NOTE: The following tables replace those in original paper. (June 1st 2014)

Table 6. Chinook salmon bycatch number per t of pollock by shore-based CV cooperative 2003-201											3-2013.
Coop	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
101	0.033	0.040	0.077	0.108	0.155	0.038	0.042	0.024	0.046	0.022	0.024
103	0.033	0.061	0.057	0.049	0.124	0.021	0.017	0.014	0.028	0.012	0.016
104	0.032	0.020	0.035	0.046	0.082	0.023	0.014	0.015	0.023	0.005	0.005
105	0.044	0.073	0.109	0.093	0.125	0.023	0.022	0.018	0.009	0.010	0.008
106	0.030	0.036	0.046	0.061	0.086	0.032	0.004	0.005	0.035	0.008	0.004
107	0.032	0.060	0.057	0.084	0.144	0.039	0.007	0.008	0.036	0.014	0.008

Table 10. Chinook salmon bycatch rate score (in units of standard deviation between cooperatives and within years) by cooperative (rows), 2003-2013.

1565			10010	11.	75	1375	1			- pita		Avg 2003-	Chinook
Coop	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013	salmon
101	-0.26	-0.45	0.51	1.37	1.20	1.13	1.79	1.46	1.33	1.74	1.72	1.05	18,219
103	-0.13	0.66	-0.27	-0.97	0.17	-0.97	-0.06	0.03	-0.12	0.07	0.67	-0.08	3,839
104	-0.33	-1.43	-1.08	-1.09	-1.25	-0.81	-0.24	0.12	-0.53	-1.18	-0.72	-0.78	1,492
105	1.98	1.25	1.74	0.77	0.19	-0.82	0.31	0.59	-1.59	-0.30	-0.44	0.34	1,954
106	-0.86	-0.62	-0.66	-0.49	-1.13	0.29	-1.01	-1.35	0.41	-0.63	-0.85	-0.63	6,609
107	-0.39	0.59	-0.25	0.41	0.82	1.17	-0.78	-0.84	0.50	0.31	-0.39	0.10	4,841

Table A2. Chinook salmon bycatch number per t of pollock by coop 2003-2013.

Table A2.	Chinook s	almon byc	aten numbe	er per t of	er t of pollock by coop 2003-2013.						
Coop	date	2011	2012	2013	Coop	date	2011	2012	2013		
	5-Sep	0.052	0.019	0.053		5-Sep	0.025	0.000			
	12-Sep	0.070	0.057	0.012		12-Sep	0.064				
	19-Sep	0.132	0.081	0.009		19-Sep	0.104				
	26-Sep	0.126	0.076	0.238		26-Sep	0.152				
101	3-Oct	0.110	0.054	0.350	105	3-Oct	0.525				
	10-Oct	0.237	0.116	0.421							
	17-Oct	0.171	0.053	0.018							
	24-Oct	0.276	0.117	0.077							
	31-Oct	0.266	0.106								
	5-Sep	0.055	0.014	0.332		5-Sep	0.033	0.003	0.000		
	12-Sep	0.058	0.020	0.007		12-Sep	0.013	0.011	0.007		
	19-Sep	0.106	0.025	0.013		19-Sep	0.387	0.000	0.002		
	26-Sep	0.117	0.043	0.155		26-Sep	0.212	0.000			
103	3-Oct	0.163	0.045		106	3-Oct	0.043	0.000			
	10-Oct	0.120	1.406			10-Oct	0.156	0.000			
	17-Oct	0.142	0.032			17-Oct	0.409				
	24-Oct	0.311				24-Oct	0.398				
	31-Oct	0.158									
	5-Sep	0.003	0.005	0.006		5-Sep	0.017	0.000	0.002		
	12-Sep	0.008	0.000	0.006		12-Sep	0.061	0.000	0.002		
	19-Sep	0.014	0.000	0.004		19-Sep	0.162	0.000	0.001		
	26-Sep	0.005				26-Sep	0.171	0.000			
104	3-Oct	0.003			107	3-Oct	0.098				
	10-Oct	0.157				10-Oct	0.284	0.000			
	17-Oct	0.231				17-Oct	0.571				
	24-Oct	0.389				24-Oct	0.448				
	31-Oct	0.097									

