalaska Coop Vessel Specific Chinook Limits

Unalaska Inshore % 12.191%	Vessel's Coop Pollock %	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season
ALASKA ROSE	13.809%	1.683%	446	279	167	641	401	239
BERING ROSE	14.140%	1.724%	457	286	171	656	411	245
DESTINATION	17.660%	2.153%	570	357	213	819	513	306
GREAT PACIFIC	10.141%	1.236%	327	205	122	471	295	176
MESSIAH	1.879%	0.229%	61	38	23	87	55	33
MORNING STAR	13.929%	1.698%	450	282	168	646	405	241
Ms. AMY	4.005%	0.488%	129	81	48	186	116	69
PROGRESS	8.300%	1.012%	268	168	100	385	241	144
SEA WOLF	12.432%	1.516%	401	251	150	577	361	215
VANGUARD	0.463%	0.056%	15	9	6	21	13	8
WESTERN DAWN	3.242%	0.395%	105	66	39	150	94	56
Totals:			3,229	2,023	1,206	4,640	2,907	1,733

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
		70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785

UniSea Coop Vessel Specific Chinook Limits

UniSea Inshore % 24.256%	Vessel's Coop Pollock %	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season
Aalsea	6.878%	1.668%	442	277	165	635	398	237
Argosy	6.752%	1.638%	434	272	162	623	390	233
Auriga	12.051%	2.923%	774	485	289	1,112	697	416
Aurora	13.574%	3.293%	872	546	326	1,253	785	468
Defender	14.319%	3.473%	920	576	344	1,322	828	494
Fierce Allegiance	3.875%	0.940%	249	156	93	358	224	134
Gun-Mar	9.179%	2.227%	590	369	220	847	531	317
Mar-Gun	0.443%	0.107%	28	18	11	41	26	15
Nordic Star	4.178%	1.013%	268	168	100	386	242	144
Pacific Monarch	6.603%	1.602%	424	266	158	610	382	228
Sea Dawn	5.718%	1.387%	367	230	137	528	331	197
Starfish	6.151%	1.492%	395	248	148	568	356	212
Starlite	5.066%	1.229%	325	204	122	468	293	175
Starward	5.215%	1.265%	335	210	125	481	302	180
Totals:			6,424	4,024	2,400	9,232	5,783	3,449

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
		70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785

Westward Coop Vessel Specific Chinook Limits								
Westward Inshore % 18.906%	Vessel's % of Coop Pollock	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
			Annual	A Season	B Season	Annual	A Season	B Season
Alaskan Command	1.960%	0.371%	98	61	37	141	88	53
Alyeska	6.378%	1.206%	319	200	119	459	287	171
Arctic Wind	5.829%	1.102%	292	183	109	419	263	157
Caitlin Ann	5.050%	0.955%	253	158	94	363	228	136
Chelsea K	24.546%	4.641%	1,229	770	459	1,766	1,106	660
Dona Martita	11.105%	2.100%	556	348	208	799	501	299
Hickory Wind	1.517%	0.287%	76	48	28	109	68	41
Ocean Hope 3	2.571%	0.486%	129	81	48	185	116	69
Pacific Knight	11.520%	2.178%	577	361	215	829	519	310
Pacific Prince	12.557%	2.374%	629	394	235	904	566	338
Viking	8.753%	1.655%	438	275	164	630	395	235
Westward I	8.213%	1.553%	411	258	154	591	370	221
Totals:			5,007	3,137	1,871	7,196	4,507	2,688

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
		70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785

Mothership Coop Vessel Specific Chinook Limits

	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
		Annual	A Season	B Season	Annual	A Season	B Season
Aleutian Challenger	4.93%	183	131	51	263	189	74
Alyeska	2.27%	84	60	24	121	87	34
American Beauty	6.00%	222	160	63	320	230	90
California Horizon	3.79%	141	101	40	202	145	57
Mar-Gun	6.25%	232	167	65	333	239	94
Margaret Lyn	5.64%	209	150	59	300	216	84
Mark I	6.25%	232	167	65	333	239	94
Misty Dawn	3.57%	132	95	37	190	137	53
Morning Star	3.60%	133	96	38	192	138	54
Nordic Fury	6.18%	229	165	64	329	237	93
Ocean Leader	6.00%	222	160	63	320	230	90
Oceanic	7.04%	261	188	73	375	270	105
Pacific Challenger	9.67%	358	258	101	515	370	145
Pacific Fury	5.89%	218	157	61	314	226	88
Popado II	2.95%	109	79	31	157	113	44
Traveler	4.27%	158	114	45	227	164	64
Vanguard	5.35%	198	143	56	285	205	80
Vesteraalen	6.20%	230	165	65	330	237	93
Western Dawn	4.15%	154	111	43	221	159	62
Totals:		3,707	2,665	1,042	5,328	3,830	1,498

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
	70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%	5.5%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785

HSCC Vessel Specific Chinook Limits

	Vessel's % of Sector Pollock	Vessel's Chinook Allocation at 47,591 Hard Cap			Vessel's Chinook Allocation at 68,392 Hard Cap		
		Annual	A Season	B Season	Annual	A Season	B Season
American Challenger	9.26%	106	86	20	86	124	29
Forum Star	7.18%	82	67	16	67	96	22
Muir Milach	13.35%	153	124	29	124	179	42
Neahkahnie	19.65%	226	183	43	183	263	61
Ocean Harvester	12.72%	146	118	28	118	170	40
Sea Storm	24.19%	278	225	53	225	324	76
Tracy Anne	13.65%	157	127	30	127	183	43
Totals:		1,149	932	217	932	1,339	312

Sector Allocations of Chinook Salmon as Described in the June NPFMC PPA.

Total hard cap	Fleet A Season	Fleet B Season	Inshore A Season	Inshore B Season	MS A Season	MS B Season	C/P A Season	C/P B Season	CDQ A Season	CDQ B Season
		70.0%	30.0%	49.8%	69.3%	8.0%	7.3%	32.9%	17.9%	9.3%
68,392	47,874	20,518	23,841	14,219	3,830	1,498	15,751	3,673	4,452	1,128
47,591	33,314	14,277	16,590	9,894	2,665	1,042	10,960	2,556	3,098	785

5 February, 2009

Good Afternoon Chairman Olsen and the Members of the NPFMC:

Thank you for the opportunity to testify for our village, myself, and the salmon of the Yukon River. My name is Timothy Gervais of Ruby, Alaska. Ruby is a community of 180 people located 500 miles upriver from the mouth of the Yukon River. It is 200 air miles west of Fairbanks. This region is considered the middle Yukon River. I am a member of the Ruby Advisory Council and a new member of the Western Interior Regional Advisory Council. I am disclosing that I am a Bristol Bay drift salmon fisherman (displaced from being a Yukon River fisherman since 1999) and a Bering Sea crab fisherman.

Mr. Mecum, one of your previous questions was on age class differentiation of harvest methods between the trawl fleet and in river. The trawlers tow at about 3.8 knots which is above the normal swimming velocity of a king salmon, particularly the older age classes. As the salmon get older and larger, their speed decreases. Middle and upper Yukon salmon harvest are about 1/2 from fish wheel which do not favor an age class. Set and drift gillnet gear are more size specific in their harvest. The healthy in river run numbers in 2001 and 2003 follow Bering Sea bycatch of less 10,000 fish in both 1999 and 2000.

There was also a question to Tanana Chiefs Conference Staff regarding how a salmon crash is defined on the Yukon River. This is how Ruby defines a salmon crash:

- 1) Every household in the village being out of salmon with winter only 2/3 over.
- 2) No commercial king salmon fishery in 6 years (including standing down in 2009).
- 3) Cross international border escapement of 17,326 in 2007 and 38,500 in 2008 while subsistence harvest levels at half or less than half the normal levels. These escapements are 43% and 72% of the goal.
- 4) Current average king salmon size approximately 65% by weight compared with mid 1990's harvests.
- 5) NPFMC Advisory Panel proposing a bycatch cap of 68,000 which is 2.32 times above the historic level.
- 6) Cumulative effective loss patterns of under escapement pushing the Yukon king stock towards listing as a threatened or endangered species.
- 7) 22.4% of the Bering Sea king bycatch being of Yukon River origin.

This year I spoke with 10 trawler crew members and 4 ground fish observers regarding the prevalence of non-reported bycatch. They stated that the average non-reporting level at 40%. The lowest figure given 20%. Some people stated the non-reporting level at well over 50%. Two people refused to say for fear of prosecution. Using the 40% number, a reported bycatch cap of 29,232 provides an actual bycatch cap of 41,052 king salmon.

NMFS staff said that their analysis ended at the mouth of the rivers. They missed the main aspect of the salmon issue by 2000 miles. It is mostly about how much king milt fertilizes how many king eggs on the spawning grounds. The Council and staff discussion has centered about the negative financial impact to the pollock industry. Escapement should dominate fishery policy.

If the NPFMC does not approve a bycatch cap of 29,323 along with incentive measures and mandatory salmon excluder use, the pollock industry will probably not be able to renew the Marine Stewardship Council sustainability certification. More importantly threatened or endangered species listing is possible within a few years. Please do not let the Yukon go the way of the Merrimack, Connecticut, Hudson, Sacramento, Colombia and Klamath Rivers as failed salmon rivers. Salmon enhancement has failed to bring any of these salmon populations back. The Yukon is one of the last great salmon runs on Earth. The Bering Sea is critical habitat to the Yukon King Salmon.

In other matters, I request the NPFMC to pass an ethics resolution to prevent members from gaining monetary benefit or employment from industry groups that are regulated by the Council. Regarding BSAI Crab Rationalization, we crew members pay lease fees of 50-80% of the gross revenue for the right to fish and our crew share % continue to decline. More crew members were on our vessel were injured this year than during any pre rationalization season I fished. We could not deliver all of our north shares because St. Paul was iced in. Rationalization is a bad program to everyone except quota recipients.

Testimony of Glenn Reed (submitted in writing) - April, 2009 NPFMC

For the record my name is Glenn Reed, I'm testifying today on behalf of the Pacific Seafood Processors Association (PSPA) on agenda item C-2 Chinook Salmon By-catch.

Our testimony today will focus on two topics. First we'll comment briefly about the "process" issues that we have spoken to in the past; second we will comment on the specific action in the Preliminary Preferred Alternative (PPA) before you today.

PSPA recognizes that the Chinook bycatch issue is an especially tough one in many ways and that the council has been innovative in addressing it. Further, we appreciate the council providing opportunities for industry to participate in designing solutions that are the most likely to be effective in addressing bycatch, while minimizing excessive and unnecessary economic harm.

However, we continue to be very concerned about whether this process and underlying problem statement comply with MSA. By reference, I reiterate the "process concerns" I stated in my testimony at the October 2008 and February 2009 council meetings.

In dealing with Chinook bycatch, neither the Council nor stakeholders have had the benefit of council staff or agency staff analyses of the cost/benefit relationship or effectiveness of the incentive plans, nor were the incentive plans subject to review and public comment in the EIS process.

We have serious reservations about the adequacy of the DEIS. We reaffirm the concerns raised by George Mannina in his February 23 letter to the Agency commenting on the DEIS on behalf of the Bering Sea pollock industry. While we acknowledge the hard work and diligent efforts of Council and agency staff, working under tremendous pressure and deadlines, PSPA agrees with the conclusion of Mr. Mannina that the DEIS is not adequate as a matter of law and, consequently, any actions based upon the DEIS may be subject to future challenge.

Despite our “process” concerns contained in the record, PSPA members and staff have worked very hard and in good faith within the framework defined by the Council and have been responsive to its requests. In October we promised to meet your schedule, and we’ve kept that promise. We believe the industry has come up with creative, effective approaches to minimizing Chinook bycatch while also allowing for continuation of a viable Pollock fishery.

If the council moves ahead with adoption of a Chinook hard cap, the approach PSPA recommends and supports is as follows:

- We support the AP motion.
- Specifically, we support the PPA with a hard cap of 68,392 combined with a more restrictive performance standard of 47,591, and recommend that both the SSIP and FIP plans be allowed to proceed to implementation.

PSPA has been an integral participant in the design of the SSIP and we support that approach as a viable incentive plan for the two sectors we

represent (shore-based and mother ships). The plan provides mathematical certainty of an average annual bycatch that complies with the performance standard of 47,591 or less. It's important to understand that in order to earn the "insurance" needed to ever fish to the hard cap (in the event of a very high encounter year) the entire industry would have to have an average bycatch of approximately 32,000 for the three previous years. Alternatively, one year at zero bycatch would also earn enough insurance to make available bycatch up to the level of the hard cap for use in a subsequent high encounter year.

We recommend that both plans be moved forward. These plans are innovative and, admittedly, untested in a fishery. By putting two plans into effect we will have the opportunity to learn about what approaches are most effective at minimizing bycatch and to improve upon each one as new information becomes available.

- PSPA supports the 75/25 sector split, as contained in the PPA. The sector allocation will affect each sector of the Pollock fishery differently and to varying degrees. PSPA represents shore-based and mothership interests. Our members in both of these sectors support the 75/25 allocative split. We believe that adoption of this approach recognizes the differences in operational capabilities within the pollock fishery and is the best available option for the entire fishery. We believe that changing the sector split to 50/50 or 25/75, as proposed by some groups, is an effort to reallocate pollock and is inappropriate and unwarranted in the context of this bycatch reduction action. Further, that change would result in the loss of industry support for

the SSIP plan and may negate all of the effort that has gone into developing this innovative incentive plan.

- Regarding the rollover and seasonal apportionment components, PSPA believes that the strength of the incentives contained in the incentive plans eliminates the need for those components.

Allowing incentive plan participants a 100% rollover from A to B season, without a “rollover tax”, is a critical component of our ability to maintain support for the PPA and the incentive plans. As the SSC noted, the rollover tax creates a disincentive to reducing bycatch in A season.

Our support for the overall program is dependent on all of the components I’ve just outlined. We believe this combination of components is critical to the effectiveness and success of the program and we would need to reconsider our support for the plan if one or more of these components were changed or not adopted.

The council’s action on Chinook bycatch will bring with it severe and costly restrictions to the Pollock industry. Had the PPA been in place over the past three years, it would have changed the way fish are harvested, left hundreds of thousands of tons of pollock un-harvested, cost hundreds of millions of dollars in lost revenue, or some combination of all of these effects.

PSPA recognizes that the people of western Alaska and the Yukon Territory have and continue to sacrifice through reductions in salmon harvests, and that some

bycatch reduction measures in the pollock fishery, in addition to those enacted to date, are necessary and appropriate.

However, we also recognize that factors other than by-catch – such as climate shifts – have significant impacts on salmon runs. Therefore, we are not convinced that the burden being placed on the Bering Sea pollock fishery will result in any measurable benefit to the salmon resource of concern or other users that depend upon it. We fully appreciate the critical importance of salmon to the ecology and people of Western and Interior Alaska and Canada – to their sustenance, livelihoods, and culture. That makes it especially disconcerting that so much focus on reducing bycatch in the pollock fishery is leaving other, potentially larger, factors in the decline of Western Alaska salmon runs unaddressed. As we've stated in previous testimony, we are concerned about the unrealistically high expectations that a hard cap on the pollock fishery will improve depressed salmon runs, when there is little scientific evidence that even a complete closure of the pollock fishery would have a definable impact on in-river run strength. Along with whatever action is taken here on salmon bycatch, we implore state and federal agencies and all stakeholders to continue exploring and addressing other factors affecting those salmon runs of concern.

In closing, we are hopeful that moving the PPA forward, with the amendments we are recommending, will satisfy both National Standards 1 and 9 and meet the bycatch reduction goals set forth by the council.

Thank you.

City of Mountain Village
P.O. Box 32085
Mtn. Village, Alaska 99632
PH: (907) 591-2929
FAX: (907) 591-2920

Asa'carsarmiut Tribal Council
P.O. Box 32249
Mtn. Village, Alaska 99632
PH: (907) 591-2814
FAX: (907) 591-2811

Azachorok, Inc.
P.O. Box 32213
Mtn. Village, Alaska
PH: (907) 591-2527
FAX: (907) 591-2127

JOINT RESOLUTION 09-03

A RESOLUTION REQUESTING THE NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL PLACE A SEVEN YEAR MORITORIUM ON THE ALASKAN POLLOCK FISHERY

WHEREAS, the community of Mountain Village is situated on the North bank of the Yukon River seventy miles inland from the Bering Sea; and

WHEREAS, The population of Mountain Village is approximately 800 people, majority of whom participate in traditional subsistence salmon harvesting such as drying, freezing, salting, and canning various salmon species such as Chinook, summer and fall chum to help sustain them through the long cold winters; and

WHEREAS, during the past few years, 1998 and 2000 included, there has been an alarming decline of our Chinook salmon that enter the Yukon River to spawn; and

WHEREAS, during the 2008 Salmon Season- Lower Yukon Salmon Fishing Permit Holders did not participate in a Chinook salmon directed Commercial Fishery; and

WHEREAS, a limit was also placed on Subsistence harvesting for Chinook salmon, further restricting our subsistence activity, which, if continued from year to year, will only continue to hurt the people that live along the Yukon River unnecessarily; and

WHEREAS, by-catch of Chinook salmon during the Alaskan Pollock Fishery has increased in recent years, while escapement goals have not been met in the spawning streams, tributaries and headwaters of the Yukon River; and

WHEREAS, the Alaskan Pollock Fishery is open out in the Bering Sea at least six months out of the fishing year, and the by-catch of Chinook salmon caught by the Pollock fleet can not be saved, transported or sold by the fleet and so is thrown overboard, dead and wasted; and

WHEREAS, the Chinook salmon that are thrown overboard by the Pollock fleet should have been able to return to the Yukon River unharmed to be used by the people that live along the Yukon River; and

WHEREAS, there are a number of possible factors as to why Chinook salmon are diminishing in recent years including: global warming, predation by animals out in the ocean, harsh winters at the spawning grounds, and by-catch, all of which occur naturally, except by-catch, making Chinook salmon by-catch one of the known factors that must be controlled immediately; and

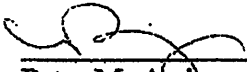
WHEREAS, by-catch of Chinook salmon must be stopped altogether, more specifically, a moratorium must be placed on the Pollock fishery and/ or, at the very minimum, a hard-cap of Chinook salmon by-catch must be set at 29,300, as soon as possible, to save our valuable salmon from further depletion.

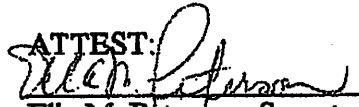
NOW THEREFORE, BE IT RESOLVED, that the North Pacific Fisheries Management Council place a seven (7) year moratorium on the Pollock Fishery immediately. This action is necessary for the Yukon Chinook Salmon to rebound to acceptable levels along the Yukon River.

BE IT FURTHER RESOLVED, that if the seven (7) year moratorium on the Alaskan Pollock Fishery is not acceptable by the North Pacific Management Council as an option, then the Joint Council of the City of Mountain Village, the Asa'carsarmiut Tribal Council and Azachorok, Incorporated hereby respectfully request that a by-catch hard-cap of 29,300 Chinook salmon be placed on the Alaskan Pollock Fishery effective immediately.

CERTIFICATION:

Passed and approved by a quorum of the City of Mountain Village this 24th day of February 2009, with a vote of 7 in favor, 0 against, and 0 absent, and 0 vacant.


Peter M. Andrews, Mayor

ATTEST:

Ella M. Peterson, Secretary / Treasurer

Passed and approved by a quorum of the Asa'carsarmiut Tribal Council this 27th day of February 2009, with a vote of 7 in favor, 0 against, and 0 absent, and 0 vacant.

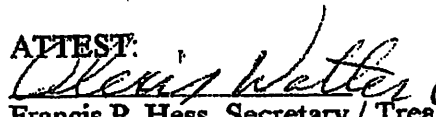

James C. Landlord, 1st Chief

ATTEST:

Dorothy Johnson, Secretary / Treasurer

Passed and approved by a quorum of Azoachorok, Incorporated this 20th day of February 2009, with a vote of 5 in favor, 0 against, and 1 absent, and 1 vacant.


Felix P. Hess, Chairman

ATTEST:

Francis P. Hess, Secretary / Treasurer

Two Key Questions

- 1) What are the primary factors affecting Chinook runs to AYK & Bristol Bay?**
- 2) What is the impact of pollock bycatch on these runs?**

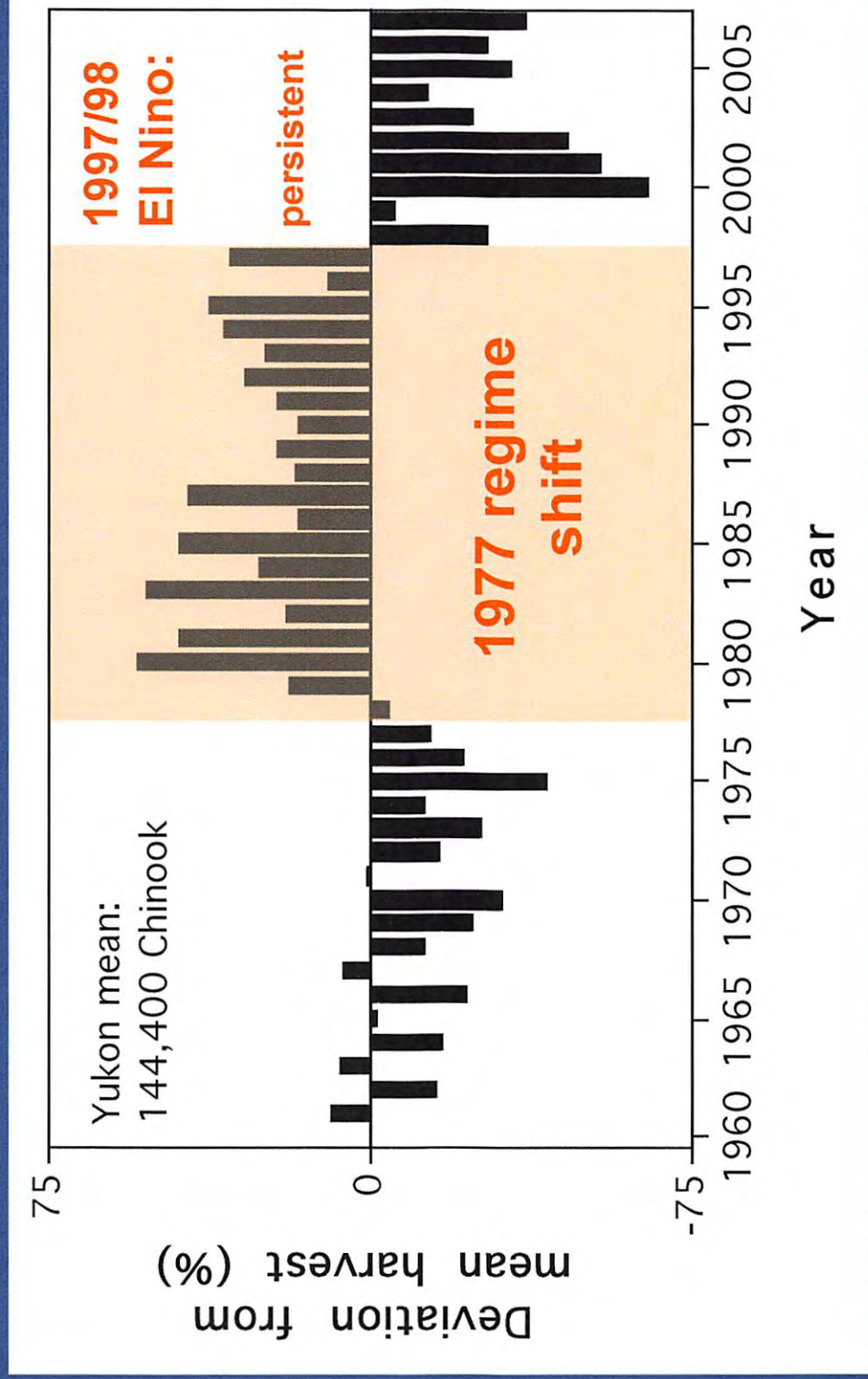
**Greg Ruggerone, Ph.D.
Natural Resources Consultant, Inc.**