(vi) How the IPA ensures that the operator of each vessel governed by the IPA will manage <u>that vessel's</u> his or her Chinook salmon bycatch to keep total bycatch below the performance standard described in paragraph (f)(6) of this section for the sector in which the vessel participates.; <u>and</u>

(vii) How the IPA ensures that the operator of each vessel governed by the IPA will manage that vessel's chum salmon bycatch to avoid areas and times where the chum salmon are likely to return to Western Alaska.

Alternative 3. Revise Federal regulations to require that IPAs include the following provisions:

Option 1. Restrictions or penalties targeted at vessels that consistently have significantly higher Chinook salmon PSC rates relative to other vessels fishing at the same time. Include a requirement to enter a fishery-wide in-season PSC data sharing agreement.

Option 2. Required use of salmon excluder devices, with recognition of contingencies.

Suboption: Required use of salmon excluder devices, with recognition of contingencies, from Jan 20 – March 31, and Sept 1 until the end of the B season.

Option 3. A rolling hotspot program that operates throughout the entire A and B seasons.

Option 4. Salmon savings credits last for a maximum of three years.

Alternative 4. Revise the Bering Sea pollock fishery seasons:

Option 1. Change the start date of the Bering Sea pollock B season to June 1.

Option 2. Shorten the Bering Sea pollock fishery to end on [suboptions: October 1 or October 15].

Alternative 5. Revise Federal regulations to lower the performance standard under Am 91 in years of low Chinook salmon abundance per the options below. Low abundance is defined as ≤500,000 Chinook salmon, based on the total Chinook salmon run size index of the coastal WAK aggregate stock grouping in a [option: year or average of two years]. Sectors that exceed the applicable performance standard, in 3 out of 7 years, would be held to their proportion of the hard cap of 47,591 in perpetuity.

Option 1. 25% reduction (36,693) Option 2. 60% reduction (19,036)

Suboption: Apply the reduction [25% or 60%] to the B season portion of the performance standard only.

Analysts should also provide data and considerations to inform an approach to differentially apply the reduction in the performance standard among the CV, CP, and MS sectors under Alternative 5.

Analysts should also develop and include recommended changes to Federal reporting requirements that would be necessary to evaluate the effectiveness of any of the alternatives.

C-5 Bering Sea Salmon Bycatch Council motion – June 7, 2014

The Council initiates an analysis of Chinook and chum salmon bycatch measures in the Bering Sea pollock fishery with the following purpose and need statement and alternatives:

Purpose and need statement: The current chum salmon bycatch reduction program under Am 84 does not meet the Council's objectives to prioritize Chinook salmon bycatch avoidance, while preventing high chum salmon bycatch and focusing on avoidance of Alaska chum salmon stocks; and allow flexibility to harvest pollock in times and places that best support those goals. Incorporating chum salmon avoidance through the Incentive Plan Agreements (IPAs) should more effectively meet those objectives by allowing for the establishment of chum measures through a program that is sufficiently flexible to adapt to changing conditions quickly.

Chinook salmon are an extremely important resource to Alaskans who depend on local fisheries for their sustenance and livelihood. Multiple years of historically low Chinook salmon abundance have resulted in significant restrictions for subsistence users in western Alaska and failure to achieve conservation objectives. The current Chinook salmon bycatch reduction program under Am 91 was designed to minimize bycatch to the extent practicable in all years, under all conditions of salmon and pollock abundance. While Chinook salmon bycatch impact rates have been low under the program, there is evidence that improvements could be made to ensure the program is reducing Chinook salmon bycatch at low levels of salmon abundance. This could include measures to avoid salmon late in the year and to strengthen incentives across both seasons, either through revisions to the IPAs or regulations.