Question 1

(Factors affecting Chinook salmon)

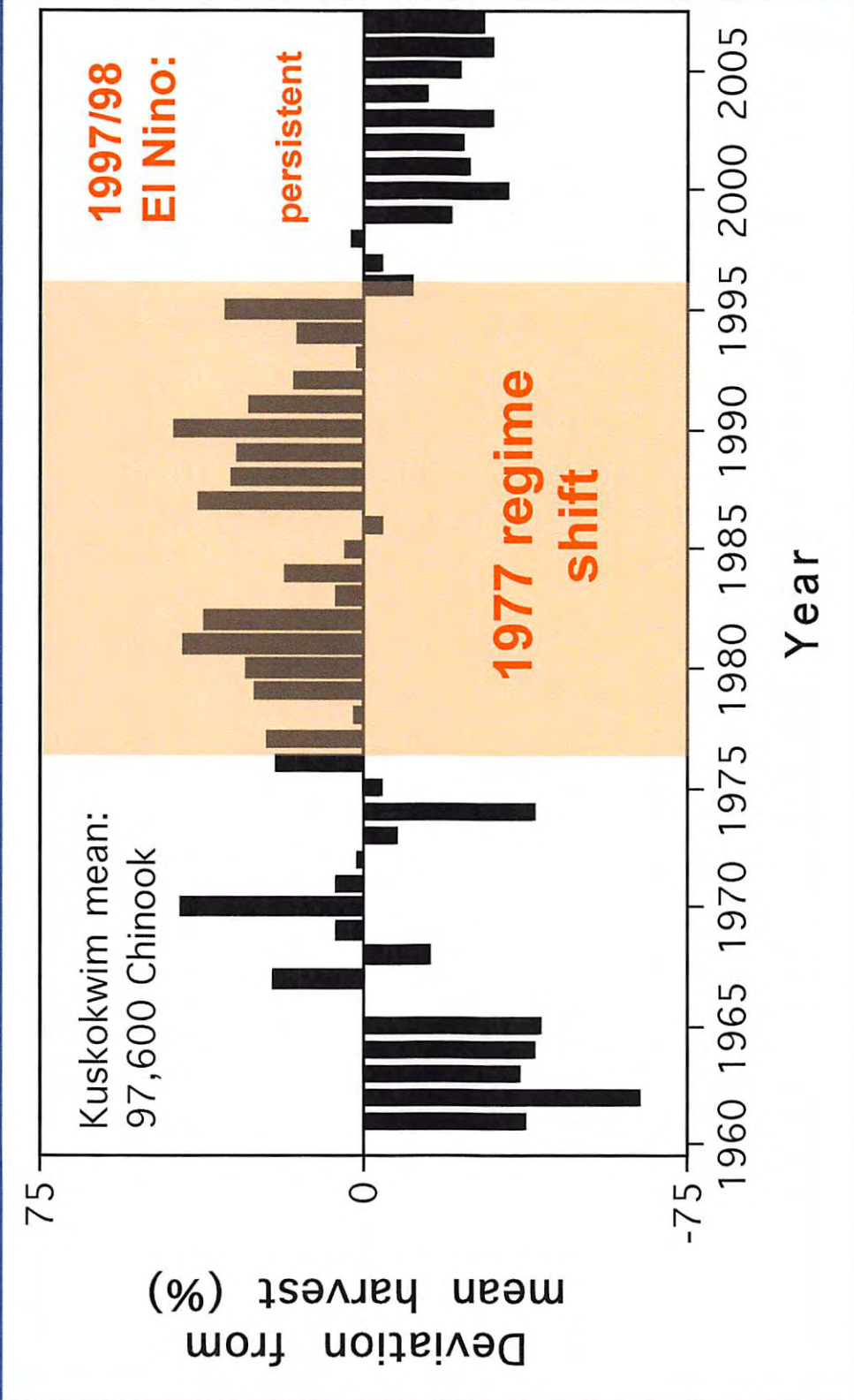
- **Climate shifts**
- **Spawning escapement**
- **Habitat conditions**
- **Salmon growth**
- **Predation**
- **Disease**
- **Bycatch**

Yukon Salmon Trends & Climate



Based on data from ADFG

Kuskokwim Salmon Trends & Climate



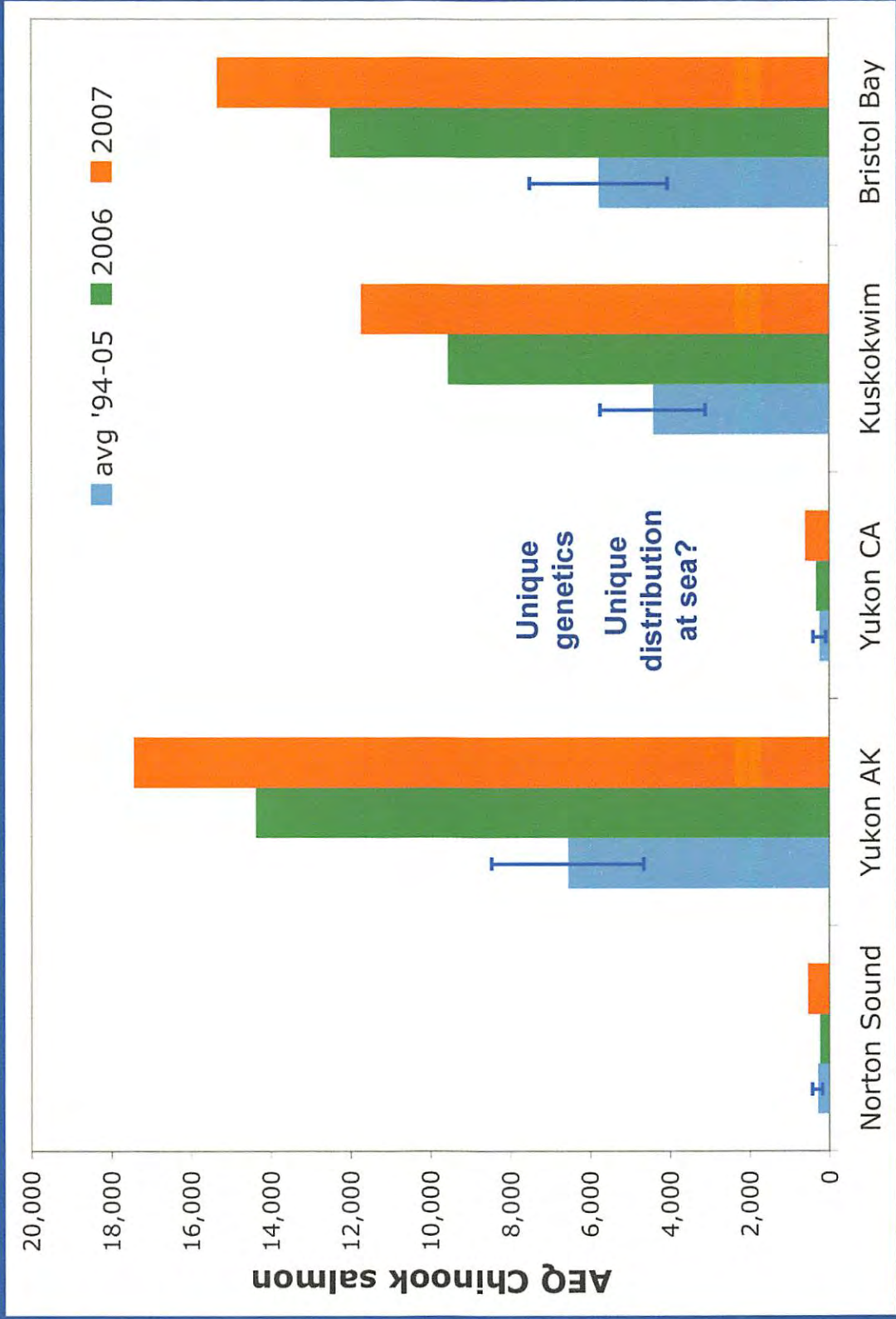
Based on data from ADFG

Question 2

(Effects of bycatch in pollock fishery)

- AEQ mortality of W. Alaska Chinook
- Proportion of total run taken as bycatch
- Foregone harvests

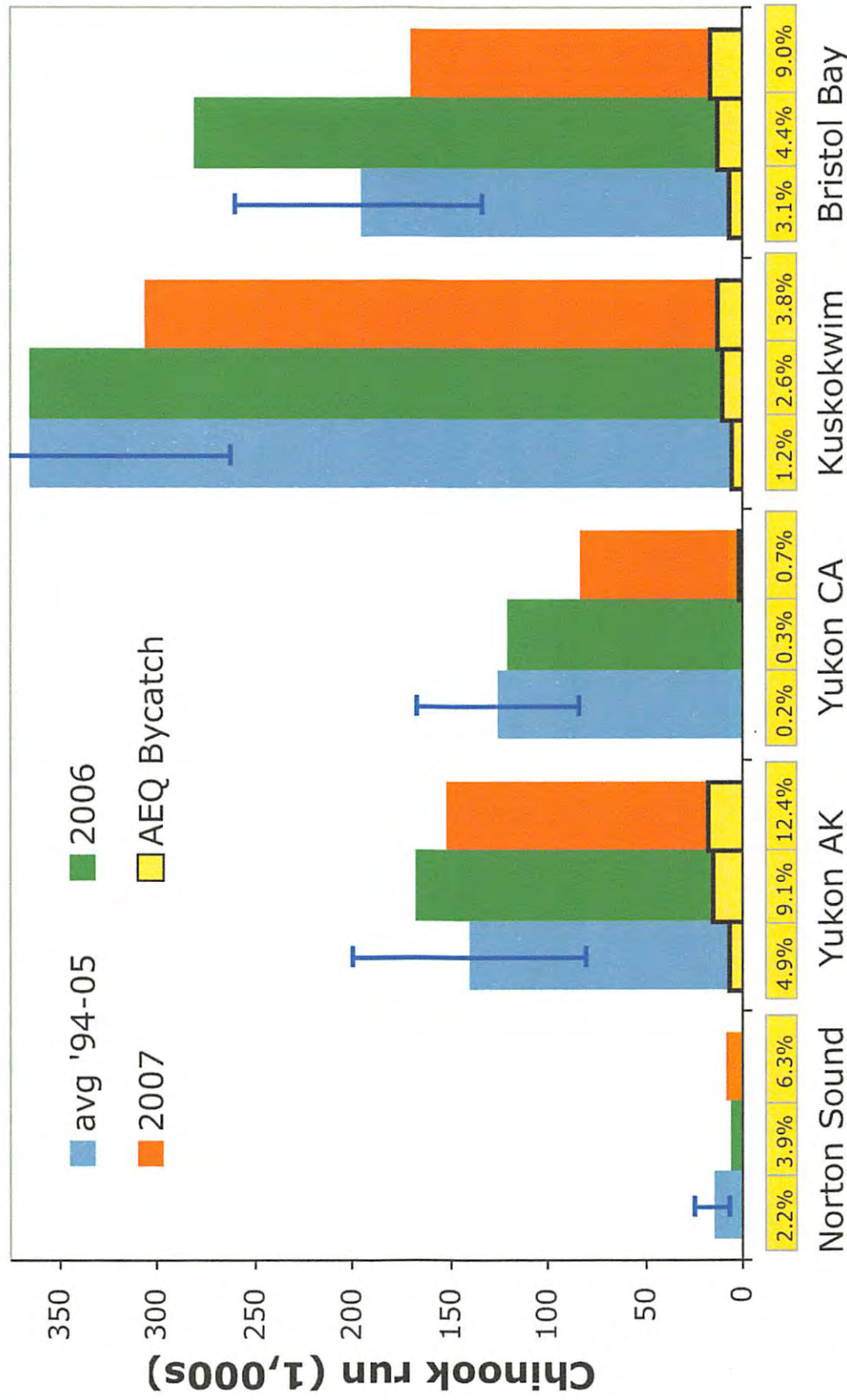
AEQ Bycatch Mortality of W. AK Chinook



~58% of AEQ bycatch would have returned to W. AK

Based on data from DEIS

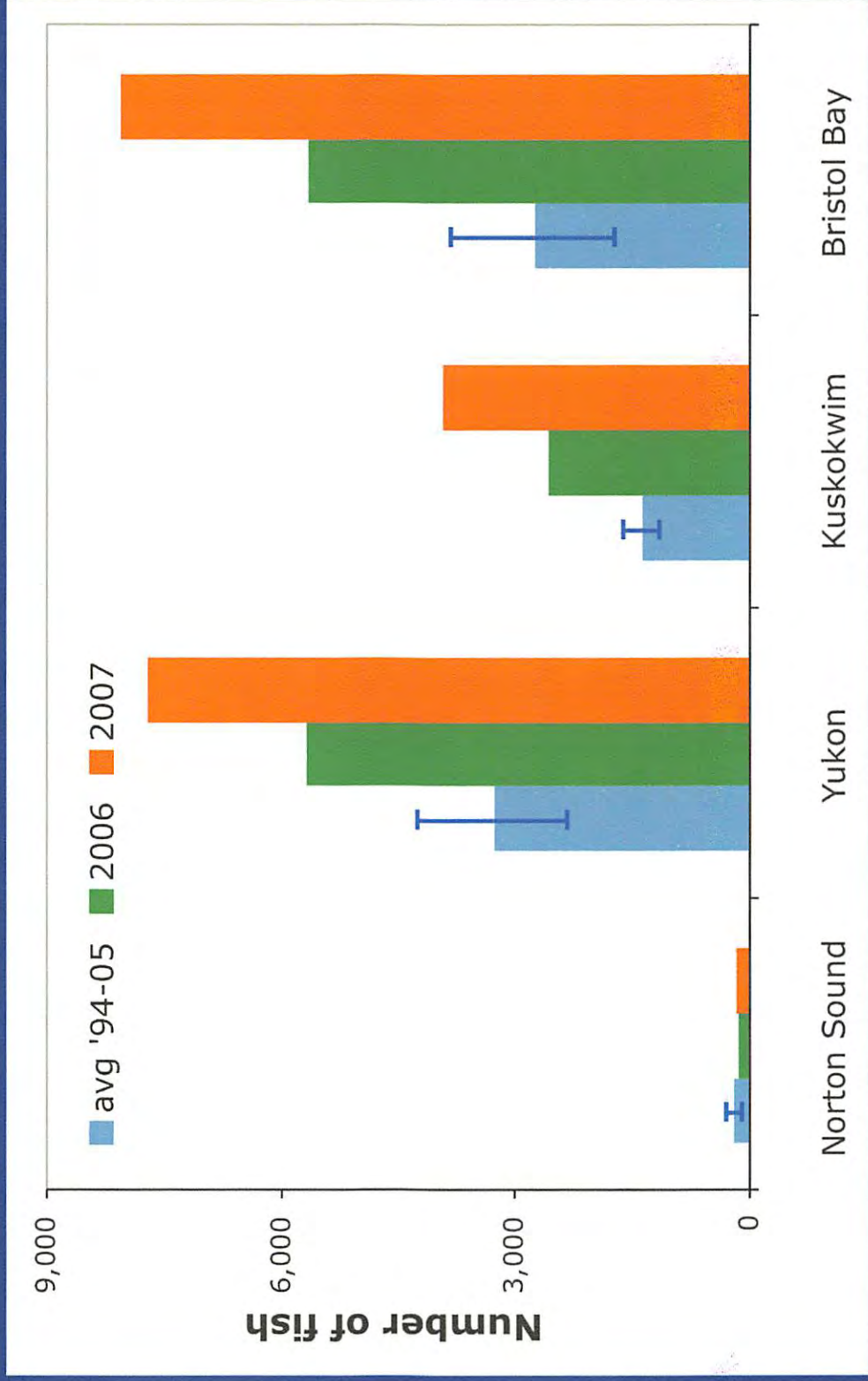
Bycatch Effect on Chinook Run



Based on data from DEIS & ADFG

Foregone Chinook Harvests

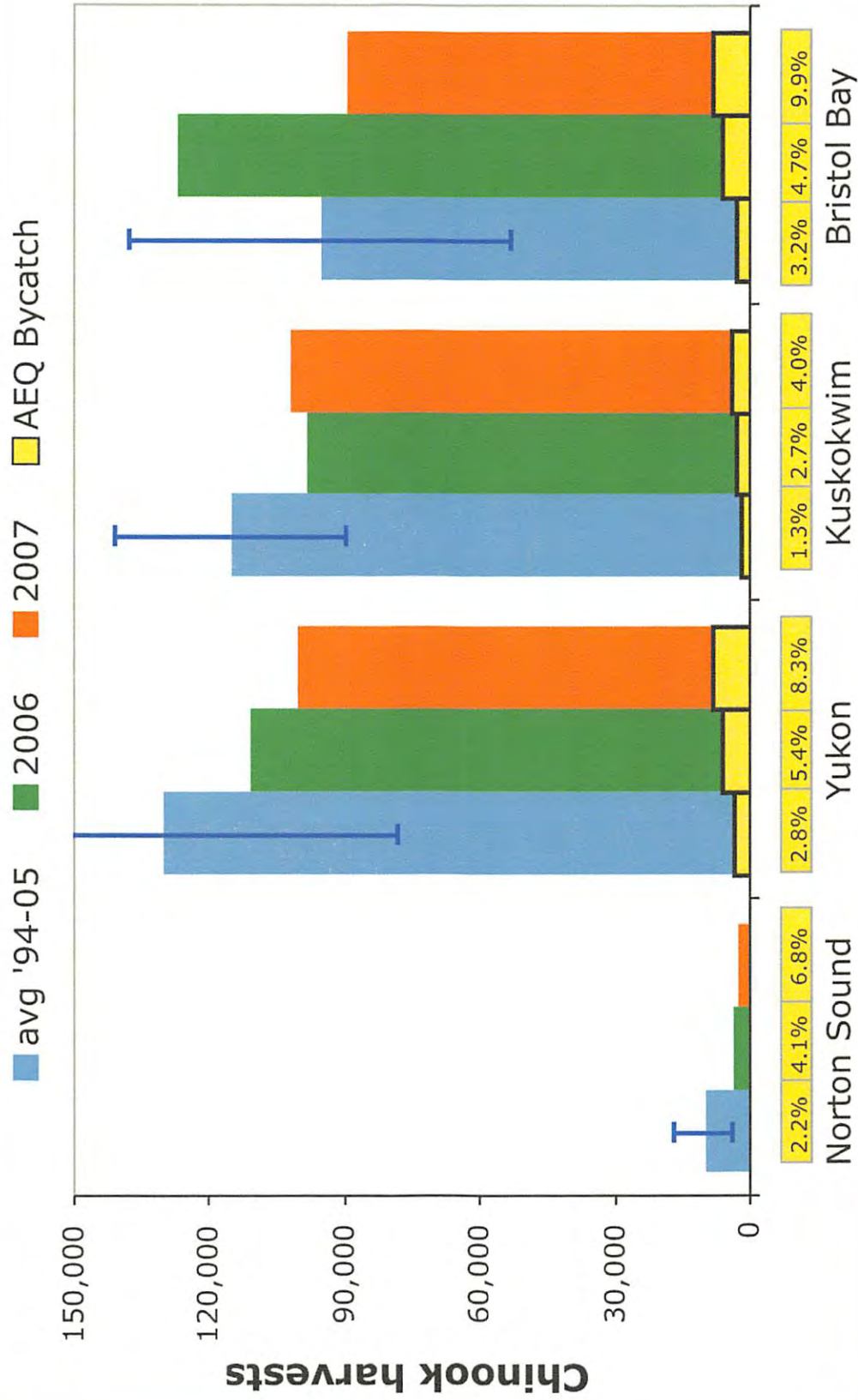
(subsistence, commercial, sport, etc)



Assumes harvest rate would remain unchanged

Based on data from DEIS & ADFG

Bycatch Effect on Chinook Catch



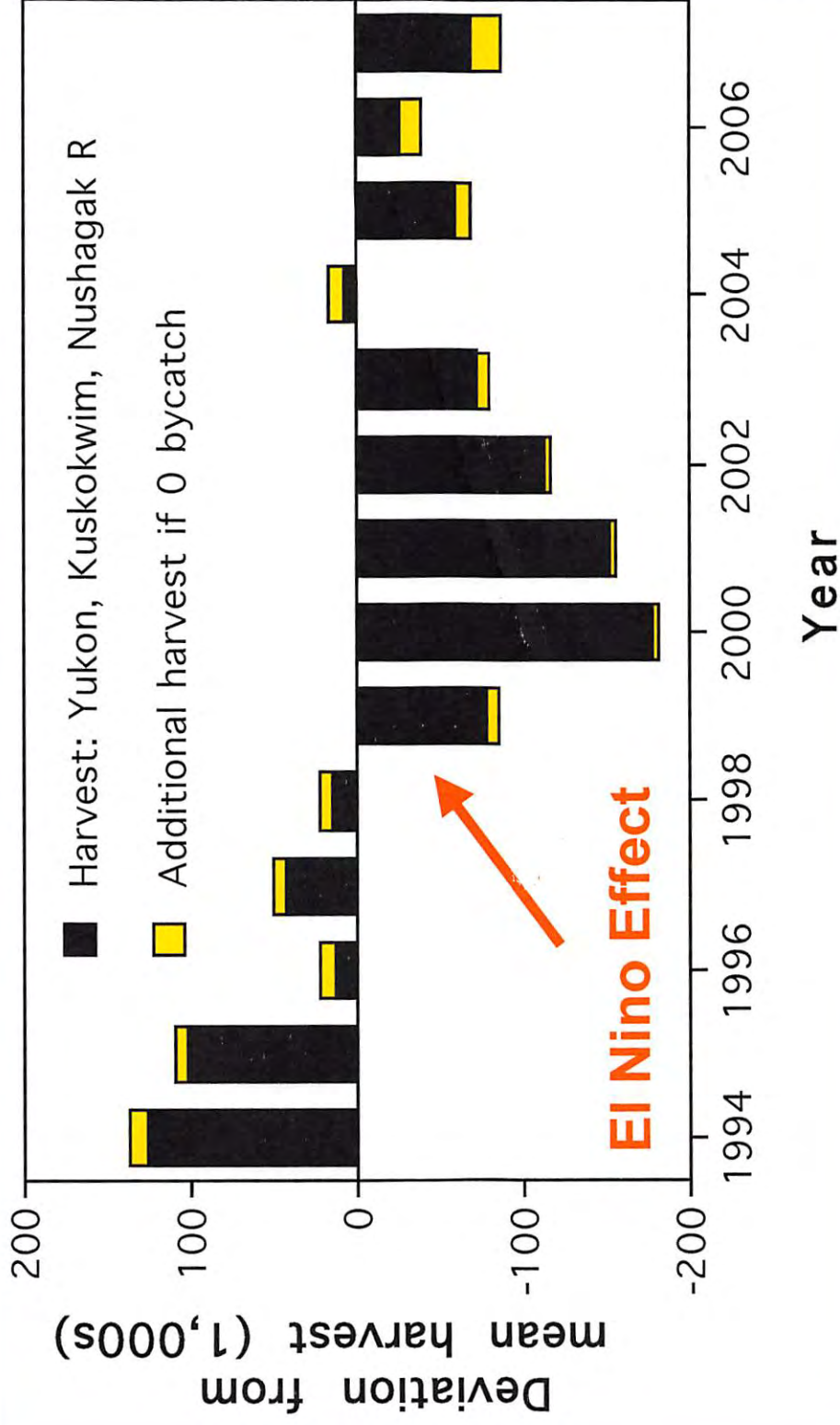
Assumes harvest rate would remain unchanged

Based on data from DEIS & ADFG

Answers to Key Questions

- Climate shifts caused Chinook harvests to increase or decrease by 35-45%, on average. (max yr to yr >300%)
- Less than 10% of each run taken as bycatch in 2006 & 2007 (avg 5.1%), except Alaska Yukon (12.4% in 2007).
- Foregone harvest less than 10% in 2006 & 2007 (avg 5.7%).
- Bycatch effects were less in 1994-2005:
 - Foregone harvest: avg 2.4%.

Climate & Bycatch



Deviation from long-term mean harvest



NATURAL RESOURCES CONSULTANTS, INC.

4039 21ST AVENUE WEST, SUITE 404
SEATTLE, WASHINGTON 98199, U.S.A.
TELEPHONE: (206) 285-3480
FAX: (206) 283-8263
EMAIL: GRuggerone@nrccorp.com

**Effects of Chinook Salmon Bycatch in the Bering Sea Pollock Fishery on Salmon Harvest,
Escapement, and Abundance in Western Alaska**

Prepared for:

North Pacific Fisheries Research Foundation

Prepared by:

Gregory T. Ruggerone, Ph.D.

This report updates the February 21, 2009 report with the recently revised estimates of Yukon River Chinook salmon that originated from Canada. It also includes additional discussion about data quality.

March 30, 2009

Summary

Chinook and other salmon are captured incidentally by the pollock fishery in the Bering Sea, leading to concerns in western Alaska villages that this offshore fishery is significantly affecting harvests and runs of Chinook salmon. In response, the North Pacific Fishery Management Council (NPFMC 2008) prepared a draft environmental impact statement (DEIS) to evaluate, in part, effects of the existing (status quo) pollock fishery and several alternative management scenarios on Chinook salmon returning to Alaska. However, NPFMC did not directly compare numbers of Chinook salmon captured in the recent pollock fishery on the harvests, spawning escapements, and runs of Chinook salmon returning to western Alaska. Therefore, the pollock industry asked Natural Resources Consultants (NRC) to examine effects of Chinook salmon bycatch in the Bering Sea pollock fishery on terminal area harvests, escapements, and total abundances of Chinook salmon in western Alaska. This analysis relied upon Chinook salmon stock composition and adult equivalent (AEQ) mortality data provided in the DEIS. More recent estimates of salmon abundance and escapement in western Alaska were provided by the Alaska Department of Fish and Game (ADFG).

The percentage of annual western Alaska Chinook salmon runs captured in the pollock fishery (based AEQ mortality estimates) was relatively constant from 1994 through 2004, averaging $2.0 \pm 0.4\%$ (SD) per year. The percentage of the run taken by the pollock fishery increased from 2.7% in 2005 to a maximum of 6.3% in 2007. AEQ mortality of western Alaska Chinook salmon was positively correlated with abundance of Chinook salmon returning to western Alaska during 1994-2004, but bycatch in 2005-2007 was high relative to abundance of western Alaska Chinook salmon. Although the AEQ mortality represents a large number of Chinook salmon each year (range: 9,697 to 45,682 western Alaska salmon), it is a relatively small percentage of the abundance of adult Chinook salmon returning to western Alaska (avg. 818,000; range: 393,000 to 1,100,000 fish). This observation is important because it implies that the pollock fishery was not responsible for the wide swings in Chinook salmon abundance returning to western Alaska during the past 15 or more years.

The effect of the pollock fishery on Chinook salmon runs and harvests in each region of western Alaska was estimated. Prior to 2005, the percentage of the Chinook salmon run to the Yukon, Kuskokwim, Bristol Bay, and Norton Sound watersheds was less than approximately 5.7% (avg. 2.1% per stock). During this period, the foregone harvest and spawning escapement was less than 5% (avg. 2.3% per stock). These values assumed harvest rates would have remained unchanged if the salmon had not been captured in the pollock fishery. During 2005 to 2007, bycatch of Chinook salmon increased relative to terminal area harvests and runs. In 2007, the year of highest bycatch, the percentage of the Chinook salmon runs taken in the pollock fishery was approximately 12.4% in the Yukon (Alaska stock only), 3.8% in the Kuskokwim area, 9% in Bristol Bay, and 6.3% in Norton Sound. Foregone harvests and escapements in 2007 were approximately 8% in the Yukon (combined Alaska and Canada), 4% in the Kuskokwim area, 10% in Bristol Bay, and 7% in Norton Sound. Genetic and abundance data indicated that <1% of the Canada-bound run of Chinook salmon was captured in the pollock fishery, indicating this genetically-distinct stock might have a unique distribution at sea such that it was not readily captured in the pollock fishery during 2005-2007. Thus, reduced bycatch may have relatively little effect on achievement of escapement objectives in Canada. Although Chinook salmon

captured in the pollock fishery would have contributed to spawning escapements and harvests in western Alaska, these analyses indicate that the percentage increase in harvest or escapement would have been relatively small in most years. Monitoring of stock composition of Chinook salmon in the pollock fishery should continue so that effects of the pollock fishery on Chinook salmon abundance in western Alaska can be assessed.

Introduction

Chinook and other salmon are captured incidentally by the pollock fishery in the Bering Sea. Many of the captured Chinook salmon would have returned to western Alaska where they would contribute to subsistence, commercial or sport harvests, or to the spawning population. Chinook salmon abundance in western Alaska has been low, especially since the 1997/1998 El Niño event that had a significant effect on the southeastern Bering Sea (Kruse 1998).

The North Pacific Fishery Management Council (NPFMC 2008) prepared a draft environmental impact statement (DEIS) in order to evaluate, in part, effects of the existing (status quo) pollock fishery and several alternative management scenarios on Chinook salmon returning to Alaska. However, NPFMC (2008) did not directly compare numbers of Chinook salmon captured in the existing pollock fishery on harvests, spawning escapements, and runs of Chinook salmon returning to western Alaska.

The pollock fishing industry (At-Sea Processors Association, Pacific Seafood Processors Association, United Catcher Boats) contacted Natural Resources Consultants (NRC) in late December and asked NRC to perform technical analysis to help the industry develop comments on the NPFMC DEIS by February 23, 2008. Specifically, NRC was asked to examine effects of Chinook salmon bycatch in the Bering Sea pollock fishery on terminal area harvests and total abundances of Chinook salmon in western Alaska. Objectives of this investigation were to:

- 1) Estimate the percentage of the total adult catch or run (catch and spawning escapement) of western Alaska Chinook salmon represented by the adult equivalent (AEQ) mortality of western Alaska Chinook salmon in the Bering Sea pollock fishery.
- 2) Estimate the percentage of total Chinook salmon returning to each region of western Alaska (Yukon, Kuskokwim, Bristol Bay, Norton Sound) represented by the adult equivalent mortality of these fish in the Bering Sea pollock fishery.
- 3) Examine effects of Chinook salmon bycatch on subsistence and commercial harvests in western Alaska.
- 4) Examine effects of Chinook salmon bycatch on attainment of Chinook salmon spawning escapement goals in western Alaska.

Methods

Stock Composition Chinook salmon stock composition in the bycatch was obtained from NPFMC (2008), who relied upon genetic data collected during 2005 to 2007. The genetic data allowed identification and enumeration in the pollock bycatch of Chinook salmon that would have returned to coastal areas of western Alaska (lower Kuskokwim, lower Yukon, Bristol Bay, Norton Sound), the middle Yukon River (Alaska), and the upper Yukon River (Canada; Table 1). Stocks of Chinook salmon that would have returned to the north Alaska Peninsula, central Alaska, southeast Alaska, the Pacific Northwest, and Russia were also identified in the pollock harvests, but analyses presented here focus on bycatch of Chinook salmon that would have returned to the Arctic-Yukon-Kuskokwim (AYK) and Bristol Bay regions, e.g., western Alaska excluding the north Alaska Peninsula. NPFMC (2008) provided details regarding the sampling of Chinook salmon for genetic analyses and the way in which catch-weighted estimates of stock composition were developed for years 1994 to 2007. NPFMC describes data quality issues, which are also discussed below.

Identification of stocks within western Alaska region was based on the scale pattern analysis findings of Myers et al. (2004) that were also utilized by NPFMC (2008) for the same purpose. For bycatch sampling during 1997-1999, the estimated stock composition of Chinook salmon returning to western Alaska averaged approximately 40% Yukon, 34% Bristol Bay, and 26% Kuskokwim Chinook salmon. Scale analysis did not differentiate Norton Sound Chinook from other stocks. For this analysis, AEQ mortality of Norton Sound Chinook salmon was based on the annual abundance of Norton Sound Chinook salmon compared with total abundance of western Alaska Chinook salmon. Thus, the analyses below assume that the AEQ bycatch of western Alaska Chinook salmon was comprised of 40% Yukon, 34% Bristol Bay, and 26% Kuskokwim Chinook salmon less a small fraction of the total that would have returned to Norton Sound (Table 2).

As in the DEIS, this analysis assumes that genetic data collected during 2005-2007 and scale pattern data collected during 1997-1999 provide reasonable estimates of Chinook salmon stock composition in the pollock fishery from 1994 to 2008. Actual stock composition in the bycatch would vary with annual abundances of stocks contributing to the bycatch and annual or seasonal shifts in stock distribution in the ocean. Genetic-based stock composition of the Chinook salmon bycatch since 1994 is shown in Table 1. Stock composition of the fraction that would have returned to specific watersheds in western Alaska is shown in Table 2.

It is worthwhile to note that genetic material present on Chinook salmon scale samples collected from the pollock fishery could be used to estimate annual stock composition of Chinook salmon in the pollock fishery during previous years. Furthermore, it may be possible to use genetic data to identify two or possibly three stocks within western Alaska if one was willing to accept lower classification accuracy of these stocks (e.g., ~80%; J. Seeb, University of Washington, pers. comm.). Presently, genetic stock groupings are based on classification accuracy that exceed 90%. Collection of genetic baseline data is continuing and resolution of stocks within the Pacific Northwest stock complex is likely to improve in the near future.

Adult Equivalent Mortality AEQ mortality of Chinook salmon is the number of fish that would have returned to the natal river had they not been captured in the pollock fishery. This value is less than the total bycatch estimate because some of the Chinook salmon captured in the pollock fishery would have died naturally before returning to freshwater. Natural mortality of Chinook salmon during each year at sea is rarely quantified and there are no direct measurements of this mortality for Chinook salmon in the Bering Sea. The AEQ mortality values used in this investigation were obtained from NPFMC (2008; Table 3-14), who described a modeling approach to estimate AEQ mortality of Chinook salmon. Stock-specific AEQ mortality values were based on genetic and scale stock identification data and age composition, as described above and in the DEIS. AEQ mortality values do not include Chinook salmon that were captured in the Russian pollock fishery in the Bering Sea.

AEQ mortality values for the adult salmon return in 2008 were assumed by NPFMC to be approximately 50,000 Chinook salmon (Fig. ES-4 of NPFMC 2008), but this value did not include bycatch in the 2008 A-season (J. Ianelli, NMFS, pers. comm.). The number of Chinook salmon that would have returned to the natal rivers in 2008 had they not been captured in the pollock fishery is an important value because bycatch was exceptionally high in 2007, but exceptionally low in 2008. Bycatch during 2007 and during the 2008 A-season would have contributed to the adult return of salmon to western Alaska in 2008. Therefore, 2008 AEQ mortality values were estimated from multi-variate regressions of AEQ mortality on total bycatch (all stocks) in the A-season (y) and total bycatch during the previous year ($y-1$):

$$\text{Western AK AEQ}_y = 3,273 + 0.343 (\text{A-season bycatch}_y) + 0.211 (\text{total bycatch}_{y-1})$$

$$\text{Total AEQ}_y = 5,392 + 0.495 (\text{A-season bycatch}_y) + 0.431 (\text{total bycatch}_{y-1})$$

The amount of variability explained by the independent variables (years 1994-2007) exceeded 96% (each variable partial $P < 0.001$, $n = 14$). The models predicted that 33,236 additional Chinook salmon would have returned to western Alaska in 2008 if they had not been captured in the pollock fishery. An estimated 65,540 additional Chinook salmon would have returned to all regions combined in 2008 (i.e., Pacific Northwest, Gulf of Alaska, and other regions). These estimates should be revised when AEQ mortality by year of adult return are developed for 2008 using the modeling approach that was used for years 1994-2007 (NPFMC 2008).

Chinook Bycatch Relative to Terminal Area Harvests and Runs

Stock-specific AEQ mortality values were compared with terminal area harvests and runs in order to approximate the effect of Chinook bycatch on fish returning to western Alaska. AEQ mortality, total catch, and total abundance estimates were used to calculate the percentage of total catch (inriver and AEQ mortality) and total run (inriver and AEQ mortality) represented by the AEQ mortality estimates for western Alaska (total) and each region of western Alaska. The total harvest rate (% of total run harvested by all fisheries including the pollock fishery) was calculated.

Details about the statistics used for each region are described below. The run size values in each area represent recent estimates of total Chinook salmon abundance provided by ADFG. These

values exceed the minimum abundance estimates presented by Myers et al. (2004), who did not attempt to expand monitored escapement counts to all Chinook salmon rivers. In a few years, spawning escapement estimates were not available, therefore harvest rate was predicted from the regression of harvest rate on Log_e Catch and this value was used to calculate escapement. Values calculated in this manner were italicized in the tables. Values during recent years are preliminary.

Foregone harvests and escapements of Chinook salmon caused by the pollock fishery were estimated. These estimates assumed that the harvest rate (percentage of total run taken by salmon fishermen) would not have changed from the observed harvest rate. This assumption appears to be reasonable because, as discussed below, the percentage of total abundance taken by the pollock fishery was typically low, indicating that it was unlikely that fisheries management and inriver fishing effort would have significantly changed if these foregone fish had returned to western Alaska.

Yukon Catch and escapement data for Alaska and Canada were obtained from Hayes et al. (2006), JTC (2008), ADFG (2008), and D. Evenson (ADFG, pers. comm.). Two estimates of total abundance of Chinook salmon in the Yukon watershed were utilized. The “sonar-based” estimates were obtained from Table 5-9 in NPFMC (2008). Sonar-based run size included harvests and escapement in the mainstem and tributaries downstream from the Pilot Station sonar. Relatively small harvests in adjacent coastal villages were added to the Pilot Station values (JTC 2008). Total abundance estimates were not available in 1994 and 1996, therefore the linear regression of harvest rate on Log_e Catch was developed for years when data were available. These regression equations were used to approximate total runs in 1994 and 1996. These regressions excluded year 2000 when the observed abundance estimate seemed to be unreasonably low (Appendix Fig. 1; see Table 5 and discussion below).

The second method for estimating total Yukon Chinook salmon by ADFG was based on radio-telemetry mark-recapture (MR) studies during 2000, 2002, 2003, and 2004 (Spencer et al. 2002, 2005, 2006, 2007, 2009). Abundance was also calculated in 2001, but the 2001 estimate appeared to be biased high in response to a different sampling approach that year (T. Spencer, ADFG, pers. comm.; Spencer et al. 2009). A linear regression relationship between the MR and sonar-based total abundance estimates was used to extend the MR-based estimates back to 1994 (Fig. 1).

Nearly 50% of the Chinook salmon entering the Yukon River are destined to habitats in Canada. Recent sampling indicated that the Canadian mark-recapture estimates were biased low. The Joint Technical Committee (JTC 2008) recommended adoption of the Eagle sonar counts, which began in 2005 (Hayes et al. 2006), as the more accurate count of Chinook salmon entering Canada. The Eagle sonar counts were used by the JTC to revise spawning escapements of Chinook salmon entering the mainstem Yukon river in Canada back to 1994 and earlier. These estimates were obtained from the recently revised brood table for Canada-bound salmon (D. Evenson, ADFG, pers. comm.).

Harvests of Canada-bound Chinook salmon in Alaska and Canada were calculated by re-arranging the brood table for Canada-bound salmon by year of return rather than by brood year

(D. Evenson, ADFG, pers. comm.). Harvest of Chinook salmon returning to Alaska streams was calculated as the difference between total harvest (utilization) in the Yukon River (plus coastal villages) and the harvest of Canadian-bound fish. Total spawning escapement in the entire Yukon River was calculated from the difference in total abundance (based on sonar or radio-tag approaches) minus total catch reported by JTC (2008) and ADFG (2008, D. Evenson, pers. comm.). Escapement of Chinook salmon in Alaska streams was calculated as the difference between total escapement in the Yukon drainage and the estimated spawning escapement in Canada (based on Eagle sonar). Harvests in Alaska and Canada were reported by the JTC (2008) and ADFG (2008, D. Evenson, pers. comm.).

It is noteworthy that the combined use of Pilot Station abundance estimates and the newly revised Canadian spawner estimates produced unreasonably low escapements in Alaska streams in some years (e.g., 1998, 2000, 2001). In these years, observed spawner counts in the five regularly monitored rivers in Alaska were much higher than indicated by the approach described above, indicating that the Pilot Station sonar estimates of total abundance were too low in some years. It is noteworthy that according to ADFG the "Pilot Station project is thought to underestimate abundance of Chinook salmon" (Pfisterer 2002 *in* Spencer et al. 2009). Therefore, Alaska-origin salmon values for years 1998, 2000, and 2001 were shown in Table 5 (below) but they were excluded from calculations of average values and from figures.

Kuskokwim Preliminary estimates of total abundance and escapement of Chinook salmon returning to the Kuskokwim River were obtained from D. Molyneaux (ADFG, pers. comm.), who has a research project with B. Bue (formerly with ADFG) to reconstruct total Chinook salmon abundance in the Kuskokwim River since 1981. A report on these new estimates should be available by spring 2009. Earlier values from this effort were presented by NPFMC (2008) but those values were approximately 20% less than the current estimates. The study by Molyneaux and Bue indicates that Kuskokwim River Chinook salmon abundance was greater than previously assumed. The Kuskokwim area statistics presented here include Molyneaux's Kuskokwim River estimates and values from District 4 and District 5, e.g., Brannian and Molyneaux 2006, Molyneaux (pers. comm.). Together, these data represent Chinook salmon runs to the Kuskokwim Area.

Bristol Bay Catch, escapement, and abundance of Chinook salmon returning to the Nushagak and Togiak districts of Bristol Bay were obtained from NPFMC (2008). Values for 2008 did not include subsistence and sport harvests (ADFG 2008b). Escapements of Chinook salmon into Togiak River in 2003, and 2006-2008 were estimated from the relationship between harvest rate and Log_e Catch because escapement counts were considered incomplete in those years.

Bristol Bay values did not include the smaller harvests and escapements of Bristol Bay Chinook salmon in Naknek, Kvichak, Alagnak, Ugashik, and Egegik areas. Genetic analyses indicated Naknek and Egegik area Chinook salmon are related to the Nushagak and Togiak stocks, but other Bristol Bay stocks have not been examined and reported. Total escapement of Chinook salmon into the eastside watersheds are not monitored each year. Also, the origin of Chinook salmon captured in the Naknek/Kvichak District has not been identified. Chinook salmon data for eastside stocks could be added to the calculations after additional genetic analyses have been conducted.

Norton Sound Total abundance of Chinook salmon returning to the Unalakleet River, the major Chinook salmon stock in Norton Sound, were obtained from Menard and Kent (2008). These values include the ADFG estimate for the unmonitored portion of the Unalakleet River. Escapement to five other rivers and catch in Norton Sound districts (outside the Unalakleet District) were included in the totals (Menard and Kent 2008; Table 5-4 of NPFMC 2008). Escapement totals include most but not all Norton Sound streams that produce Chinook salmon.

Results and Discussion

Western Alaska (all stocks)

The percentage of annual western Alaska Chinook salmon runs captured in the pollock fishery (based on AEQ mortality estimates) was relatively constant from 1994 through 2004, averaging $2.0 \pm 0.4\%$ (SD) per year (Fig. 2, Table 3). The percentage of the run taken by the pollock fishery increased from 2.7% in 2005 to a maximum of 6.3% in 2007. Except for 2005-2007, the percentage of the Chinook run taken in the pollock fishery was relatively constant regardless of run size of Chinook salmon in western Alaska.

AEQ mortality of western Alaska Chinook salmon was positively correlated with abundance of Chinook salmon returning to western Alaska during 1994-2004 (Fig. 3). Approximately 55% of the variability in bycatch was explained by abundance of western Alaska Chinook salmon. Thus, except for 2005-2007, greater bycatch was associated with greater Chinook salmon run size. This type of a relationship is analogous to a Type I predator response to prey (Hollings 1959), and it is less controlling of the Chinook population compared with depensatory mortality in which percentage mortality increases at lower abundances of Chinook salmon. Identification of factors contributing the higher than expected bycatch in 2005-2007 is important to the ability to minimize bycatch.

Although the AEQ mortality represents a large number of Chinook salmon each year (range: 9,697 to 45,682 western Alaska salmon), it is a relatively small percentage (less than 6.4%) of the abundance of adult Chinook salmon returning to western Alaska (avg. 818,000; range: 393,000 to 1,100,000 fish). This observation is important because it implies that the pollock fishery is not responsible for the wide swings in Chinook salmon abundance returning to western Alaska during the past 15 or more years. For example, the total abundance of Chinook salmon returning to western Alaska in 2000 was the lowest run since 1994 (393,000 salmon) and the AEQ mortality of western Alaska Chinook salmon was also the lowest (9,697 salmon). Total abundance of Chinook salmon returning to western Alaska was low in 2008, but subsistence harvests and spawning escapements of Chinook salmon have yet to be reported in all western Alaska areas.

The percentage of total harvests of western Alaska Chinook salmon taken in the pollock fishery increased over time from approximately 3.7% during 1994-1998 to 5.6% during 1999-2004, and to as much as 14.3% in 2007 (Fig. 2, Table 3). The percentage of total harvests taken in the pollock fishery increased over time because greater restrictions (primarily commercial fisheries)

have been placed on the terminal area fisheries since the late 1990s when Chinook abundance declined.

The influence of the pollock fishery on subsistence harvests and escapement goals in each region of western Alaska is discussed below. It is worthwhile to note that the accuracy of stock-specific bycatch estimates declines as one attempts to examine smaller components of the Chinook salmon runs in western Alaska because these estimates require an additional level of estimation. Nevertheless, it is worthwhile to examine the effect of bycatch on specific stocks in order to evaluate whether bycatch effects might be relatively great for some stocks or less for others.

Worse Case Scenario Genetic stock identification data were not available prior to 2005, therefore a worse case scenario was examined in which 100% of the bycatch was assumed to have originated in western Alaska. During 1994-2004, total AEQ bycatch represented $3.5 \pm 0.6\%$ (SD) of the total abundance of Chinook salmon returning to western Alaska. During 2005-2007, a period when bycatch increased, total AEQ bycatch represented $7.1 \pm 3.0\%$ (SD), on average, of the total abundance of Chinook salmon returning to western Alaska. Thus, bycatch levels were not sufficiently high to cause the observed wide swings in Chinook salmon abundance during the past 15 years even if one incorrectly assumes all Chinook salmon captured in the pollock fishery were destined for western Alaska.