Alternatives: (Note: action alternatives are not mutually exclusive.)

Alternative 1. No action.

Alternative 2. Remove BSAI Am 84 regulations and incorporate chum salmon avoidance into the Am 91 Incentive Plan Agreements. Revise regulations at 50 CFR 679.21(c)(13) to include associated reporting requirements for chum salmon. Revise regulations at 50 CFR 679.21(c)(12)(iii)(B)(3) to include chum salmon bycatch avoidance as follows:

- (3) Description of the incentive plan.
 The IPA must contain a written description of the following:
- (i) The incentive(s) that will be implemented under the IPA for the operator of each vessel participating in the IPA to avoid Chinook salmon <u>and chum salmon</u> bycatch under any condition of pollock and Chinook salmon abundance in all years;
- (ii) The incentive(s) to avoid chum salmon should not increase Chinook salmon bycatch;
- (iii) The rewards for avoiding Chinook salmon, penalties for failure to avoid Chinook salmon at the vessel level, or both;
- (iv) How the incentive measures in the IPA are expected to promote reductions in a vessel's Chinook salmon <u>and chum salmon</u> bycatch rates relative to what would have occurred in absence of the incentive program;
- (v) How the incentive measures in the IPA promote Chinook salmon savings <u>and chum salmon savings</u> in any condition of pollock abundance or Chinook salmon abundance in a manner that is expected to influence operational decisions by vessel operators to avoid Chinook salmon <u>and chum salmon</u>; and

Nome Subsistence Chum Fisherman

June 5, 2014

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

Re: Agenda Item C-5 Bering Sea Chinook/Chum Salmon Bycatch

Dear Chairman Olson and Council Members:

As a Eskimo raised in Nome, Alaska, my elders and family are culturally dependent on subsistence salmon fishing, to eke out a annual living, especially on Chum salmon. When Alaska statehood was declared to our people, our people were promised that "we will keep our subsistence lifestyle forever". Apparently both state and federal government entities supposingly are trying to keep this promise to rural Alaska.

This week there have been pleading speeches to your management council addressing the Bering Sea Chinook/Chum Salmon Bycatch from Western Alaska., especially from Native Organizations who have given both written and oral testimony for your decision making deliberation. We need to give them credit in trying to work with your council.

Nome is an economic depressed area, heavily dependent on catching salmon to make a subsistence living for their young children and extended families. (trying to stretch their \$dollar) This does add to our cultural and economic stress within the region.

Nome is a growing community, facing high food, heating and fuel costs – cost of living- regardless of being a regional hub in the Bering Sea region. The community of Nome has been patiently abiding with fishing regulation changes in the development of "hot spot programs", fish limitations, pitting commercial fishing vs. subsistence fishing through faction formulas over the past 30 years. (*To where within the Norton Sound/Bering Sea region has experienced a Native person being endangered by one who gives the impression he speaks for all Natives – he does not.*) Nome still sees chum salmon problems facing the Native people. Nome people are still trying to live the American dream through our subsistence dependency since statehood.

We do appreciate your council holding your meetings in the region to hear us voice our salmon concerns in dealing with the Bering Sea Chinook/Chum Salmon Bycatch. This does give us hope that we can resolve this Bycatch problem in Western Alaska, especially Nome Area.

Sincerely,

Perry T. Mendenhall

Revised 6 June June 3, 2014

Testimony to North Pacific Fisheries Management Council regarding subsistence salmon harvests.