Yukon River (all stocks)

The percentage of Yukon Chinook salmon runs captured in the pollock fishery was relatively constant from 1994 through 2004, averaging $2.2 \pm 0.5\%$ when abundance was based on the mark-recapture approach (Fig. 4, Table 4), or $3.1 \pm 0.9\%$ when abundance was based on Pilot Station sonar (Fig. 5, Table 5). The percentage of the run taken in the pollock fishery increased from 3.6-5.0% in 2005 (depending on abundance methodology) to a maximum of 6.6-9.3% in 2007. The percentage of the 2008 Chinook run taken in the pollock fishery was approximately 5.6-8.2%, owing to the relatively large bycatch during the 2007 pollock fishery. Bycatch in the 2008 pollock fishery was low (20,273 Chinook salmon from all stocks; <http://www.fakr.noaa.gov/sustainablefisheries/bycatch/default.htm>).

The percentage of total harvests of Yukon Chinook salmon taken in the pollock fishery increased over time from approximately 4.0% during 1994-1999 to 6.6% during 2000-2004, and to as much as 21% in 2008 (Fig. 4, Table 4). During 2008, direct commercial fishing on Chinook salmon was not allowed and subsistence fishing was restricted, leading to relatively low inriver harvests. Therefore, the percentage of the total harvest taken by the pollock fishery was relatively high in 2008.

Total abundance of Chinook salmon returning to the Yukon River during 1994-2008 ranged from a minimum run of 114,000 (MR estimate) or 68,000 salmon (sonar estimate) in 2000 to a maximum run of 380,000 (MR estimate) or 333,000 salmon (sonar estimate) in 2003 (Tables 4 and 5). The estimated AEQ mortality of total Yukon Chinook salmon during these years was approximately 3,792 fish in 2000 and 8,196 fish in 2003. The AEQ mortality estimates are smaller than the error associated with abundance estimates provided by sonar versus radio tag mark-recapture studies. In other words, although the AEQ mortality estimates are actual fish that

would have returned to the Yukon River, their presence would not have changed the total abundance estimates to the extent that harvest managers would have altered decisions during the course of the fishing season.

Subsistence harvests in the Yukon watershed (Alaska and Canada) averaged approximately 58,274 Chinook salmon or 54% of the total Chinook salmon harvest from 1994 to 2007 (Table 6). Commercial harvests varied considerably from year to year depending on total abundance of Chinook salmon.

If Chinook salmon had not been captured in the pollock fishery, it is reasonable to assume that these additional fish would have been harvested at the same rate as fish that actually returned to the river each year. Based on this assumption¹, total harvests of Chinook salmon in the Yukon River (all fisheries) would have increased by approximately 3% (3,762 fish per year), on average, or up to 7,710 fish in 2007 (Table 6). Likewise, spawning escapement would have increased 3% (4,405 fish per year), on average, or up to 8% in 2007. Attainment of escapement goals is discussed below.

Yukon River (Alaska stocks)

During 1994-2008, Yukon Chinook salmon returning to spawning areas in Alaska represented approximately $59 \pm 8\%$ of the total run based on the MR approach, or $48 \pm 8\%$ of the total run based on Pilot Station Sonar (values in 1998, 2000, 2001 excluded because values were unreasonably low for Alaska). However, the Alaska stocks represented 97% of the total Yukon AEQ mortality in the pollock fishery, based largely on genetic sampling during 2005-2007. The genetic data indicate that the Alaska component of the Yukon run is captured at a much higher rate than the Canadian component of the run, suggesting that the upper Yukon stock may have a unique distribution in the ocean.

The percentage of Yukon Chinook salmon runs (Alaska stocks) captured in the pollock fishery was relatively constant from 1994 through 2004, averaging 3.8-5.5% depending on the abundance methodology (Figs. 5 and 6, Table 4 and 5). The percentage of the run taken in the pollock fishery increased from 5.8-11.1% in 2005 to a maximum of 9.1-15.6% in 2007 (depending on abundance methodology).

The percentage of harvests of Yukon Chinook salmon (Alaska stocks) taken in the pollock fishery increased over time from approximately 8.8% during 1994-1999 to 13.3% during 2000-2004, and to as much as 28-30% in 2007 and 2008. No directed commercial fishing was allowed in 2008 (4,641 fish taken incidentally in other salmon fisheries) and subsistence fishing was restricted (ADFG 2008) (Fig. 4, Table 4). The 2008 values are preliminary.

Subsistence harvests in the Alaskan Yukon have been relatively stable, averaging $51,200 \pm 5,800$ fish from 1994-2007 (Hayes et al. 2006, JTC 2008). An estimated 1,479 households participated in subsistence harvests of salmon during 2005 (Busher et al. 2007). From 1993-2002, a reported 2,986 household subsistence permits were issued and 1,333 permits were returned to ADFG (Fall

¹ For these calculations, harvest rate was based on the mean rate calculated from the two estimates of Chinook salmon abundance, i.e., sonar and mark-recapture.

et al. 2003). Subsistence harvests have only been restricted in 2000 and 2008 when run size was unusually low. In 2001, the Alaska Board of fisheries identified the “amount necessary for subsistence” (ANS) in the Yukon River as 45,500 to 66,704 Chinook salmon (Hayes et al. 2006). Based on this range, subsistence needs were met in all years since the late 1980s except for 2000, 2002, and 2008. The reason for low subsistence harvests in 2002 (43,742 fish) is unknown (Hayes et al. 2006).

The ability of subsistence fishermen to capture Chinook salmon is dependent, in part, on the abundance of Chinook salmon in the river. The above analyses show that bycatch in the pollock fishery did not cause the wide fluctuations in Chinook salmon returning to the Yukon River. In most years, approximately 2-4% of the run to the Yukon (Alaska stocks) was taken by the pollock fishery, and the maximum amount was approximately 9-16% in 2007. Changes in the ability of subsistence fishermen to capture Chinook salmon likely reflect the relative magnitude (% of run) in which Chinook abundance was altered. Therefore, in most years, the average increase in effort needed to achieve the desired numbers of Chinook salmon for subsistence is likely small (e.g., < 5%). In 2007, the pollock fishery captured approximately 9-16% of the Alaska run (depending on abundance method), therefore the increase in effort would have been more than in most previous years. However, this potential increase would have been offset to some extent by the interception of Canada-bound Chinook salmon that appears to be minimally influenced by bycatch in the pollock fishery according to recent genetic data (see below). Commercial harvests in the Yukon River would also be a key factor affecting effort by subsistence fishermen to meet their goals because subsistence effort likely increases in years when commercial fishing removes a significant number or proportion of Chinook salmon. However, many commercial fishermen are also subsistence fishermen. Commercial harvests of Chinook salmon in the Yukon River exceeded that of subsistence fishermen until the late 1990s when abundance declined. During 2002-2004, there were 574 active commercial salmon permits per year (all species) in the Alaska portion of the Yukon River (Hayes et al. 2008).

ADFG and the Board of Fisheries has classified Yukon Chinook salmon as a Stock of Yield Concern because it is not producing the harvests that it did during 1989-1997 (see Appendix Figure B2 of JTC (2008)). The decline in harvests (and run size) corresponded with the 1997/98 El Nino event that had a significant influence on the southeastern Bering Sea (Kruse 1998, Hunt et al. 2002). Based on the analyses presented above, it is evident that bycatch in the pollock fishery was not a key factor causing the substantial Chinook decline beginning in 1998.

Alaska Chinook Escapement Goals Escapement goals of Chinook salmon for the seven rivers in Alaska with established goals were achieved during 2002, 2003, 2004, 2005, 2006, and 2007, except for the Nulato River in 2005 when only 553 spawners were counted (goal: 940-1900 fish) (Hayes et al. 2006, JTC 2008). In 2008, high water levels hampered surveys in most tributaries such that counts in all but two tributaries cannot be directly compared with previous escapements or with spawner goals (ADFG 2008). Of the two stocks with reasonable survey conditions in 2008, the Nulato River was 2% below the lower goal and the Gisasa River was 16% above the lower goal. Escapement counts in the other tributaries were below the lower goal, but these counts were low because survey conditions were poor according to ADFG (2008). ADFG (2008) suggested that the lower end of the escapement goals of the Chena and Salcha rivers, the

largest producers of Chinook in the Alaska portion of the Yukon, were met in 2008 even though the total run size was small and high water hampered survey conditions.

If Chinook salmon had not been captured in the pollock fishery, it is likely that they would have been harvested at the same rate as fish that actually entered the Yukon watershed. Based on this assumption, spawning escapements in Alaska would have increased 6%, on average, or up to 14% in 2007 if they had not been captured in the pollock fishery. These estimates were based on average values of Alaska-origin salmon estimated from the radio-tag mark-recapture and Pilot Station sonar approaches.

Yukon River (Canada stocks)

Approximately 41% to 52% of all Chinook salmon entering the Yukon River are destined for Canadian streams, on average (Tables 4 and 5). Many Canada-bound fish are harvested in Alaska and the JTC (2008) has estimated Canada-bound Chinook salmon harvested in Alaska in addition to salmon harvested in Canada.

Genetic analyses have shown that Chinook salmon returning to the Canadian mainstem and tributaries of the Yukon River are genetically distinct from other stocks in the lower river and in western Alaska. According to NPFMC (2008), the AEQ mortality of Chinook salmon that would have returned to Canada averaged approximately 288 fish per year and reached a maximum of 645 fish in 2005 (Table 2). The percentage of the Canada-bound Chinook salmon taken in the pollock fishery was less than 1% each year. AEQ mortality of Chinook salmon as a portion of total catch of Canada-bound Chinook salmon was 2% or less (Tables 4 and 5).

Based on the 2005-2007 genetic data, Canada-bound Chinook salmon are less abundant in the bycatch than expected based on their relative abundance. These initial genetic data suggest these fish may have a unique distribution in the ocean. Additional genetic analyses would be useful to further evaluate this hypothesis.

Canada Chinook Escapement Goal The escapement goal for Chinook salmon returning to Canada via the Yukon mainstem is currently under review by the JTC because recent evidence suggests more salmon have been passing into Canada than previously estimated. Previously, the interim escapement objective was 33,000-43,000 Chinook salmon based on the earlier (lower) spawning estimates (Fig. B15 of JTC 2008). The escapement target for “stabilization and rebuilding” during 1996-2006 (2002: 25,000 fish) was 28,000 Chinook salmon (based on the earlier mark/recapture escapement counts). The spawning objective in 2008, based on Eagle sonar counts, was 45,000 fish. The spawning objectives for the Canadian Yukon have not been consistently met during recent years regardless of escapement methodology.

Based on the genetic data, relatively few Canada-bound Chinook salmon were captured in the pollock fishery. These data suggest that bycatch of Canada-bound Chinook salmon in the pollock fishery has had a relatively small effect on spawning escapements in Canada. For example, the percentage of spawning escapement represented by total AEQ mortality of upper Yukon Chinook salmon was 0.6%, on average (Table 4). The maximum value occurred in 2007 (1.7%). Some of these fish would have been captured in the Yukon River fisheries. The average

increase in escapement would have been 0.3%, assuming harvest rates remained unchanged if the fish had not been captured in the pollock fishery.

Kuskokwim Area

Total abundance of Chinook salmon returning to the Kuskokwim River during 1994-2007 ranged from a minimum run of 192,000 in 2000 to a maximum run of 493,000 in 1994 (Fig. 6, Table 7). The estimated AEQ mortality of Kuskokwim Chinook salmon during these years was approximately 2,465 fish in 2000 and 5,697 fish in 1994. The percentage of Kuskokwim Chinook salmon runs captured in the pollock fishery was relatively constant from 1994 through 2004, averaging $1.2 \pm 0.3\%$ (Fig. 6, Table 7). The percentage of the run taken in the pollock fishery increased from 1.6% in 2005 to a maximum of 3.8% in 2007.

The percentage of total harvests of Kuskokwim Chinook salmon taken in the pollock fishery increased over time from approximately 3.2% during 1994-2001 to 5.2% during 2002-2005, and to as much as 10.7% in 2007 (Fig. 6, Table 7).

Subsistence harvests in the Kuskokwim area averaged approximately 79,845 Chinook salmon or 73% of the total harvest from 1994 to 2007 (Table 6). Approximately 4,339 households occur in 38 communities within the Kuskokwim area but not all of these households rely upon salmon for subsistence (Fall et al. 2003, Whitmore et al. 2008). In 2002, at least 1,696 households (39% of total) were identified as harvesting salmon for subsistence. In recent years, commercial harvests of Kuskokwim River Chinook salmon typically occur as incidental harvests in other directed salmon fisheries. Kuskokwim Chinook salmon were classified as a Stock of Yield Concern but this classification was removed in 2007. Approximately 496 commercial salmon permits were utilized per year (2000 to 2003) to capture all species of salmon in the Kuskokwim area (Whitmore et al. 2008).

If Chinook salmon had not been captured in the pollock fishery, it is reasonable to assume that these additional fish would have been harvested at the same rate as fish that actually returned to the river each year. Based on this assumption, total harvests of Chinook salmon in the Kuskokwim area (all fisheries) would have increased by approximately 2% (1,646 fish per year), on average, or up to 3,916 fish in 2007 (Table 6). Thus, it is possible that each household, on average, might have harvested one additional Chinook salmon per year (assuming 1,696 households) if the fish had not been captured in the pollock fishery. In 2007, each household may have captured 2.3 additional Chinook salmon, on average, if the fish had not been captured in the pollock fishery.

Kuskokwim Area Chinook Escapement Goals The Kuskokwim area has spawning escapement goals for Chinook salmon returning to 14 drainages. Escapement goals have been met in each of these drainages during at least 80% of the past six or more years examined by Molyneaux and Brannian (2006). In 2008, spawning escapement goals were achieved in 8 of 11 monitored tributaries (Linderman and Clark 2008). Goals were not met in three tributaries, in part, because the run appeared to be adequate in the lower river (nearly all inseason subsistence reports were "very good" or "normal") and normal fishing operations were allowed.

If the pollock fishery had not captured Kuskokwim area Chinook salmon, then spawning escapement may have increased approximately 2% (3,663 fish per year), on average, during 1994 to 2007, or up to 4% in 2007, assuming harvest rates remained unchanged (Table 6).

Bristol Bay (Westside stocks)

The percentage of Bristol Bay Chinook salmon runs captured in the pollock fishery was relatively constant from 1994 through 2005, averaging $3.1 \pm 0.8\%$ (Fig. 7, Table 8). The percentage of the run taken in the pollock fishery increased from 4.4% in 2006 to a maximum of 9% in 2007. Values shown for 2008 are biased high because they do not incorporate subsistence and sport harvests, which were not available at the time of this report.

The percentage of total harvests of Bristol Bay Chinook salmon taken in the pollock fishery increased over time from approximately 6.6% during 1994-2005 to 15.9% in 2007 (Fig. 7, Table 8).

Subsistence harvests represent approximately 18% of the total harvests of Chinook salmon (Table 6). Approximately 556 subsistence permits were issued to people living in the westside of Bristol Bay (Nushagak and Togiak) where more than 90% of Chinook salmon were harvested in 2002 (Fall et al. 2003). A total of 1,093 subsistence permits were issued for all of Bristol Bay. Commercial fishing took 72% of the total Chinook salmon harvest, on average, whereas other fisheries (mostly sport) took 10% of the total Chinook harvest in the westside districts. Approximately 2,474 commercial salmon permits per year (drift and set gillnet) were utilized in Bristol Bay to harvest all species of salmon (mostly sockeye salmon) during 1996 to 2005.

Assuming the harvest rate remained unchanged, the foregone harvest of Chinook salmon caused by the pollock fishery was approximately 3,349 fish per year, or approximately 4% of the observed catch (all Westside fisheries). Foregone catch peaked at 8,066 fish in 2007 (10% of total).

Bristol Bay Chinook Escapement Goals Escapement goals for Togiak and Nushagak Chinook salmon have been achieved in each of the last 10 years or more (Baker et al. 2006). Escapement goals for the smaller Chinook runs on the eastside were met in 80% of the past 10 years (Naknek, Alagnak) or 50% of the past 10 years (Egegik, the smallest monitored Chinook stock). If the pollock fishery had not captured Bristol Bay Chinook salmon, then spawning escapement in westside districts may have increased approximately 4% (3,593 fish per year), on average, during 1994 to 2007, or up to 10% in 2007, assuming harvest rates remained unchanged.

Norton Sound District

Norton Sound supports small runs of Chinook salmon compared with the Yukon, Kuskokwim, and Bristol Bay. Stock-specific estimates of Norton Sound Chinook salmon captured in the pollock fishery have not been made. The analysis here assumed that bycatch of Norton Sound Chinook salmon was equivalent to their abundance relative to other western Alaska stocks.

Chinook runs to Norton Sound averaged approximately 12,600 fish per year since 1994 (Table 9). The percentage of Norton Sound Chinook salmon runs captured in the pollock fishery was relatively constant from 1996 through 2004, averaging $2.1 \pm 0.3\%$ (Fig. 8, Table 9). The percentage of the run taken in the pollock fishery increased from 3.9% in 2006 to a maximum of 6.3% in 2007. The run of Chinook salmon to Norton Sound in 2008 was considered to be the smallest run on record (Menard and Scott 2008).

Subsistence harvests represent approximately 74% of the total harvests of Chinook salmon since 1994, but nearly all harvests in recent years are for subsistence (Table 6). In 2002, there were approximately 935 households in the Norton Sound District (Fall et al. 2003). Chinook salmon harvests in the Shaktoolik and Unalakleet subdistricts have been classified as a Stock of Yield Concern since 2004 because they have not been producing sufficient harvests. Approximately 34 commercial salmon fishing permits per year were utilized in Norton Sound District during 2001 to 2005 (all species of salmon; Banducci et al. 2007). Assuming the harvest rate remained unchanged, the foregone harvest of Chinook salmon caused by the pollock fishery was approximately 182 fish per year, or approximately 3% of the observed catch. Foregone catch peaked at approximately 549 fish in 2007 (7% of total).

Norton Sound Chinook Escapement Goals Escapement goals have been developed and evaluated for North River (tributary to Unalakleet River) and Kwiniuk River. The escapement goal in the North River was achieved from 2001-2003 and 2007, but it was not met in 2004-2006 and in 2008. The escapement goal in the Kwiniuk River was met during 2002-2005 but it was not met during 2006-2008. Poor weather has reduced the quality of aerial escapement surveys on the Shaktoolik River, therefore the counts could not be compared with the escapement goal in recent years.

If the pollock fishery had not captured Norton Sound Chinook salmon, then the spawning escapement may have increased by approximately 3% (135 fish per year), on average, during 1994 to 2007, or up to 7% in 2007, assuming harvest rates remained unchanged. Addition of these fish to the escapement fish would have brought the total escapement count closer to the lower end of the escapement goal ranges.

Data Quality Issues

The DEIS and the Preliminary Comment Report (NPFMC 2009) caution readers about their AEQ mortality estimates while also defending the use of the data as the best available data. The Preliminary Comment Report indicates that the DEIS did not directly evaluate effects of bycatch on western Alaska Chinook salmon runs, harvests and escapements for the following reasons:

“Use of total run-size estimates for impact analysis by river system or in aggregate is problematic. As described in sections 5.2 assessment of total run size and escapement by river system is highly variable between systems. Some river systems in the WAK region lack total run or escapement estimates. As such, combining available estimates to determine an “aggregate total run” for WAK is inappropriate due to magnification of errors as well as masking the uncertainties and data limitations associated with individual river system estimates. Use of individual run estimates to compare with bycatch AEQ is also complicated

by the caveats associated with the stock composition estimates. AEQ estimation to river of origin is used to estimate the relative changes under various cap scenarios. These estimates are also uncertain and that uncertainty increases with further extrapolations historically and to finer resolutions. Therefore, judgments with respect to detailed impacts were avoided, especially in cases where it would require interpretations beyond the extent of the data. Finally, impact rates by river system (i.e., explicit comparison of AEQ with run size for runs) would presume analyses on productivity thresholds about river systems that are beyond the scope of this analysis."

As stated in the Introduction of this report, it is important to put the estimates of bycatch of Chinook salmon in perspective with total abundance, catch and escapement of Chinook salmon returning to western Alaska. The logic for this statement is simple. Greater urgency and greater restrictions may be warranted if bycatch represents a high fraction of the total abundance (e.g., 50%) versus a small fraction (e.g., 1% of total). Although every salmon is important to the salmon population or to the people in western Alaska, an analysis of this type provides important information for policy decision-makers and to the user groups in western Alaska. This type of analysis provides the basis for determining whether people in western Alaska can expect large, medium, or small increases in abundance or harvest when bycatch is reduced in the pollock fishery. Data quality and quantity are common issues in fishery management and they need to be described and discussed to evaluate whether bias and/or unreasonably high uncertainty in the estimates will lead to erroneous decisions.

The aforementioned quote from the Preliminary Comment Report implies that abundance estimates of western Alaska Chinook salmon are not adequate for comparison with AEQ mortality estimates either at the watershed or aggregate (western Alaska) levels. However, ADFG has made significant efforts in recent years to improve monitoring of spawning escapements and to improve estimates of total Chinook salmon runs in western Alaska. Total abundance estimates are now available for most major stocks in western Alaska (see revised DEIS Table 5-3). For example, the Bristol Bay Chinook salmon estimates used in this report include Nushagak and Togiak Chinook salmon catch and escapement data. These data have been used by ADFG to develop sustainable escapement goals for each stock (Baker et al. 2006). For the Kuskokwim River, ADFG recently completed a multi-year study to estimate total annual runs of Chinook salmon returning to the river since the early 1980s (D. Molyneaux, ADFG, pers. comm.). Abundance values for Districts 4 and 5 of the Kuskokwim Area may slightly underestimate total abundance because some fish are not enumerated by weirs and aerial surveys. Total abundance of Chinook salmon in the Yukon River is difficult to estimate, but ADFG has developed two independent estimates of total abundance. Abundance has been estimated by ADFG using Pilot Station sonar (DEIS Table 5-9) and several years of radio-tag mark-recapture investigations (Spencer et al. 2009). The two independent estimates were correlated (Fig. 1), suggesting that both estimates tracked the abundance of Yukon Chinook salmon. ADFG has noted that Pilot Station sonar likely underestimates total abundance of Chinook salmon (Spencer et al. 2009). For the upper Yukon River, the JTC has developed and recently updated a brood table (total age-specific return from parent spawning year) for Canada-bound Chinook salmon (D. Evenson, ADFG, pers. comm.). The data used in this report were based on the recently revised values provided by ADFG. The revised brood table will likely be used to revise escapement goals for Chinook salmon passing into Canada. In Norton Sound, Chinook salmon

runs are small compared with the other large watersheds in western Alaska. Escapement of Chinook salmon are not monitored in all watersheds of Norton Sound and weather can inhibit escapement counts in some years. But ADFG does monitor escapement in the major tributaries (e.g., the North River) and ADFG has developed expansion factors to estimate total abundance escaping to the major Chinook watershed in Norton Sound, e.g., Unalakleet River (Menard and Kent 2008).

ADFG has spent considerable effort and resources to estimate abundance of Chinook salmon returning to watersheds in western Alaska. The data are available for use in the impact analysis. The potential bias in using these abundance estimates for comparison with AEQ mortality is that total abundance may be underestimated in some areas. This means that the percentage of total salmon run captured in the pollock fishery is biased high. However, this bias is likely small because most large runs have been estimated by ADFG.

The aforementioned quote from Preliminary Comment Report implies that it is not proper to compare the aggregate AEQ mortality estimates with aggregate abundance estimates for western Alaska. This statement makes sense if either the AEQ mortality estimates or the abundance estimates are biased. However, the DEIS has defended the genetic-based AEQ mortality estimates for western Alaska, and while noting that stock composition estimates may change over time, they also estimated AEQ mortality estimates for western Alaska Chinook salmon each year since 1994 (see DEIS Table 3-14). The DEIS notes that the percentage of western Alaska versus other stocks of Chinook salmon in the pollock fishery was similar for the genetic (54% during 2005-2007) and scale studies during 1997-1999 (56%) and 1979-1982 (60%) (DEIS Table 3-12). Thus, unless the NPFMC believes that the aggregate AEQ values are biased, it is logical and reasonable to directly compare the aggregate AEQ values with the western Alaska abundance estimates in order to estimate the percentage of the Chinook salmon runs that were captured by the pollock fishery. This type of analysis can and should be updated with new genetic stock composition data as it becomes available.

The aforementioned quote from Preliminary Comment Report also implies that its AEQ mortality estimates for each watershed should not be compared with total runs to each major watershed in western Alaska. The DEIS identified the limitations of identifying AEQ mortality at the watershed level, yet it provides AEQ mortality at the watershed level in Table 5-46 and Tables 5-53 to 5-59. Accuracy and precision of the estimates becomes less at this higher level of resolution, but this is to be expected. The key question is whether the estimates are biased or not. If the aggregate AEQ mortality for western Alaska is assumed to be reasonably correct, as the DEIS states, then bias or error at the watershed level simply means that some AEQ mortality should be shifted among the stock groups. For example, if the AEQ mortality estimate for the Upper Yukon River is actually higher than reported, then AEQ mortality estimates for other stocks would be accordingly reduced. One reason for comparing AEQ mortality with abundance at the watershed level is to identify stocks that may be captured at relatively high or low levels in the pollock fishery. The data used in this report utilizes the best available information in order to provide this important information. This type of analysis can and should be updated when new genetic stock composition data become available.

The DEIS states that the accuracy of stock composition declined prior to 2005 because genetic data are not yet available for that period. Nevertheless, the DEIS provides estimates of AEQ mortality by region or stock back to 1994 while assuming stock composition remained unchanged (DEIS Table 3-14). Stock composition in the pollock fishery is expected to change somewhat from year-to-year depending on relative abundance of the stocks and distribution at sea. Because stock composition estimates are less reliable for this earlier period, this report also examined the effect of total AEQ mortality on runs of Chinook salmon to western Alaska assuming that 100% of the bycatch was destined for western Alaska. This analysis purposely overestimated the impact of bycatch on western Alaska Chinook salmon runs but it provides a reference for evaluating impacts on western Alaska Chinook salmon runs in response to the pollock fishery.

This report provides estimates of additional harvest and spawning escapement had the bycatch of Chinook salmon in the pollock fishery been nil. This type of analysis is important because policy decision-makers and people of western Alaska need to know the degree to which the pollock fishery has affected harvests and escapements even though each fish is deemed important. This analysis was based on the simple assumption that harvest rate (proportion of run taken by in-river fisheries) would have remained unchanged if bycatch was nil. This assumption is reasonable because in most years the percentage of the run captured in the pollock fishery was not sufficiently large such that ADFG would have altered fisheries management if all of the captured Chinook salmon had returned to the watershed. It is not reasonable to assume that all of the Chinook salmon would have been harvested in-river or all would have escaped to the spawning grounds, if they had not been captured in the pollock fishery. During years when directed fisheries on Chinook salmon are closed, some Chinook salmon are harvested incidentally in fisheries that target other salmon species. The harvest rate values reflect incidental harvests. The assumption of unchanged harvest rate is reasonable, parsimonious, and it provides important information for policy makers and people in western Alaska. This type of quantitative analysis is more informative than simply stating that some fish would have been captured and others would have spawned. These calculations are relatively straightforward and the analysis can be updated when new genetic stock composition data become available. The analysis of foregone harvests and escapement did not attempt to account for future benefits of additional fish on the spawning grounds.

In summary, it is recognized that each salmon returning to rivers in western Alaska is important for the salmon populations and for the people that utilize salmon. The primary objective of this report was to use the best available information in order to evaluate effects of the pollock fishery on Chinook salmon runs, harvests, and spawning escapements. The DEIS and ADFG have provided data that can be used to estimate the increase in Chinook salmon runs, harvests, and escapements if the pollock fishery had not captured the salmon. These data, whose quality has been discussed here and in the DEIS, were utilized in this report. Analyses of this type have been previously conducted using earlier datasets (e.g., Witherell et al. 2002, Myers et al. 2004, Sandone 2007). New analyses should be conducted when updated information becomes available.

References

- ADFG. 2008a. 2008 preliminary Yukon River summer season summary. October 20, 2008. Alaska Department of Fish and Game, Anchorage, AK.
- ADFG. 2008b. 2008 Bristol Bay season summary. September 22, 2008. Alaska Department of Fish and Game, Anchorage, AK.
- Baker, T. T., L. F. Fair, R. A. Clark, and J. J. Hasbrouck. 2006. Review of salmon escapement goals in Bristol Bay, Alaska, 2006. Alaska Department of Fish and Game, Fishery Manuscript No. 06-05, Anchorage.
- Banducci, A., T. Kohler, J. Soong, and J. Menard. 2007. 2005 annual management report Norton Sound, Port Clarence, and Kotzebue. Alaska Department of Fish and Game, Fishery Management Report No. 07-32, Anchorage.
- Busher, W. H., T. Hamazaki, and A. M. Marsh. 2007. Subsistence and personal use salmon harvests in the Alaskan portion of the Yukon River Drainage, 2005. Alaska Department of Fish and Game, Fishery Data Series No. 07-52, Anchorage.
- Fall, J.A., C.L. Brown, D. Caylor, S. Georgette, T. Krauthoefer, and A.W. Paige. 2003. Alaska subsistence fisheries 2002 annual report. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 315. Juneau.
- Hayes, S. J., D. F. Evenson, and G. J. Sandone. 2006. Yukon River Chinook salmon stock status and action plan; a report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Special Publication No. 06-38, Anchorage. Report revised 2/2/2007.
- Hayes, S. J., F. J. Bue, B. M. Borba, K. R. Boeck, H. C. Carroll, L. Boeck, E. J. Newland, K. J. Clark, and W. H. Busher. 2008. Annual management report Yukon and Northern areas 2002-2004. Alaska Department of Fish and Game, Fishery Management Report No. 08-36, Anchorage.
- Hunt, G.L., P. Stabeno, G. Walters, E. Sinclair, R.D. Brodeur, J.M. Napp, and N.A. Bond. 2002. Climate change and control of the southeastern Bering Sea pelagic ecosystem. Deep-Sea Research Part II 49:5821-5853.
- Hollings, C.S. 1959. The components of predation as revealed by a study of small mammal predation on the European pine sawfly. Canadian Entomologist 91:293-320.
- JTC (Joint Technical Committee of the Yukon River US/Canada Panel). 2008. Summary and 2008 season outlook. Alaska Department of Fish and Fisheries, Regional Information Report No. 3A08-01, Anchorage.
- Kruse, G.H. 1998. Salmon run failures in 1997-1998: a link to anomalous ocean conditions? Alaska Fishery Research Bulletin 5:55-63.

Linderman, J. and K. Clark. 2008. Preliminary 2008 Kuskokwim area salmon fishery summary. Alaska Dept. Fish and Game, Bethel, AK. September 24, 2008.

Menard J. and S. Kent. 2008. 2008 Norton Sound salmon season summary. Alaska Dept. Fish and Game, Nome, AK. November 4, 2008.

Molyneaux, D.M., and L.K. Brannian. 2006. Review of escapement and abundance information for Kuskokwim area salmon stocks. Alaska Department of Fish and Game, Fishery Manuscript No. 06-08, Anchorage.

Myers, K.W., R.V. Walker, J.L. Armstrong, and N.D. Davis. 2004. Estimates of the bycatch of Yukon River chinook salmon in U.S. groundfish fisheries in the Eastern Bering Sea, 1997-1999. Final Report to the Yukon River Drainage Fisheries Association, Contr. No. 04-001. SAFS-UW-0312, School of Aquat. Fish. Sci., University of Washington, Seattle. 59 p.

North Pacific Fishery Management Council (NPFMC). 2008. Bering Sea Chinook salmon bycatch management: draft environmental impact statement/regulatory impact review/initial regulatory flexibility analysis. December 2008.

North Pacific Fishery Management Council (NPFMC). 2009. Preliminary comment analysis report for the Bering Sea Chinook salmon bycatch management: draft environmental impact statement/regulatory impact review/initial regulatory flexibility analysis. March 2009.

Pfisterer, C.T. 2002. Estimation of Yukon River salmon passage in 2001 using hydroacoustic methodologies. Alaska Department of Fish and Game, Division of Commercial Fisheries Regional Information Report 3A02-24, Anchorage.

Sandone, G. 2007. AYK & Bristol Bay Chinook salmon stock status and relation to BSAI Chinook bycatch. ADFG PowerPoint presentation to the Yukon Panel, December 2007.

Spencer, T. R., R. S. Chapell, T. Hamazaki, and J. H. Eiler. 2003. Estimation of abundance and distribution of Chinook salmon in the Yukon River using mark-recapture and radio telemetry in 2000 and 2001. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A02-37, Anchorage.

Spencer, T. R., T. Hamazaki, and J. H. Eiler. 2005. Mark-recapture abundance estimates for Yukon River Chinook salmon in 2002. Alaska Department of Fish and Game, Fishery Data Series No. 05-75, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fds05-75.pdf>

Spencer, T. R., T. Hamazaki, and J. H. Eiler. 2006. Mark-recapture abundance estimates for Yukon River Chinook salmon in 2003. Alaska Department of Fish and Game, Fishery Data Series No. 06-31, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fds06-31.pdf>

Spencer, T. R., T. Hamazaki, and J. H. Eiler. 2007. Mark-recapture abundance estimates for Yukon River Chinook salmon in 2004. Alaska Department of Fish and Game, Fishery Data Series No. 07-30, Anchorage.

Spencer, T.R., J.H. Eiler, and T. Hamazaki. 2009. Mark-Recapture abundance estimates for Yukon River Chinook Salmon in 2000-2004. Alaska Department of Fish and Game, Fishery Data Series No. YY-XX, Anchorage. Draft Report (March 2009).

Whitmore, C., M. Martz, J. C. Linderman Jr., R. L. Fisher, and D. G. Bue. 2008. Annual management report for the subsistence and commercial fisheries of the Kuskokwim area, 2004. Alaska Department of Fish and Game, Fisheries Management Report No. 08-25, Anchorage.

Witherell, D.W., D. Ackley and C. Coon. 2002. An overview of salmon bycatch in Alaska groundfish fisheries. Alaska Fishery Research Bulletin 1:53-6.

Table 1. Estimated AEQ mortality of Chinook salmon in the pollock fishery by year of return to natal watersheds. The upper Yukon stock represents salmon in Canada, whereas the middle Yukon stock was included in the Alaska portion of the Yukon total. The average percent contribution of each stock to the total AEQ bycatch is shown. See methods for estimating values in 2008. Source: Table 3-14 of NPFMC (2008).

Year of return	BC, WA, OR, and CA	Coastal W. AK	Cook Inlet	Middle Yukon	N. Alaska Peninsula	Other	Russia	Upper Yukon	Transboundary SEAK	Total
1994	5,198	21,518	242	201	4,898	714	147	194	198	33,310
1995	5,635	14,084	415	104	3,302	532	112	96	279	24,559
1996	6,974	17,025	520	154	3,939	632	142	137	364	29,886
1997	11,376	16,895	1,276	413	3,364	715	277	343	783	35,442
1998	10,967	14,218	1,110	103	3,382	696	165	87	711	31,439
1999	6,429	15,099	573	297	3,193	561	188	245	387	26,973
2000	2,815	9,383	219	167	2,106	330	99	147	152	15,418
2001	3,694	10,473	349	260	2,141	375	149	221	238	17,899
2002	6,236	14,516	509	106	3,467	609	117	96	341	25,997
2003	5,743	20,065	398	356	4,424	679	207	311	292	32,475
2004	10,164	21,904	1,018	466	4,592	859	305	393	685	40,386
2005	11,169	25,462	1,203	767	5,107	923	439	645	772	46,487
2006	12,719	36,337	892	363	8,355	1,348	290	339	633	61,275
2007	18,079	44,380	1,597	694	9,743	1,688	485	608	1,069	78,344
2008		33,236		524				454		65,540
Avg. %	23%	56%	2%	1%	12%	2%	1%	1%	1%	

Table 2. Approximate AEQ mortality of Chinook salmon in the pollock fishery by year of return to each western Alaska watershed. The values are based on those presented in Table 1. The average percent contribution of each stock to the total AEQ bycatch is shown for years 1996-2007. See methods for description of the values for Norton Sound and for all 2008 values. The approach utilized scale stock identification data presented in NPFMC (2008).

Year of return	Yukon (AK)	Yukon (Canada)	Kuskokwim	Bristol Bay	Norton Sound	Total Western AK
1994	8,571	194	5,697	7,451		21,913
1995	5,618	96	3,714	4,857		14,284
1996	6,649	137	4,411	5,768	350	17,316
1997	6,473	343	4,430	5,794	611	17,651
1998	5,518	87	3,643	4,764	396	14,408
1999	5,867	245	3,973	5,195	361	15,641
2000	3,645	147	2,465	3,223	216	9,697
2001	4,086	221	2,799	3,661	188	10,954
2002	5,684	96	3,757	4,913	268	14,718
2003	7,885	311	5,327	6,966	243	20,732
2004	8,634	393	5,867	7,673	197	22,763
2005	10,028	645	6,937	9,072	192	26,874
2006	14,378	339	9,566	12,510	246	37,039
2007	17,446	608	11,734	15,346	549	45,682
2008	13,114	454	8,819	11,533	295	34,215
Avg. %	38%	1%	26%	33%	1.7%	

Table 3. Western Alaska Chinook salmon statistics that incorporate AEQ mortality estimates from the Bering Sea pollock fishery. Harvest rate includes AEQ mortality.

Year	Terminal Catch	Escapement	Terminal Run	AEQ Mortality	AEQ Mortality % of total catch	AEQ Mortality % of total run	Harvest Rate
1994	478,993	624,340	1,103,333	21,913	4.4%	1.9%	45%
1995	502,911	539,362	1,042,273	14,284	2.8%	1.4%	49%
1996	383,150	448,535	831,685	17,316	4.3%	2.0%	47%
1997	441,049	566,768	1,007,817	17,651	3.8%	1.7%	45%
1998	405,300	424,710	830,010	14,408	3.4%	1.7%	50%
1999	289,186	332,859	622,045	15,641	5.1%	2.5%	48%
2000	188,727	204,721	393,448	9,697	4.9%	2.4%	49%
2001	222,211	398,061	620,272	10,954	4.7%	1.7%	37%
2002	226,276	411,875	638,151	14,718	6.1%	2.3%	37%
2003	277,474	555,953	833,427	20,732	7.0%	2.4%	35%
2004	382,002	630,381	1,012,383	22,763	5.6%	2.2%	39%
2005	304,521	647,358	951,879	26,874	8.1%	2.7%	34%
2006	325,538	578,485	904,024	37,039	10.2%	3.9%	39%
2007	274,786	399,044	673,831	45,682	14.3%	6.3%	45%
2008				34,215			

Table 4. Yukon River Chinook salmon statistics that incorporate AEQ mortality estimates from the Bering Sea pollock fishery. Total abundance statistics were based on the radio telemetry mark-recapture study (see methods). Underlined values indicate preliminary or estimated values. Canada-origin estimates are from the newly revised brood table that utilized Eagle sonar counts (D. Evenson, ADFG, pers. comm.).

Year	Terminal Catch	Escapement	Terminal Run	AEQ Mortality	AEQ Mortality % of total catch	AEQ Mortality % of total run	Harvest Rate
Total Yukon Chinook salmon							
1994	192,852	<u>183,222</u>	<u>376,074</u>	8,765	4.3%	2.3%	52%
1995	200,632	157,308	357,940	5,714	2.8%	1.6%	57%
1996	160,539	<u>178,151</u>	<u>338,690</u>	6,786	4.1%	2.0%	48%
1997	192,292	179,352	371,644	6,816	3.4%	1.8%	53%
1998	105,697	117,578	223,275	5,605	5.0%	2.4%	49%
1999	137,895	163,474	301,369	6,112	4.2%	2.0%	47%
2000	50,749	62,959	113,708	3,792	7.0%	3.2%	46%
2001	66,759	127,293	194,052	4,307	6.1%	2.2%	36%
2002	78,267	165,017	243,284	5,780	6.9%	2.3%	34%
2003	110,619	269,336	379,955	8,196	6.9%	2.1%	31%
2004	125,608	188,188	313,796	9,027	6.7%	2.8%	42%
2005	97,726	187,875	285,601	10,673	9.8%	3.6%	37%
2006	105,139	207,601	312,740	14,717	12.3%	4.5%	37%
2007	92,600	164,071	256,671	18,054	16.3%	6.6%	40%
2008	<u>52,344</u>	<u>174,488</u>	226,832	<u>13,568</u>	20.6%	5.6%	27%
Alaska origin Chinook salmon							
1994	76,397	<u>126,773</u>	<u>203,170</u>	8,571	10.1%	4.0%	40%
1995	81,512	106,635	188,147	5,618	6.4%	2.9%	45%
1996	52,095	<u>104,092</u>	<u>156,187</u>	6,649	11.3%	4.1%	36%
1997	84,413	125,531	209,944	6,473	7.1%	3.0%	42%
1998	52,911	82,081	134,992	5,518	9.4%	3.9%	42%
1999	64,632	126,290	190,922	5,867	8.3%	3.0%	36%
2000	23,776	37,089	60,865	3,645	13.3%	5.7%	43%
2001	33,665	74,729	108,394	4,086	10.8%	3.6%	34%
2002	39,140	122,658	161,798	5,684	12.7%	3.4%	27%
2003	41,236	188,742	229,978	7,885	16.1%	3.3%	21%
2004	54,334	139,719	194,053	8,634	13.7%	4.3%	31%
2005	42,100	119,324	161,424	10,028	19.2%	5.8%	30%
2006	48,284	144,668	192,952	14,378	22.9%	6.9%	30%
2007	44,635	129,168	173,803	17,446	28.1%	9.1%	32%
2008	<u>29,751</u>	<u>140,480</u>	170,231	<u>13,114</u>	30.6%	7.2%	23%
Canadian origin Chinook salmon							
1994	116,455	56,449	172,904	194	0.2%	0.1%	67%
1995	119,120	50,673	169,793	96	0.1%	0.1%	70%
1996	108,444	74,060	182,504	137	0.1%	0.1%	59%
1997	107,879	53,821	161,700	343	0.3%	0.2%	67%
1998	52,786	35,497	88,283	87	0.2%	0.1%	60%
1999	73,263	37,184	110,447	245	0.3%	0.2%	66%
2000	26,973	25,870	52,843	147	0.5%	0.3%	51%
2001	33,094	52,564	85,658	221	0.7%	0.3%	39%
2002	39,127	42,359	81,486	96	0.2%	0.1%	48%
2003	69,383	80,594	149,977	311	0.4%	0.2%	46%
2004	71,274	48,469	119,743	393	0.5%	0.3%	60%
2005	55,626	68,551	124,177	645	1.1%	0.5%	45%
2006	56,855	62,933	119,788	339	0.6%	0.3%	48%
2007	47,965	34,903	82,868	608	1.3%	0.7%	58%
2008	22,593	34,008	56,601	454	2.0%	0.8%	40%

Statistics for Canadian origin salmon were based on the revised Canadian brood table (D. Evenson, ADFG, pers. comm.). Total terminal area run includes catch in nearby coastal areas (except 2008).

Table 5. Yukon River Chinook salmon statistics that incorporate AEQ mortality estimates from the Bering Sea pollock fishery. Total abundance statistics were based on the Pilot Station sonar counts (See NPFMC 2008). Canada-origin estimates are from the newly revised brood table that utilized Eagle sonar counts (D. Evenson, ADFG, pers. comm.). Boxed values were excluded from the Alaska-origin calculations because the escapement calculations for all Alaska streams were much lower than observed escapement in five index tributaries. See methods.

Year	Terminal Catch	Escapement	Terminal Run	AEQ Mortality	AEQ Mortality % of total catch	AEQ Mortality % of total run	Harvest Rate
Total Yukon							
1994	192,852	<u>117,262</u>	<u>310,114</u>	8765	4.3%	2.7%	63%
1995	200,632	92,758	293,390	5714	2.8%	1.9%	69%
1996	160,539	<u>109,721</u>	<u>270,260</u>	6786	4.1%	2.4%	60%
1997	192,292	125,013	317,305	6816	3.4%	2.1%	61%
1998	105,697	42,422	148,119	5605	5.0%	3.6%	72%
1999	137,895	83,361	221,256	6112	4.2%	2.7%	63%
2000	50,749	17,623	68,372	3792	7.0%	5.3%	76%
2001	66,759	58,751	125,510	4307	6.1%	3.3%	55%
2002	78,267	86,912	165,179	5780	6.9%	3.4%	49%
2003	110,619	222,307	332,926	8196	6.9%	2.4%	35%
2004	125,608	109,367	234,975	9027	6.7%	3.7%	55%
2005	97,726	107,049	204,775	10673	9.8%	5.0%	50%
2006	105,139	128,809	233,948	14717	12.3%	5.9%	48%
2007	92,600	84,387	176,987	18054	16.3%	9.3%	57%
2008	<u>52,344</u>	<u>98,656</u>	151,000	13568	20.6%	8.2%	40%
Alaska origin Chinook salmon							
1994	76,397	<u>60,813</u>	<u>137,210</u>	8571	10.1%	5.9%	58%
1995	81,512	42,085	123,597	5618	6.4%	4.3%	67%
1996	52,095	<u>35,661</u>	<u>87,756</u>	6649	11.3%	7.0%	62%
1997	84,413	<u>71,192</u>	<u>155,605</u>	6473	7.1%	4.0%	56%
1998	52,911	<u>6,925</u>	<u>59,836</u>	5518	9.4%	<u>8.4%</u>	<u>89%</u>
1999	64,632	<u>46,177</u>	<u>110,809</u>	5867	8.3%	5.0%	60%
2000	23,776	<u>-8,247</u>	<u>15,529</u>	3645	13.3%	19%	143%
2001	33,665	<u>6,187</u>	<u>39,852</u>	4086	10.8%	9.3%	86%
2002	39,140	44,553	83,693	5684	12.7%	6.4%	50%
2003	41,236	141,713	182,949	7885	16.1%	4.1%	26%
2004	54,334	60,898	115,232	8634	13.7%	7.0%	51%
2005	42,100	38,498	80,598	10028	19.2%	11.1%	58%
2006	48,284	65,876	114,160	14378	22.9%	11.2%	49%
2007	44,635	49,484	94,119	17446	28.1%	15.6%	56%
2008	<u>29,251</u>	<u>64,648</u>	94,399	13114	30.6%	12.2%	40%
Canadian origin Chinook salmon							
1994	116,455	56,449	172,904	194	0.2%	0.1%	67%
1995	119,120	50,673	169,793	96	0.1%	0.1%	70%
1996	108,444	74,060	182,504	137	0.1%	0.1%	59%
1997	107,879	53,821	161,700	343	0.3%	0.2%	67%
1998	52,786	35,497	88,283	87	0.2%	0.1%	60%
1999	73,263	37,184	110,447	245	0.3%	0.2%	66%
2000	26,973	25,870	52,843	147	0.5%	0.3%	51%
2001	33,094	52,564	85,658	221	0.7%	0.3%	39%
2002	39,127	42,359	81,486	96	0.2%	0.1%	48%
2003	69,383	80,594	149,977	311	0.4%	0.2%	46%
2004	71,274	48,469	119,743	393	0.5%	0.3%	60%
2005	55,626	68,551	124,177	645	1.1%	0.5%	45%
2006	56,855	62,933	119,788	339	0.6%	0.3%	48%
2007	47,965	34,903	82,868	608	1.3%	0.7%	58%
2008	22,593	34,008	56,601	454	2.0%	0.8%	40%

Statistics for Canadian origin salmon were based on the revised Canadian brood table (D. Evenson, ADFG, pers. comm.). Total terminal area run includes catch in nearby coastal areas (except 2008).