I am here on behalf of the hundreds of subsistence salmon fishermen and women of the Lower Yukon River. We are severely burdened with the Pollack industry's harvests. Over the years our escapement numbers are getting smaller and smaller, over the years their (commercial harvesters) wallets are getting fatter and fatter. The website FISHWATCH will tell you the Pollack fishery is the "cleanest in terms of incidental catch of other species", an Alaska Dispatch article dated December 21, 2013 says 1.267 million metric tons, and an increase of 20,000 metric tons was approved by NPFMC. The report says 2% which is roughly 25,340 pounds was bycatch. A scientist only spoke of Pollack, that scientist watchful eye should come to the Yukon River, during our summer seasons and keep his watchful eye on the lack of returning salmon to our river! . "The numbers are grim". You will hear this time and time again. The deep-sea fishermen and women are taking faster than any species can reproduce, their claim speaks to the Pollack fishery, it does not speak to the salmon destined for rivers and tributaries of western and northern Alaska. Where are you going to be 40 years from now? At your alarming harvest rates you'll be flat broke and we'll never taste salmon strips again!

In recent times every human on this planet has been asked to conserve. We are asked to conserve energy, conserve water, and to conserve our resources. Please, just for a moment think like the Yup'ik men and women; the Gwich'in men and women; the Eskimo men and women who are customarily harvest Chinook salmon (kiartaq); realize the hardships we encounter when we are mandated to stay ashore and watch the deep-sea fisherman "go for gold". This is a sorrowful feeling. We do not harvest our catch for money; we harvest to sustain our future. OUR FUTURE IS IN JEOPARDY! The tribes up and down the Yukon River have unified and we are suggesting a moratorium be set on the once mighty Chinook of the might Yukon River. We have come to a conclusion that we will sacrifice food on our table for the abundant return of the Chinook salmon. Please share with us that the deep-sea fishermen and women will also give something up for the healthy returns of the Chinook salmon bound for the spawning grounds of the Mighty Yukon River!

Reports will tell you specific information when it comes to specific topics. What you don't see are the fine lines. An article came out June 3, 2014 by The Atlantic. The article's subtitle says 23 Alaskan tribesmen broke the law when they overfished king salmon. Let's put the Pollack fishery on trial; for they have been overfishing for king salmon since they began fishing for Pollack! Why aren't they taken to court and issued fines, and have it on their criminal history? Do you see the drawbacks? We see them clearly. Money speaks loud and clear; from this point on I will speak louder and clearer for my children, my grandchildren, and my great-grandchildren. Thank you.

Lower Tukon

Stanlas Appul



www.beringseaelders.org * beringsea.elders@gmail.com

June 2, 2014

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

RE: Agenda Item C-5: Bering Sea Chinook Salmon Bycatch

Dear Chairman Olson and Members of the Council,

The Bering Sea Elders Group is made up of elders from 39 participating tribes from Kuskokwim Bay to the Bering Strait. Our mission is to protect our traditional ways of life and the ocean web of life that supports the resources we rely on, and our children's future.

Low returns of Chinook salmon, and the broad restrictions or closing of subsistence fishing, has become an undeniable crisis throughout western Alaska. Our way of being is disrupted and, as elders, we are concerned for our future generations.

The cost to our people cannot be measured in dollars or quantified in terms of lost company revenue and jobs. We are tribal nations who for countless generations have relied on

Our subsistence lifestyle is our culture. Without subsistence we will not survive as a people...If our culture, our subsistence lifestyle, should disappear, we are no more and there shall not be another kind as we in the entire world.

- John Active

From "Why Subsistence is a Matter of Cultural Survival: A Yupik Point of View" Alaska Native Writers, Storytellers and Orators. Alaska Quarterly Review, 1999.

the Chinook salmon to return to western Alaska rivers. Fish camps along the river are the pulse of the Yupik way of life in the summer. It is the way we have always lived, drying king salmon, teaching our children, and preparing food that we will share throughout the winter.

Our salmon culture is in jeopardy. But while there are not enough to catch for our families, Chinook salmon are allowed to be taken in the offshore pollock fishery as bycatch to ensure groundfish revenue is maximized. This is far out of balance. The situation is so dire that every fish counts. We must urge you to take immediate action to reduce as much as possible the amount of Chinook that can be taken in the pollock fishery.

Fred KP holy

Sincerely,

David Bill, Chair

David BirSi.

Fred Phillip, Executive Director