Table 6. Chinook salmon harvests (subsistence, commercial, other) in each region of western Alaska, harvest rate, AEQ mortality in the Bering Sea pollock fishery, and the estimated foregone harvest and spawning escapement associated with the AEQ mortality of Chinook salmon. Foregone values assume harvest rates remain unchanged with additional fish. Values during recent years are preliminary.

Year	Harvests				Inriver Harvest Rate	AEQ Mortality	Foregone Catch	Foregone Escapement	Foregone (%)
	Subsistence	Commercial	Other	Total					
Yukon River									
1994	62,399	125,165	5,288	192,852	56%	8,765	4,927	3,838	3%
1995	59,358	133,874	7,400	200,632	62%	5,714	3,520	2,194	2%
1996	54,188	99,835	6,516	160,539	53%	6,786	3,578	3,208	2%
1997	66,816	118,152	7,324	192,292	56%	6,816	3,805	3,011	2%
1998	58,910	44,008	2,779	105,697	57%	5,605	3,190	2,415	3%
1999	62,223	72,435	3,237	137,895	53%	6,112	3,225	2,887	2%
2000	40,522	8,518	1,709	50,749	56%	3,792	2,114	1,678	4%
2001	63,605	1,351	1,803	66,759	42%	4,307	1,799	2,507	3%
2002	51,068	24,836	2,363	78,267	38%	5,780	2,215	3,565	3%
2003	63,253	43,110	4,256	110,619	31%	8,196	2,544	5,652	2%
2004	62,488	59,936	3,184	125,608	46%	9,027	4,132	4,894	3%
2005	60,179	36,095	1,452	97,726	40%	10,673	4,254	6,419	4%
2006	54,664	48,161	2,314	105,139	38%	14,717	5,661	9,057	5%
2007	56,158	33,634	2,808	92,600	43%	18,054	7,710	10,344	8%
2008	46,299	4,641	1,404	52,344	28%	13,568	3,759	9,809	7%
Kuskokwim Area									
1994	97,895	27,345	3,251	128,491	26%	5,697	1,482	4,215	1%
1995	99,733	72,352	2,017	174,102	36%	3,714	1,324	2,389	1%
1996	81,663	22,959	1,892	106,514	30%	4,411	1,329	3,082	1%
1997	85,459	47,990	1,723	135,172	30%	4,430	1,349	3,082	1%
1998	86,023	44,192	2,234	132,449	38%	3,643	1,375	2,268	1%
1999	77,232	25,019	764	103,015	43%	3,973	1,702	2,270	2%
2000	68,600	26,115	488	95,203	50%	2,465	1,222	1,243	1%
2001	77,386	14,384	661	92,431	31%	2,799	879	1,920	1%
2002	70,139	12,531	1,036	83,706	31%	3,757	1,164	2,593	1%
2003	72,335	16,014	1,491	89,840	29%	5,327	1,557	3,770	2%
2004	84,745	30,330	1,548	116,623	25%	5,867	1,447	4,420	1%
2005	74,296	30,515	1,180	105,991	25%	6,937	1,719	5,218	2%
2006	69,286	25,758	796	95,840	27%	9,566	2,577	6,989	3%
2007	73,034	23,160	1,981	98,175	33%	11,734	3,916	7,817	4%
2008						8,819			
Bristol Bay (westside stocks)									
1994	16,394	129,962	11,294	157,650	61%	7,451	4,516	2,935	3%
1995	14,149	91,923	5,533	111,605	54%	4,857	2,643	2,213	2%
1996	16,412	80,613	6,181	103,206	66%	5,768	3,794	1,974	4%
1997	15,985	70,226	4,706	90,917	49%	5,794	2,856	2,937	3%
1998	13,040	131,196	6,604	150,840	56%	4,764	2,656	2,108	2%
1999	11,301	22,812	4,881	38,994	37%	5,195	1,912	3,283	5%
2000	10,586	19,913	6,487	36,986	36%	3,223	1,174	2,050	3%
2001	13,372	21,505	22,084	56,961	37%	3,661	1,342	2,319	2%
2002	11,984	42,274	3,769	58,027	38%	4,913	1,875	3,039	3%
2003	19,894	45,846	6,296	72,036	45%	6,966	3,140	3,826	4%
2004	16,704	105,844	12,268	134,816	53%	7,673	4,037	3,636	3%
2005	14,057	72,913	10,162	97,132	36%	9,072	3,237	5,834	3%
2006	11,601	101,106	8,537	121,244	45%	12,510	5,641	6,868	5%
2007	14,848	59,105	7,393	81,346	53%	15,346	8,066	7,280	10%
2008						11,533			
Norton Sound									
1994									
1995	7,274	8,860	438	16,572					
1996	7,245	4,984	662	12,891	77%	350	268	82	2%
1997	8,989	12,573	1,106	22,668	65%	611	397	214	2%
1998	8,295	7,429	590	16,314	71%	396	283	113	2%
1999	6,144	2,508	630	9,282	65%	361	233	128	3%
2000	4,148	752	889	5,789	66%	216	143	74	2%
2001	5,576	213	271	6,060	57%	188	107	81	2%
2002	5,469	5	802	6,276	54%	268	145	123	2%
2003	4,728	12	239	4,979	51%	243	124	119	2%
2004	4,420	0	535	4,955	57%	197	111	86	2%
2005	3,305	151	216	3,672	54%	192	104	89	3%
2006	2,876	12	427	3,315	55%	246	136	110	4%
2007	2,646	19		2,665	33%	549	181	368	7%
2008						295			

Table 7. Kuskokwim area (Kuskokwim, Goodnews, Kanetok) Chinook salmon statistics that incorporate AEQ mortality estimates from the Bering Sea pollock fishery.

Year	Terminal Catch	Escapement	Terminal Run	AEQ Mortality	AEQ Mortality % of total catch	AEQ Mortality % of total run	Harvest Rate
1994	128,491	365,392	493,883	5,697	4.2%	1.1%	27%
1995	174,102	314,087	488,189	3,714	2.1%	0.8%	36%
1996	106,514	246,966	353,480	4,411	4.0%	1.2%	31%
1997	135,172	308,884	444,056	4,430	3.2%	1.0%	31%
1998	132,449	218,488	350,937	3,643	2.7%	1.0%	38%
1999	103,015	137,399	240,414	3,973	3.7%	1.6%	44%
2000	95,203	96,871	192,074	2,465	2.5%	1.3%	50%
2001	92,431	202,015	294,446	2,799	2.9%	0.9%	32%
2002	83,706	186,515	270,221	3,757	4.3%	1.4%	32%
2003	89,840	217,595	307,435	5,327	5.6%	1.7%	30%
2004	116,623	356,359	472,982	5,867	4.8%	1.2%	26%
2005	105,991	321,702	427,693	6,937	6.1%	1.6%	26%
2006	95,840	259,963	355,804	9,566	9.1%	2.6%	29%
2007	98,175	195,963	294,139	11,734	10.7%	3.8%	36%
2008				8,819			

Table 8. Bristol Bay (Nushagak & Togiak districts) Chinook salmon statistics that incorporate AEQ mortality estimates from the Bering Sea pollock fishery. Values for 2008 exclude sport and subsistence harvests. Values exclude Naknek, Kvichak, Ugashik, and Egegik Chinook salmon.

Year	Terminal Catch	Escapement	Terminal Run	AEQ Mortality	AEQ Mortality % of total catch	AEQ Mortality % of total run	Harvest Rate
1994	157,650	102,455	260,105	7,451	4.5%	2.8%	62%
1995	111,605	93,456	205,061	4,857	4.2%	2.3%	55%
1996	103,206	53,703	156,909	5,768	5.3%	3.5%	67%
1997	90,917	93,495	184,412	5,794	6.0%	3.0%	51%
1998	150,840	119,703	270,543	4,764	3.1%	1.7%	57%
1999	38,994	66,966	105,960	5,195	11.8%	4.7%	40%
2000	36,986	64,571	101,557	3,223	8.0%	3.1%	38%
2001	56,961	98,457	155,418	3,661	6.0%	2.3%	38%
2002	58,027	94,055	152,082	4,913	7.8%	3.1%	40%
2003	72,036	87,761	159,797	6,966	8.8%	4.2%	47%
2004	134,816	121,432	256,248	7,673	5.4%	2.9%	54%
2005	97,132	175,049	272,181	9,072	8.5%	3.2%	38%
2006	121,244	147,620	268,864	12,510	9.4%	4.4%	48%
2007	81,346	73,421	154,767	15,346	15.9%	9.0%	57%
2008	<u>21,720</u>	118,896	<u>140,616</u>	11,533		7.6%	

Table 9. Norton Sound Chinook salmon statistics that incorporate AEQ mortality estimates from the Bering Sea pollock fishery.

Year	Terminal Catch	Escapement	Terminal Run	AEQ Mortality	AEQ Mortality % of total catch	AEQ Mortality % of total run	Harvest Rate
1994							
1995	16,572						
1996	12,891	3,931	16,822	350	2.6%	2.0%	77%
1997	22,668	12,207	34,875	611	2.6%	1.7%	66%
1998	16,314	6,519	22,833	396	2.4%	1.7%	72%
1999	9,282	5,077	14,359	361	3.7%	2.5%	66%
2000	5,789	2,988	8,777	216	3.6%	2.4%	67%
2001	6,060	4,567	10,627	188	3.0%	1.7%	58%
2002	6,276	5,340	11,616	268	4.1%	2.3%	55%
2003	4,979	4,776	9,755	243	4.6%	2.4%	52%
2004	4,955	3,812	8,767	197	3.8%	2.2%	57%
2005	3,672	3,145	6,817	192	5.0%	2.7%	55%
2006	3,315	2,697	6,012	246	6.9%	3.9%	57%
2007	2,665	5,431	8,096	549	17.1%	6.3%	33%
2008		2,712		295			

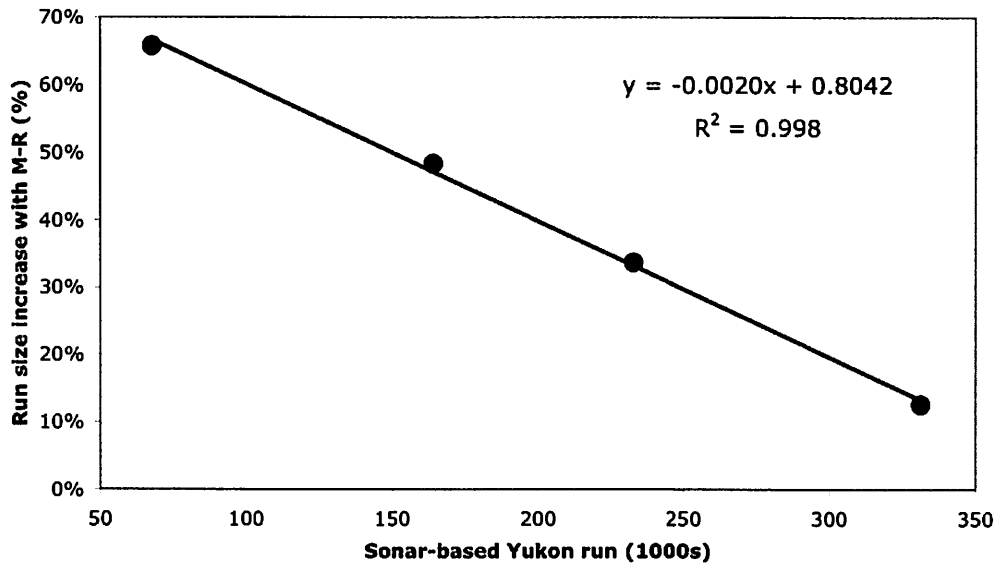


Fig. 1. The relationship between percentage increase in Yukon Chinook run size based on the mark-recapture approach (MR) versus the Pilot Station sonar approach (Y-axis) and run size based on sonar (X-axis). This relationship was used to estimate total run size of Yukon Chinook salmon based on the MR approach during years when only sonar-based values were available.

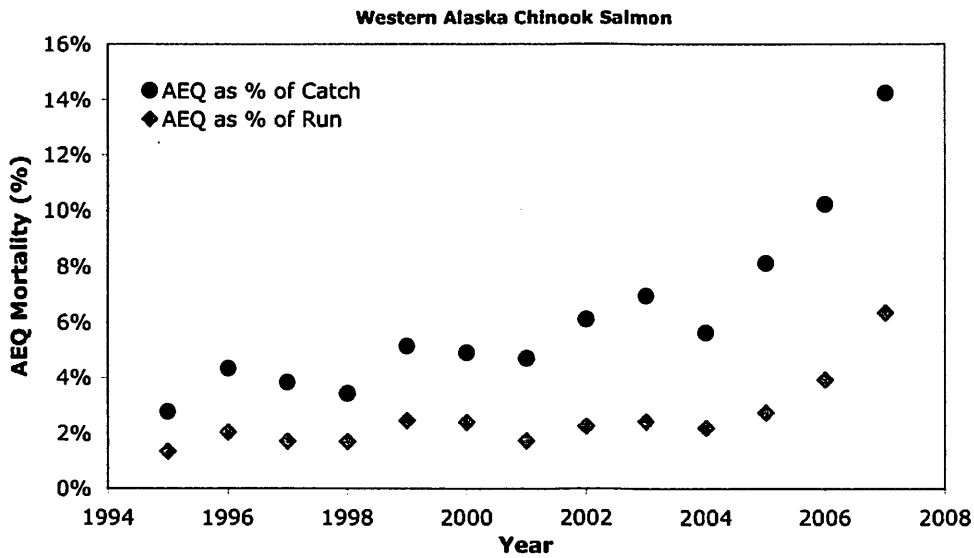
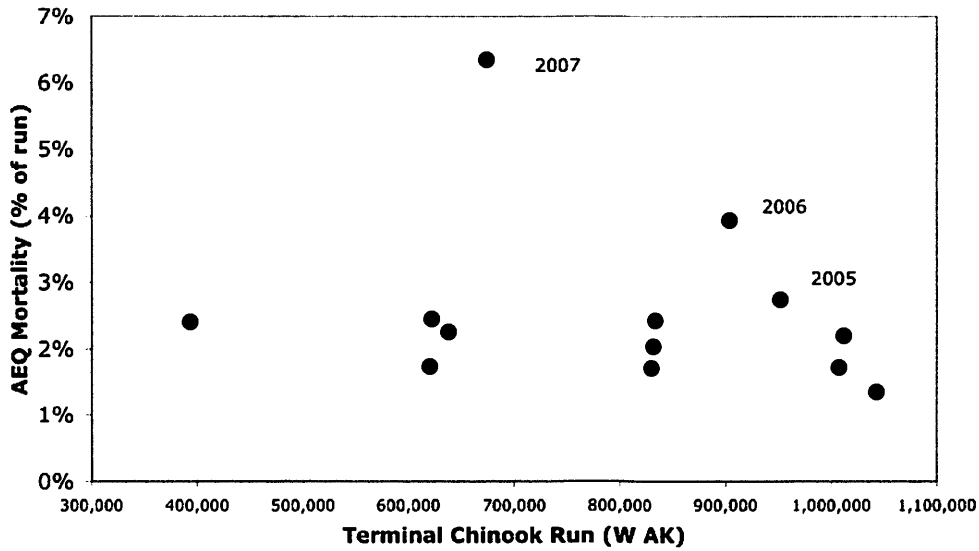


Fig. 2. Adult equivalent mortality of western Alaska Chinook salmon in the pollock fishery in relation to the abundance (catch and escapement) of Chinook salmon returning to western Alaska (upper graph) and in relation to year of return (lower graph). AEQ mortality values are the percentage of total catch or total run that would have returned to the rivers had they not been captured in the pollock fishery.

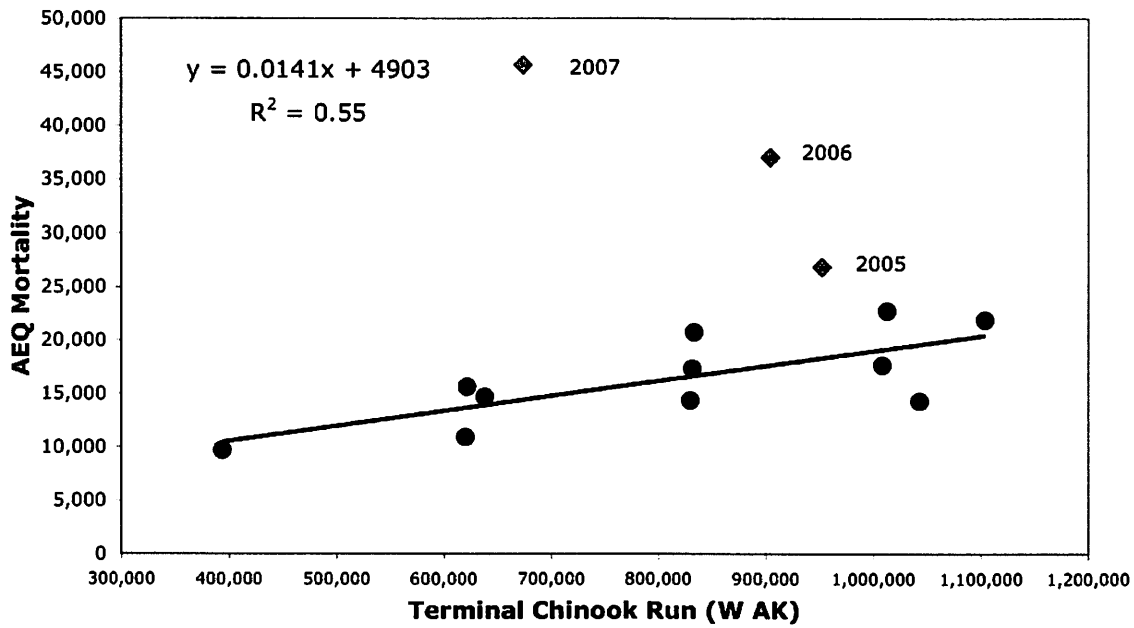


Fig. 3. Relationship between AEQ mortality of western Alaska Chinook salmon and the total abundance of Chinook salmon that would have returned to western Alaska. Linear regression is based on return years 1994-2004. Years 2005-2007 are shown as outlier years when compared with previous years.

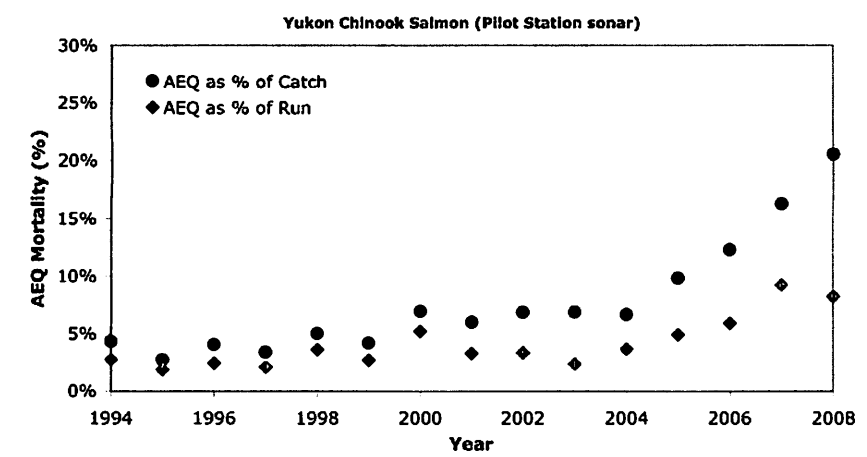
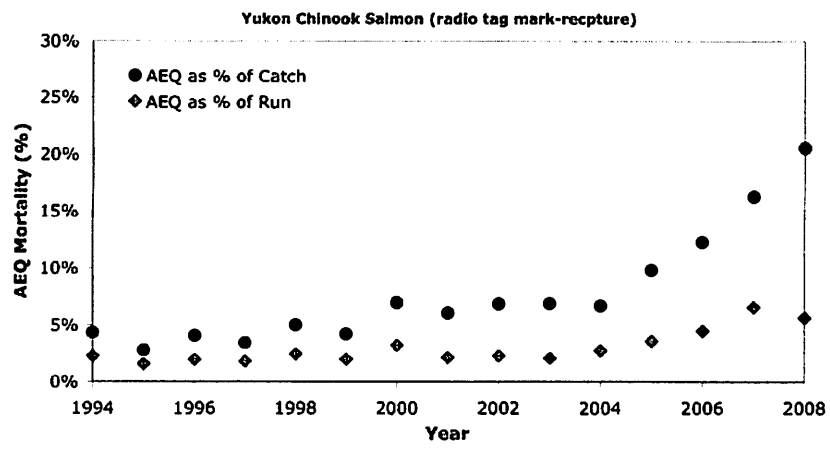
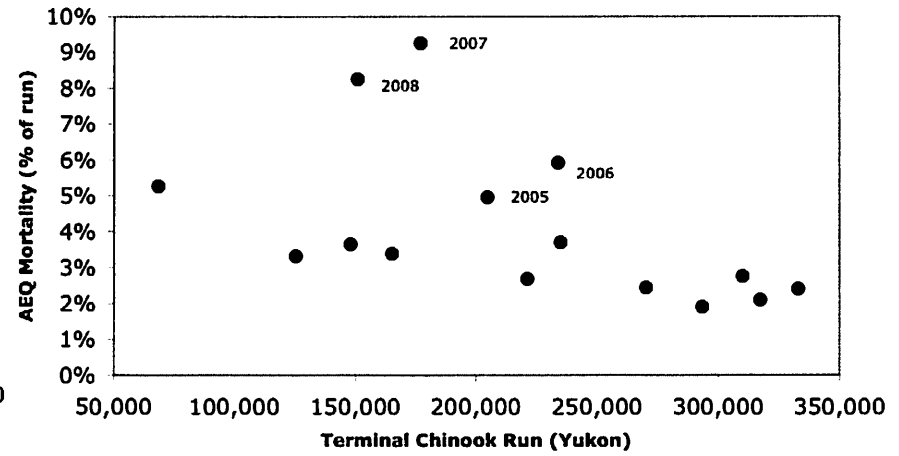
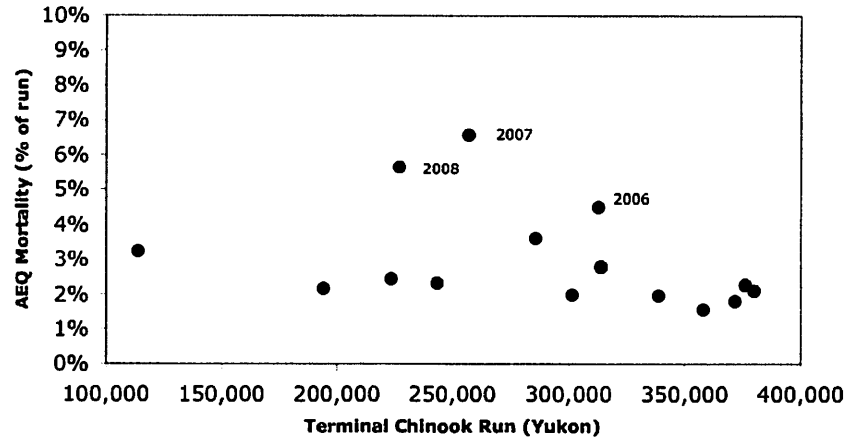


Fig. 4. Adult equivalent mortality of Yukon Chinook salmon in the pollock fishery in relation to the abundance (catch and escapement) of Chinook salmon returning to the Yukon River (upper graphs) and in relation to year of return (lower graphs). Graphs on the left are based on radio tag mark-recapture estimates of total abundance, whereas graphs on the right are based on Pilot Station sonar counts. AEQ values are the percentage of total catch or total run that would have returned to the rivers had they not been captured in the pollock fishery.

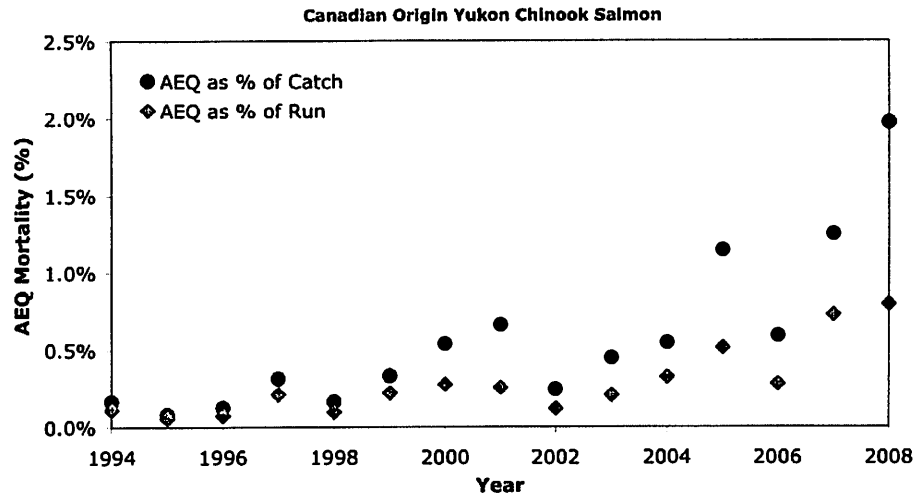
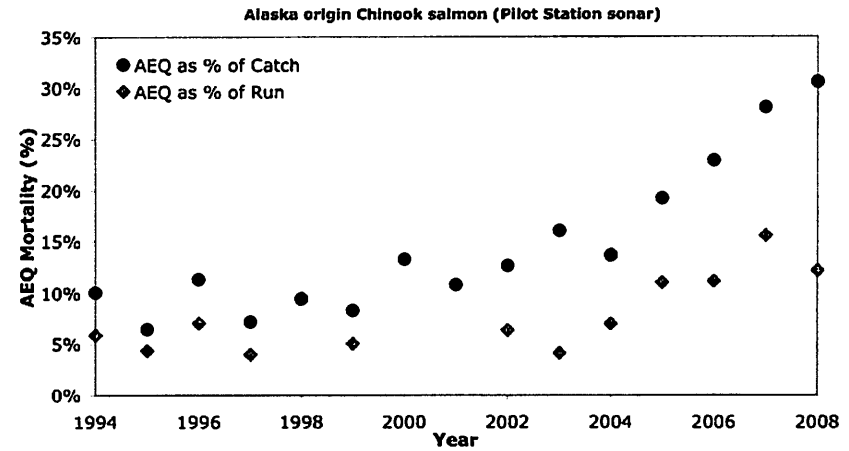
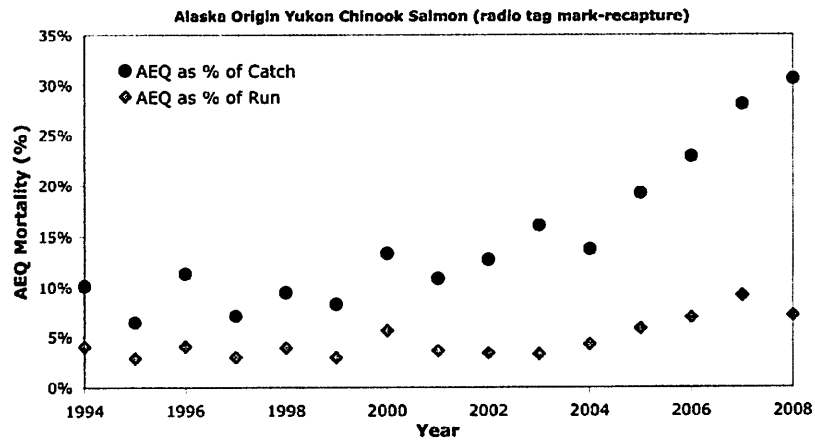


Fig. 5. Adult equivalent mortality of Yukon Chinook salmon originating from Alaska (upper graphs) and Canada streams (lower graph). Alaska graph on the left is based on radio tag mark-recapture estimates of total abundance, whereas graph on the right is based on Pilot Station sonar counts. AEQ values are the percentage of total catch or total run that would have returned to the rivers had they not been captured in the pollock fishery.

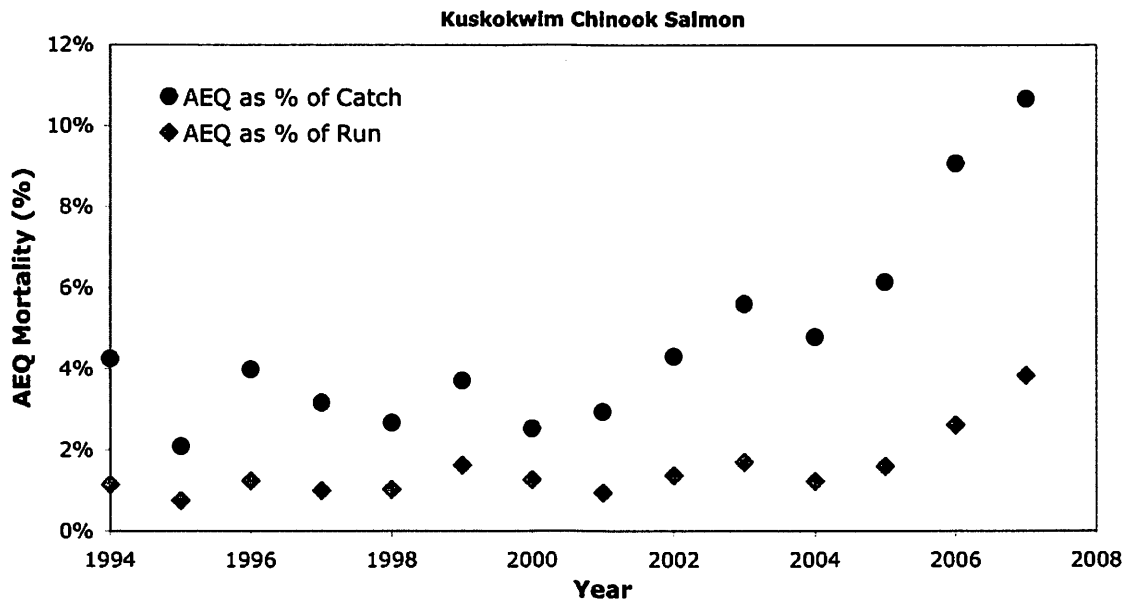
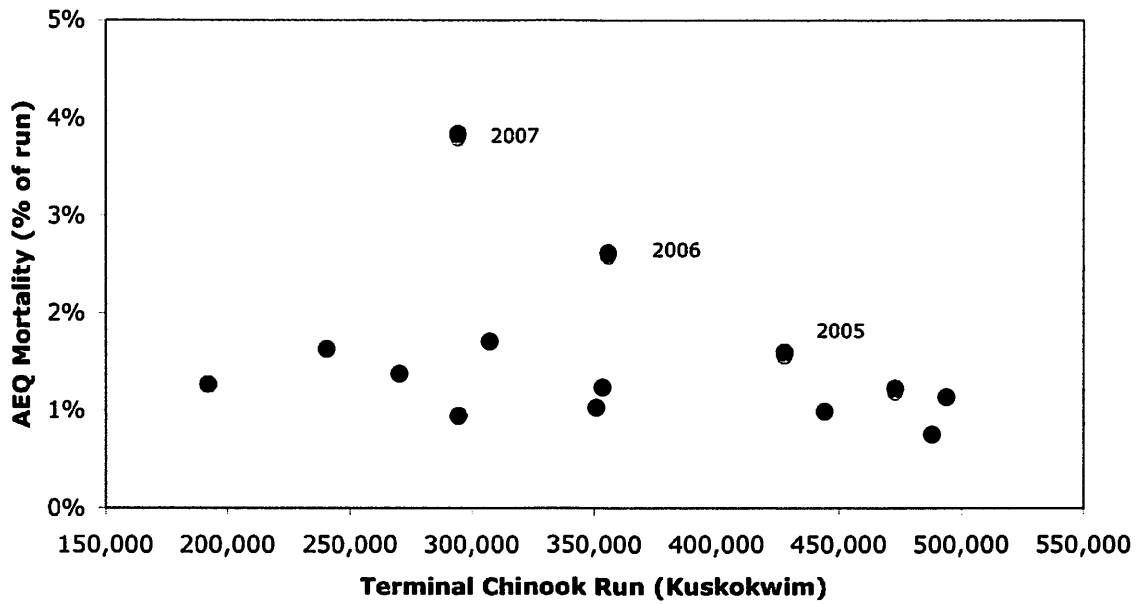


Fig. 6. Adult equivalent mortality of Kuskokwim area Chinook salmon in the pollock fishery in relation to the abundance (catch and escapement) of Chinook salmon returning to the Kuskokwim area (upper graph) and in relation to year of return (lower graph). AEQ values are the percentage of total catch or total run that would have returned to the rivers had they not been captured in the pollock fishery.

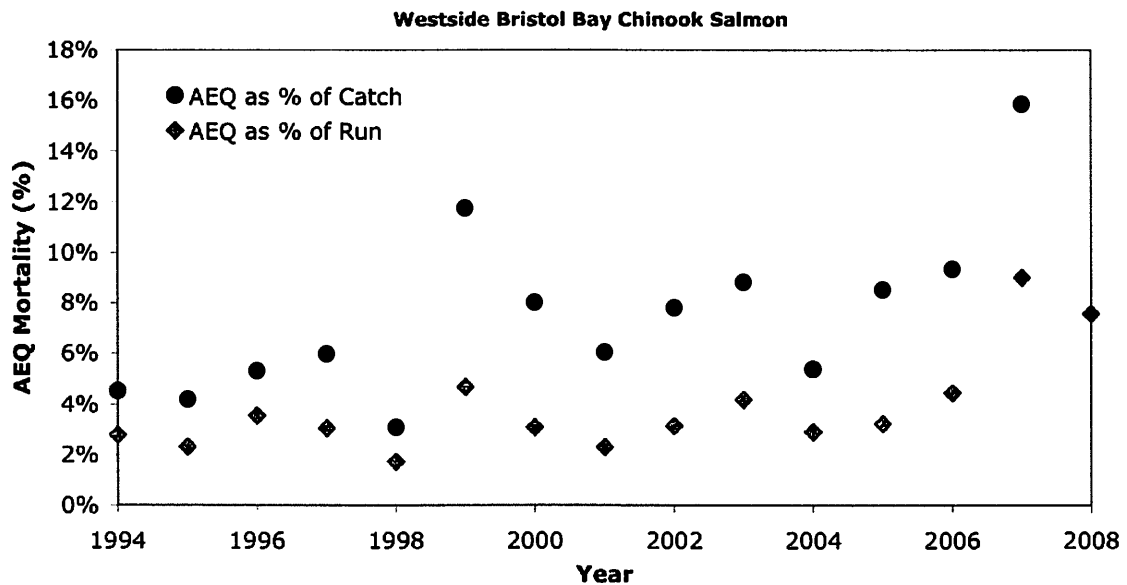
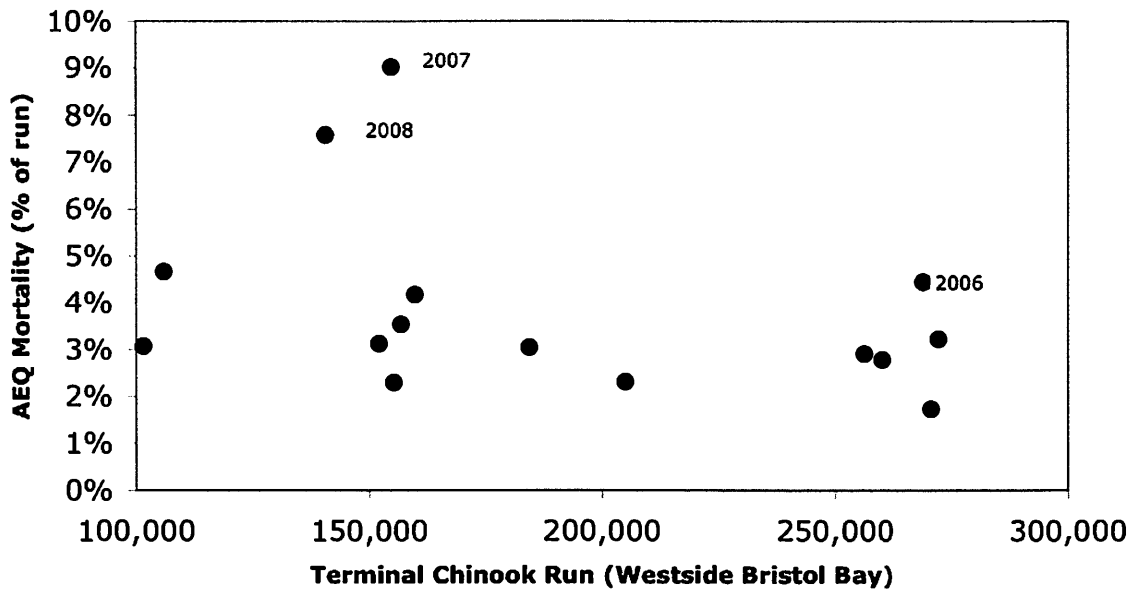


Fig. 7. Adult equivalent mortality of Bristol Bay Chinook salmon in the pollock fishery in relation to the abundance (catch and escapement) of Chinook salmon returning to Bristol Bay (upper graph) and in relation to year of return (lower graph). Subsistence and sport catch values were not yet available for 2008. AEQ values are the percentage of total catch or total run that would have returned to the rivers had they not been captured in the pollock fishery.

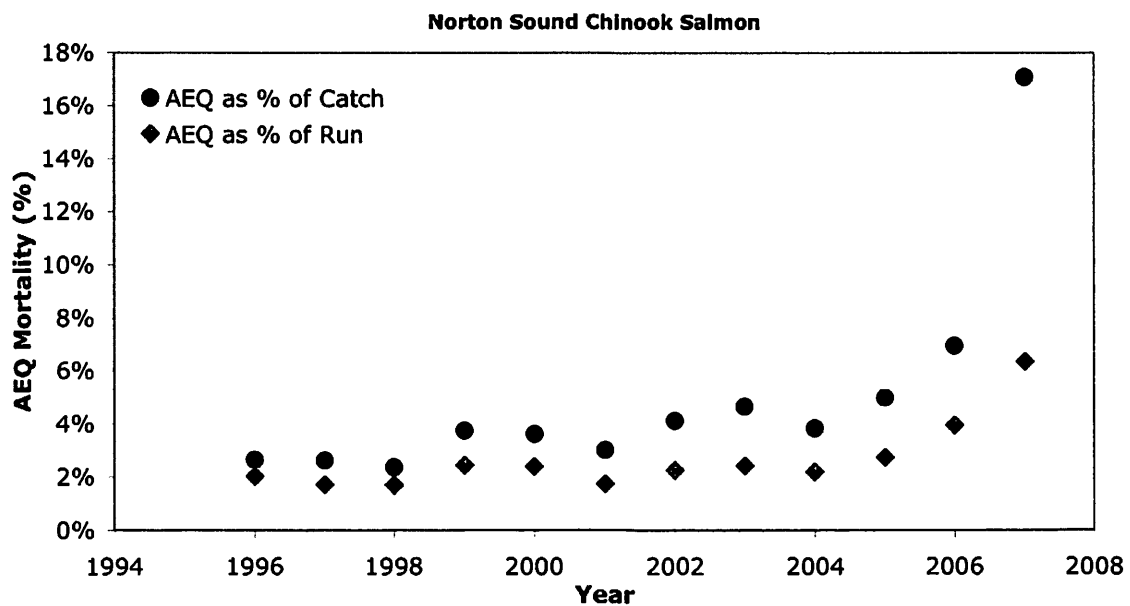
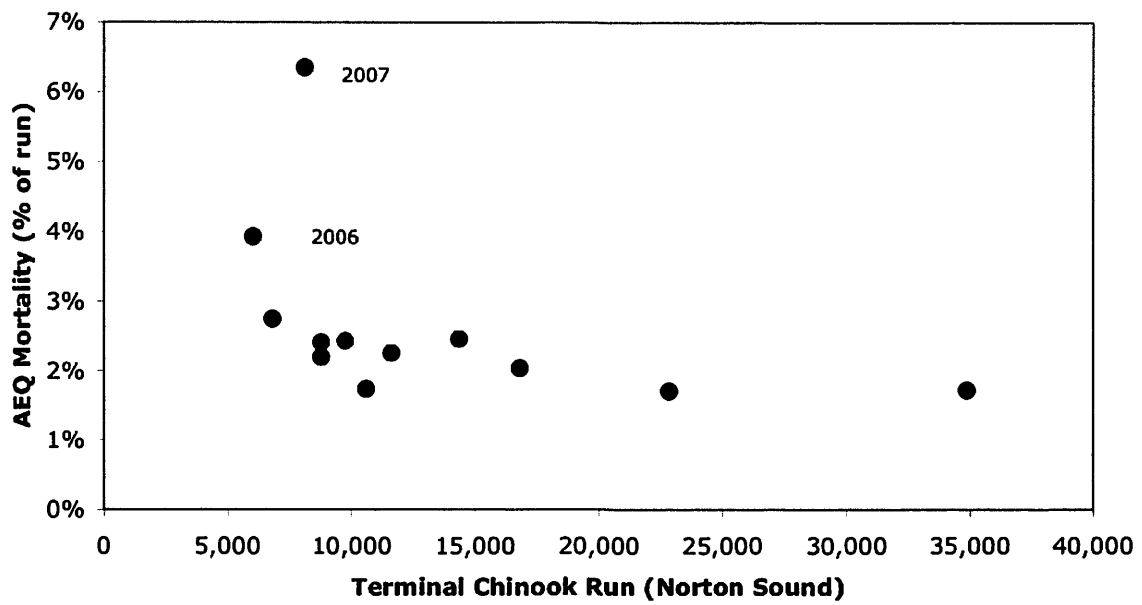
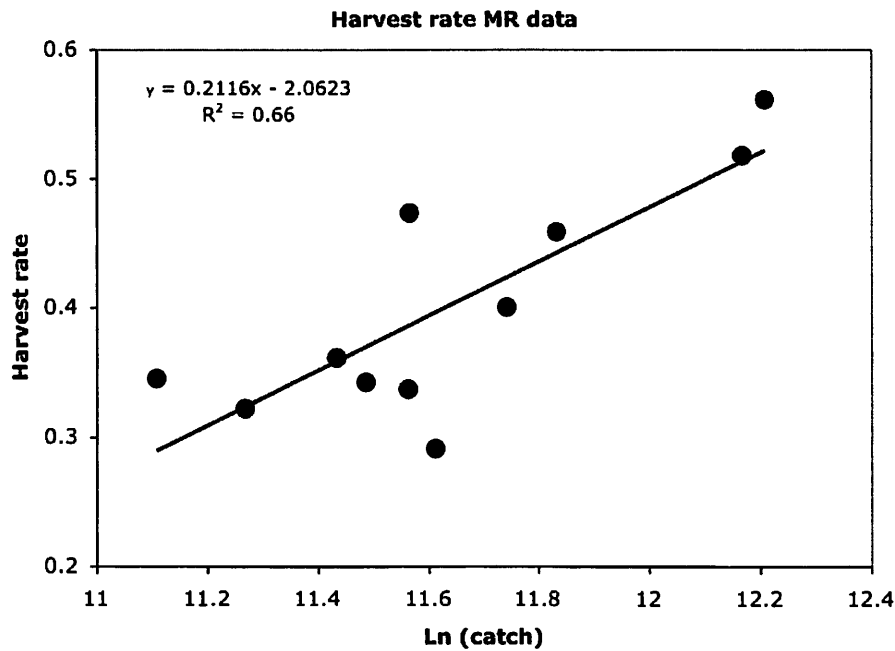
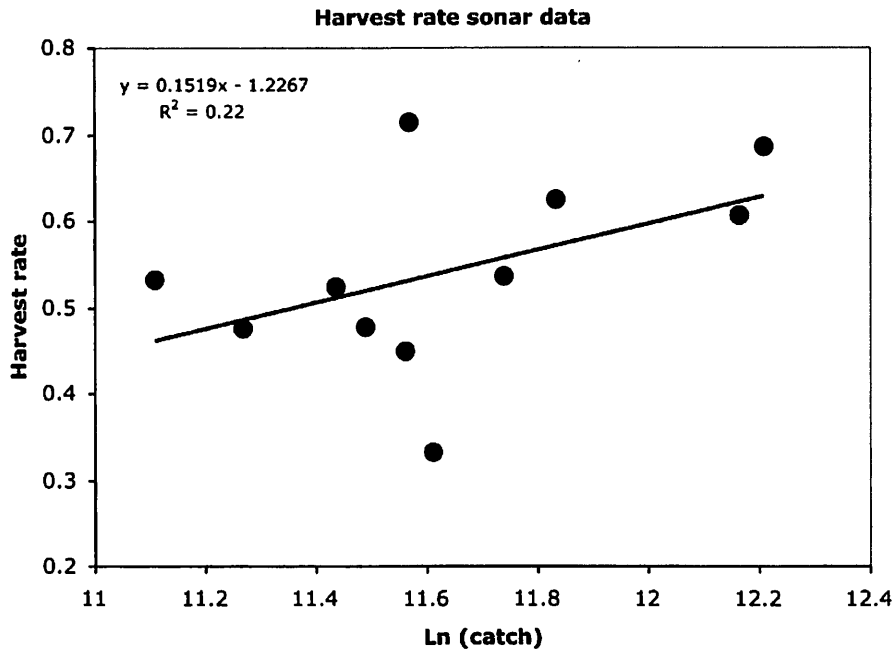


Fig. 8. Adult equivalent mortality of Norton Sound Chinook salmon in the pollock fishery in relation to the abundance (catch and escapement) of Chinook salmon returning to Norton Sound Bay (upper graph) and in relation to year of return (lower graph). AEQ values are the percentage of total catch or total run that would have returned to the rivers had they not been captured in the pollock fishery.

APPENDIX



Appendix Fig. 1. Linear regressions of harvest rate in the Yukon River (all stocks) on Log_e Catch of Chinook salmon based on Pilot Station sonar (upper graph) and mark-recapture estimates of total abundance (lower graph).

LATE COMMENT

REC

MAR 8 2009

N.P.F.M.C.

North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252
Fax: (907) 271-2817

Dear Mr. Olson and Council Members

I am a subsistence fisherman in Fort Yukon. I am writing to comment on salmon by catch reduction measures in the Bering Sea Pollock fishery. The high salmon by catch numbers of recent years threaten our salmon and our way of life. Salmon serves an important cultural and economic role in my community and throughout Western Alaska. Salmon provides a primary source of food for us, and the commercial salmon harvest provides the only means of income for many who live in the remote villages of the Yukon River. Salmon is an irreplaceable Resource that must be protected.

Chinook salmon returns were very poor on the Yukon River, as well as throughout Western Alaska, in 2008. In Alaska, subsistence fishing time was reduced and there was no directed Chinook salmon commercial fishery. The commercial chum fishery was delayed to allow Chinook to pass through, reducing the chum salmon harvest as well. In Canada, subsistence Fishers voluntarily restricted themselves to half of their historic take and no commercial fishery occurred. Despite these restrictions, estimated Chinook salmon spawning escapement into Canada was only 32,700 fish, 27 percent below the Yukon River Panel agreed upon goal of 45,000 fish.

The outlook for this coming summer is no better: the Alaska Department of Fish and Game and the U.S. Fish & Wildlife service are preparing users for further subsistence restrictions in 2009, and have already stated that it is unlikely that a commercial Chinook fishery will be allowed. We are currently working with managers to develop measures which can be used to restrict our own subsistence harvest to provide escapements to ensure healthy salmon Runs in the future.

While by catch is not the sole cause of these declines, it is vital that we all bear the burden of sacrifice to recover our majestic salmon runs. Therefore, I recommend that the Council and NMFS should set a hard cap of no more than 2,500 Chinook salmon immediately to protect Western Alaska Chinook Salmon. Do you know how families 122,000 king salmon can feed? That's more than the total amount of the whole subsistence catch. We got to stop this by catch, its taking to much of our salmon.

Sincerely, 
Walter Peter
Gwichyaa Zhee Gwich'in Tribal Gov., Fort Yukon

LATE
MENT

CHEVAK NATIVE VILLAGE
Chevak Traditional Council
P.O. Box 140 Aurora Street
Chevak, AK 99563
Phone: (907) 858-7428, Fax: (907) 858-7812

March 23, 2009

North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252
Fax: (907) 271-2817

LATE COMMENT

Dear Mr. Olson and Council Members:

We are a subsistence fishing community of Chevak, a tribal community of just under a thousand. We would like to take this time to comment on salmon by-catch reduction measures in the Bering Sea Pollock Fishery.

We are the Kashunamiut people of Chevak Native Village, a federally recognized tribe, through our tribal government the Chevak Traditional Council (Council) wish to extend our appreciation for allowing for comment on the By-Catch measures in the Bering Sea. We as the Kashunamiut have established our tribal government to be more responsive to the unique cultural and traditional values of the cupik. Our people have been weathering some of the harshest conditions and climates, have survived some of these conditions even before the westernization of our lifestyles. Our lifestyle and our need to sustain ourselves go hand in hand which is our subsistence way of life. These were handed down from fathers to sons and their fathers before theirs.

We stand behind our subsistence way of life and through our tribal government the Council will protect our rights to fish and subsist without any restrictions now and anytime in the future. We take steps to protect this way of life not just for our tribal members, our future generations but also with the other subsistence users at heart.

Recently we have begun to hear of the climb of salmon by-catch numbers which will ultimately result as a threats to our cultural and lifestyle. Our subsistence use of salmon has been a very important source for our existence and the process of fishing, drying, smoking and other means of preserving for the winter has been handed down through generations.

We make use of these practices and teach our young never to waste our catch in any manner. Without protection and monitoring of fish that would otherwise be used by our people, will be one of the ways our culture and heritage will begin to disseminate. Our neighboring villages begin to see poor return of Chinook salmon, they begin to set periods for subsistence fishing; then they begin to reduce these subsistence fishing periods, and then the people begin to wonder why their catches are not meeting their

needs and then begin to question the subsistence communities down the river(s), when the high seas fisheries will take as much as they can; taking only certain fish for money and literally pollute our seas with fish that may have otherwise been used to feed us.

The Chinook salmon fishing have been poor, not just for the Yukon people, there were other subsistence communities too that are affected by this. The Subsistence use fisheries should not be reduced or restricted, but we will voluntarily lift our fishing times so there can be healthy returns. It has been said that the outlook for the upcoming summer fishing is dismal; and we would like to let it be known that we have been hit hard by the price of gasoline soaring; and the price of everything else sky-rocketing. The importance of subsistence fishing and storing for the winter is important just as it is for the commercial fishermen to work for their winter expenses, which are necessities for their existence.

Our membership and neighbors needs to be informed about the possible intended upcoming further restrictions in 2009 for the subsistence uses, and this needs to be done ahead of time. We are willing to sacrifice or limit our take of the subsistence use of the Chinook salmon with the understanding that measures will be developed for the by-catch. We are recommending a cap of no more than 32,500 Chinook salmon now. Any or all measures for strong runs in the future need to be taken. The measures for wanton waste or disregard to the needs of the Chinook users need to be addressed and measures implemented.

Cordially,



Roy J. Atchak
Tribal Chief



Chilkoot Indian Association



LATE COMMENT April 1, 2009

Chris Oliver, Executive Director
North Pacific Fishery Management Council
605 W. 4th Ave., Suite 306
Anchorage, AK 99501

RECEIVED
APR - 8 2009
N.P.F.M.C.

RE: King Salmon Escapement/Pollock

FAXED 271-2817

Dear Mr. Oliver:

This letter is being sent to encourage you to choose a policy for by-catch limits on King Salmon that protects King stocks at the most restrictive levels. I am aware that there will be tremendous pressure and strong arguments to protect the interests of the factory trawl fleet. In short, I am a proponent of factory trawlers, and all forms of commercial fishing. The line that I draw regarding catch limits is based on the issue of favoring one fishery at the detriment of another.

Recently we have been witnessing decreased return numbers for Yukon River fish. That resource must be protected. It would be more prudent and advantageous for all to place the king salmon by-catch number at a low figure. If escapement goals are reached on the Bering Sea river systems, the by-catch limit for the factory fleet could be adjusted upward to reflect a successful return of fish.

If a high by-catch number is used, there is then the possibility that river escapement goals are not met and thus being in a position where fish needed for reproduction will have been caught by the trawl fleet; ceasing that availability to get more fish up river. The fishery must be managed in a manner that protects all species and users and with an approach that guarantees that all stocks will be



Chilkoot Indian Association



healthy into perpetuity. Thank you for taking the time to read this message. Do not hesitate to contact me if you have any questions regarding this position.

Sincerely,

A handwritten signature in cursive script that reads "Chris Schelb".

Chris Schelb
Director of Economic Development

cschelb@chilkoot-nsn.gov

To Eric Olson
907-271-2817

RECEIVED
APR - 8 2009
N.P.F.M.C.

Mr. Olson, before getting together in anchorage why not come out
To dutch and take a look at the waste. Ask the city why it has so many
Pick ups.I don't know why they have mechanics. Go over to city hall,
Ask why they have fights over who has the most expensive chair
Go over to the cop shopand ask why they compete to see who can get
The nights so they can get the most dui's. Dutch harbor has become a cesspool.
I have many friends who fish or work nets and they say its easy to identify
A Yukon king. If the draggers cant find a way to stop killing them
They should be restricted. You would be amazed how many people out
Here agree with this basic thought.

CAP THE SALMON

LATE COMMENT

Dear Sirs

I started thinking about the kinds of seafood
I've seen around here in dutch harbor and I came
Up with something like this.

Pacific halibut, Greenland halibut,

Pacific cod,black cod,

Atka mackerel, yellowfin sole,

Rock sole,flat sole,

Scallops, baridi crab

Tanner crab, several species of king crab.

The list goes on,for a full break down I'm

Sure it can be done.

The point is we are not a one horse town.

Many GREEDY people have spent a lot to

Develop Pollock and I cant help it.

We do other things and just capping the salmon

For a few years would give the fish the rest

They need to grow really big again, then we

Can go at it smarter people with a resource that

Will be healthy and last a long time

RECEIVED
APR - 8 2009
N.P.F.M.C.

CAP THE SALMON

LATE COMMENT

March 25, 2009

Via Facsimile (907) 271-2817

Mr. Chris Oliver
 Executive Director
 North Pacific Fishery Management Council
 605 W. 4th Avenue, Suite 306
 Anchorage, Alaska 99501

RECEIVED
 APR - 8 2009
 N.P.F.M.C.

Dear Chris,

Thank you for your March 4, 2009 correspondence notifying The Tanadgusix Corporation ("TDX"), the Alaska Native Village Corporation for St. Paul Island, that the North Pacific Fishery Management Council ("Council") is scheduled to take final action on measures to limit Chinook salmon bycatch in the Bering Sea pollock fishery in its April meeting. TDX strongly urges the Council to reject Alternative 3 which will likely shift the pollock fleet north into key Northern Fur Seal feeding areas. The Council should not adopt measures to protect Chinook salmon that shift risk to an even more threatened species in the Bering Sea area.

The Northern Fur Seal is a more threatened species than the Chinook salmon. Since 1998, pup production at Pribilof Island breeding colonies has declined at an annual rate of 5.2 percent.¹ The Northern Fur Seal has been listed as "depleted" under the Marine Mammal Protection Act (MMPA) for the last twenty years and is now at low enough numbers to be considered for "threatened" or "endangered" status. In fact, the Northern Fur Seal population has declined to less than 50% of levels observed in the late 1950s.² According to the DEIS, fur seals rely on pollock as a principal prey in the Pribilofs based on studies of fur seal spew and scat data.³ Increasing harvests of fur seal prey, particularly pollock, could have significant impacts on the abundance of Northern Fur Seals in the Pribilofs. The species faces potential harm when fisheries become concentrated spatially or temporally in the fur seal's habitat.⁴

Fur seals are highly reliant on open ocean areas that have major oceanographic frontal features such as sea mounts, valleys, and canyons. Two Bering Sea areas with these prime characteristics, the Zhemchug and Pribilof Canyons, are critical feeding areas for fur seals that return to and depend on their original St. Paul and St. George rookery locations. Fur seals swim

¹ National Marine Fisheries Service: National Marine Mammal Laboratory (NMML), Alaska Ecosystems Program: Northern Fur Seal Research in Alaska Quarter 4 Report, 2008.

² North Pacific Fisheries Management Council: Bering Sea Chinook Salmon Bycatch Management Draft Environmental Impact Statement ("DEIS"), p. 145.

³ *Id.* p. 399.

⁴ *Id.* p. 398.

LATE OF THE



Mr. Chris Oliver
Executive Director
North Pacific Fishery Management Council
March 25, 2009
Page 2

far offshore for foraging areas -- as it has been documented that female fur seals can swim over 400 km round trip for prey.⁵ Female seals find essential prey in these rich Canyon environments when feeding their new born pups. With the pup counts at an all time low, the fur seal feeding grounds are even more important strategically now. The DEIS acknowledges that harvesting pollock in the nursing female's foraging areas "may have an effect on the reproductive capability and possibly the population."⁶

The Council should reject salmon bycatch Alternative 3, which will likely shift the fleet north into these important fur seal feeding zones. Alternative 3 establishes area closures that are triggered when specified salmon bycatch cap levels are reached. The DEIS concludes that "the closures proposed for the A season would likely shift the fleet north into areas that may contain spotted and northern fur seal prey."⁷ Consequently, Alternative 3 causes greater risk that fur seals will face burdensome competition for prey.

Generally, TDX is concerned that the draft environmental analysis does not sufficiently take into account the far ranging foraging behavior of the Northern Fur Seal. If the Council adopts closure measures for the Chinook salmon that could shift the fleet to critical fur seal foraging areas, the closures should include areas and times that prevent unintended harm to the seals. For example, the Council could include the Pribilof and Zhemchug Canyons when it closes other areas for the Chinook salmon. Negative impacts should not be pushed into another species' backyard.

The most direct way to protect the Chinook salmon along with the fur seal feeding areas is to establish marine protection zones around the most sensitive areas such as the Pribilof and Zhemchug Canyons. Establishing the Pribilof Habitat Conservation Area was a step in the right direction, but the area was cut back and is way too small to protect the strategic areas. At best, the Conservation Area protects the near shore habitat of the fur seals, and does not address the females' feeding grounds as was originally proposed.

This same mistake is being made in overlooking the environmental impacts of the Chinook salmon closures. The DEIS recognizes the importance of offshore feeding grounds like the Pribilof and Zhemchug Canyons to fur seals:

⁵ National Marine Fisheries Service: Setting the Annual Subsistence Harvest of Northern Fur Seals on the Pribilof Islands, Final Environmental Impact Statement, 2005, p. 23.

⁶ DEIS, p. 399.

⁷ DEIS, p. 402.

Mr. Chris Oliver
Executive Director
North Pacific Fishery Management Council
March 25, 2009
Page 3

The subpolar continental shelf and shelf break from the Bering Sea to California are known feeding grounds for fur seals while at sea. It has been suggested that the highest fur seal densities in the open ocean occur in association with major oceanographic frontal features such as sea mounts, valleys, canyons, and along the continental shelf break.⁸

However, the DEIS does not address the impacts on fur seals if the fleet shifts to the two Canyon areas, which lie well beyond the Pribilof Habitat Conservation Area. Thus, the DEIS does not evaluate and address the impact on Northern Fur Seals to its fullest extent.

The Council will soon have an opportunity to reexamine the effectiveness of marine protection criteria and programs, such as in its upcoming five year review of the Essential Fish Habitat program. TDX intends to carry forward its advocacy in those proceedings.

TDX appreciates the Council's outreach efforts, and in particular, thanks Council Staff Dr. Diana Stram and Nicole Kimball for being so helpful in answering TDX's questions related to these issues.

Regards,

Ron Philemonoff by ETR

Ron Philemonoff, CEO
The Tanadgusix Corporation

cc: Dr. Diana Stram
Nicole Kimball

⁸ *Id.* p. 400.

Laurie Thomas
P.O. Box 166
Fort Yukon, Alaska 99740
laurie_thomas97@hotmail.com
Phone: 907 662-2788

LATE COMMENT

RECEIVED
APR - 8 2009
N.P.F.M.C.

March 25, 2009

North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Dear distinguished Council Members:

As a lifelong Rural Alaskan subsistence fisherwoman of Fort Yukon, Alaska, I am writing this letter of concern to address the salmon bycatch reduction measures that are being considered in order to save our Yukon River Salmon.

I agree with limiting harvest of Salmon at the mouth of the Yukon River and Bering Sea where the commercial fishing is taking its toll and in my opinion affecting the minimal return numbers of the Salmon in the Yukon River. I also attribute this demand in particular to the mass media of world-wide advertisement on how healthy salmon is for you and in particular the Yukon River Salmon being rich in omega-3 nutrients.

We the people of this part of rural Fort Yukon, Alaska have been harvesting salmon our whole lives as a main food staple during the months of July and August when the Salmon finally reach our part of the Yukon River. In addition, we are accustomed to drying and preserving this fish we catch to help our families survive the long winter months. None of the fish we catch is sold commercially. During these hard economic times and the ever increasing cost of heating fuel, gasoline and groceries in Rural Alaska where we pay \$5.50 per gallon of gasoline, \$4.40 per gallon of heating fuel and \$8.00 per gallon of milk, we need our fair share of the Salmon!

Additionally, it is not as easy as you think harvesting Salmon in this part of the Yukon River. Most fisherman along the Yukon River have only one channel to fish out of making it easier to find the fish. The Yukon River at Fort Yukon is the widest point and it braids into several channels that can sometime make fishing difficult because of this we have to constantly move our fishnets and fish wheels to find the best fishing spot. This practice already limits our catch.

MEMORANDUM FOR THE RECORD

MEMORANDUM FOR THE RECORD
DATE: [illegible]
SUBJECT: [illegible]

[illegible signature]

[illegible title]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

[illegible text]

Please do not put strict harvesting rules and regulations in our region of Alaska where we subsistence fish, instead focus on restricting those commercial fisherman who are making huge profits in the world-wide market for Yukon River Salmon.

Sincerely,

Laurie Thomas

Laurie Thomas
Fort Yukon

LATE COMMENT

U.S. Fish and Wildlife Service
c/o Yukon Delta National wildlife Refuge
Office of Regional Council Coordinator
P.O. Box 346
Bethel, Alaska 99559

FAX COVER SHEET
Telephone: 907-543-1037
Toll Free: 800-621-5804 ext. 257
FAX: 907-543-4413

RECEIVED
APR - 8 2009
N.P.F.M.C.

Date: March 27, 2009 **Number of Pages:** 3 + Cover
To: Nicole Kimball
North Pacific Fishery Management Council
FAX Number: 907-271-2817 **Phone Number:** 907-271-2809
From: Alex Nick, Council Coordinator
Subject: YKDSRAC Letter Regarding Pollock Fishery Bycatch
Hard Cap Recommendation

Remarks:

Enclosed please find a letter from the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council (Council) regarding its recommendation on hard cap for the Bering Sea pollock fishery salmon bycatch. During its meeting on February 25-26, 2009 in Bethel, Alaska, Council deliberated on the bycatch issue and came up with its decision on salmon bycatch recommendation and they directed staff to draft the letter. The letter has gone through review and was signed by the chair. Signature page was sent to me via fax.

I'm hoping it is not too late to distribute this letter to the North Pacific Fishery Management Council members and its audience on March 31-April 4 meeting next week. Please let me know as soon as possible whether or not copies will be made available at NPFMC meeting next week via email @ alex_nick@fws.gov.

Thank you.

LATE COMMENT

LATE COMMENT

North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252
Fax: (907) 271-2817

REC
MAR 23 2009
23 MARCH 09
N.P.F.M.C.

Dear Mr. Olson and Council Members:

I am a [commercial or subsistence] fisherman/woman in KOTLIK [name of village]. I am writing to comment on salmon bycatch reduction measures in the Bering Sea pollock fishery. The high salmon bycatch numbers of recent years threaten our salmon and our way of life. Salmon serves an important cultural and economic role in my community and throughout Western Alaska. Salmon provides a primary source of food for us, and the commercial salmon harvest provides the only means of income for many who live in the remote villages of the Yukon River. Salmon is an irreplaceable resource that must be protected.

Chinook salmon returns were very poor on the Yukon River, as well as throughout Western Alaska, in 2008. In Alaska, subsistence fishing time was reduced and there was no directed Chinook salmon commercial fishery. The commercial chum fishery was delayed to allow Chinook to pass through, reducing the chum salmon harvest as well. In Canada, subsistence fishers voluntarily restricted themselves to half of their historic take and no commercial fishery occurred. Despite these restrictions, estimated Chinook salmon spawning escapement into Canada was only 32,700 fish, 27 percent below the Yukon River Panel agreed upon goal of 45,000 fish.

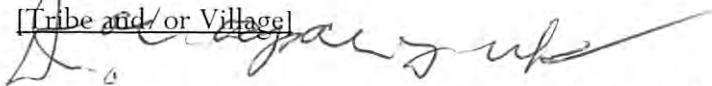
The outlook for this coming summer is no better: the Alaska Department of Fish and Game and the U.S. Fish & Wildlife service are preparing users for further subsistence restrictions in 2009, and have already stated that it is unlikely that a commercial Chinook fishery will be allowed. We are currently working with managers to develop measures which can be used to restrict our own subsistence harvest to provide escapements to ensure healthy salmon runs in the future.

While bycatch is not the sole cause of these declines, it is vital that we all bear the burden of sacrifice to recover our majestic salmon runs. Therefore, I recommend that the Council and NMFS should set a hard cap of no more than 32,500 Chinook salmon immediately to protect Western Alaska Chinook salmon.

Sincerely,

[Name]

[Tribe and/or Village]



VILLAGE OF BILL MOORE'S SLOUGH

LATE COMMENT

March 17, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

RECEIVED
APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Gabriel Wasky and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Gabriel Wasky

LATE COMMENT

March 7, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

RECEIVED
APR - 8 2009
N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Alexie Sergie and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitkas Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Alexie Sergie

LATE COMMENT

March 17, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Nikita Wasky Jr. and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point, AK. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Nikita Wasky Jr.

LATE COMMENT

March 17, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Nathan Oney and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point AK. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely, Nathan Oney

LATE COMMENT

March , 2009

LATE COMMENT

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

RECEIVED
APR - 8 2009

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Elizabeth Nick and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Elizabeth Nick

LATE COMMENT

LATE COMMENT

March 23, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Josephine Tinker and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pikha's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Josephine Tinker

LATE COMMENT

LATE COMMENT

March 9, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is William John and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitkas Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

William John

LATE (MEMO)

LATE COMMENT

March 19, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

REC'D
APR 1 2009
N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Ruth Riley and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Ruth J. Riley
Pitka's Point - Village.

LATE COMMENT

LATE COMMENT

March 9, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

RECEIVED
APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Martha Wasly and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitkas Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Martha Wasly

LATE COMMENT

March /9, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

LATE COMMENT

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Chris Tinker and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitkas Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely, Christopher Tinker

LATE COMMENT

March 17, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

LATE COMMENT

APR - 6 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Jimmy Kozunikoff and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely, Jimmy Kozunikoff

LATE COMMENT

LATE COMMENT

March 18, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

RECEIVED
APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

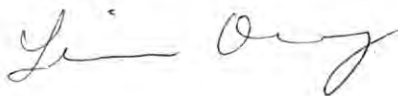
Dear Governor Palin:

My name is Linda Oney and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,



LATE COMMENT

LATE COMMENT
APR - 6 2009

March 18, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

R.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Anna L. Tinker and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitkin's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Anna L. Tinker

LATE COMMENT

March 17, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001,
Juneau, AK 99811

LATE COMMENT

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Karen Thompson and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Karen Thompson

LATE COMMENT

LATE COMMENT
MAR 18 2009

March , 2009
3/17

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Matthew Thorgan and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitt's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Matthew Thorgan

LATE COMMEM

LATE COMMENT

March 17, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

RECEIVED
PI - 8 2009
N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Maureen E. Tinker and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely, Maureen E. Tinker

LATE COMMENT

March 24, 2009

The Honorable Sarah Palin,
Governor of Alaska
Pouch 110001
Juneau, AK 99811

LATE COMMENT

APR - 8 2009

N.P.F.M.C.

Re: Unacceptable Chinook salmon bycatch in the pollack trawl fishery

Dear Governor Palin:

My name is Elia Tinker and I am a subsistence/commercial fisher of the Yukon/Kuskokwim River. I am from the Village of Pitka's Point. My dependence on the Chinook salmon is my inheritance from our past generations who have carefully managed the resource to make it available to my family and me at this current day. I am concerned about the future sustainability of our Chinook salmon resources for my children and their children in the future. The once abundant Chinook salmon are declining at a rate that causes us to have concerns of whether or not we can sustain our current harvest to feed our families. Meanwhile, under the current state position, the Bering Sea Pollack Trawl fishery will continue to take huge numbers of Chinook as bycatch and legally discard our valuable salmon without recourse or penalty. This is wanton waste. All the Chinook salmon should be allowed to return to the rivers where each one is valued for its contribution to conservation and subsistence, and in the small scale commercial fisheries that are essential to enable our subsistence way of life.

We most strongly disagree with the State of Alaska's position supporting the pollack trawl industry's position that would allow 68,392 of our Chinook salmon to be caught as bycatch. How can the State of Alaska take a position so blatantly unbalanced in favor of the trawl industry, dominated by out-of-state interests and residents, and risk the devastation of our communities, economies and very way of life? Do our Alaskan communities have no value in comparison to the trawl fleet? As a resident, voter, and subsistence user I would like to know the basis of the State's position of allowing 68,392 Chinook salmon to be caught as bycatch while our small scale commercial fisheries are closed and our subsistence fisheries are threatened. I would like to know why the needs of Alaska's villages are being virtually ignored during this time of severe economic distress.

The State's policy should be that every Chinook should return to Alaska Rivers where they can contribute to conservation and the way of life of the people who have lived along these waters for centuries. The state should implement this policy by taking a position in the North Pacific Fisheries Management Council that the bycatch must not exceed 30,000 per year and that this cap must gradually be reduced to near zero as industry adjusts its fishing means to avoid Chinook bycatch. Also, the trawl industry should be assessed a significant monetary penalty for each Chinook taken as bycatch and these funds should be used for Chinook research, restoration and local management capacity in the areas affected by the bycatch. I look forward to your answer.

Sincerely,

Elia Tinker

LATE COMMENT